

Q4 2017

The Future of the Banker

Transforming Intellectual Capital Through AI and BI



The Future of Banking Series

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GREENWICH ASSOCIATES
BELIEVES THAT RMs WILL
REMAIN A CENTRAL PART
OF BANKS' VALUE
PROPOSITION, DESPITE
THE EVOLUTION OF THEIR
ROLES

IN THE NEXT 5-7 YEARS,
RM PORTFOLIOS ARE
PROJECTED TO EXPAND

30-40%

Executive Summary

Dramatic advances in artificial intelligence (AI) are quickly changing this technology from a banking buzzword to a critical capability that helps drive better outcomes for clients. In the coming years, AI—including machine learning, robotics and other technology platforms—will have a profound impact on nearly all aspects of the banking industry.

This report focuses on the future of “the banker” and presents a series of ideas to guide bank leadership teams in leveraging this new technology to: 1) increase the effectiveness of bankers, 2) help solve for shortfalls in consistency of banker advisory skills, and 3) differentiate their banks by delivering high value-added intellectual capital to clients.

The banking industry and the process by which banks service customers and provide advice to clients will pass through four distinct stages:

1. Analog Banking

2. Business Intelligence

3. Artificial Intelligence

4. Advanced Artificial Intelligence

The next couple of years should be good ones for highly skilled bankers. In fact, as banks scramble to differentiate their offerings by providing value-added advice in a time of increasing product commoditization, banks will have trouble finding bankers talented enough to meet their new requirements.

Over a longer horizon, AI platforms will begin to replicate many of the functions now performed by bankers, shifting some banking jobs toward technology and potentially lowering front-office compensation. The leading banks' AI systems will generate high-level, customized recommendations and advice across many lines of business. This will

help companies optimize efficiencies throughout their corporate finance and treasury functions and pinpoint the best growth opportunities based on market conditions and competitive pressures. The AI-aided advice can help anticipate clients needs—even identifying potential M&A targets and partners.

As this change plays out, the number of front-office banker jobs will decrease, the portfolios of individual bankers will expand meaningfully, and the positions of certain types of relationship managers (RMs) and other bankers will diminish in importance. Many roles will shift to more junior professionals, who can manage the bank's tech-focused offerings at a lower cost to the banks.

However, Greenwich Associates believes that bankers/RMs will remain a central part of banks' value proposition, despite the evolution of their roles. Even over the long term, human RMs will be required in a range of roles. These include explaining to commercial customers how the banks' AI and other digital tools work, managing challenging onboarding and implementation projects, navigating inside the bank to marshal required resources and deliver effective solutions, and—perhaps most importantly—picking up the phone/Skype when corporate treasurers, CFOs and other company officials call with questions and requests.

By providing rapid response times, effective error resolution and a human face to an essential business partner, bankers will ensure their central role for decades to come.

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THE FUTURE OF BANKING SERIES

Additional titles in *The Future of Banking Series* include:

- The Future of Banking 2025: Rise of Digital Banking Superstores
- Future of Business Banking—2020 (webinar deck)
- U.S. Banking 2010 – 2015: Two Steps Forward, One Step Back



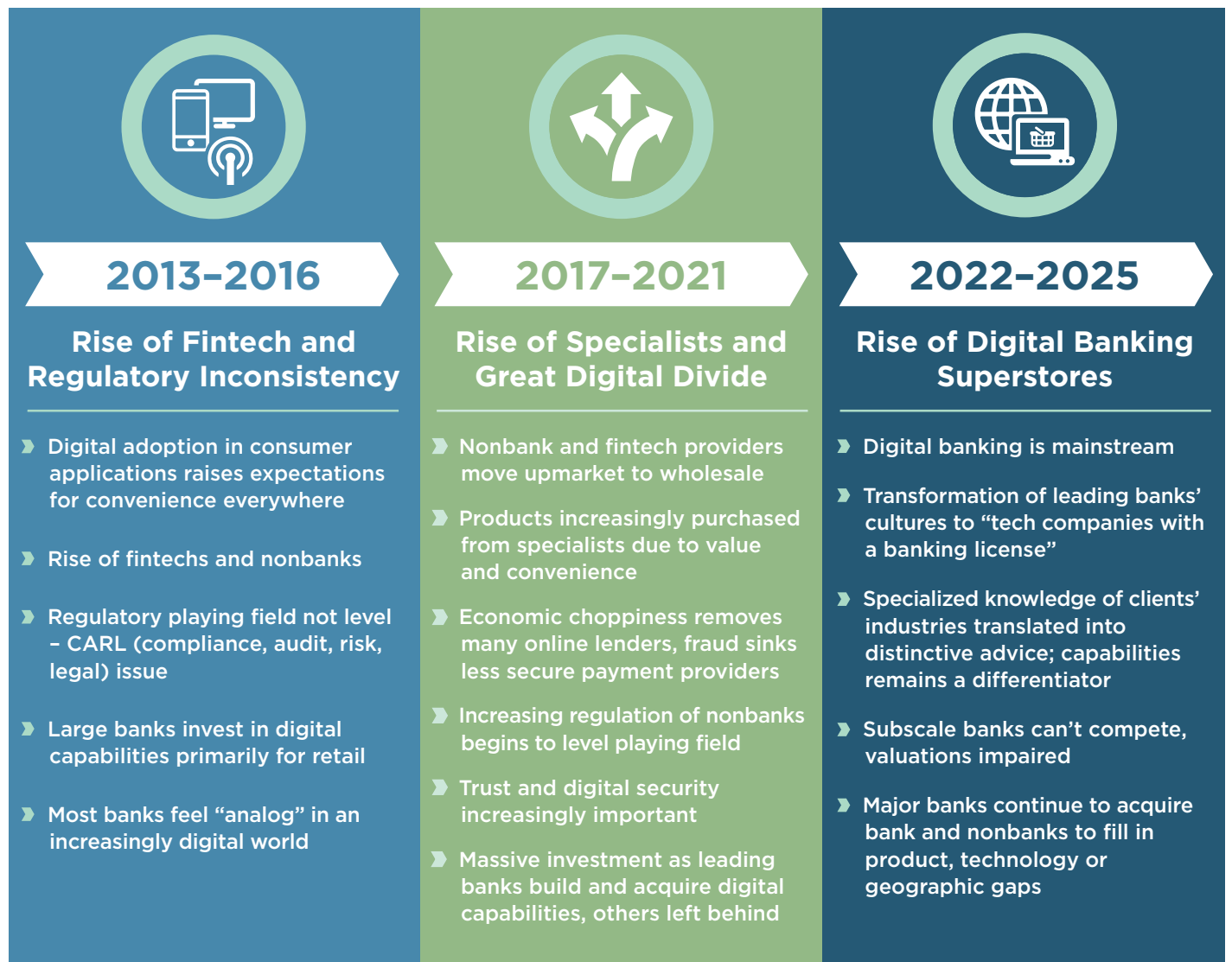
For more information on our research on the evolution of the banking industry, or to receive a copy of one or more of these reports, please contact Maribeth Farley at +1 203.625.4314 or Maribeth.Farley@greenwich.com

Introduction

The seamless, transparent and easy-to-use customer experience that people receive on Amazon, Uber and other consumer websites has heightened expectations in the digital space for all companies. These demands and other competitive factors are pushing banks inexorably toward a new model: Leading banks soon will be operating as digital financial superstores that blur the line between technology companies and banks.

That was one of the main conclusions of our 2016 report, [The Future of Banking 2025: Rise of Digital Banking Superstores](#). That report analyzed how digital technology is revolutionizing banking and tracked the evolution of the industry from 2013—when online banking was going mainstream,

PATHWAY TO BANKING 2025



Source: Greenwich Associates 2016, [The Future of Banking 2025: Rise of Digital Banking Superstores](#)

mobile banking was just beginning to gain traction and a new cadre of competitors called “fintech” was starting to emerge—to the current day and beyond. The report projected that by 2025, the walls between fintech and traditional banking will be crumbling, and banks will be operating like “tech companies with banking licenses.”

In this report, we will try to answer an important question arising from that transformation: In a digital banking future, what is the role of the human banker and the advice given to the client?

FORCES ALIGN FOR AI

Every day brings new headlines about breakthroughs in artificial intelligence and new ways that AI is being applied in business. In financial services, algorithmic trading systems represent perhaps the most ubiquitous and influential AI application. At a less high-profile level, most consumers have probably engaged with simplified AI when dealing with bank customer-service platforms—although they might not even realize it.

Meanwhile, investors are getting more comfortable with the notion of receiving investment advice or even delegating investment decisions to computers, as evidenced by the growing popularity of “robo-advisors.” Look to BlackRock’s March 2016 decision to adopt a new investment model for many of its active funds, which will shift much decision-making from portfolio managers to computer models.

AI—and digital platforms as a whole—have had less of an impact in commercial banking. But a series of powerful trends are all pushing in the same direction: Banks will adopt AI, and eventually the technology will revolutionize retail, commercial and even corporate banking. The following trends are moving the industry toward the widespread adoption of AI:

- As banking products and services become increasingly commoditized, banks are relying on the provision of recommendations and solutions as a cornerstone of their strategies.
- At the same time, uncertainties about the business environment and economic conditions are increasing clients’ demand for highly informed and tailored advice.
- Due in large part to cuts in training programs after the global financial crisis, as well as millennials’ propensity to job hop, the banking industry faces a shortfall of highly talented RMs capable of filling the role of trusted advisor.
- While modest interest-rate hikes have helped, most banks continue the relentless process of cost reduction that started when new capital reserve requirements and other regulations changed the economics of the banking business and narrowed profit margins.
- As corporate treasurers and CEOs become accustomed to immediate, high-quality service from consumer applications, companies are demanding the same level of tech-enhanced service from their banks. The growing popularity of “digital assistants” like Alexa and Siri are accelerating this process.
- Clients are becoming more familiar with technology in general as well as more comfortable with AI-type interfaces and robo-advising to make their lives easier.
- Computing power and large, normalized data sets are growing sufficiently to allow more robust machine learning and higher quality predictions.

Bankers that relied on lending a decade or more ago to bolster their personal success are often in management positions today. They will be increasingly aware that the behaviors that created success in the past are not necessarily the determinants of success going forward.

In the not-too-distant future, commercial banking customers will be receiving computer-enhanced advice about how to increase profitability through better trade-offs of risks, returns, costs, and liquidity across various working capital, growth capital and hedging frameworks. Many of these ideas will be the product of AI platforms using ever more sophisticated algorithms to synthesize economic data, risk, payment patterns, returns for alternative short-term investments, tax rates, FX, liquidity needs, bank costs, company needs, and a host of other inputs.

Banks will face competition not just from the thousands of fintechs with niche products, but from large gig-economy companies like Apple, Amazon, Google, and others. The European adoption of PSD2 leading to open application programming interfaces (APIs) increases the competitive threat and fight to “own” the front-end customer digital experience. Delivering a differentiated level of advice by leveraging AI will help the winners prevail.

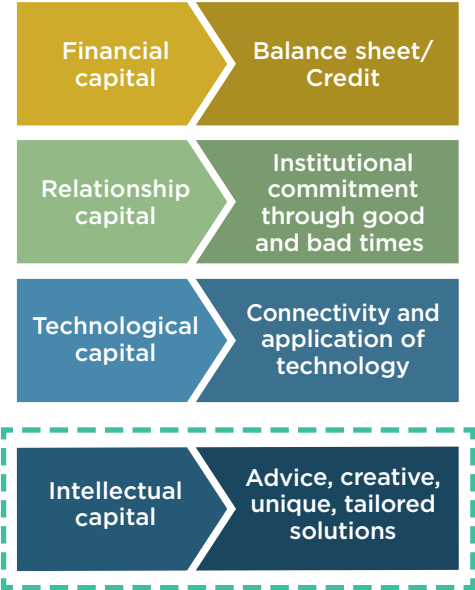
One thing is clear—over the next few years, the bar for what is considered distinctive levels of advice to individuals and companies by bankers will be rising substantially. The question is which providers will deliver advice in a consistent, cost-effective manner that creates relationship loyalty, brand lift and share of wallet capture.

By mid-2018, the leading banks will be regularly leveraging business intelligence (BI) and AI to help streamline their own operations, deliver superior service, advise clients, and fend off competitors. The AI “arms race” is being intensified by the entry of fintech and other tech companies (e.g., IBM) that use these same AI and cloud-based technologies to enter elements of the banking business and deliver high-quality advice based on strong data analytics, tailored solutions and low-cost service.

By 2020, AI will be nearly mainstream across most major providers and lines of businesses. Make no mistake: This automation will decrease the number of banking jobs, alter traditional banking roles, and diminish the seniority and compensation of some banking positions. However, we believe that bankers/RMs will remain a central part of banks’ value proposition, despite their roles evolving. Even as core bank functions are automated and segments of companies become more accustomed to a self-service model, there will still be a need for smart, articulate, savvy advisors who can help clients flesh-out their needs and guide them through complex decisions in which the stakes are high, issues complex and situations fluid.

BANK CAPITAL: INTELLECTUAL CAPITAL SETS WINNERS APART

Four types of capital delivered by banks



Source: Greenwich Associates 2017

The Future of the Banker

The next three to five years are promising for highly skilled bankers who can deliver distinctive advice. With banking products becoming increasingly commoditized, banks are striving to add value to clients and differentiate themselves from rivals by providing advice at both the strategic and product level.

The bad news for banks: It's not easy finding bankers talented enough to provide this kind of advice—especially at a time of such dramatic uncertainty about fundamental factors like the regulatory environment and the corporate tax code. In addition, the number of factors bankers need to take into consideration to provide excellent advice is growing. The leaders will need to leverage BI and AI tools to make their bankers more consistently distinctive and efficient.

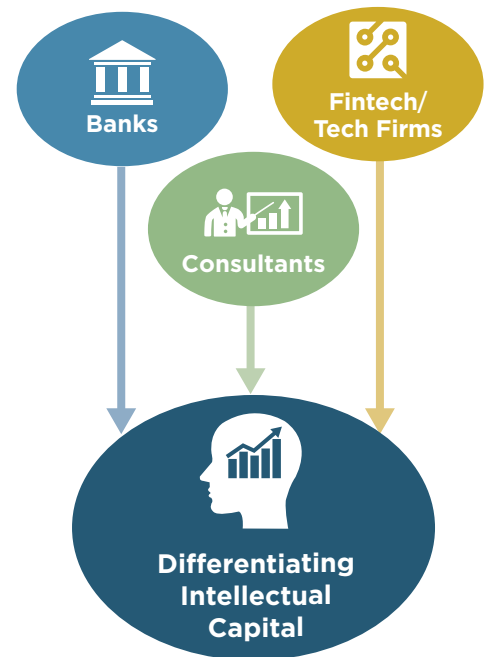
Generally, it takes close to a decade for a commercial/corporate banker to develop the expertise and credibility required to efficiently and effectively command the role of a real trusted advisor. Unfortunately for banks, the training programs that get young bankers started on this path were scaled back nearly 10 years ago, during the deep cost cuts following the financial crisis. As a result, banks are facing a dearth of talent at precisely the time they are relying on experienced relationship managers to anchor their new advisory approaches.

Furthermore, efforts to keep millennials interested and excited long-term about banking has generally been less successful than in past generations. Benefiting from this shortfall in talent are the top bankers, who are being fought over in a “war for talent.” These good times should get even better in the medium term, as banks add new technology resources that can vastly improve bankers’ reach and effectiveness.

Looking out over a longer horizon, AI platforms will begin to replicate many of the functions now performed by bankers, eliminating some banking jobs and potentially lowering compensation. The process for servicing and providing advice to bank customers will pass through four distinct stages:

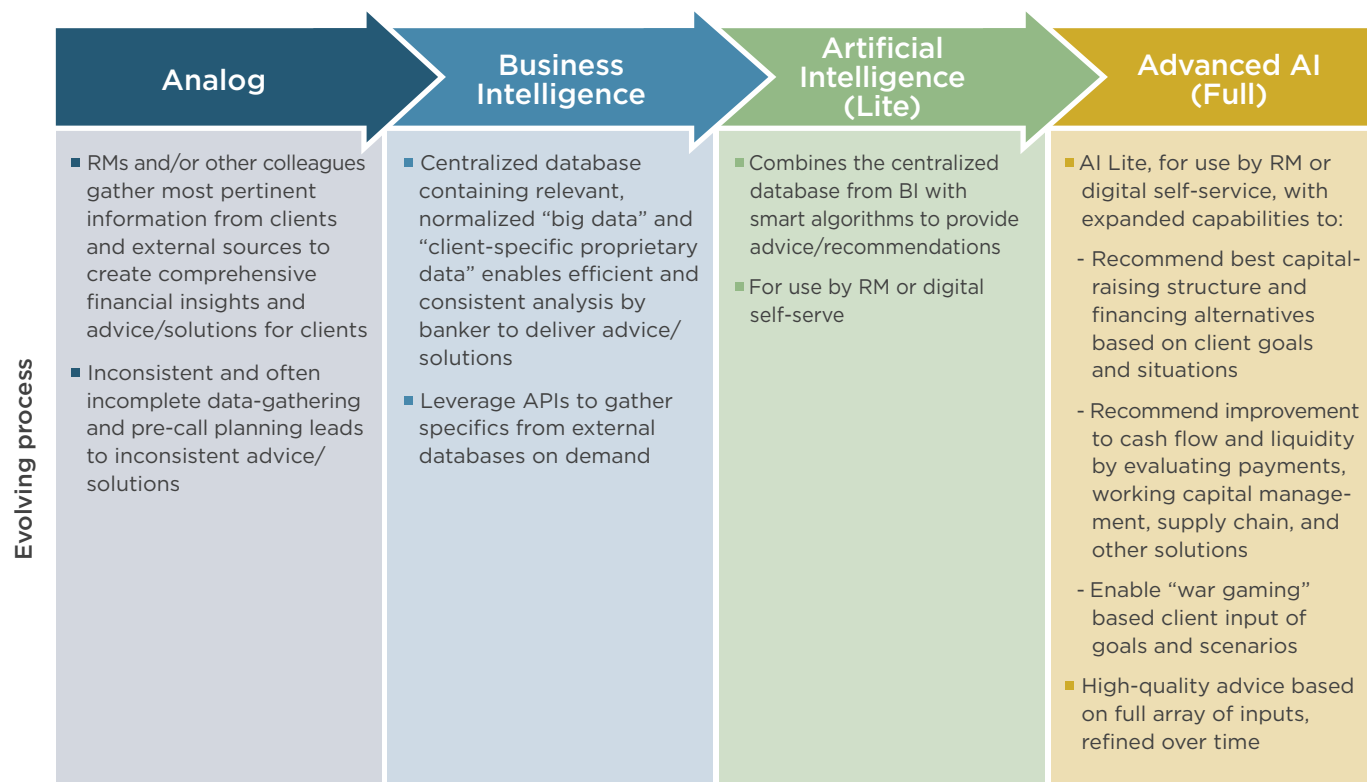
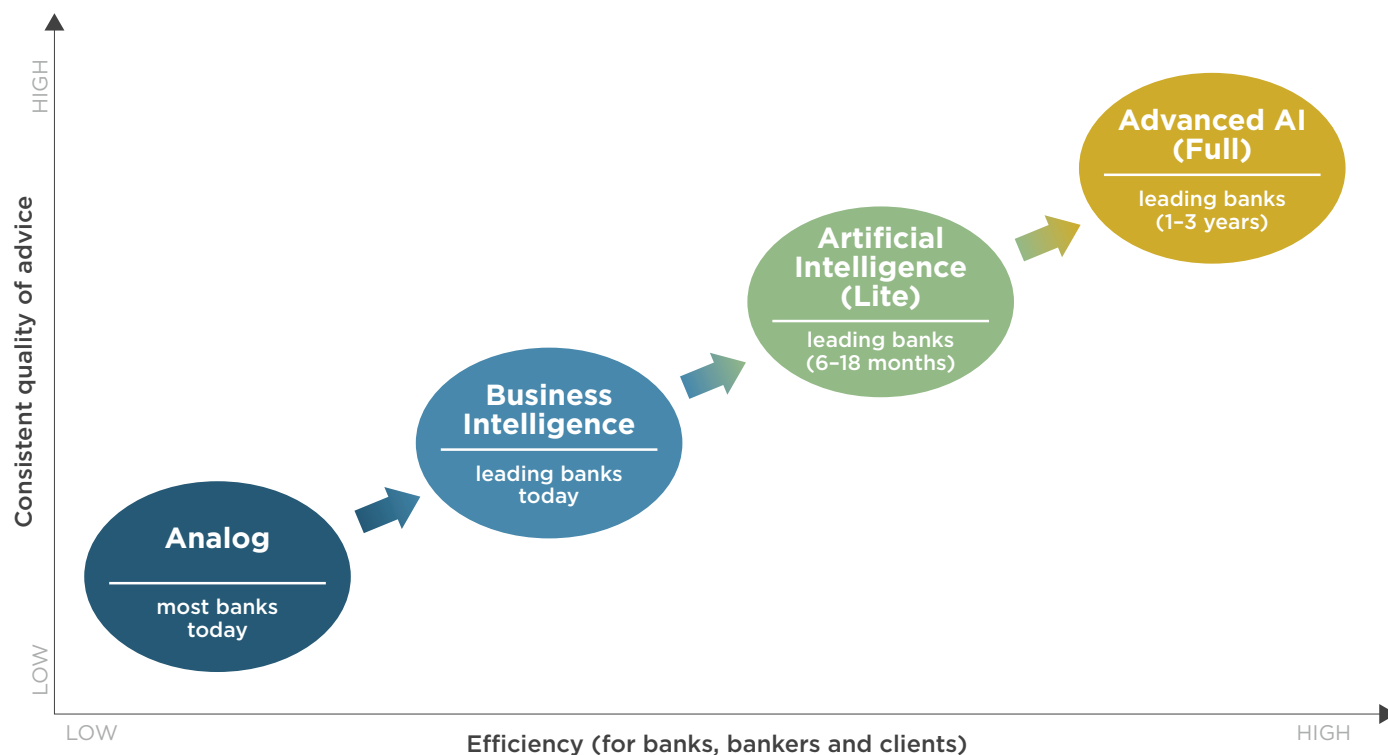
1. Analog Banking
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KEY PLAYERS CONVERGE TO CREATE DIFFERENTIATING INTELLECTUAL CAPITAL



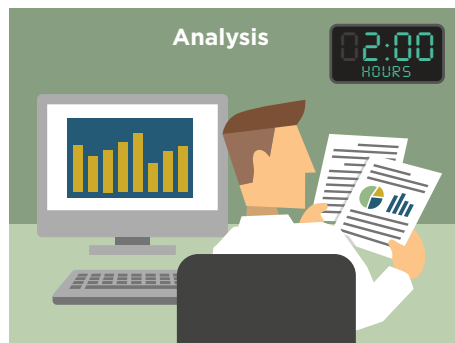
Source: Greenwich Associates 2017

EVOLUTION OF BANK ADVISORY CAPABILITIES—LEVERAGING AI TO DELIVER INTELLECTUAL CAPITAL



Source: Greenwich Associates 2017

Analog Banking



Source: Greenwich Associates 2017

The banking industry is transitioning from the era of analog banking to the age of business intelligence. That transition is most evident in retail banking, where online platforms, mobile banking and other technologies are automating many back-office functions, along with critical customer interactions and banking services. Although advances have not progressed as rapidly in commercial banking, the transformation from analog to BI is taking hold ever more rapidly among leading banks in this segment.

Banks need to increase cost-efficiency, and there's growing demand for tech upgrades from customers who have integrated easy-to-use services like Amazon, Uber and digital interfaces like Siri into their daily lives. Expect the digital transformation to accelerate as millennials who have come of age in the era of Venmo/PayPal, Betterment and Apple Pay assume more influential corporate executive positions as buyers of financial services.

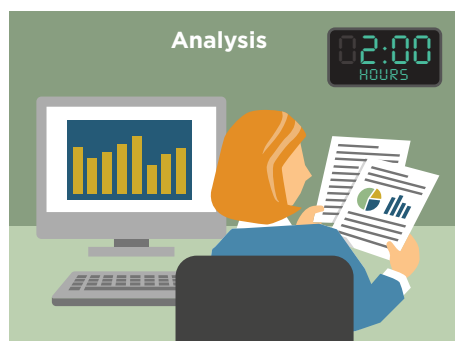
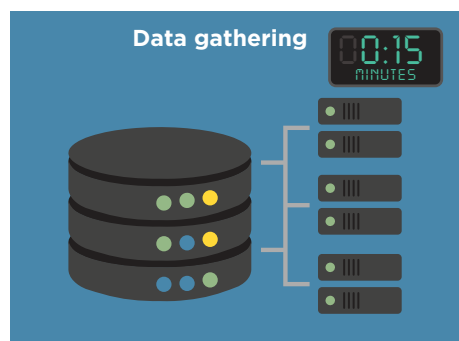
Since analog banking is manual in nature, putting together high-quality advice, recommendations and solutions for commercial/corporate banking clients based on the best and most relevant information is a laborious process requiring many hours of research. The type of information gathered varies widely depending upon the client situation but often considers key data points to advise companies on increasing their profitability. To do so, bankers need to synthesize an array of inputs from a wide variety of sources.

At most banks, much of this burden falls on relationship managers or their colleagues. Many leading banks employ some version of a financial planning or insight document, which aggregates the banks' basic research on a client company and their business. This includes the bank's overall assessment of the company's market position, financial condition and business strategy—as well as other financial and business

Expect the digital transformation to accelerate as millennials assume more influential corporate executive positions as buyers of financial services.

metrics benchmarking the company against industry peers or some other measures. While the pay-off in building trusted-advisory-type relationships may be worth the effort, under the analog method it is tough to do a high volume of these with the necessary quality to be distinctive.

Business Intelligence



Source: Greenwich Associates 2017

New business intelligence platforms will automate much of this work, severing the link between the RM gathering data and providing advice. BI will free up RMs to spend more time to come up with thoughtful recommendations and meet with clients, hopefully increasing loyalty and generating new opportunities for cross-sales.

In their simplest form, BI platforms capture key information about customers and their business environments, then present it in an easy-to-access manner, enabling professionals across the organization to provide better and more efficient service. Ultimately, these platforms will also allow clients to perform research to draw their own conclusions, accessing the BI data through the bank's internet banking or mobile platforms.

As the proliferation of BI platforms automates the customer information collection process and makes results easy to access and employ, RMs will be able to cover more clients. Greenwich Associates projects that among the leaders, average RM portfolios will expand 30–40% in the next five to seven years, based on employing technology to help gather pertinent research and identify the most promising solutions.

BI will also make RMs more effective. With accurate benchmarked data on every customer at their fingertips, bankers who currently operate at a C+/B- level in creating advisory dialogues with clients and prospects will easily perform like B+/A- bankers—even as they cover more clients.

BI BOOSTS RM PERFORMANCE

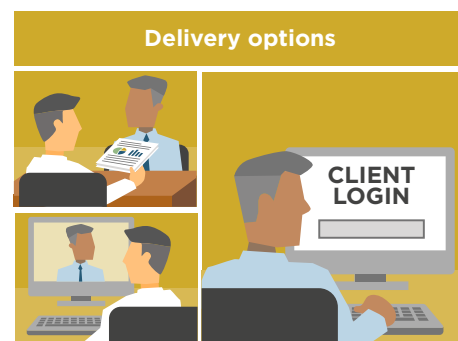
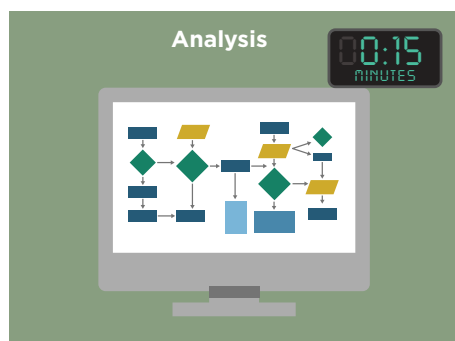
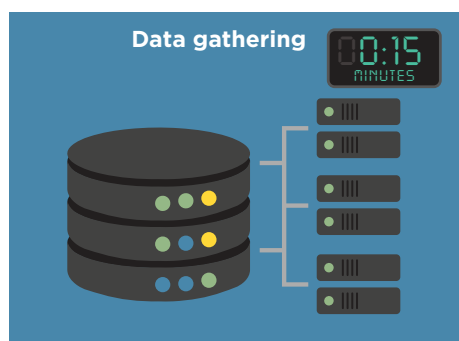


Source: Greenwich Associates 2017

Improvements in banker effectiveness will be amplified by development of new strategies for employing technology tools similar to LinkedIn and other social media to engage with banking clients and prospects.

Leading BI platforms will have feeds from news media, press releases, company websites, and social media. For example, learning from a news organization that a company (or its competitor) plans to expand its plant, open another location, etc. provides fresh insights that can lead to new business opportunities. Social media will also help spread the word about which banks have the most talented bankers—leveraging sophisticated data and analytics combined with the best product capabilities—to craft best-in-class advice and solutions for their clients. Bank brands will be more fluid and dependent upon client/market feedback.

Artificial Intelligence



Source: Greenwich Associates 2017

Banker effectiveness in crafting advice will reach its peak when human bankers are augmented with robust, fully developed AI that leverages large data sets. New AI applications will extend the process of automation beyond information collection and research into the creation of value-adding recommendations and solutions for clients.

AI will help bankers enter client meetings armed with highly customized advice about how companies can optimize their performance and strategies based on broad-based data and analytics. These recommendations will have been created, at least in part, by AI algorithms drawing on vast stores of “big data” and “small/proprietary data” collected by banks through their interaction with clients, prospects and third-party information.

A PRIMER ON ARTIFICIAL INTELLIGENCE

In March 2017, Greenwich Associates published a report analyzing the impact of artificial intelligence on the brokerage industry. The Greenwich Report, [Meet Your Robot Broker: AI in Institutional Finance](#), included a primer on AI, tracing the development of the technology and providing definitions of key AI-related terms. Since these are the same technologies revolutionizing the banking industry and the role of the banker, we are reprinting the primer here.

The term “artificial intelligence” was coined more than 50 years ago, and the field has progressed with limited success until very recently. A combination of factors has led to explosive growth in the capabilities of AI:

- The rise of the internet has made billions of documents and images available for training computers.
- The desktop and video gaming industry has driven significant advancement in graphical processing units (GPUs) which are also highly adept at the kind of number crunching AI programs require.
- The growth in cloud computing has made it cheaper and easier for startups and research teams to tap into the computing power needed to develop AI technologies.

There is an array of techniques and terminology used in the field of AI:

- **Machine learning** – refers to the ability of computers to learn things without being explicitly programmed. There are different techniques within machine learning, including supervised and unsupervised learning and deep learning.

Supervised learning – occurs when the computer is presented with a series of inputs and their desired outputs. The machine learns from this data, such that when presented with a new set of inputs, it correctly determines the associated outputs. This can be useful in teaching a computer to understand “good trades” and “bad trades,” for example.

Unsupervised learning – provides the computer with access to a dataset without

specific instructions. This can allow a computer to discover previously unknown relationships and patterns between factors. This can be very useful in finding alpha-generating signals in data.

Deep learning – refers to learning algorithms with many different layers of logic; the output becomes more and more accurate as it passes through each layer. Artificial neural networks are often used within deep learning, seeking to replicate the processes that occurs in the human brain. Advancements in computing power have made it possible to build more layers of logic, making the results more accurate.

- **Natural language processing** – is comprised of natural language understanding and natural language generation.

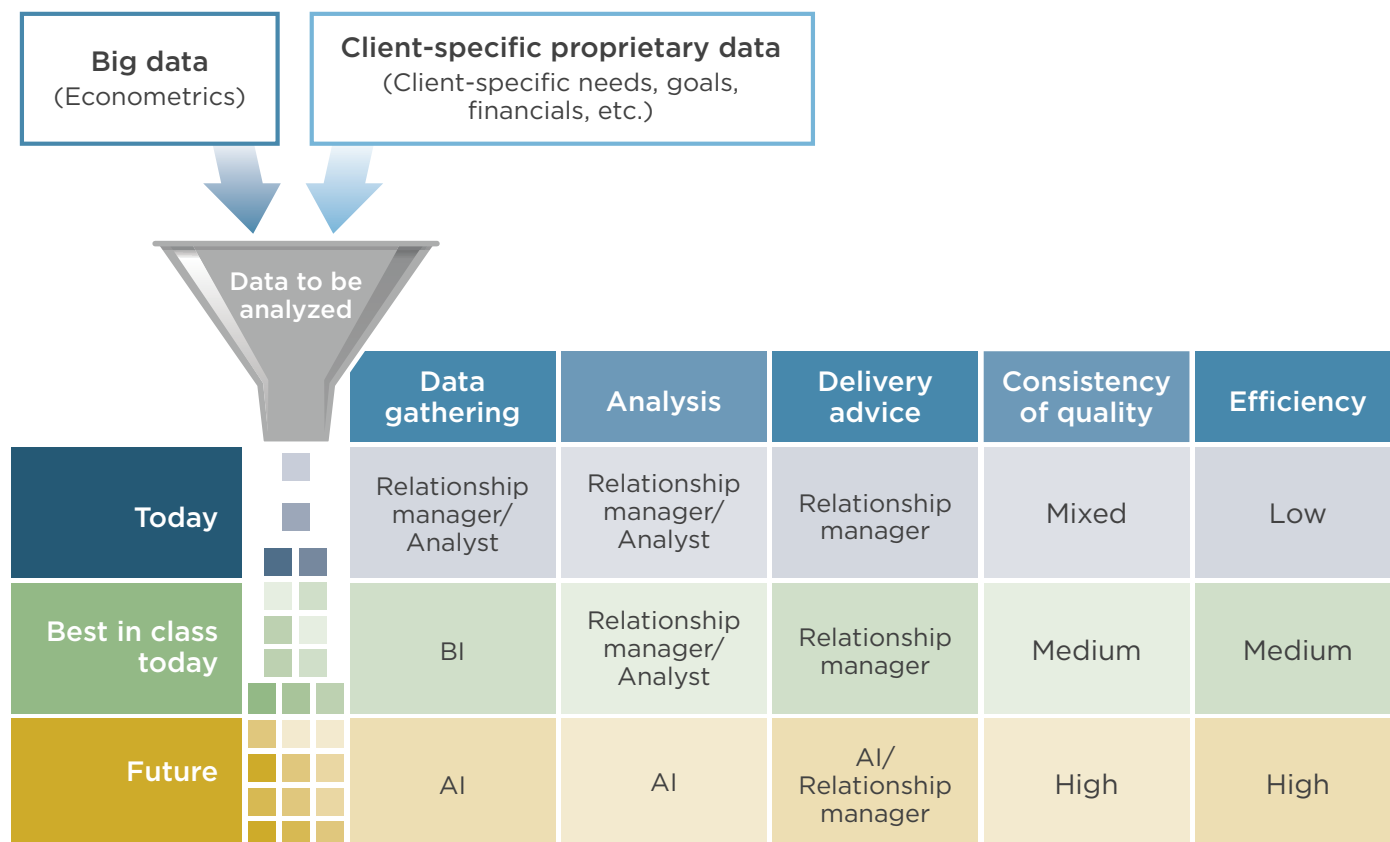
Natural language generation – refers to the ability of a machine to convert data and computer-based representations into text that reads as if written by a human. This field has clear applications in finance particularly for research report generation.

Natural language understanding – refers to the ability of machines to disassemble and parse written or spoken language. In finance, this type of technology can be applied to customer service interactions, research (extracting information from documents) and compliance (reading and categorizing information in emails, chats and voice logs).

- **Robotic process automation** – uses artificial intelligence applications to automate business processes.

Source: Greenwich Associates 2017, [Meet Your Robot Broker: AI in Institutional Finance](#)

AI IS CHANGING ALL ASPECTS OF PROVIDING ADVICE



Source: Greenwich Associates 2017

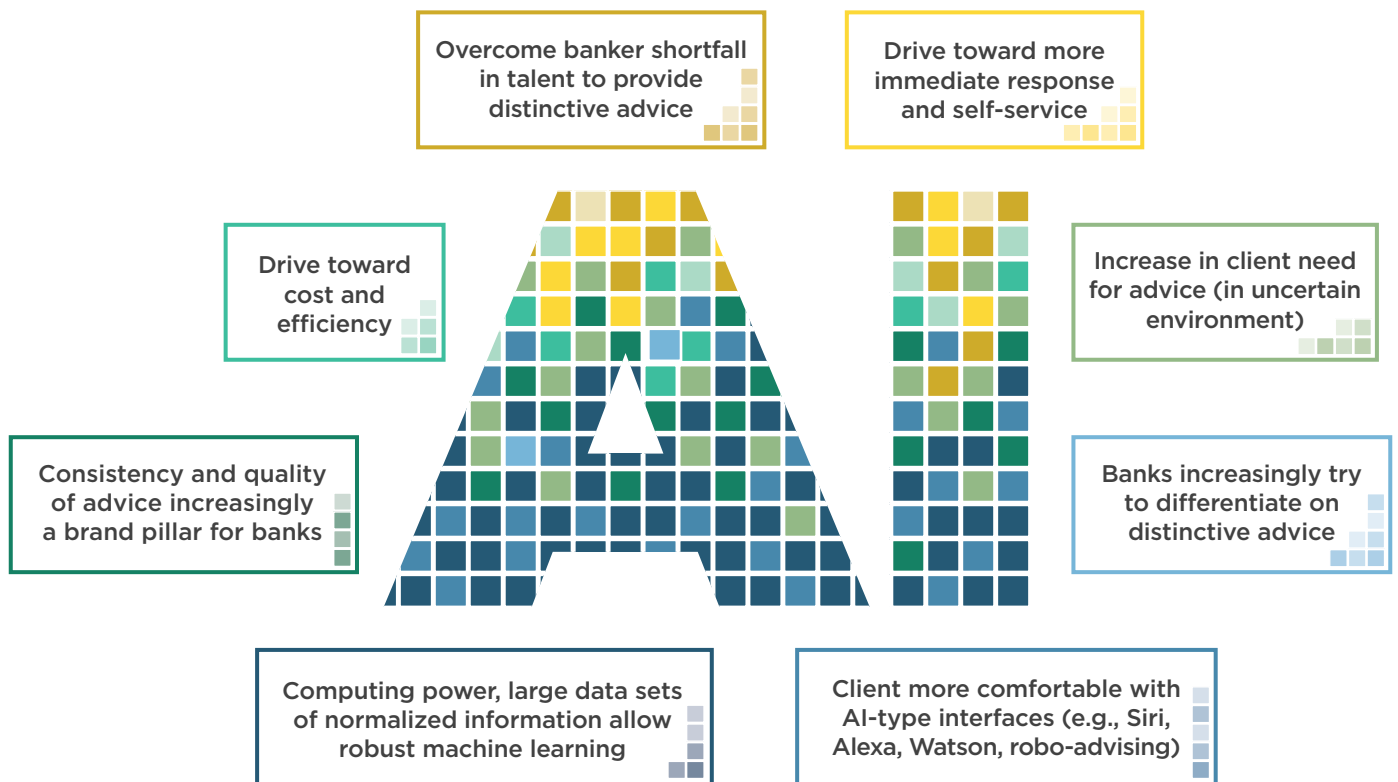
While AI has become an increasingly common buzzword, it is and will be transformational in banking. Where companies formerly relied exclusively on human expertise, today many are using AI to improve medical diagnoses, make investment portfolio recommendations and to perform a host of other tasks with extremely impressive outcomes. Banks are already experimenting with and adopting AI applications in front- and back-office functions. In retail banking, for instance, AI is being applied to basic customer service functions to speed and improve the quality of customer interactions.

In commercial banking, the first AI applications are generally taking place in the back office. For example, in the U.S., a number of midsize regional banks have adopted IBM's Watson AI platform. In these pilot programs, Watson handles information requests and other inquiries from RMs and bank staff, either providing an answer or instructing the questioner on where to go next inside the organization to fulfill the request.

Assuming Watson functions well in these internal tests, banks will start applying AI to a broader range of back-office tasks and then move into client-facing activities. AI will play a prominent role in functions ranging from loan applications to risk management and compliance.

As advances in technology interfaces make AI platforms more human-like in managing customer interactions in commercial banking, AI will begin to assume a bigger role in front-office functions—including the basic relationship management functions that make up the primary job of RMs. Several banks today are already employing the term “Digital Relationship Manager,” as they digitize many of the key elements where clients have turned to RMs in the past (obtaining copies of documents, opening new accounts, etc.).

DRIVERS OF AI USAGE

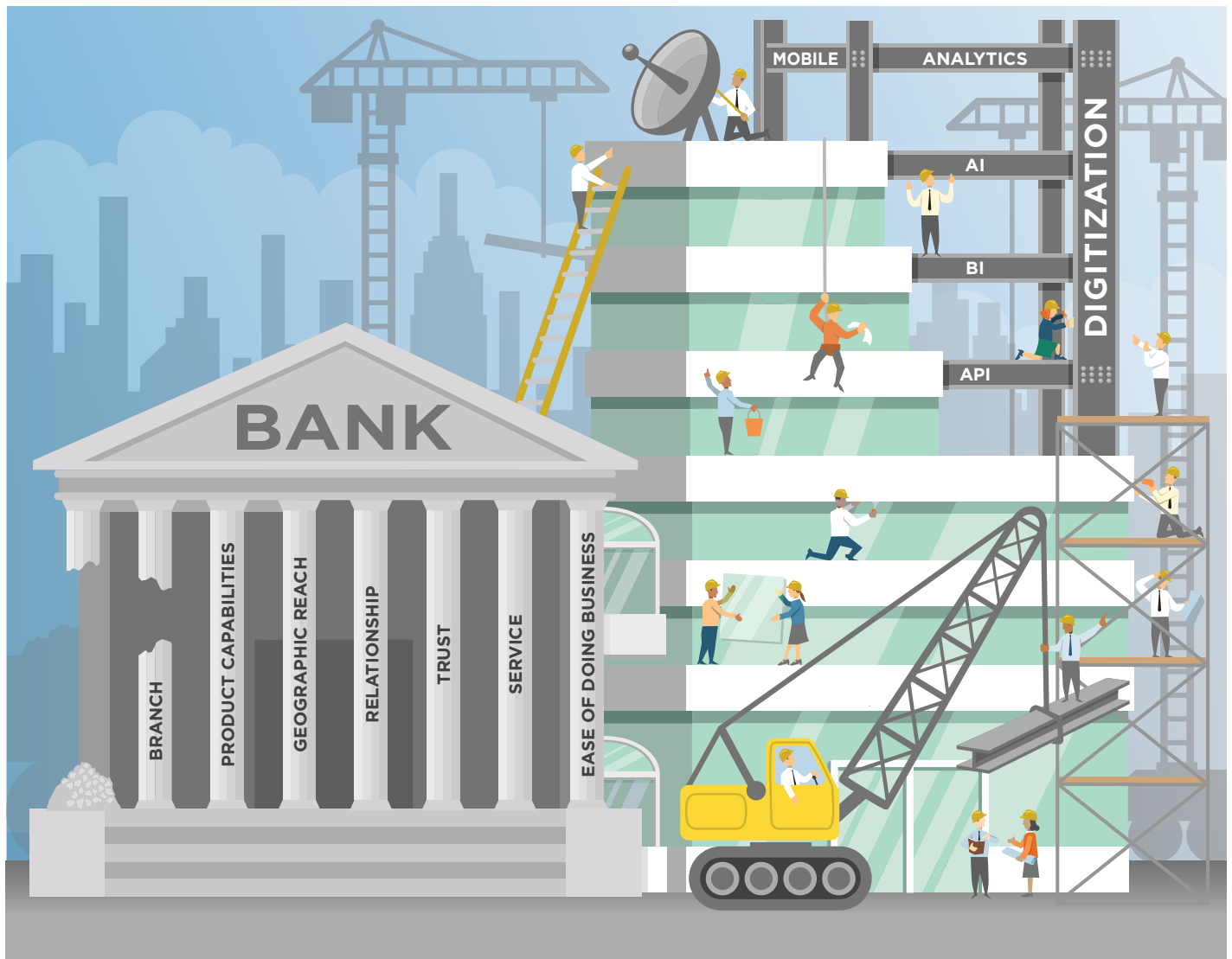


Source: Greenwich Associates 2017

Advanced Artificial Intelligence

Within the next couple of years, the leading banks' AI systems will generate high-level, customized recommendations and advice across many lines of business. That advice will cover many of the key functions now serviced by human bankers, including helping companies optimize efficiencies across their corporate finance and treasury functions, pinpointing the best growth opportunities based on market conditions and competitive pressures, and otherwise helping manage business strategies—even identifying potential M&A targets and partners. This ability to run “what-if” scenarios and “war-game” the outcomes based on different strategies will help clients make better and more informed decisions.

LEADING BANKS TRANSFORMING INTO TECH COMPANIES



Source: Greenwich Associates 2017

At this stage, banks will have dramatically improved AI interfaces, perhaps making it as easy to log a request as it is to ask Alexa to play your favorite song. AI algorithms will be capable of delivering highly tailored solutions in near real time that take into consideration a myriad of factors ranging from tax rates and liquidity needs to risk-return trade-offs.

Banking has always been a relationship-driven business, but AI will shake at the heart of some of these long-held roots. These technology advances will help the role of the RM evolve in banking relationships. When every banker who calls on a client can quickly provide high-quality, personalized insights and advice, there is less differentiation among bankers. In this new environment, the quality of inputs and output from a bank's algorithms will help distinguish the advice and recommendations it provides. The RM will evolve and become more essential in relationship-building, bringing in experts, client experience, and establishing/maintaining trust in an increasingly digitized world.

As technology shoulders a bigger part of the banks' responsibilities, there will be less focus on the abilities of individual bankers to perform analyses once the market becomes comfortable with the soundness of AI outputs. As a result, the hot job market for top client-facing bankers will cool. The number of banker jobs will decrease, the portfolios of individual bankers will expand meaningfully and the positions of certain types of RMs and other bankers will see diminished importance.

Many roles will shift to more junior professionals who can manage the bank's tech-focused offerings at a lower cost to the banks. That said, senior rainmaking RMs will still be important to bringing in and retaining business—perhaps just not to the same degree as in the past. It will still be a relationship-based business where trust is needed, especially in tougher economic cycles. It is the lower-quality bankers that should be most concerned and will be most at risk of being disintermediated by machines.

Technology advances will help the role of the RM evolve in banking relationships.

Banks' Key Competitive Advantage: Bankers

However, banks will not be the only ones offering technology solutions. Fintech companies and tech giants like Google have the AI resources to enter this market. Large companies will use third-party AI platforms to perform many of these same functions in-house (e.g., analyzing risks, hedging, liquidity, etc.). The shift to open APIs will open business lines to new technology applications from a fast-expanding universe of providers. (See the Greenwich Report [Open APIs: A Disruptive Technology with Benefits](#) for a detailed analysis of the implications of the industry's move to open APIs.)

Banks' 3 Competitive Advantages

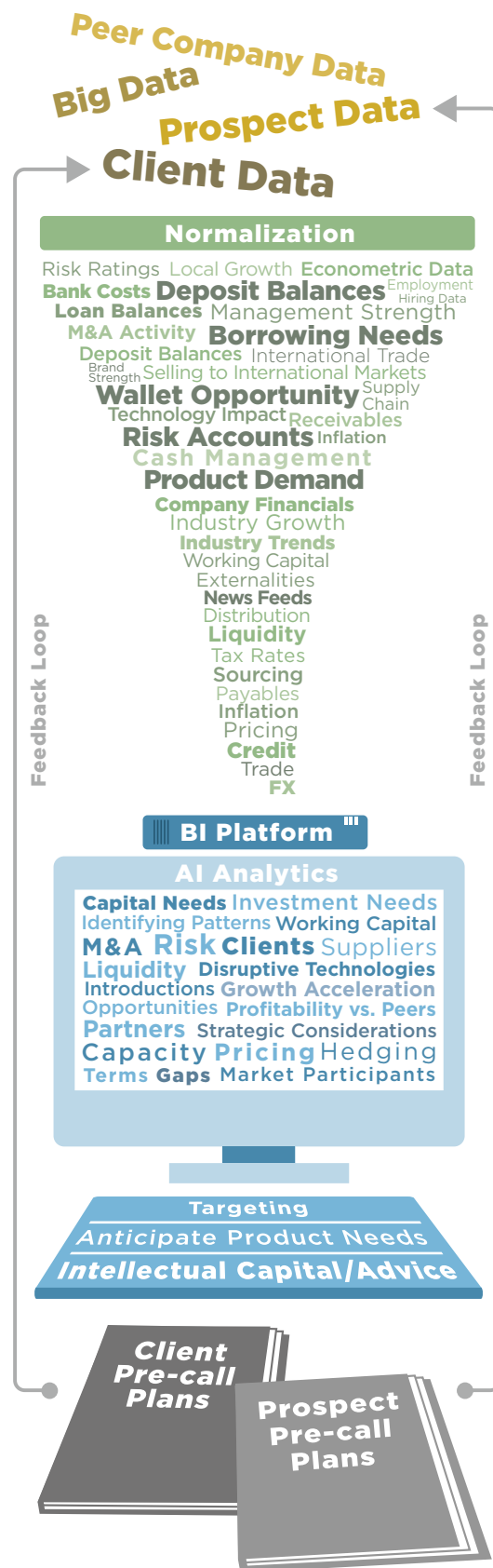
To compete in this market, banks will have to capitalize on three competitive advantages—one of which speaks directly to the future professional prospects of bankers:

1. Large banks will not only be in a position to identify the right steps companies should take due to experience through various economic cycles, they will also have the full, broad product array to implement these solutions.
2. Banks will have vast proprietary data sets, including a unique blend of “big data” and “small proprietary client data.” Banks’ big data will be culled from industry, econometric and news/social media data from a large number of global sources. Banks’ small data sets will include information from bank CRM systems, financial insights/trusted advisor strategy sessions to understand the client’s needs and goals, and analytics from all lines of business where the client might be involved (wealth management, M&A, FX, etc.).

Inputs would include a wide array of metrics measuring the specific position of client companies in terms of market situation, capital structure, liquidity needs, etc.—all benchmarked against peers by industry, region, size, etc. In a world in which AI will play a role in nearly every major decision, the scope and quality of these data will represent an invaluable asset—and one that will be difficult, if not impossible, for competitors to replicate.

3. Finally, we believe that bankers/RMs will remain a central part of banks’ value proposition, despite their evolving roles. Even as core bank functions are automated and companies become more accustomed to a self-service model, there will still be a need for smart, articulate, savvy advisors who can help clients flesh-out their needs and guide them through complex decisions in which the stakes are high, issues complex and situations fluid.

In the short-to-medium term, human bankers will often bring in perspectives or consider new variables not yet built into still-emerging AI systems. For example, will early-version AI platforms effectively take into account international taxes, bank fees, investment returns, liquidity needs, multi-dimensional risks, cash-flow efficiency, FX, personal risk-return trade-offs, convenience, likelihood of externalities, competitor actions, M&A activity, potential government policy changes, etc.?



Source: Greenwich Associates 2017

TOP INVESTMENTS BANK MANAGEMENT TEAMS SHOULD BE MAKING TO OUTPERFORM PEERS

Banker/RM Investments and Changes

- 1 Create and train bankers to leverage tools that help uncover client needs (e.g., consistently use financial planning/financial insights documents and discussion guides based on client needs)
■ ■ ■ ■ ■
- 2 Revise hiring model to those with strong relationship-building skills, as analytical rigor will be reduced once BI/AI platforms become available (recruiting strategy, skills sought, compensation, etc.)
■ ■ ■ ■ ■
- 3 Evaluate and adjust RM gearing ratios (#s of clients/prospects covered per banker) once AI/BI capabilities are rolled out, based on increased efficiencies in pre-call planning and analysis
■ ■ ■ ■ ■
- 4 Have frontline RMs involved in the development, testing, training, and feedback loop for AI/BI platform to ensure needs are met
■ ■ ■ ■ ■
- 5 Train bankers on the new technology applications and benefits to them so they embrace rather than reject the new capabilities
■ ■ ■ ■ ■
- 6 Remap client coverage based on their needs and profitability as well as desire for digital self-service given new AI/BI capabilities
■ ■ ■ ■ ■
- 7 Aggressively market the quality of advice as a differentiator based on sophistication of bank inputs and algorithms
■ ■ ■ ■ ■
- 8 Ensure RMs/product specialists are converting AI-enhanced advice based on client needs to executing on product solutions cross-sell
■ ■ ■ ■ ■

Technology Investments

- 1 Create technology roadmap for key investments (e.g., consider what pieces to insource vs. outsource)
■ ■ ■ ■ ■
- 2 Understand what are the key inputs and sources of data for creating advice for clients depending on the segment (a long and diverse set of inputs)
■ ■ ■ ■ ■
- 3 Develop BI platforms that normalize and centralize data relevant to providing advice to clients
■ ■ ■ ■ ■
- 4 Create an AI overlay to the BI platforms for bankers that incorporates not just data mining but smart, imaginative analytics turned into recommendations for bankers and clients
■ ■ ■ ■ ■
- 5 Ensure data inputs and analytics can help target clients/prospects with larger wallet opportunities and help anticipate client needs for solutions
■ ■ ■ ■ ■
- 6 Create a digital platform that enables client access to AI/BI data
■ ■ ■ ■ ■
- 7 Allow bankers and clients to perform scenario testing/war gaming based on different strategies, investments, debt levels, growth rates, etc.
■ ■ ■ ■ ■
- 8 Solicit feedback from clients and bankers on where the models are not quite spot on and adjust/refine accordingly
■ ■ ■ ■ ■

Source: Greenwich Associates 2017

At the very least, the presence of a human banker will provide clients with a level of confidence that a capable and experienced professional is at hand and considering all the relevant variables.

Even over the long-term, human RMs will be required in a range of roles, including explaining to commercial customers how the banks' AI and other digital tools work, managing challenging onboarding and implementation projects, navigating inside the bank to marshal required resources and deliver effective solutions and—perhaps most importantly—picking up the phone/Skype when corporate treasurers, CFOs and other company officials call with questions and requests.

No service—not even one driven by the world's best AI platform—will ever be completely error-free. To be an effective business partner, banks will need to provide advice as well as security and transparency, something bankers can help with when issues arise. By providing rapid response times, effective error resolution and a human face to an essential business partner, bankers will ensure their central role for decades to come.

Banks' effectiveness in pairing technology with human expertise and relationships will fast become a key determinant of success.

Conclusion

Greenwich Associates has written extensively about its view that today's global banks are rapidly evolving into giant technology firms that happen to provide banking products and services. This is a major culture and capabilities shift for leading banks, and AI platforms will be a primary component of this transformation.

Although we are confident in that trajectory, there is no way to predict precisely how the full integration of IT and banking will play out. Fintech firms are already providing real competition to banks in certain niche areas of payments, mortgage lending and other products. The acquisition of many of these startups by major banks will play an important role in the creation of a new tech-centered bank business model.

Yet looming on the not-so-distant horizon are tech giants like Google and IBM—the latter of which is already partnering with banks on ways to apply Watson's artificial intelligence to the banking industry. It is much more difficult to project how these firms will approach and influence the banking industry. Will they partner with banks to provide the AI engine for commercial, corporate, wealth, and even retail banking? Or, as the value-adds for banking services become more technology-driven, will they look to capture some of this business for themselves?

Meanwhile, will the big banks rely on the IBMs of the world to provide their AI capabilities, or will they build their own platforms? With Jamie Dimon's revelation that J.P. Morgan spent nearly \$10 billion on technology last year, it certainly seems like large banks are at the very least preparing to spend tremendously to help ensure they are a leader well into the future.

Regardless of how these specific dynamics play out, the end result is likely to be the emergence of a handful of technology-based superstores with the scale needed to build and maintain sophisticated platforms and AI capabilities. As this powerful technology augments even the highest-level banking and advisory functions, banks' effectiveness in pairing technology with human expertise and relationships will fast become one of the industry's most important determinants of success.

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