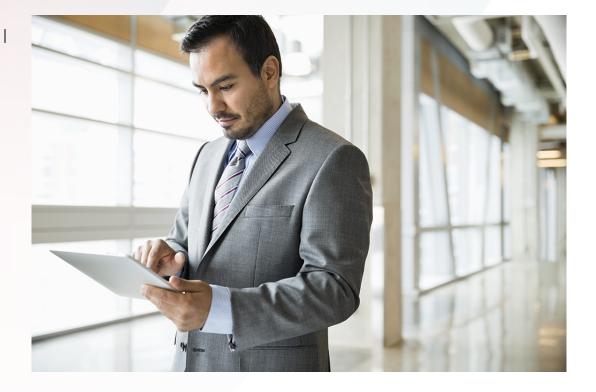


ENRICHING, EMPOWERING, AND ENHANCING CORPORATE BANKING





Todays' digital corporates are growing at a tremendous speed, creating innovative business models to stay ahead of competition. It is imperative for banks to keep pace with the changing needs of their corporate customers.

Corporate banks are now beginning to face the impact of digital disruptions, much like retail/consumer banking has been. Innovative offerings in the areas of credit, liquidity and cash management, virtual account management, trade finance and payments are increasingly on the radar of global corporates and these provide new opportunities to banks to gain market share and new relationships. It is imperative for banks to establish the agility and the digital capabilities needed to respond to this new paradigm.

Corporates are seeking control of their data and transactions and expect their banks to assist them in this process. To serve this need effectively, banks need to increase their focus on driving stronger customer centric strategies and to reinvent the customer journey.

Oracle is committed to building industry-first corporate banking capabilities that are digitally- enabled and exclusively designed for corporate banks. Our solutions help banks adopt emerging technologies, extract greater efficiency, and increase speed of execution.

Oracle offers standalone comprehensive capabilities across deposits, loans, trade finance, liquidity, virtual accounts and payments to meet global corporate customers' needs.

CELENT

ENRICHING, EMPOWERING, AND ENHANCING CORPORATE BANKING

Alenka Grealish Patricia Hines, CTP 30 October 2018

This report was commissioned by Oracle at whose request Celent developed this research. The analysis, conclusions and opinions are Celent's alone, and Oracle had no editorial control over the report contents.



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EXECUTIVE SUMMARY

KEY RESEARCH QUESTIONS

Why is it important for banks to focus on enriching corporate customer journeys?

How can banks empower their corporate banking staffs as well as clients? How can banks enhance their offerings to address customer needs and be more competitive?

Corporate banking is at a critical juncture. To compete effectively against not only incumbents in the tech vanguard but also digital giants and fintechs, bankers need to make step changes. They need to abandon their product-centric approach and embrace a customer journey approach, one that reimagines and improves workflows. They need to make more aggressive moves to digitize paper-based processes and migrate from intuition-driven decisions to putting data analytics first.

A confluence of forces is reshaping corporate banking (Figure 1). On the demand side, corporations are increasingly relying on the support of bankers to help them overcome challenges and seize opportunities. At the same time, their expectations are rising, often being set by digital giants and fintechs that serve them. Corporations are facing numerous pressures, risks, and opportunities, ranging from globalization 2.0, new economy challengers, increasing regulation, rising risk, and cybersecurity threats. As a result, treasurers are facing an expanding role, which is increasingly strategic and technology-focused with expectations to handle rising complexity and risk, hedge and make forecasts, and ultimately do more with less.

Figure 1: Pressures Leading to Step Change in Corporate Banking

BANKS UNDER PRESSURE

TECH ADVANCES

CORPORATIONS UNDER PRESSURE

- Challenged to meet rising customer expectations set by digital giants
- Frictions in customer journeys
- Increasing regulation, unsustainable growth in compliance costs
- · Nimble non-bank competitors

Transformation needed to improve:

- Customer journeys
- · Operational efficiencies
- · Staff value-add
- Data analytics

- Faster, cheaper processing power and data storage
- · Improved data infrastructure
- · Production ready advanced AI
- · New methodologies, e.g., agile
- Advances alleviating the pressures:
- Improved data (quality, timeliness) and analytics
- · Smart automation
- Contextual banking

- Globalization 2.0
- · Increasing regulation
- · Cybersecurity threats
- Inefficiencies in financial supply chain, cash/liquidity management

Treasurer/CFO teams challenged:

- Expanded role, increasingly strategic, tech-focused
- Efficiency & risk management paramount
- · Working capital mandate

Source: Celent.

On the supply side, banks have a great opportunity to build stronger relationships, position themselves as advisers, and generate new revenue streams if they can respond to the corporates' growing and shifting needs. But most banks are underprepared to respond to corporates' dynamic needs and demand for real-time information flows. Like their traditional clients, most are challenged to move from batch to real-time and to move from paper to digital. Most are scrambling to meet the needs of new economy companies which are data-driven and run lean with light, cloud-based infrastructure. Instead, third party providers have been the early movers in filling the gaps.

In this report, Celent discusses how corporate bankers can outperform by exceling along three dimensions: *enrich* the corporate customer journey front to back, *empower* staff and clients, and *enhance* offerings through partnerships, best of breed, and point solutions. The three E's can be summed up as investing in innovation, and there are signs that select banks are getting ahead of the pack. Morgan Stanley and Oliver Wyman estimate that "leading players are outspending mid-tier rivals on innovation by as much as three to one." These leaders will capture a disproportionate share of the nearly \$1 trillion global corporate banking revenue pools (this figure includes lending, payments/cash management, and trade finance; Oliver Wyman 2017). They will be able to invest the incremental revenue to further invest in technology to create new competitive advantages and defend against disruption caused by digital giants and fintechs. The time is nigh for the other banks to catch up.

For details and additional insights on corporate banking, see the Celent report *Top Trends in Corporate Banking:* 2018-2019, July 2018.

ENRICHING CUSTOMER EXPERIENCE

Key Research Question

Why is it important for banks to focus on enriching corporate customer experience?

1

To deepen customer relationships, banks need a digital strategy that incorporates the latest technology and runs front to back.

Technological advances have made it easier for banks to differentiate their offerings and improve client satisfaction. Improvements in the basics (e.g., optical character recognition), advances in application programming interfaces (APIs) and robotic process automation (RPA), and major inroads in advanced artificial intelligence (AI) are enabling step changes in client experience and improved customer journeys. Banks in the vanguard are undertaking a digital transformation that spans the front, middle, and back offices.

LEVERAGING EMERGING TECHNOLOGIES

Banks in the vanguard are differentiating themselves through enriched client experiences by leveraging the latest technologies: APIs, machine learning, artificial intelligence, and blockchain.

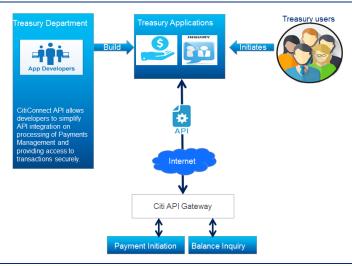
Accelerating Information Flows with APIs

Transaction banking APIs for client connectivity have the potential to move corporates beyond batch processes for payments, transforming intraday, static reporting into real-time, interactive analysis. Historically, treasurers must log in to the bank's corporate online portal to check on specific transactions. APIs facilitate real-time payment and information flows, including balance inquiries, credit line availability, and vendor payments offering instant visibility and transaction execution.

Several banks are working on API connectivity for corporate treasury management systems, along with other financial software used by their business clients. One example is CitiConnect API. In early 2017 Citi's Treasury and Trade Solutions (TTS) group launched CitiConnect API, one of the first universal banks to roll out integrated API capabilities for transaction services. Based on the belief that client experience is the driver of sustainable differentiation, CitiConnect API allows clients and partners to integrate directly with Citi's applications for real-time access to their data and banking services.

Chapter: Enriching Customer Experience

Figure 2: CitiConnect API



Source: Citi

CitiConnect API offers clients a global, flexible, and fully automated delivery channel that provides full visibility into their working capital flows across all accounts, allowing Citi to become one of the first transaction banks to fully enable a core set of cash management products and services. Based on Celent's detailed analysis of open banking portals, Citi lists more APIs in its global developer portal than any other bank, with more than 60 available (depending on country) as of February 2018.

Enabling New Journeys with Advanced Al

After decades of work in academia and labs, significant AI breakthroughs have been achieved during the course of this decade. Al in banking has been steadily moving from lab experiments to proofs of concept and scaled implementations (see Figure 3). Advanced AI is enabling banks to reimagine critical corporate customer journeys (for details and additional insights on AI in corporate banking, see the Celent report The Cognitive Corporate Bank: Heading Toward the Summit, March 2018).

Back Front – Customer facing Middle Payments processing Repairs Credit Loan booking Relative Maturity Pricing Small business/lowvalue Loan contract & notice originations processing Compliance **Functional areas** AML and sanctions Accounts receivable Compliance · KYC Payments: B2B fraud prevention **Trade finance** Relationship manager · AML/sanctions screening · Next best action/ offer Document processing CFO/treasurer, Credit Loans > \$500K+ originations

Figure 3: Advanced AI in Corporate Banking — From Base Camp to Summits

Source: Celent

Advanced AI is enabling the long-elusive digitization of key customer and bank workflows. For example, it is powering straight-through reconciliation rates in accounts receivable above 95%, which is striking given the growing complexity of remittance sources and level of unstructured data. Combined with other technologies (e.g., RPA), it is not only expediting historically painful processes but also making them more transparent for clients, such as client onboarding and credit applications. Behind the scenes, in the back office, it is driving operational efficiencies in anti-money laundering and sanctions screening as well as lowering compliance risk by catching false negatives.

In the front office, advanced AI will gradually transform bank-customer and relationship manager-customer engagement. Two major forces are propelling advancement. First, as consumers, we are becoming increasingly comfortable talking to machines. This comfort level will gradually flow over to the business world as it did with prior innovations, such as mobile banking. Second, banks are realizing successful virtual assistant initiatives on the retail side, and the infrastructure and learnings will be applied to the commercial side. Initially, relationship managers (RMs) will be guided by AI-generated basic next best action and offer suggestions. In the long run, advanced AI will dramatically change customer engagement. Banks will engage with corporate customers through virtual assistants, deliver daily recommendations, and enable actions to be initiated verbally supported by advanced biometric security. The work of RMs will become much more interesting as they focus more on adding value and less on administrative tasks.

Reducing Friction with Blockchain-Based Technology

As discussed in the Celent report *Beyond the Buzz: Distributed Ledger Technology in Capital Markets and Corporate Banking* (August 2016), blockchain-based technology has

the potential to improve banking services provided to corporate banking clients greatly. With the promise to improve visibility, lessen friction, automate reconciliation, and shorten cycle times, corporate banking use cases have attracted significant attention and investment.

Improving Supply Chain Finance (SCF) Transparency

SCF involves pledging assets of various types as collateral for working capital loans with transactions taking place directly between a borrower and a bank (or group of banks). There are many different types of financing under the supply chain finance umbrella: asset-based financing, buyer-led financing, supplier-led financing, accounts receivable financing (factoring), and invoice discounting. In addition to bank-led supply chain finance programs, there are a number of non-bank working capital finance and supplier networks.

The pain points in supply chain finance arise from a lack of transparency across the entire supply chain, both physical and financial (Figure 4).

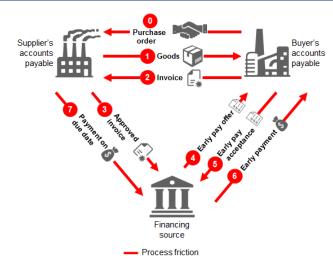


Figure 4: Supply Chain Finance Transaction Flows

Source: Celent

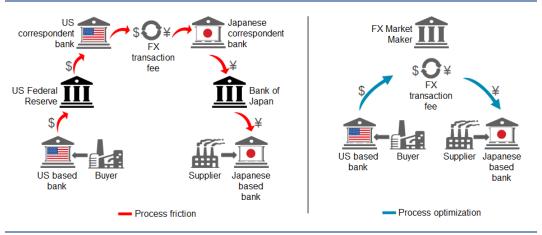
One pain point is fraudulent invoices. With the current, disconnected accounts payable process, it is easy for fraudsters to submit doctored or fraudulent invoices using compromised email accounts. The solution is to transform original, physical invoices into digital assets on a shared, decentralized ledger, reducing the potential for duplicate invoice financing. This gives the participants the ability to access a single source of information on the status of invoices pledged against financing requests across all participating banks while preserving confidentiality.

Blockchain-based technology has the potential to enhance visibility and further streamline supply chain finance by linking incumbent networks of banks and non-bank providers, increasing collaboration and automating authentication, invoicing, and payment release, resulting in a more streamlined supply chain finance process.

Streamlining Cross-Border Payments

The traditional cross-border payment process often involves a multi-hop, multi-day process with transaction fees charged at each stage. For small payments, transaction fees can be onerous (Figure 5).

Figure 5: Cross-Border Payment Flows



Source: Celent analysis

Financial technology firms are already working to address the pain points associated with cost-effectively providing cross-border payments for low value, high volume use cases. The goal is to remove the middleman inherent in correspondent banking, to lower cost, to expedite processing, and to enhance transparency. Blockchain-based technology offers an opportunity for even faster cross-border payment processing and settlement at an even lower price point than incumbent providers by eliminating intermediary central and correspondent banks in transaction flows. Concerns remain over blockchain-based technology's ability to handle the throughput necessary to support high volume payments use cases, but moving to near real-time cross-border settlement is a big advantage over today's multi-day cross-clearing processes.

INTEGRATING CORPORATE DIGITAL CHANNELS

Delivering an integrated corporate banking portal is a common strategy to make invisible the organizational and product silos inherent in corporate banking. But at most banks, there is no integration between "attended" channels and "unattended" channels. Celent defines attended digital channels as solutions with which employees of a corporate client interact to retrieve information and conduct financial transactions (e.g., an online portal, mobile banking application, or tablet banking application). These are differentiated from unattended channels that corporates use to integrate with bank reporting and transaction systems in an automated fashion (e.g., host-to-host, SWIFTNet for Corporates, or APIbased integration). Large corporate customers rely heavily on unattended channels and demand easy connectivity with their ERP systems in order to realize operational efficiencies. These customers are becoming frustrated with the lack of integration between unattended and attended channels. For example, a client that transmits a file through a host-to-host or SWIFTNet channel has no visibility to that file or its contents using the desktop, mobile, or tablet channel. Some banks, however, have established a level of integration across those channels that provides for visibility of file status, file approval, and even exception management of transactions, batches, or entire files. This

integration allows clients to have complete visibility to their interactions with the bank regardless of channel. It also provides an additional level of security for those clients whose internal systems may not provide sufficient capability to approve transactions contained in the file. Finally, this level of integration can offer support for disaster recovery when the client's preferred channel is unavailable. With an increasing reliance by corporate clients on initiating transactions through the file-based channels and the emerging use of APIs for client connectivity, providing visibility and access for approval or exception management will become an even more important differentiator for addressing customer needs.

ORCHESTRATING BUSINESS PROCESSES FRONT TO BACK

Much of the focus on digital transformation in corporate banking is on customer-facing channels, when in fact, substantive transformation opportunities lie in a bank's front, middle, and back offices. To serve fast-moving corporate clients with changing expectations, banks must achieve a new level of agility and automation.

A combination of end-to-end process orchestration, internal visibility, 360-degree client view, and integration of front, middle, and back office systems is required to reduce friction in customer journeys and client lifecycle management. And reducing friction can drive substantial revenue growth as well as cost efficiency, but unlocking business value across the front, middle, and back office requires a genuinely cross-functional approach.

Banks that implement sophisticated process management, case management, and document management solutions can extend the benefits of these systems to achieve end-to-end orchestration. End-to-end orchestration provides the infrastructure for bank staff across sales, service, operations, compliance, and legal to manage their own customer onboarding, support, and maintenance tasks but also allows visibility into the current state of tasks, regardless of which group "owns" the customer request. Orchestration solutions also provide end client visibility and self-service where appropriate, reimagining the corporate customer journey by supporting digitization of the many interactions that occur between the client and their bank.

In addition to orchestration solutions, banks that are exceling in migrating from analog to digital are leveraging AI, RPA, and other automation technologies (e.g., optical character recognition) to drive not only process efficiencies but also transparency. These banks recognize that automation requires reimagining processes and implementing a combination of technologies. RPA is being effectively used to automate key steps in the value chain that are repetitive, rules-based tasks relying on structured data. AI is increasingly being applied in steps involving unstructured data and smart data (data entry point has some intelligence capability to make select decisions on incoming data immediately, e.g., Internet of things sensors). Use cases range from accounts receivables and credit underwriting to anti-money laundering and sanctions screening.

On the back end, integration and middleware technologies help banks to bring efficiency and reduce integration costs when connecting to what can be hundreds of distinct back office accounting, servicing, and processing systems inside global banks. Web services and APIs can wrap aging systems of record with a decoupled integration layer, isolating the limitations of what the systems were designed to do. APIs also create a bridge

between traditional batch-based, on-premises integration approaches and real-time digital integration with the cloud, mobile, and social applications underpinning corporate omnichannel delivery.

Celent also recommends that financial services firms adopt a modular IT architecture which can drive down the cost of technology while making it more adaptive. Key attributes of a good target state modular architecture include API-based connectivity, service-based architecture, cloud-hosted platforms, configurable business rules, and robust data architecture.

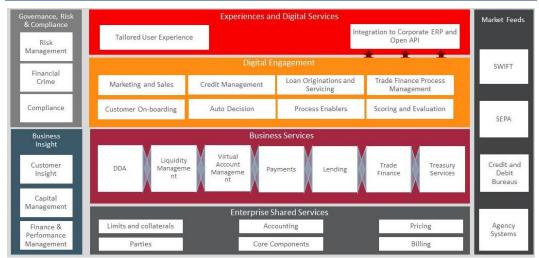


Figure 6: Sample Corporate Banking Target State Modular Architecture

Source: Oracle

EMPOWERING CLIENTS AND BANKERS

Key Research Question How can banks empower their corporate banking staffs as well as clients?

2

By providing staff with data analytics tools and embracing agile delivery models, and improving client collaboration with self-service solutions.

Over the next decade, clients as well as bankers will become more tech savvy. Part of the shift will be generational as mobile-first millennials are hired. Part will be driven by changes to the talent profile sought. Either way, to fully support the shifting workforce, banks have to empower them with better data analytics and self-service tools. Furthermore, their expectations for enhancements and time to market will be relatively shorter than prior generations', requiring bankers to adopt a design thinking approach and agile delivery models as discussed in the next section.

"As banks reimagine their business and operating model around technology and data, they need to manage a transition in their talent model — including a ~20% shift in spending away from traditional roles and towards technologists and quants and a shift in business and product owner skillsets to include some tech and design thinking experience." Morgan Stanley Research and Oliver Wyman

TURNING DATA INTO ACTIONABLE INSIGHTS

Several forces are pushing banks to enhance their data analytics and the channels through which they disseminate them (e.g., customer relationship management, case management, and loan origination systems). The strongest force is competition. Select banks and non-banks are differentiating themselves based on personalization and their understanding and simplifications of customer journeys. Second, customers' service expectations are being set by digital giants and fintechs which are data analytics-driven and excel at translating data into intelligence. Third, the amount of data on clients — in particular, unstructured data, their interactions, and transactions — is increasing exponentially, and legacy data infrastructure, onboarding, product (e.g., credit), and CRM systems are unable to harness this data.

As banks strive to become customer-centric, automate processes, and harness the myriad of customer data to arrive at actionable insights, they are struggling with antiquated data infrastructure. A few banks are responding by undertaking the Herculean task of building a modern data infrastructure including robust data analytics and artificial intelligence. They are migrating from data silos with audit and quality challenges and

slow, costly analytics to a streamlined data ecosystem with robust data governance frameworks. In the process, they are enabling cross-product and functional area access to a "single source of truth" about clients. For example, the data credit collects on a customer is readily accessible by compliance, and vice versa. These banks are moving from simply delivering data to their RMs, loan officers, and other staff to providing knowledge and wisdom. The wisdom is coming from predictive models that assess customers' creditworthiness, credit needs, preferences, and potential behavior. Advanced artificial intelligence is being used to gauge a customer's current behavior and intent as well as track news on customers.

For RMs, advanced AI will be increasingly embraced as a partner, increasing their productivity while making their jobs more interesting. They will be able to be more proactive in customer service when provided "next best action" recommendations based on analysis of a customer's transaction behavior, customer communications, and external information and news. Machine learning and natural language understanding are enabling sentiment analysis of the customer as well as of external news sources. For example, it could detect customer dissatisfaction during his last call to the service center, which could trigger an outreach by the relationship manager. Or it could perceive a negative outlook for a customer's business made by an analyst, which could trigger a review of the customer's loans outstanding. RMs will share their desktops with their own virtual assistant, enabling them to delegate basic tasks. The concept of humans and machines working side by side has already been realized in compliance and fraud operations in which humans can review the work done by AI and focus on the cases that AI cannot resolve, and through their actions train the machine.

For RM-client engagement, a few banks are empowering their salesforce with interactive tools that demonstrate the value of a product or service to clients and prospects. For example, the ability to show the positive impact on working capital resulting from the adoption of an advanced accounts receivable service and/or a supply chain financing program is powerful.

Banks in the vanguard are also delivering better data and analytical tools to their clients. They are responding to clients' demands — in particular new economy corporations (e.g., ride-sharing and e-commerce platforms) — for robust data in real time and just-in-time funding. The advent of real-time payments is increasing pressure to continually refresh data. As data timing and quality improve, banks can improve their predictive analytics for real-time cash forecasting.

DELIVERING SELF-SERVICE THAT CLIENTS WELCOME

As discussed in *Top Trends in Corporate Banking: From Disruption to Transformation* (July 2017), among the low hanging fruit in empowering corporate clients, enhancements to self-service stand out. Moreover, they offer the double bang of lowering cost to serve while increasing customer satisfaction. Unlike harnessing the potential of machine learning, which requires new capabilities and talent, much of the technology which drives client self-service is readily accessible and has immediate positive client impact.

Self-service tools for product onboarding, account maintenance, and service inquiries improve customer engagement and satisfaction. Key targets for improvement include

simplifying the addition/deletion of signators, expediting service requests (e.g., missing transaction, account analysis question) and updates, and amplifying transaction monitoring (e.g., advanced fraud alerts). Inroads in servicing include enabling customers to initiate and monitor queries through corporate digital channels such as desktop, tablet, and mobile. Digital channels increase collaboration, enabling chat, secure document exchange, and document signing. Such tools are particularly powerful for multinational corporations whose end users are often geographically dispersed and may not be near a bank office.

Despite the differentiation boost that superior self-service affords, many banks are challenged to allocate resources to fund these initiatives. The root challenge lies not in making the economics work but in the lack of a comprehensive digital strategy which encompasses customer service and workflows.

Another area where some banks are successfully differentiating themselves is with industry-specific advisory services and financial needs. These banks recognize that financial management requirements are unique to every industry, and they offer bundled offerings consisting of tailored solutions, supported by industry specialists. Table 1 shows examples of some of the industry-specific solutions offered by large banks in the US.

Table 1: Examples of Industry-Specific Bank Offerings

VERTICAL	EXAMPLE	FEATURES
PROPERTY MANAGERS	Citi Business Solutions for Property Managers/ Landlords	 Cash management services: Checking, saving, payables, receivables Sub-accounts: Ability to manage (open, close, deposit, withdraw, transfer) tenant subaccount online. The subaccounts are linked to one central control account and are used to segregate tenant's security deposits. Remote check deposit: Deposit rent checks in the office or on the go. Commercial cards: Purchase building equipment or pay for building maintenance.
SCHOOLS AND NON-PROFITS	Wells Fargo Philanthropic Services	 Cash management services Payroll: Internal ACH or outsourced payroll. Merchant services: e-Commerce gateway to accept contribution online. Business insurance: Commercial property insurance, directors, and officer's liability insurance. Retirement plans: 403 (b).
PROFESSIONAL SERVICES	PNC Bank Advantage for Professional Services Providers	 Cash management services: Subaccounts (attorneys) Cash flow forecasting Working capital lines and loans

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VERTICAL	EXAMPLE	FEATURES
		Commercial real estate loansCommercial cards
PE/VC	Silicon Valley Bank Private Equity Venture Capital	 Cash management services Working capital lines and loans FX an Interest rate hedging Trade finance Fund administration services: investor tracking, fund accounting, tax support services, investor reporting, cash distribution.

Source: Bank websites, Celent analysis

Key Research Question How can banks enhance their offerings to address customer needs and be more competitive?

3

By embracing a design thinking approach and partnering with best practice players.

To meet corporations' growing needs and expectations, banks need to embrace a business and operating model that is customer journey centric. They need to shift from their traditional product-centric, inside-out approach to a design thinking approach (that is, one that starts with the customer as well as the employee and their workflows and bank interactions). As banks embrace this user-centric approach and map optimal customer journeys, they often find that they do not have the in-house resources to enable the new journeys. As a result, they are thinking differently about build versus buy decisions.

SHIFTING TO DESIGN THINKING PARADIGM

To achieve a digital transformation, banks need to shift paradigms. They need to embrace a design thinking approach in which the end user is central and understanding, empathizing with, and innovating for her or him are the objectives (Figure 7).

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success," Tim Brown, CEO of IDEO.

In banking, Adaptive Path (owned by Capital One) describes itself as a: "diverse team of human-centered designers charged with re-imagining end-to-end experiences that will change banking for good. We are change agents bringing new design capabilities."

	Traditional business thinking	Design thinking
Goal	Management	Innovation
Importance of end user	 The customer is one of several key factors To understand customer needs & behaviors: Focus is on what the customer says not what they do Customer analyzed in terms of facts, e.g., demographics 	 The end user is central Focus is on what customers do ("day in the life of"), what's working, what's not And why they are doing something Goal is empathy and understanding intent
Ideating and product development environment	 Innovation is limited to digital or technology teams and specific innovation centers Product launches are carried out at a late stage after numerous iterations and internal rounds Working environment is designed to promote efficiency Minor product upgrades are the norm Modus operandi: Validate a problem that exists in order to assess current states analytically 	 Innovation is at the core of the bank Working environment fosters innovation and generation of new ideas Prototypes are build and launched into the market Customer feedback is constantly incorporated into the prototypes Modus operandi: Rely on data and experimentation in order to assess future possibilities imaginatively
Team work	Team members tend to have similar backgrounds and/or experiences Individuals work in silos	Teams include people with radically different profiles and experiences Diverse thinkers working together Select teams include clients for co-creation

Source: Design Thinking: The New DNA of the Financial Sector by the IESE Business School (Josemaria Siota, Thomas Klueter) and Oliver Wyman (Dieter Staib, Sam Taylor, Inigo Ania) and Celent interviews and analysis.

Banks which have pursued a design thinking approach have found that many customer journeys extend beyond their domain and that they occasionally need to partner and either embed third party services in their platform or embed their services in third party platforms. A prime example of this is found in digitizing the financial supply chain (i.e., migrating the purchase order/invoice to reconciliation cycle to a streamlined electronic process). Banks are partnering with ERP, treasury management, and accounting software providers to cover the last mile (reconciliation), supply chain financing companies to expedite invoice processing and credit underwriting, and accounts payable (AP) and accounts receivable (AR) providers which are realizing high straight-through reconciliation rates thanks to a combination of traditional technologies and advanced AI (AP and AR are discussed below).

PARTNERING WITH SOLUTION PROVIDERS

Leading banks are leveraging the value of partnerships with financial technology and non-bank providers to modernize and digitize both back office and client-facing solutions. *In Innovation in Banks: Selecting the Best Models*, (February 2016), Celent describes six different models that banks are using to increase their visibility into new products and services and improve their innovation capabilities. All of these models involve partnerships with traditional and nontraditional players with varying levels of control, ownership of intellectual property, and tolerance for failure.

The delivery of corporate banking products and services has always involved multiple solution providers, whether the bank generally chooses a "build" approach for in-house solutions or a "buy" approach for commercial off-the-shelf vendor solutions. If there is any doubt about the commitment of banks to establishing new forms of partnership, one only needs to read the leading banking newsletters for a host of announcements. Banks enter some partnerships to offer specialized solutions and transform rapidly (e.g., liquidity management, accounts receivable, accounts payable, payment processing, commercial lending). Other partnerships focus on point solutions that can improve efficiency, centralize information, provide real-time information, or reduce costs.

Best-of-Breed Solutions

Best-of-breed vendors provide focused solutions with deep functionality and product expertise. These vendors enable banks to extend their product set with a proven partner quickly. In some cases, a bank's build versus buy analysis shows that best-of-breed vendors with a broad customer base and proven software already support most functionality requirements, leverage newer technologies, deliver regulatory-related updates, and offer a robust roadmap for new features.

Best-of-breed solutions in digitizing the financial supply chain (FSC, including AP and AR) are prime examples. Banks have numerous compelling reasons to excel in digitizing the FSC, but most lack the business case to build a solution on their own. On the demand side, buyers and suppliers are grappling with rising payments fraud. cybersecurity risks, and payments and remittance complexity as well as facing pressure to operate more efficiently. Most do not have the resources to alleviate the pain and digitize their financial supply chain on their own. Even at large corporations, most have automated only fragments of the financial supply chain, and few have gone beyond leveraging EDI. By becoming an integral part of digitizing their customers' FSC, banks strengthen and deepen their customer relationships, and in the process improve customer retention and generate new revenue streams. Moreover, visibility into a customer's AP and AR enables a bank to discover cross-sell opportunities in adjacent areas such as risk hedging (e.g., foreign exchange) and credit (e.g., invoice financing, line of credit). For details and additional insights, see the Celent reports Digitization of Accounts Receivable: Banks as Frontrunners, February 2018, and Integrated Payables: Raising the Bar on Customer Experience, June 2017.

On the supply side, a confluence of forces is driving new solutions. At the top of the list are technological advances in APIs, cloud-based platforms, RPA, OCR, and advanced AI. Second, venture capitalists and private equity investors have been eager to invest in

fintechs solving FSC pain points. As a result, rising non-bank competition is threatening to lock banks out of lucrative revenue streams. Banks, however, are well-positioned to partner. No fintech has the resources or the brand equity to reach the thousands to millions of business relationships that a typical regional to national bank owns. No bank wants to create its own B2B platform; there are too many of them already. Neither do they want to get involved in maintaining the payment preferences and bank account information for suppliers that are not their direct clients.

Best-of-breed providers are also digitizing other areas of corporate banking including traditional trade finance and commercial lending, often with a focus on back office processes. Although traditional trade finance continues to be intensively paper-based, the information delivery about transaction flows is critical to businesses that rely heavily on cross-border suppliers and customers. Increasingly, banks are focusing investments on front-to-back traditional trade finance solutions that enhance the accessibility of information, including exceptions and approvals, required to keep the wheels of commerce moving. Furthermore, with the long-term shifts in trade patterns and the increasing dominance of Asia and emerging markets, we see banks in these areas setting the bar for innovation in trade delivery channels.

In commercial lending, workflow, document management, and decisioning tools continue to improve loan origination and servicing. But the biggest near-term gains are coming from RPA. RPA can populate credit applications using data pulled from multiple systems, perform data entry into loan spreading platforms, generate email and written correspondence to borrowers, and coordinate completion of due diligence items.

Another solution area continuing to garner attention and investment by banks is payment processing. Celent's research finds that often the primary driver behind payments infrastructure upgrade projects is a "burning platform," where inaction is not an option. The underlying reasons can be:

- Technology-driven, when, for example, an existing payments engine becomes obsolete or no longer meets the bank's requirements for functionality, capacity, flexibility, or other criteria.
- Business-driven, when the bank becomes concerned about losing customers and market share unless it upgrades its offering(s).
- Regulatory, when new regulations (or self-regulatory initiatives, such as SEPA)
 require new capabilities and investments.
- Or, quite typically, a combination of the above.

Banks that are serious about their payments business are using such "burning platforms" to rethink their payments architecture and foundations for the business case to develop a long-term solution.

Point Solutions

A point solution is a product or service that has a relatively narrow focus, addressing a specific need or problem. In corporate banking, examples of a point solution include a:

- Security token that delivers multifactor authentication.
- File format translation software that enables straight-through integration with ERP and TMS systems.
- Business credit report that helps to evaluate a new credit applicant.
- Document management solution to digitize onboarding documents.
- Virtual account management solution that allows corporate customers to create and manage multiple virtual accounts and account structures.

In these cases, and many others, point solutions can improve efficiency, centralize information, provide real-time information, and reduce costs. Point solutions are sometimes maligned as being too expensive, difficult to support, and challenging to integrate. But many vendors built their point solutions using a modular, service-based architecture, hosted in the cloud, and available via API integration.

In choosing a solution provider, *Top Trends in Corporate Banking 2016: Turning Innovation into Results* (March 2016) suggests that banks partner with fintech companies that you would never have considered partnering with to help fill the innovation gap. Actively monitor the innovation landscape and consider ways to engage with them — ways that may be outside your comfort zone.

Whether considering a fintech partnership, best-of-breed solution, point solution, or fintech partnership, banks must consider ease of integration — whether to back office legacy account servicing systems, regulatory reporting engines, client lifecycle management tools, or customer-facing digital portals. The good news is that with today's modular approaches and API-enabled solutions, integration is easier than it has ever been, although it still requires focused planning and a detailed integration roadmap.

Chapter: The Path Forward

THE PATH FORWARD

For most banks developing and executing a strategy for enriching, empowering, and enhancing corporate banking is a challenge. In some cases, the biggest challenge is getting senior executives to prioritize an overarching, comprehensive approach to achieving excellence across the corporate banking organization. More often it comes down to internal organization silos that make it difficult for all of the lines of business and support units to embrace paradigm shifts which result in new team dynamics and changes in control.

The playbook to succeed at step change is clear. As discussed herein, banks need to:

- Offer enriched client and bank staff experience by leveraging the latest technologies, including APIs, RPA, and AI.
- Digitize business processes for the front office to the back office, including implementing dynamic case-based workflows.
- Empower clients and bank staff with smart technologies, tools, and skills to enable a digital and data analytics first strategy.
- Address dynamic customer needs by innovating faster in collaboration with third party market players.
- Leverage best-of-breed solutions that will enable banks to offer specialized solutions and transform rapidly.
- Offer point solutions that improve efficiency, centralize information, provide realtime information, and reduce costs.

Corporate banks are well-positioned to lead the digitization charge and get ahead of the challengers. They already have a relatively large customer base, expertise in data capture, remittance processing, dispute resolution, disbursement, and reconciliation. Some are in the data analytics and artificial intelligence vanguard. In addition, they can leverage their credit products and skills and offer working capital financing options. Banks that harness these assets and excel at enriching, empowering, and enhancing will win a disproportionate share of the nearly \$1 trillion global corporate banking revenue pools.

Chapter: Leveraging Celent's Expertise

LEVERAGING CELENT'S EXPERTISE

If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

SUPPORT FOR FINANCIAL INSTITUTIONS

Typical projects we support related to corporate banking include:

Vendor short listing and selection. We perform discovery specific to you and your business to better understand your unique needs. We then create and administer a custom RFI to selected vendors to assist you in making rapid and accurate vendor choices.

Business practice evaluations. We spend time evaluating your business processes, particularly in corporate banking. Based on our knowledge of the market, we identify potential process or technology constraints and provide clear insights that will help you implement industry best practices.

IT and business strategy creation. We collect perspectives from your executive team, your front line business and IT staff, and your customers. We then analyze your current position, institutional capabilities, and technology against your goals. If necessary, we help you reformulate your technology and business plans to address short-term and long-term needs.

SUPPORT FOR VENDORS

We provide services that help you refine your product and service offerings. Examples include:

Product and service strategy evaluation. We help you assess your market position in terms of functionality, technology, and services. Our strategy workshops will help you target the right customers and map your offerings to their needs.

Market messaging and collateral review. Based on our extensive experience with your potential clients, we assess your marketing and sales materials — including your website and any collateral.

Chapter: Related Celent Research

RELATED CELENT RESEARCH

Top Trends in Corporate Banking July 2018

Blockchain in Action in Corporate Banking July 2018

From Moonshot to Reality: Al in Action June 2018

APIs in Banking: Four Approaches to Unlocking Business Value March 2018

The Cognitive Corporate Banking: Heading Toward the Summit March 2018

The New Architecture for Core Systems: What It Is and How Quickly Vendors Are Adopting It
March 2018

Digitizing Accounts Receivables: Banks as Frontrunners February 2018

Top Trends in Corporate Banking: From Disruption to Transformation July 2017

Integrated Payables: Raising the Bar on Customer Experience June 2017

Citi: CitiConnect API April 2017

CBW Bank: Leveraging Modern APIs April 2017

YES Bank: API Banking April 2017

Strategies for Enhancing Corporate Client Experience: The Future of Attended Channels January 2017

Challenging the Status Quo: External Forces Supporting the Rise of Non-Bank Financial Services
September 2016

Top Trends in Corporate Banking 2016: Turning Innovation into Results March 2016

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