CHASING THE TAIL

CAPTURING TAIL CLIENTS THROUGH DIGITAL TRANSFORMATION

PUBLICATION DATE
June 2018

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&ASSOCIATES

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SPECIAL THANKS

We would like to thank our summer interns, Avinash Bharwaney (BBA, Global Business and Finance at The Hong Kong University of Science and Technology) and Hemant Kumar (BBA, Accounting and Finance at The University of Hong Kong) for their help in the preparation of this report.

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Prior to founding Quinlan & Associates, Benjamin was the Head of Strategy for Deutsche Bank AG's Equities business in Asia Pacific and its Investment Bank in Greater China, and sat on a number of the bank's global and regional executive committees. He was also the global strategy lead for several of Deutsche Bank's landmark projects executed out of London and New York.

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EXECUTIVE SUMMARY

In the years following the global financial crisis ("GFC"), the banking industry experienced a paradigm shift in the regulatory environment, with regulators across the world shifting from what was widely perceived as a relatively relaxed stance to an overtly vigilant one. The imposition and enforcement of stricter risk management requirements have not only increased compliance costs for banks, but also led to larger and more frequent fines and penalties, weighing considerably on industry profitability.

In response to the new regulatory climate, global banks made a seemingly unanimous decision to off-board their "tail clients" – namely, clients with low existing revenues and / or high associated compliance risks. Much of this was driven by the view that the profits generated by such clients did not justify the costs (and risks) of servicing them. The scale of this coverage optimisation / de-risking exercise has been far from trivial; we estimate that over USD 13 billion in revenues has been off-boarded by the top 15 global banks alone since 2014. Several global tier-2 and regional players have been actively targeting these revenue pools.

While we recognise the short-term rationale behind a renewed focus on larger accounts, especially in a cost-conscious and resource-constrained environment, we believe this strategy is both short-sighted and economically sub-optimal over the medium-to-long-term. Banks have not only failed to create a compelling service proposition for their tail clients over the years, but the move by many firms to focus on their key accounts is weighing considerably on margins and wallet share. Moreover, the future growth potential for a large number of these "key clients" remains much more subdued than many up-and-coming tail accounts.

We believe that a renewed focus on tail clients remains an attractive long-term strategic proposition for global and regional banks alike, given lower barriers to entry, less competition, and the strong future growth potential of banking successful (albeit smaller) high-growth accounts. However, to capture this opportunity in a profitable manner, a robust, end-to-end digital strategy is needed. At its core, this will necessitate a low-cost, low-touch approach across the entire client service value chain. Whilst we recognise that this has been done with varying degrees of success in retail banking, digital transformation in the wholesale banking space lags significantly behind.

We see a number of regional banks in Asia Pacific ("APAC") being well-positioned to capitalise on this opportunity, especially those with greater management and operational flexibility, including a willingness to invest and innovate – in other words, those with the appetite to change. Additionally, given the rich, burgeoning FinTech landscape in the region, we also see a sizeable ecosystem of existing FinTech firms which regional banks can partner with (or potentially acquire) to supercharge their digitalisation efforts.

While the digital transformation journey will take considerable time, effort, and investment, we believe the off-boarded tail represents a USD 25 billion revenue opportunity. Overall, we estimate that digitalisation has the potential to deliver a 10-15% increase in top-line revenues and a 30% reduction in operating costs for successful players. With incumbents being rapidly disrupted by a plethora of FinTech firms, digitalisation is fast moving from a strategic priority to an operational necessity for banks that want to stay relevant in today's market and capture new revenue pools offered by chasing the tail.

SECTION 1
OFF-BOARDING IN CONTEXT

REGULATORY HURDLES MOUNT

Following the GFC, the banking industry witnessed a considerable compliance revolution. From what was considered a lax regulatory climate with relatively limited financial supervision, governments and regulators across the world have since transitioned to an almost overprotective stance. This was largely reflective of widespread public opinion that banks faced an inherent conflict of interest between optimising profit and incorporating objective risk management processes.

The GFC catalysed the need for regulatory change in the global banking industry – in particular, it highlighted the need for stricter forms of risk management in areas of consumer / investor protection and corporate governance. Due to the "too-big-to-fail" mindset driven by the bailouts of several global financial institutions, many firms did not adequately manage their risks, creating a moral hazard problem. However, faced with the bankruptcy of Lehman Brothers and the near-collapse of Bear Stearns, as well as heightened public and government pressure in response to multi-billion-dollar taxpayer bailouts, financial regulators across the globe instituted a raft of new compliance and control standards for the industry.

The post-GFC regulatory backlash was both rapid and widespread. New regulations such as Basel III focused on improving capital buffers to minimise the risk of a bank collapse. Others, such as Dodd Frank, homed in on consumer protection, drawing a clear distinction between investment banking and commercial banking functions, including the prohibition of proprietary trading (i.e. the Volcker Rule). It also outlined provisions relating to whistleblowing, encouraging individuals with information about security violations to report them to higher regulatory bodies and the government. Regulators also cracked down heavily on money laundering and terrorism financing activities, especially the facilitation of payments for customers located within countries sanctioned by the United States, through more stringent anti-money laundering ("AML") and counter-financing of terrorism ("CFT") regulations.

As a by-product of these regulations, compliance spend across the industry has skyrocketed, with many institutions more than doubling their compliance and control budgets between 2008-16. In fact, an estimated USD 127 billion was spent on compliance and controls by the top 50 global banks in 2017. The global regulatory crackdown has also seen the top 50 global banks slapped with over USD 342 billion in fines since the GFC by US and EU regulators alone.[1] As a result, industry profitability has suffered considerably.

[1] Quinlan & Associates, 'Value At Risk: A Look At Banking's USD 850 Billion Behavioural Problem', September 2017, available at: https://www.quinlanandassociates.com/insights-value-at-risk/

THE BANKS RESPOND

In response to heightened levels of regulatory scrutiny, there has been a seemingly unanimous move by many global banks to not only bolster their compliance and control functions, but also to discard their unprofitable and risky "client clutter". This mass off-boarding (or de-risking) was designed to purge banks of anything that undermined their profitability or exposed them to excessive risk.

Over the past few years, a number of leading global firms have publicly stated their intention to rationalise their client base. Deutsche Bank has been particularly vocal about their decision to sever ties with almost 3,400 debt and equity sales clients in their Global Markets business. Deutsche Bank's former CEO, John Cryan, said in late 2015 that 50% of the bank's clients in Global Markets and Corporate and Investment Banking would be culled as 'the economic returns [were] inadequate.'[2]

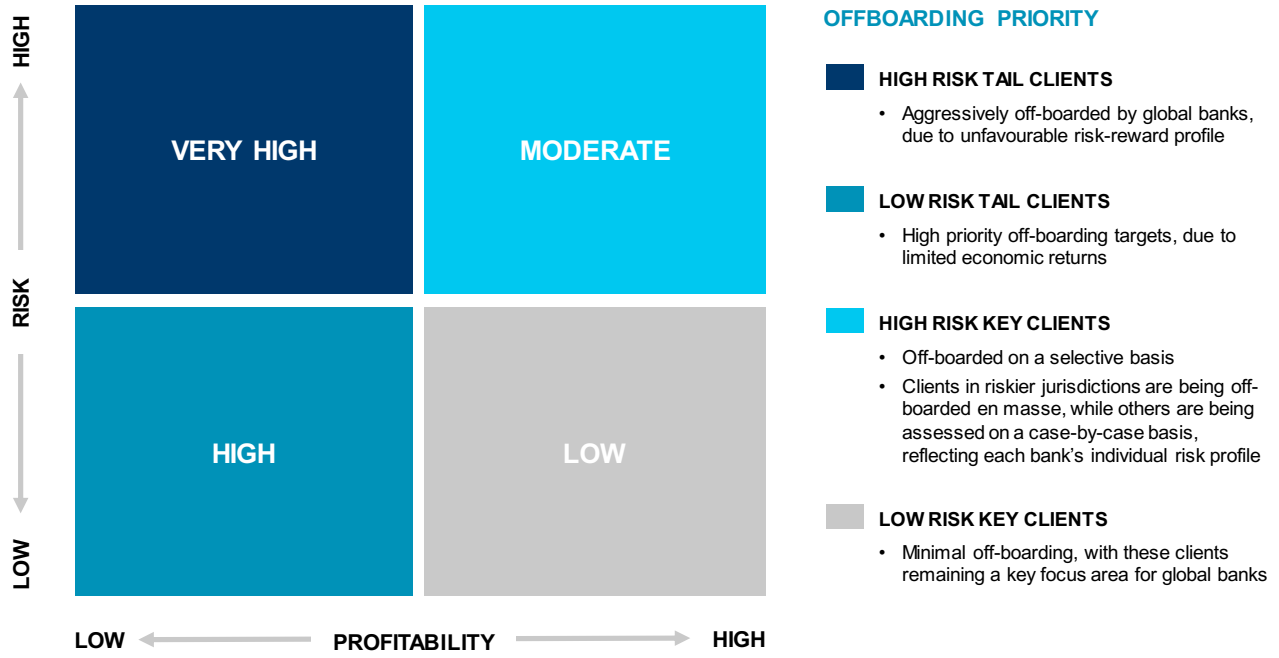
Similarly, in December 2016, Barclays announced that it would begin trimming its client base, through setting clear minimum thresholds for its clients. Those that did not meet the mark were given an ultimatum: either bring in business or look for another provider. Ranking systems – such as Barclays' new "Flight Deck" software – were also implemented to help sieve through clients based on their Return on Capital, allowing the bank to identify and off-board accounts that fail to meet pre-determined thresholds.[3]

We also met with representatives from several global banks to better understand the extent of their off-boarding efforts. In one discussion, the APAC CEO of a North American bank said that the bank's institutional business had reduced its regional client coverage universe from nearly 250 clients in 2015 to just under a third of this by the middle of 2017. The move was designed to streamline coverage efforts and enhance operational efficiency.

We believe the widespread off-boarding by global banks has been driven by two major factors: (1) profitability; and (2) risk (see Figure 1).

[2] Reuters, 'Deutsche Bank cuts ties with 3,400 clients in trading business', 3 December 2016, available at: https://www.reuters.com/article/us-deutsche-bank-cutbacks-idUSKBN13R26R
[3] Bloomberg, 'Barclays Severing Ties With Up to 7,000 Business Clients', 19 December 2016, available at: https://www.bloomberg.com/news/articles/2016-12-19/barclays-severing-ties-with-up-to-7-000-clients-to-boost-returns

FIGURE 1: CLIENT OFF-BOARDING PRIORITY



Source: Quinlan & Associates analysis

1. PROFITABILITY

A surge in post-GFC compliance costs and regulatory penalties has forced many banks to streamline their business operations.

In the private banking space, regulatory directives, such as Europe's MiFID II (which took effect on 3 January 2018), enforce stricter reporting standards for offshore accounts. The resultant surge in compliance costs, driven also by increased regulatory demands around client due diligence (i.e. Know Your Customer ("KYC") and trade surveillance), has compelled many private banks to cull their smaller, less profitable accounts.

The removal of dormant private banking accounts – namely, unused accounts of clients who hold multiple accounts – has been of critical importance to this off-boarding exercise. With dormant accounts estimated to cost anywhere from several hundred to several thousands of US dollars per year to maintain, banks are scouring their databases to close any accounts that are not providing sufficient economic returns. In fact, the APAC COO of one global private bank we spoke to told us the bank off-boarded 25% of its accounts in the region in 2017, the majority of which were dormant.

The ongoing regulatory crackdown around AML / CFT has driven similar trends in correspondent banking. With global AML compliance spend estimated to have reached USD 12 billion by the end of 2016 (up by 70% from 2009), corporate banks have been shedding their smaller

accounts.[4] One senior executive working in the transaction banking division at a global universal bank said the firm had set a minimum annual revenue threshold of USD 50,000 for clients to continue accessing its services. All clients below this threshold would be off-boarded, impacting an estimated ~10% of total transaction banking revenues. Similar minimum revenue thresholds have also been adopted in investment banking, especially sales and trading, which has resulted in the widespread off-boarding of smaller, less profitable accounts.

Irrespective of the business unit or client segment, rising costs have seen the tail rapidly fall out of favour with many leading global firms.

2. RISK

In addition to scrutinising underlying economic returns of their clients, banks are looking at a variety of risk considerations in their off-boarding decisions. These include the credit, market, and operational risks associated with servicing specific accounts, as well as potential fines and penalties for compliance breaches.

This is also the case for clients that generate sizeable revenues; Morgan Stanley, for example, decided to turn down the opportunity to underwrite the IPO of Anbang Insurance Group Co., considered to be one of Hong Kong's most lucrative IPO deals for 2017, due to a lack of transparency around the company's ownership structure.[5]

In recent years, increased scrutiny around AML / CFT scandals has imposed a substantial cost on the banking industry, especially with respect to fines and penalties. Since 2009, US regulators alone handed out over USD 17 billion in AML-related penalties to banks for compliance failings, with the majority related to sanction breaches. In response, many banks in developed markets have been actively de-risking by cutting their correspondent banking ties with certain geographic "hot spots", including Central Europe, Central Asia, South Asia, Latin America, and Africa.[6]

While some of this "trimming" reflects a general deleveraging by the industry following the GFC, correspondent banks have become extremely sensitive to the risk of potential fines – and any associated reputational damage – from non-compliance. In a survey of large international banks conducted by the International Monetary Fund ("IMF"), the top two reasons driving the reduction in correspondent banking relationships were concerns about money laundering / terrorism financing and the imposition of international sanctions, cited by 95% and 90% of respondents respectively.[7]

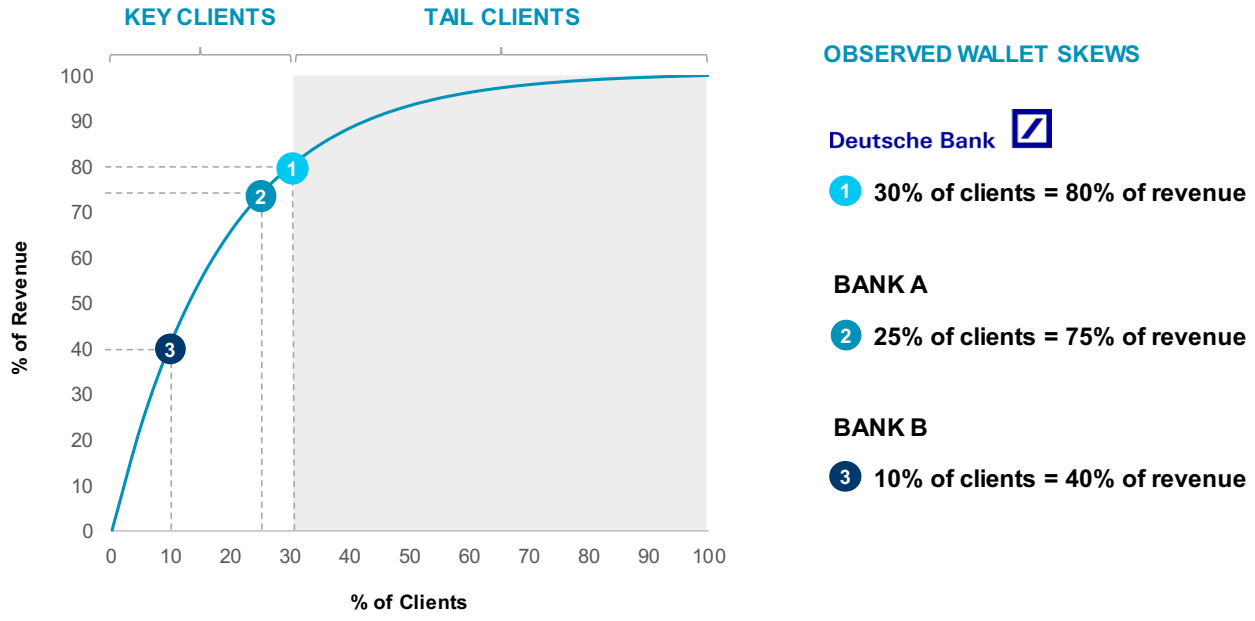
[4] Quinlan & Associates, 'From KYC To KYT: Blockchain's Emerging Role In The Global Payments System', November 2016, available at: https://www.quinlanandassociates.com/insights-from-kyc-to-kyt/
[5] Reuters Breakingviews, 'Anbang IPO is high-profile test for global banks', 4 October 2016, available at: https://www.breakingviews.com/considered-view/anbang-ipo-is-high-profile-test-for-global-banks/
[6] Quinlan & Associates, 'From KYC to KYT: Blockchain's Emerging Role In The Global Payments System', November 2016, available at: https://www.quinlanandassociates.com/insights-from-kyc-to-kyt/
[7] The World Bank, 'Withdrawal from Correspondent Banking: Where, Why and What to Do About it?', November 2015, available at: http://documents.worldbank.org/curated/en/113021467990964789/pdf/101098-revised-PUBLIC-CBRReport-November-2015.pdf

FOCUS ON BIG FEE PAYERS

In tandem with widespread off-boarding efforts, most global banks have redoubled their coverage efforts on their top fee-paying clients – including large corporates, asset managers, hedge funds, family offices, and ultra-high net worth individuals – to further penetrate a larger, more concentrated wallet with fewer front-line resources.

Deutsche Bank, for example, has publicly stated that 30% of the bank's clients generate 80% of its revenue.[8] At another universal bank we spoke to, the corresponding figures are 25% and 75% respectively. We also spoke with a global investment bank, who said that 40% of its revenues came from just 10% of its client base. These figures align with the following client revenue distribution curve (see Figure 2).

FIGURE 2: CUMULATIVE REVENUE DISTRIBUTION CURVE



Source: Bank press releases, industry interviews, Quinlan & Associates proprietary data

[8] Business Insider, 'A bunch of Deutsche Bank clients are learning the harsh reality of an age-old rule on Wall Street', 2 December 2016, available at: http://www.businessinsider.com/deutsche-bank-is-cutting-its-client-list-2016-12

Several banks have rolled out various initiatives to supercharge coverage efforts for their highest priority accounts. For example, *The Focus Five* – the top five hedge fund clients at Citi, including the likes of Citadel and Point72 – receives additional insights, analyst access, and sales coverage, given the huge commissions they generate for the bank's trading business. Morgan Stanley and HSBC have adopted similar client targeting strategies, with their own versions of Focus Five-like "whitelists". Morgan Stanley, for example, has divided their top-tier European fixed income clients into "base", "core", and "super-core", allowing the bank to allocate time, energy, and resources in a more systematic and disciplined manner.[9]

While the rationale to optimise coverage efforts is well understood, we believe the ongoing trend of de-risking poses a considerable threat to the workings of the global financial system, including the ability for smaller firms to secure the relevant banking services needed for growth, such as funding, hedging, and advisory services. As a result, banks are inadvertently creating competitive distortions by further entrenching the dominance of larger firms within their respective industries. Moreover, in the transaction banking space, respondent banks and their respective clients are shying away from regulation and shifting to unregulated financial markets and "shadow banking" to receive financial services, posing major risks to the global economy.

Aside from financial inclusivity being put at risk by mass off-boardings, we believe many banks have also become rather short-sighted in their strategic objectives by ignoring a sizeable and fast-growing fee pool of tail accounts, where potential "unicorns" are located. As such, we see considerable future growth potential being left on the table.

[9] Livemint, 'Wall Street's 0.01%: An inside look at Citi's secret client list', 25 March 2016, available at: https://www.livemint.com/Money/hskk7mflhKoOQTGO0rA2EO/Wall-Streets-001-An-inside-look-at-Citis-secret-client.html

SECTION 2
SIZING THE TAIL

As highlighted in Section 1, many global banks have either undergone or are still in the midst of an aggressive client off-boarding exercise. While we recognise this move has been designed to enhance operational efficiency and reduce overall risk, we believe sizeable tail revenues are being sacrificed.

For example, Deutsche Bank reported revenues of EUR 8.1 billion (USD 9.2 billion) in Q1 2016, down 20% year-on-year. According to a Deutsche Bank executive we spoke to, their aggressive off-boarding efforts were considered a major contributing factor to this revenue decline, leaving sizeable fee pools up for grabs.

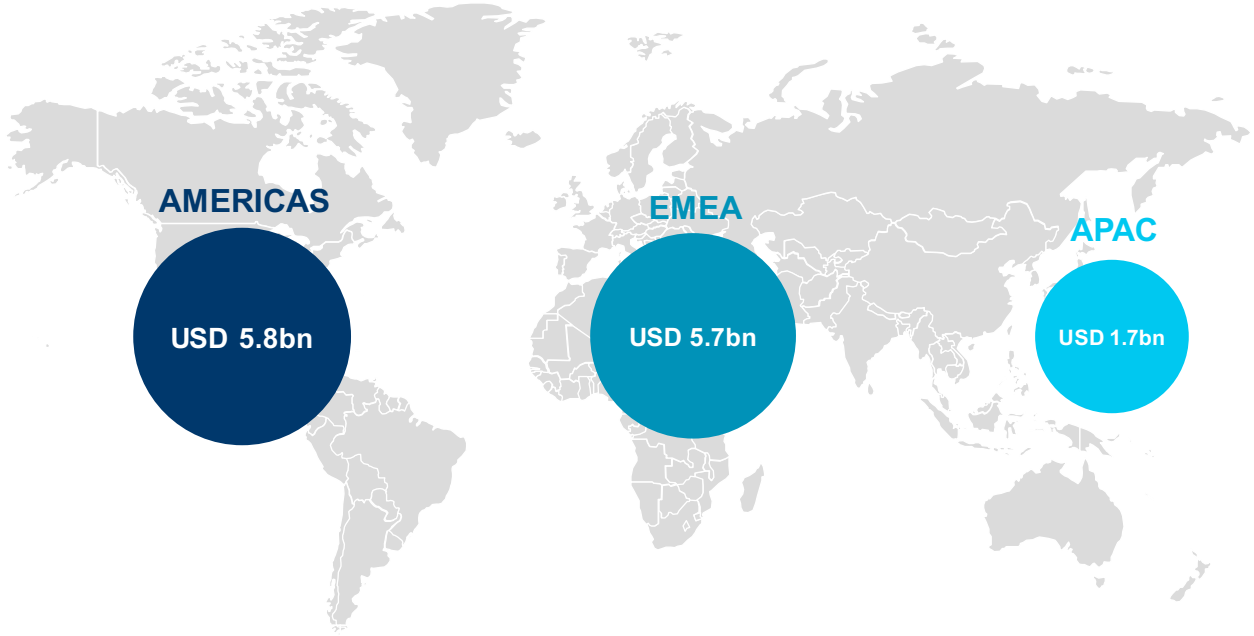
While tail clients, by definition, only make up a small proportion of a bank's revenue base, the sum of off-boarded revenues from leading global banks represents a substantial revenue opportunity for global tier-2 and larger, regional players.

OFF-BOARDED REVENUE

Based on a combination of discussions with various industry professionals and public announcements made by several international banks, we estimate that over USD 13 billion of tail revenues have been – or are still in the process of being – off-boarded by the top 15 global banks. We estimate this number to be ~USD 25 billion for the top 50 international players.

As the majority of the top 15 banks are based in (and focus their operations on) North America and EMEA, these regions contain larger shares of the off-boarded revenue pool (USD 5.8 billion and USD 5.7 billion respectively), compared to APAC with USD 1.7 billion (see Figure 3). However, due to the varying strategies of different banks, the number of clients being off-boarded across business units – and hence the associated revenue pools that have been off-boarded – will depend on the strategic focus of each individual firm.

FIGURE 3: REVENUE OFF-BOARDED (TOP 15 GLOBAL BANKS), 2014-17



USD 5.1bn

INVESTMENT BANKING

- Corporates with complex entity / holding structures
- Smaller institutional accounts with limited trading appetite

USD 4.1bn

CORPORATE & TRANSACTION BANKING

- Non-core lending markets
- Correspondent banking relationships with clients in high risk jurisdictions

USD 3.3bn

PRIVATE BANKING

- Dormant client accounts
- Offshore private banking relationships due to stringent reporting obligations

USD 0.8bn

RETAIL BANKING

- Branch closures reflecting shift to digital channels
- Exit from frontier / non-core offshore markets

Source: Bank annual reports, Quinlan & Associates analysis

INVESTMENT BANKING

In investment banking, the majority of the USD 5.1 billion revenue pool has come from firms culling corporate clients with complex organisational / holding structures. Banks have also targeted institutional clients that generate limited trading commission, as well as corporate clients with reduced credit appetite and cross-sell potential. These clients have predominantly included smaller hedge funds and mid-market corporates, especially those located in countries considered KYC trouble spots.

CORPORATE & TRANSACTION BANKING

The off-boarding drive has been just as pronounced in the corporate and transaction banking space, with leading global firms slashing correspondent banking relationships with clients located in high risk jurisdictions. These locations – namely, South and Central Asia, Latin America, and Central Europe – tend to have less stringent AML compliance standards. A number of global firms have also offloaded portions of their global loan portfolios in non-core markets to regional banks looking to expand their lending business. We believe these efforts have freed up an estimated USD 4.1 billion fee pool.

PRIVATE BANKING

In the private banking space, much of the estimated USD 3.3 billion off-boarded fee pool has come from banks' withdrawal from frontier markets. It also reflects the widespread closure of dormant accounts, as well as sizeable withdrawals from offshore private banking, given such clients now present greater challenges with respect to a bank's reporting and compliance obligations. The sale of the Asian wealth management operations of several global banks – such as Barclays and Bank of America Merrill Lynch – has also been reflected in this number.

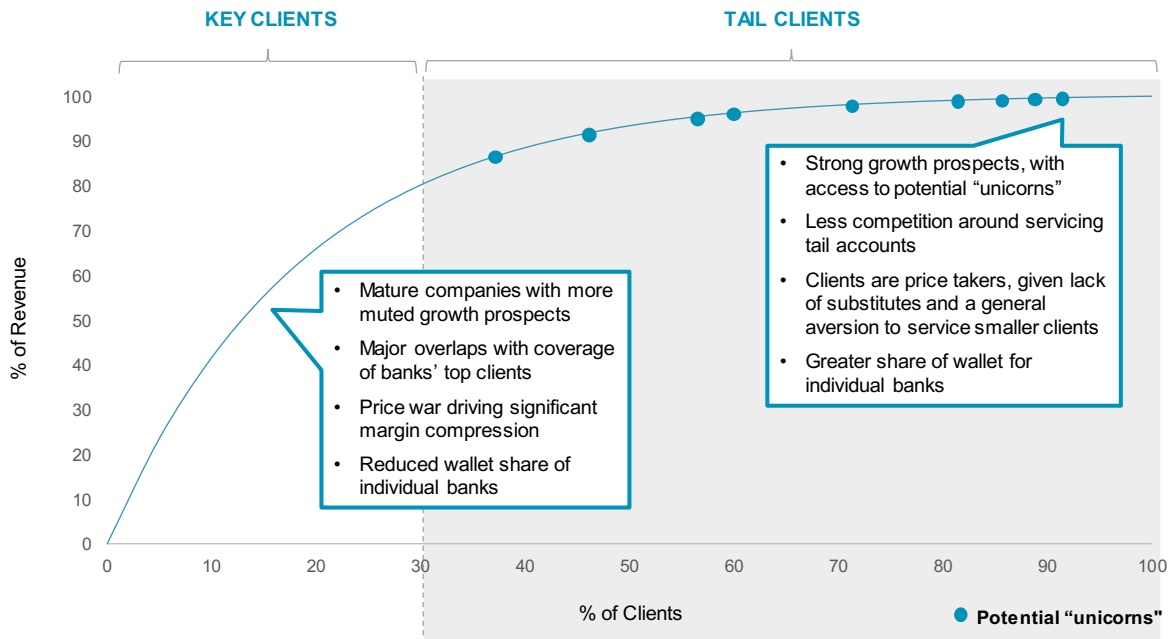
RETAIL BANKING

We estimate USD 800 million in retail banking revenues has been off-boarded by the top 15 global banks between 2014-17, reflecting the decision by a number of players to rationalise their overseas branch footprints, as well as pull out of certain jurisdictions altogether. Many of these efforts have been directed at non-core markets, where marginal profit contributions are considered negligible. Citi, for example, announced in April 2017 that it would close 80% of its branches in Korea. The previous year, HSBC said it would halve its branch presence in India. The bank also announced in early 2017 that it intended to shut an additional 62 branches in the UK, on top of the 55 it had already earmarked for closure, in response to an ongoing shift to digital banking channels.

KEY VS. TAIL CLIENTS

While we acknowledge that a bank's key clients currently offer considerably more top-line revenue than its tail accounts, we believe rapidly evolving market and competitive dynamics will create a considerably more attractive coverage proposition for the tail in coming years (see Figure 4).

FIGURE 4: COMPARISON BETWEEN KEY AND TAIL CLIENTS



CLIENTS	OUTLOOK	OUTLOOK
RETAIL	× Developed markets are well-penetrated, with a slower rate of population growth	✓ Significant growth in bankable population in frontier and emerging markets ✓ Strong growth in middle-class (including rising mobile/online penetration rates), driving demand for retail banking products (e.g. lending, payments)
HNWIs & UHNWIs	× Tempered growth in HNWI and UHNWI population	✓ Strong economic fundamentals driving emerging market wealth creation ✓ Significant growth in number of tech-savvy, second-generation HNWIs
CORPORATES	× Considerable bookrunner/ advisor saturation on large deals	✓ Growing sophistication of emerging market corporates (e.g. CFOs/treasurers) ✓ Explosive growth in start-up space, particularly tech firms (IPOs and M&A)
FINANCIAL INSTITUTIONS	× Fund manager consolidation × Heavy cost-cutting by banks and AMs stemming from greater regulatory scrutiny (e.g. MiFID II)	✓ Ongoing institutionalisation of savings driving growth in pension funds ✓ Strong growth in emerging market hedge funds and private equity firms ✓ Rapid offshore expansion of regional banks and AMs (e.g. Chinese banks)

Outlook: ✓ Favourable × Unfavourable

Source: Quinlan & Associates analysis

KEY CLIENTS

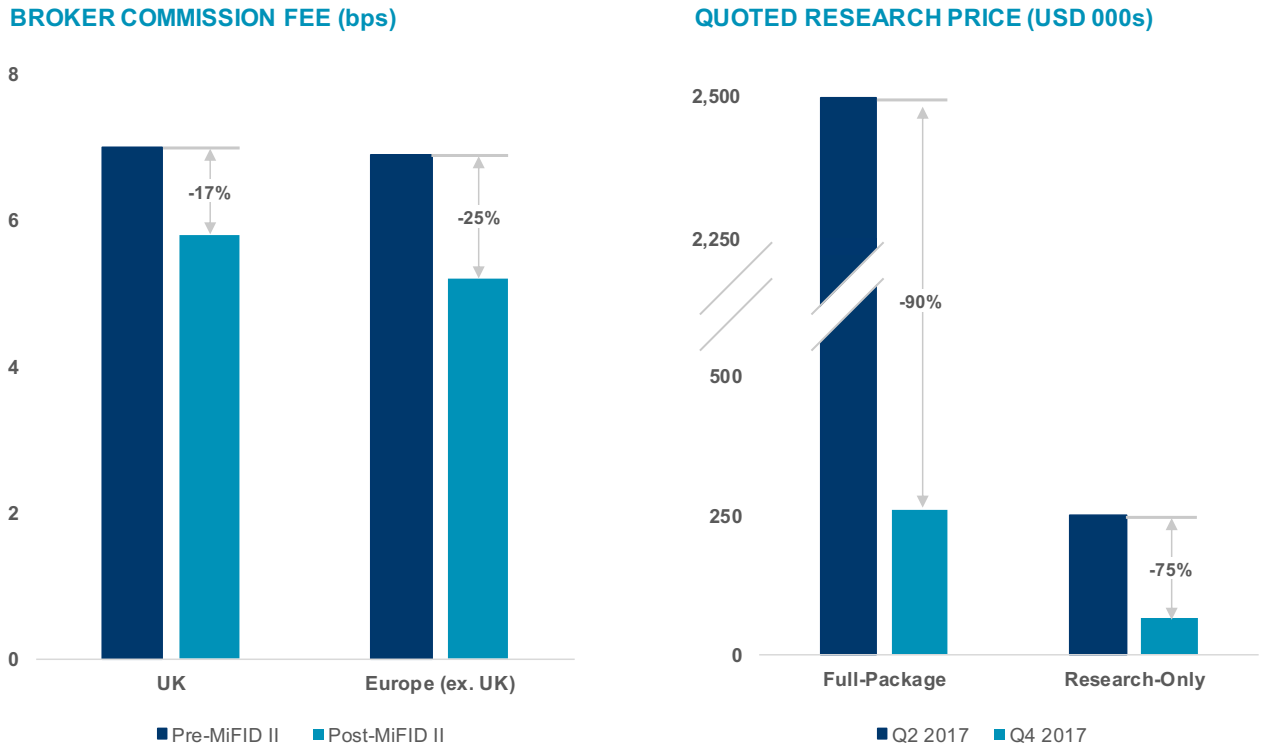
As global banks ramp up their coverage efforts with top fee-paying clients, overcrowding and heavy competition is taking its toll on margins. The industry is already in the midst of an aggressive price war in several key product lines (including wealth management, capital markets, and sales & trading) as banks compete to capture wallet share with their key accounts. Moreover, with many global banks refocusing their efforts on their home markets, growth rates of available fee pools are considerably more tempered than many of the emerging markets where they have either exited or scaled back their operations.

Growing competition between banks for the largest revenue tickets can be readily seen in the IPO space, especially in markets such as Hong Kong and China. For example, the 2016 IPO of Postal Savings Bank of China ("PSBC") involved a record breaking 26 bookrunners underwriting a single deal. In fact, according to Dealogic, the average number of Equity Capital Market ("ECM") bookrunners per deal (for deals over USD 200 million) in North Asia (excluding China) jumped from 3.2 in 2014 to 5.7 in 2016. This ongoing trend of "bookrunner saturation" in Asia is having a considerable impact on the underlying economics of many big-ticket deals.

In addition to competitive pressures in servicing major corporate clients, the industry has been experiencing ongoing margin erosion in the institutional space as trading volumes continue to migrate to electronic platforms. In fact, with the recent introduction of MiFID II in January 2018, sell-side brokerage commissions in Europe have already fallen by 25% (see Figure 5). The underperformance of active managers is also causing a flight of assets to passive funds, which generate considerably less trading revenue for brokers. Together with regulatory changes such as MiFID II, fund managers are being forced to cut costs, and industry consolidation is on the rise as firms look to capture economies of scale.[10]

[10] Quinlan & Associates, 'Alternative Alpha: Unlocking Hidden Value In The Everyday', September 2017, available at: https://www.quinlanandassociates.com/insights-alternative-alpha/

FIGURE 5: TRADING AND RESEARCH PRICING



Source: IPE, Reuters, Quinlan & Associates analysis

MiFID II is also incentivising the buy-side to become more disciplined in their research consumption decisions, especially as most managers opt to pay for research using their own P&L. In the battle to capture market share of a rapidly shrinking global research wallet, many brokers have engaged in an all-out price war with respect to their research offerings.[11]

Faced with increased competition from a growing number of cheap, high quality Independent Research Providers ("IRPs") and Online Research Marketplaces ("ORMs") / aggregation platforms, revenue opportunities from servicing large institutional managers are coming under immense pressure.

[11] Quinlan & Associates, 'A Brave Call: Is It Time For Investment Bank To Explore Alternative Research Models Post-MiFID II?', June 2017, available at: https://www.quinlanandassociates.com/insights-brave-call/

TAIL CLIENTS

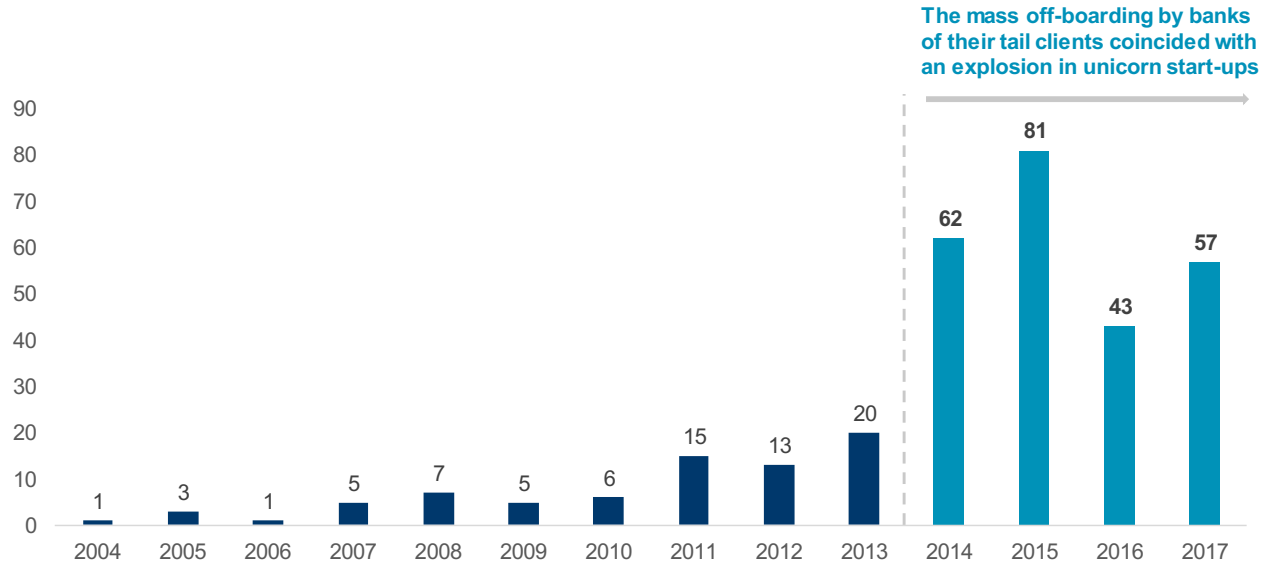
While tail clients generally only account for 10-15% of a bank's total revenue, they often include accounts with the highest growth potential. Moreover, many of the non-core markets that the global banks are exiting – particularly emerging markets – are growing at rapid speeds, offering valuable returns over the long term.

Strong economic fundamentals and continued growth in international trade – led by an array of government-backed initiatives such as China's One Belt One Road – are driving demand for transaction banking services in emerging and frontier markets, particularly trade finance. As these regional companies look to expand offshore, both organically and via acquisitions, demand for investment banking services (including corporate finance and FX / interest rate hedging services) is also set to rise, especially given the growing sophistication of emerging market corporate CFOs and Treasurers.

Strong growth fundamentals in emerging economies are also driving significant wealth creation, especially among more tech-savvy second and third generation High Net Worth Individuals ("HNWIs"). Moreover, the explosive growth of many start-ups, especially in the technology space, is providing lucrative financing and capital raising opportunities. This could prove extremely lucrative if the company ends up becoming the next Airbnb or Facebook (i.e. a unicorn).

In fact, from 2014 onwards, the period in which global banks were most aggressive with their off-boarding efforts, a whopping 243 start-ups achieved unicorn status, with valuations in excess of USD 1 billion (see Figure 6). We believe firms who banked these clients early in each company's lifecycle are likely to have a much better chance of monetising these relationships than banks who were unwilling to service them in their formative years.

FIGURE 6: START-UPS REACHING USD 1 BILLION VALUATION, 2004-17



Source: PitchBook, Quinlan & Associates analysis

Similar trends are being seen in the institutional space. One executive we spoke to working in the prime brokerage division of a global investment bank commented on the explosive growth rates being experienced by a plethora of hedge fund start-ups in China. However, as part of its client "de-cluttering" efforts in 2016, the bank was forced to cut some of its smaller hedge fund clients to refocus its coverage efforts on its larger, more profitable accounts. Since then, a number of these funds have grown to manage sizeable assets, taking their business to regional brokers with lower minimum revenue hurdles. According to the executive we interviewed, this has cost the regional prime broking business 'several millions of dollars in potential revenues annually.'

SUMMARY

Given lower barriers to entry, a relatively sparse competitive landscape, and the high growth potential on offer with a range of nascent accounts, establishing a relationship foothold with tail clients is likely to open up attractive future revenue streams for banks that can successfully tap into this space. However, as tail clients currently provide low levels of revenues, a fundamentally different approach is needed; one that is built around providing a truly digital end-to-end service proposition that allow banks to service tail clients in a scalable and cost-efficient manner.

SECTION 3
CAPTURING THE TAIL

As outlined in Section 2, ~USD 25 billion in "new" revenues have been washed onto the market from the off-boarding exercises of the top 50 international banks since 2014. Coupled with the potential for many smaller firms to turn into potential unicorns (and hence cash cows), we believe the tail is an opportunity that warrants closer consideration from global and regional banks alike.

Notwithstanding this, the economics of servicing smaller clients remains relatively unattractive under most banks' current cost structures and coverage models, especially in the wholesale banking space. This is because the majority of processes across the client service value chain are extremely manual in nature (or are only partially automated), resulting in higher costs, wasted resources, slower processing times, and heightened levels of client dissatisfaction (see Figure 7).

FIGURE 7: PROBLEMS WITH THE CURRENT CLIENT SERVICE VALUE CHAIN

	ACQUISITION		MONETISATION			MAINTENANCE		
	CLIENT IDENTIFICATION	CLIENT ONBOARDING	PRODUCT DEVELOPMENT	SALES	EXECUTION	QUERIES & MAINTENANCE	SURVEILLANCE / MONITORING	REPORTING
PROCESS FLOW	× Manually targeting clients leveraging pre-existing relationships	× Labour-intensive process requiring significant time and resources	× Resource intensive process to tailor products to specific clients	× Poorly targeted and ineffective coverage with overlaps / duplication	× Labour-intensive (e.g. high touch trading), often needing physical presence	× Multiple, labour-intensive client service teams handling client queries	× Manual investigation / reconciliation of suspicious activity	× Key information is not intuitively flagged, with manual edits often required
CLIENT JOURNEY	× Plethora of non-targeted, paper-based marketing information	× Duplicative and lengthy onboarding processes	× Homogenous offering driving lack of client engagement	× Suboptimal coverage with overlapping discussions	× Costly and slow execution with duplicative touchpoints	× Slow processing times and varied service level quality	× Slowdown in service times due to manual investigations	× Slow reporting turnaround time with suboptimal delivery
BANK IMPACT	× Suboptimal targeting efforts impacting top-line revenue potential	× Costly process with heightened customer dissatisfaction around delays	× Costly product process with considerable waste of bank resources	× Loss of client engagement and suboptimal resource allocation	× Costly process with client dissatisfaction and loss of revenues	× Costly teams with client dissatisfaction driving potential lost of business	× Considerable resource waste, especially with very high "false positive" rates	× Considerable time and resources to produce bespoke reports

Source: Quinlan & Associates analysis

A DIGITAL TAIL STRATEGY

We see two major concerns associated with servicing tail clients, namely:

1. Profit-generation; and
2. Risk-control.

At its core, an effective tail strategy necessitates a low-cost, light-touch proposition across the entire client service value chain, together with robust (and largely automated) risk management protocols. In other words, it requires banks to digitalise.

While the digitalisation process comes attached with inevitable upfront costs, if set up correctly, it allows a bank to service a vast pool of tail accounts in a relatively standardised fashion at a negligible marginal cost per client.

Risk control, on the other hand, needs to be more individually tailored based on each client's specific risk profile. New technological applications, such as artificial intelligence ("A.I.") and shared KYC utilities, can prove extremely beneficial in this regard. Moreover, with rapid advancements in the global and regional FinTech industry, we believe banks are in a prime position to leverage existing technological capabilities in the market through partnerships and / or acquisitions. We outline some of these potential digital solutions below (see Figure 8).

FIGURE 8: DIGITALISAING THE CLIENT SERVICE VALUE CHAIN

	ACQUISITION		MONETISATION			MAINTENANCE		
	CLIENT IDENTIFICATION	CLIENT ONBOARDING	PRODUCT DEVELOPMENT	SALES	EXECUTION	QUERIES & MAINTENANCE	SURVEILLANCE / MONITORING	REPORTING
EXAMPLE FINTECH AREAS	• Big Data • Digital Channels	• A.I. • Shared Utilities and Blockchain	• Big Data • A.I.	• Robo-Advisory • E-Channels & CRM Tools	• Trade Platforms • A.I.	• Chatbots • A.I.	• A.I. & Big Data • Blockchain	• Trade Platforms • RegTech
DESCRIPTION	• Leverage big data to identify clients with attractive future fee potential • Engage in targeted marketing via an omni-channel approach	• Digital documentation (e.g. e-KYC) • NLP / A.I. for document processing • Use blockchain to minimise process duplication	• Gain in-depth understanding of clients' specific needs through big data and online profiling • Develop tailored products via A.I. tools	• Provide automated sales advice using robo-advisors • Use digital platforms to distribute sales material / product information	• Collect client orders through electronic / online trading platforms • Utilise RegTech with A.I. capabilities for best execution and for reporting purposes	• Leverage chatbots to address more standard / basic client queries • Use A.I. to flag account issues and manage ongoing complaints	• Utilise surveillance software to track origination and destination of trades • Use A.I. with adaptive capabilities to flag suspicious activities	• Collect key performance and compliance metrics through automated procedures of trade platforms • Use RegTech to automate reporting procedures
SAMPLE PROVIDERS	dealogic Neener Analytics	TAIGER	SIGFIG blooom	SBDA group smartkarma	INSTINET A NOMURA COMPANY	Kasisto HARO	NetGuardians ComplySci	Alphametry FRTFNT

Source: Quinlan & Associates analysis

ACQUISITION

1. CLIENT IDENTIFICATION

Rather than focusing solely on clients that generate the largest top-line revenue, banks should look to optimise coverage decisions based on their clients' future revenue potential. More importantly, consideration should be given to the fully-loaded cost of servicing each client. In doing so, coverage can be better aligned to a client's forecasted profit expectations (i.e. its bottom-line contribution to the bank).

Looking at client-level profitability is critical; in our experience, a notable portion of a bank's largest revenue-generating accounts are loss-making. This reflects the considerable service levels – and resource commitments, such as balance sheet – required to maintain key relationships and grow wallet share. Moreover, many larger corporate and institutional clients have sizeable bargaining power over their banking providers, weighing considerably on margins.

While revenues generated from tail clients may be relatively small, many of these accounts are likely to offer significant medium-to-long-term growth potential. There may also be opportunities to cross-sell various financial products as these accounts mature over time.

Through a mix of big data, machine learning tools, and effective analysis of a bank's internal management information systems ("MIS"), the labour-intensive client identification processes currently employed by most of banks can be largely automated. This may involve clustering clients based on criteria such as their past spending patterns, future industry growth outlook, or propensity to pay, and subsequently leveraging large volumes of disparate (but relevant) data points to better identify suitable coverage targets (see Figure 9).

FIGURE 9: LEVERAGING BIG DATA TO OPTIMISE CLIENT TARGETING (ILLUSTRATIVE)

	No. Deals Completed	Avg. no. of Bookrunners per Deal	Avg. SoW per Bookrunner per Deal	Access to Deal Flow (How easy is it to access deal flow?)	Share of Deal Flow (How much wallet can we capture?)	Description
CO 1	84	15	6.67%	✓	✗	COs 1-3 are the largest ECM issuers in the bank's target market, but their deals are very bookrunner heavy; while this raises the probability of being engaged for a mandate, individual advisor share of wallet ("SoW") will remain low
CO 2	72	12	8.33%			
CO 3	70	16	6.25%			
CO 4	66	5	20.00%			
CO 5	61	4	25.00%			
CO 6	57	7	14.29%	✗	✓	COs 7-8 are the smallest ECM issuers in the bank's target market, though they use few bookrunners on every deal; while harder targets to secure a mandate, SoW for each advisor will be high
CO 7	55	2	50.00%			
CO 8	43	2	50.00%			
CO 9	39	9	11.11%			
CO 10	38	4	25.00%			

Source: Dealogic, Quinlan & Associates analysis

A number of market data firms (such as global capital markets data provider Dealogic), as well as various social media analytics players (such as Neener Analytics) can already be employed by banks to optimise their client identification and targeting efforts. However, we feel these tools are heavily underutilised in the current climate.

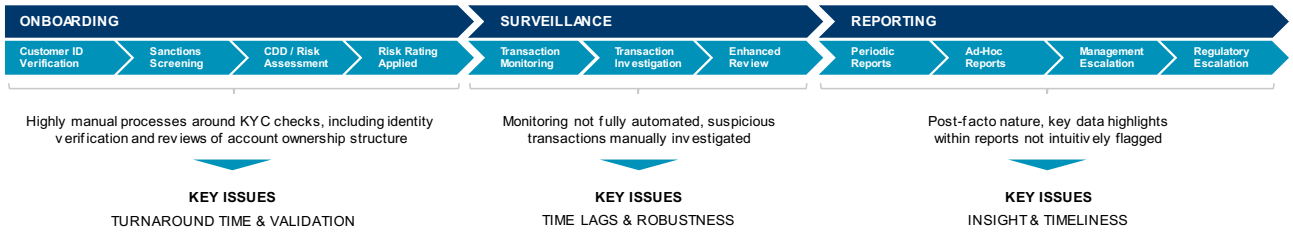
2. CLIENT ONBOARDING

The core problem with AML compliance processes at most banks is the fact that they are extremely labour-intensive. While we understand some parts of the AML process are automated (such as the use of transaction monitoring software tools), the majority of bank compliance budgets are dedicated to personnel responsible for manually onboarding new clients (i.e. KYC) and investigating suspicious payment activities (i.e. surveillance).

As it stands today, manual input is required across all key stages of the AML compliance process, including onboarding, surveillance, and reporting (see Figure 10). In fact, we estimate that headcount costs represent anywhere between 75-85% of total AML-related compliance spend at global banks, with the remainder devoted to technology.[12] This is adding considerably to costs, making it difficult for banks to onboard and service smaller clients in a profitable fashion.

[12] Quinlan & Associates, 'From KYC to KYT: Blockchain's Emerging Role In The Global Payments System', November 2016, available at: https://www.quinlanandassociates.com/insights-from-kyc-to-kyt/

FIGURE 10: AML COMPLIANCE PROCESS



Source: Quinlan & Associates analysis

We believe there is considerable scope for banks to further automate their client onboarding processes, which are still predominantly paper-based at many organisations. This could include the acceptance of digital documentation, E-certification tools (i.e. E-KYC), and the use of natural language processing ("NLP") technology to scour for relevant client information on the internet and paper documents. The rise of automated semantic engines, such as smartKYC, allows banks to leverage technology to analyse the entire online footprints of potential clients. Online investment firms, such as Betterment, also leverage robo-advisory tools (via online questionnaires) to streamline its onboarding process.

A number of centralised applications are also helping to address onboarding woes, particularly with respect to process duplication and information sharing. Payment infrastructure incumbent, SWIFT, has developed The KYC Registry to standardise a set of key KYC documentation and data to cover the compliance requirements of different jurisdictions. Banks are able to upload KYC data to a registry, which can then be shared with their correspondent banks. By allowing institutions to exchange KYC information safely and securely, The KYC Registry increases transparency while eliminating costly and redundant document exchanges. Other service providers, such as Thomson Reuters' Org ID, collect data on and verify a customer's identity. They also provide ongoing monitoring to determine changes in a corporate client's legal entity status.[13]

[13] Quinlan & Associates, 'From KYC to KYT: Blockchain's Emerging Role In The Global Payments System', November 2016, available at: https://www.quinlanandassociates.com/insights-from-kyc-to-kyt/

Over the longer term, we also see blockchain technology having the potential to streamline the onboarding experience. We believe duplicative KYC checks for the same clients across different banks can be significantly reduced if firms can leverage the screening / vetting efforts conducted by other institutions on a shared, immutable ledger. Biometric authentication software, such as facial/iris recognition tools and fingerprint scanning, can also be linked to KYC documentation to further enhance security.

Onboarding new clients can be costly and time consuming. CRM solution provider, Fenergo, estimates that it costs up to USD 25,000 to onboard every client, and can take over six months to complete when using solely manual procedures.[14] We believe the ability to shorten onboarding times with the use of digital applications (while ensuring systems are both compliant and cost-effective) can provide banks with a competitive edge in the race for the tail.

[14] Fenergo, 'Onboarding costs up to $25,000 per clients', available at: https://www.fenergo.com/company/news/fenergo-in-the-news/onboarding-costs-up-to-$25000-per-client.html

MONETISATION

3. PRODUCT DEVELOPMENT

Product development efforts at many banks are notoriously tedious and cumbersome. A large number of firms spend a significant amount of time and resources tailoring their products to specific clients through what is largely a manual and highly inefficient product design and approval process. For products that are more standardised in nature, clients are often left to choose from a relatively homogenous product shelf, impacting engagement levels.

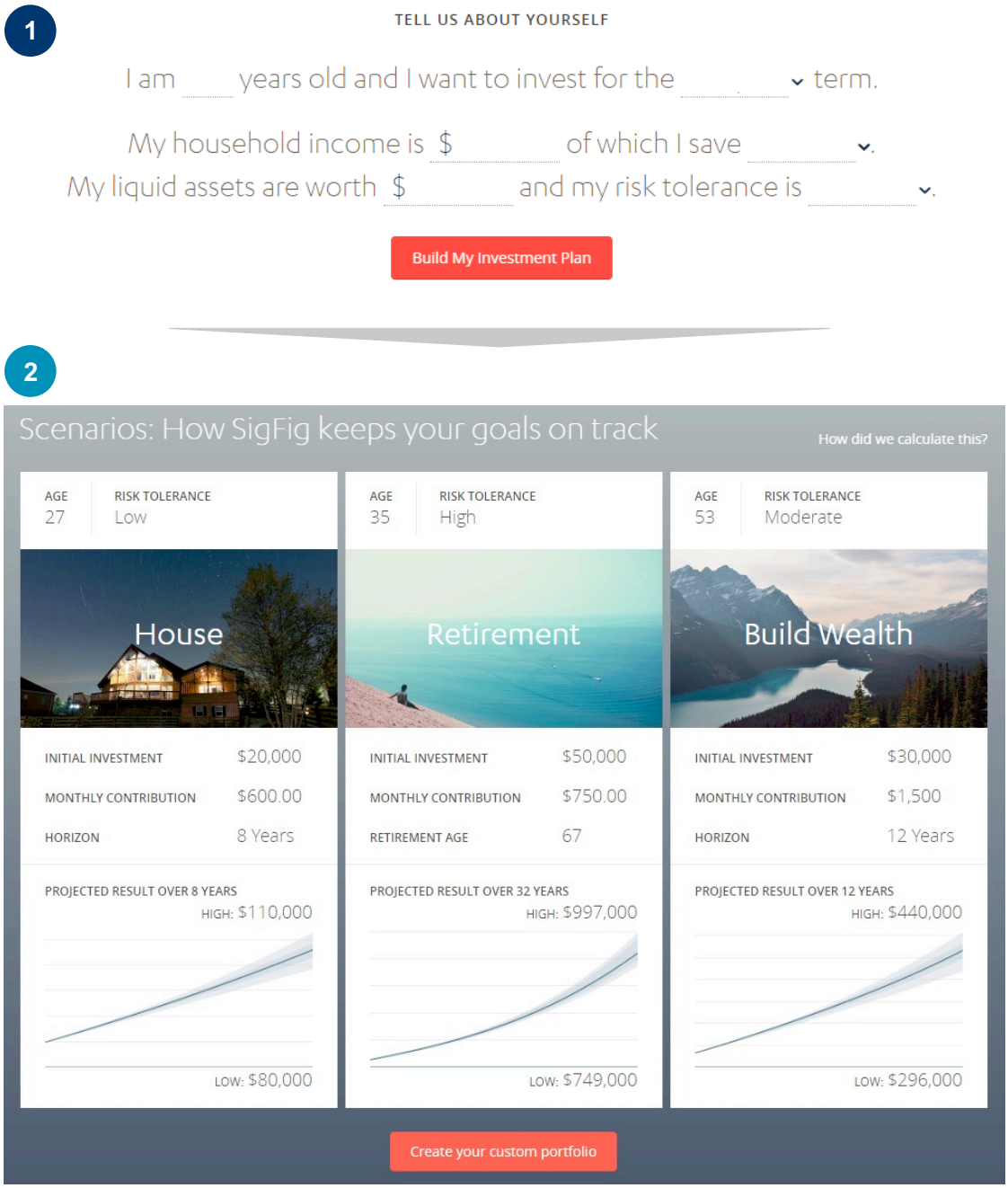
We believe that big data and A.I. can be more effectively utilised by banks to gain a better understanding of client needs, based on a mix of wider industry trends and each client's specific circumstances. In its simplest form, banks can gain a better understanding of their clients' needs through digital profiling, such as online questionnaires. A.I. tools can then automatically match appropriate products based on each client's individual objectives or can suggest new product ideas to front-line staff if desired products are not currently offered by the bank. We also see much more scope for banks to leverage technology to streamline the product approval process, which typically involves a long trail of emails, leading to significant delays and overlapping communication channels. Examples of such technology include centralised portals and collaboration tools.

Several firms are also considering new sources of data – namely, alternative data – to supercharge their idea-generation process in investment research. Banks are increasingly looking to draw alpha-generating insights from non-traditional data sets, including social media feeds, satellite imagery, and geolocation data. As much of this information is analysed through machine learning tools (such as NLP), manual tasks can be significantly reduced, driving meaningful enhancements to productivity / output per analyst.

A.I.-enabled product development efforts are fast gaining traction in the wealth management space. Platforms such as SigFig allow clients to enter information online about their investment objectives (such as their initial investment, monthly contributions, and investment horizon) to determine their overall risk tolerance. The algorithms then suggest appropriate investment products / portfolios to achieve their clients' targeted returns, usually with reference to a specific financial objective, such as going to university, buying a house, or retirement (see Figure 11).

We believe banks can easily employ similar technologies to enhance the product development process for their wealth management customers (especially those in the "core affluent" space) in a more scalable and cost-effective manner. However, most firms lag significantly behind the technology curve.

FIGURE 11: AUTOMATED PRODUCT DEVELOPMENT INTERFACE (SIGFIG)



1 Enter your personal information and investment preferences

2 Review investment outcomes / scenarios

Source: SigFig company website

4. SALES

The sales process at many banks remains relatively archaic and highly inefficient.

Several retail banks still employ hordes of telemarketers to make random, untargeted calls, pushing credit card and personal lending products to the mass market. Not only are such tactics costly and ineffective, but they can also have a negative impact around brand perception in the eyes of the public, as such calls are largely considered a nuisance.

The situation does not meaningfully improve with corporate and institutional clients. In investment banking, senior bankers spend a substantial amount of their time pitching for deals that have little chance of materialising, expending vast amounts of human labour in developing pitchbooks and other marketing material. In markets, sales coverage is often left untracked. In our experience, this means the same salesperson is sometimes allocating the same amount of time in a month to a leading franchise client and a small hedge fund, highlighting major coverage inefficiencies.

One of the clearest examples of a poorly managed sales process can be seen in investment research. For many decades, banks have distributed their research to clients as PDF reports attached to widespread email blasts. We estimate over 40,000 research notes – from comprehensive reports to minor updates linked to corporate announcements – are sent out every week by the top 15 global investment banks alone. However, we found that less than 5% of these reports are opened. Even for those reports which are opened, our conversations with buy-side professionals revealed most managers limit their focus to the executive summary and key takeaways. Overall, we believe less than 1% of all content being sent out by brokerages is being consumed by the buy-side.[15]

Recognising the inefficiencies associated with current distribution models, global brokers are investing heavily in the development of their proprietary research portals (e.g. Barclays Live, Macquarie Dimension), seeking to move from a "product push" to "customer pull" strategy. Many firms are also leveraging mobile apps, as well as social media and multimedia channels, to enhance the overall user experience, making their service platform more personalised, interactive, and engaging.

In tandem with the efforts of individual brokers, a plethora of ORMs have launched in recent years, akin to the Online Travel Agents ("OTAs") of the investment research world (e.g. Booking.com and Trivago). The ORMs provide a forum for research firms and even individual influencers to contribute content, with proprietary search engines tailoring output to the end user's criteria. Common to most platforms is the ability to filter a large universe of suppliers, with a mixture of quality validation via peer ratings, greater price transparency and / or dynamic pricing, together with tracking and reporting tools (see Figure 12).

[15] Quinlan & Associates, 'A Brave Call: Is It Time For Investment Bank To Explore Alternative Research Models Post-MiFID II?', June 2017, available at: https://www.quinlanandassociates.com/insights-brave-call/

FIGURE 12: OTAs AND ORMs

	ACCOMODATION	RESEARCH
INTERFACE	• Filter and sort by price, location, room configuration, and other criteria • View location of options on map	• Fully customisable dashboard • Filter research by asset class, sector, region, trading theme
BREADTH OF OFFERING	• Total number of rooms • Major hotels / boutique hotels on offer • B&B options available	• Number of reports and providers • Small cap and frontier country coverage • Independent firms and analysts
PRICING	• Price for the same room • Cancellation policy • Book ten nights, get one free	• Price for the same report • One subscription price • Multi-user access
FEEDBACK	• Rated by TripAdvisor and site's consumers • Last time booked	• Rated by site's consumers • Number of downloads
ACCESSIBILITY	• Desktop • Mobile app	• Desktop • Mobile app
VALUE-ADD	• Package deals • Exclusive deals • Hotel photos and details	• Budget and consumption reporting tools • Company price feed and high level financials • Analyst interaction and corporate access • Bespoke research

Source: Company websites, Quinlan & Associates analysis

Robo-advisors are increasingly being employed in the wealth management space to provide automated sales recommendations to customers, based on new developments in the market and / or changes in a client's preferences or circumstances. With some companies offering minimum account balances as low as USD 500 and almost non-existent management fees, online wealth management platforms are capitalising on the low-price segment, providing tail clients with tailor-made, granular service offerings within reasonable price ranges.

Many banks also already employ customer relationship management ("CRM") tools and various cloud applications to drive collaboration and optimise sales efforts on the front line. However, we believe these technologies are heavily underutilised by most organisations, especially with respect to cross-selling and up-selling, impacting revenue potential.

5. EXECUTION

The execution process at many banks is often labour-intensive and requires physical presence. The "human element" results in costly and slow execution times. Moreover, there are frequently duplicative touchpoints and suboptimal order flow processes.

As outlined in Section 2, one of the most obvious examples of technology being used in automating execution is sales and trading, where trading volumes are continuing to move from high-touch to electronic channels. In fact, one equities COO at a global investment bank we interviewed said that more than 50% of cash trading volumes were routed through the bank's electronic trading desks, up from ~10-15% in 2009-10. Algorithmic and program trading have been key beneficiaries of this trend.

Tora is one example of an innovator in this space, having created A.I.-driven systems and services to automate both order and execution management systems ("OEMs") and provide real-time market intelligence for order requiring human intervention. Its automated process can be configured to enable traders to customise the execution process using any number of data inputs. Traders can set trading strategies to begin at specific time of the day or when particular market conditions are met (including when a stock reaches a certain price). The system can also be configured to send a certain percentage of orders to different broker-algos, helping to avoid sample bias. The automation of such features significantly enhances the ability of firms to meet MiFID II's "best execution" requirements.[16]

Rapid innovation is also providing firms with the opportunity to integrate beneficial aspects of both high- and low-touch trading. Using voice recognition technology and real-time conversion of voice into text, trading platforms have the newfound capacity to 'replicate… intimate sales trading relationship' and provide the quality user experience found in high-touch trading, all while enhancing efficiency and minimising risks through electronic trading services.[17]

A.I. is also being increasingly utilised by wealth management providers to automate order execution. Various investment products offered by online wealth managers (such as ETFs) automatically rebalance based on pre-defined risk / return objectives, removing the need for investors to engage in any manual execution around the management of their portfolios. Moreover, with intuitive, easy-to-use user interfaces ("UIs"), all execution instructions can be made in a fast, efficient manner, providing an enhanced user experience.

[16] Finextra, 'Tora launches AI-powered 'AlgoWheel' for best execution', 24 April 2018, available at: https://www.finextra.com/pressarticle/73598/tora-launches-ai-powered-algowheel-for-best-execution/ai
[17] Tabb Group, 'High Touch in Low Touch: Next Generation Trading', 29 April 2014, available at: https://research.tabbgroup.com/report/v12-024-high-touch-low-touch-next-generation-trading

MAINTENANCE

6. QUERIES & SERVICING

Most banks employ armies of client service professionals to handle ongoing client queries and oversee account maintenance. While many firms have offshored these teams to locations such as the Philippines and India to reduce their back-office costs, the process is still labour-intensive and costly. This often results in slower processing times and wide-ranging service quality. Much of this will reflect the team's capacity constraints, overlapping points of client contact, as well as the inconsistent knowledge base of a client service team's employees.

Chatbots are increasingly being used by banks to automate responses to general client queries. Through the use of A.I., including voice and text recognition, machines can engage in conversations with customers to provide guidance and assistance on general enquiries (such as questions concerning credit cards, personal loan limits, and mortgage repayment) in a quicker, more consistent, and cost-effective manner. Examples include HSBC's Amy and Hang Seng Bank's HARO and DORI (see Figure 13). Moreover, such technology can be used to proactively (and automatically) reach out to clients to manage potential account issues.

While we understand such technology is being more widely adopted by retail banks, we see scope for further deployment among wholesale banks, especially when addressing more standardised / general queries from tail accounts. One thing to consider however, is the general nature of wholesale banking; the sector is highly customised, with individual clients having different needs, using unique products, and posing different questions. Nevertheless, most of the queries that institutions have should fall into a handful of more general categories that can be handled by chatbots, such as queries regarding payment information.

FIGURE 13: HANG SENG BANK CHATBOT (HARO)

Mobile Version

Step 1:

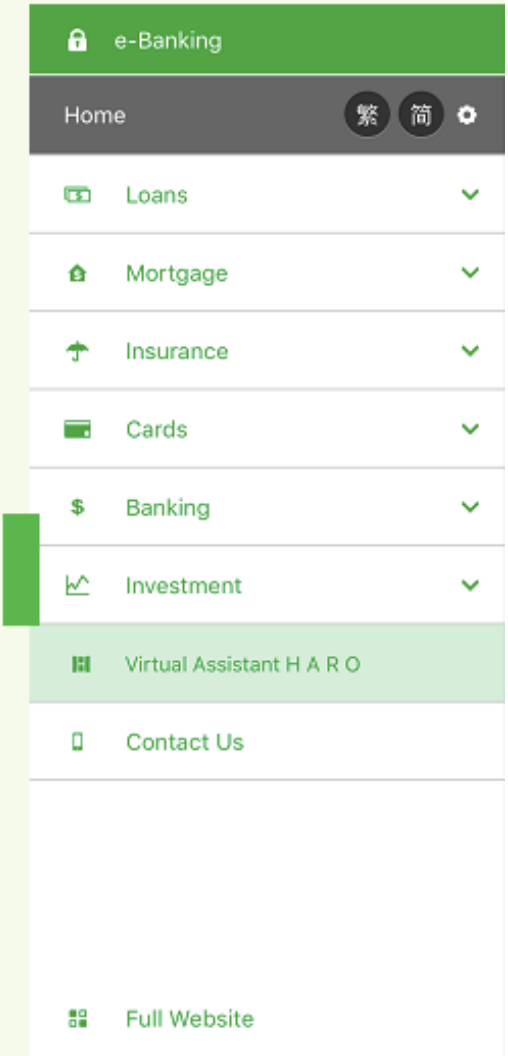
Open services menu on upper-left corner, and choose "Virtual Assistant H A R O" to H A R O main menu.

Step 2:

Choose the banking product which you would like to enquire from the main menu.

Step 3:

Upon entering the conversation window, you will need to read and confirm the Important Notice before starting to chat with Virtual Assistant H A R O. After your conversation with H A R O starts, there will be a reference number (Ref. No) assigned to the conversation. In case you have any enquiries about the conversation, you may quote the Ref. No and contact us for further assistance.



Source: Hang Seng Bank company website

7. SURVEILLANCE / MONITORING

The surveillance and monitoring of client activity is a key area where digitalisation can make an impact, especially through leveraging A.I., big data, and blockchain technology.

In retail banking, some banks have introduced credit monitoring systems, which automate debt management and credit monitoring processes based on real-time data and analysis. With tail clients frequently being associated with an increasing degree of credit and data privacy risk, these new, cost-effective credit monitoring systems allow banks to optimise a number of existing services, including credit scoring, loan management, and the protection of customer information against identify theft, enhancing risk management. Some FinTech companies, such as UK-based Funds-Axis, also provide real-time monitoring of depository cash flows to avoid potential breaches of AML / CFT regulations.

In corporate and transaction banking, it is difficult for banks to conduct risk-based analysis of individual payments: instead, bank surveillance teams (and the software that supports them) tend to focus their efforts on monitoring overall transaction patterns. Suspicious activity is typically only identified when an abnormal payment pattern arises, which means it is too late to rectify (i.e. the illegal activity has already occurred). By attaching more detailed information to each transaction or payment instruction (e.g. legal entity information, ultimate beneficial owner), blockchain technology could help reduce the currently high false positive rates (currently 99%+) for suspicious transactions, helping banks conduct KYC checks at the transaction level (i.e. "know your transaction").[18] The distributed ledger would also act as an effective means of recordkeeping for audit purposes, given the data is both irrefutable and immutable. This would allow banks to react more swiftly to regulatory requests, such as furnishing surveillance reports.

In capital markets, we also see greater potential for advancements in trade surveillance software through A.I. and machine learning tools, reducing the number of false alerts that bank compliance teams need to investigate. These software tools can not only be used to identify suspicious trading activity, but can also be employed to meet best execution compliance requirements, as well as enhance broader AML / KYC processes. One example of a company providing such technology is Luxembourg-based Alto, which uses machine learning to help firms identify any unusual or significant cash flows in investment funds, as defined by EU regulations.

[18] Quinlan & Associates, 'From KYC to KYT: Blockchain's Emerging Role In The Global Payments System', November 2016, available at: https://www.quinlanandassociates.com/insights-from-kyc-to-kyt/

8. REPORTING

Digitalisation can provide numerous benefits for banks' reporting procedures, which include the collection of key performance and compliance metrics. This can be achieved by utilising a range of regulatory technology ("RegTech") solutions, which aim to tackle the growing number of compliance demands facing the financial services industry.

Within capital markets, banks are required to report trades (and their positions) to regulatory bodies. UK company TRADEcho provides two key regulatory reporting services – Smart Report Router ("SRR") and Assisted Reporting. SRR determines if and when counterparties need to publish their trades. When the publication of a trade is required, it routes the trade immediately to an appropriate Approved Publication Arrangement ("APA"). In this way, SRR allows firms to perform publications more efficiently and minimise compliance costs, preventing them from making publication errors or having to connect directly to multiple APAs. Meanwhile, Assisted Reporting gives buy-side firms real-time visibility to observe and potentially contribute to the reporting procedure with much lower connectivity costs. The report can also be made available for future use, allowing for instant and low-cost storage.

Corporate banks also provide various types of reports to their clients, such as credit reports. Banks such as ICBC have begun to integrate digitisation processes for reports in this area, leveraging the services of Luxembourg-based RegTech provider Taleo Reporting. The firm's technology streamlines the reporting process by connecting client data with their application's data model, analysing the data's consistency to ensure regulatory compliance, and generating automated reports in a variety of file formats. Similar technology has been implemented by private banks, who are required to submit their customer risk profiles, together with reports on the performances of their portfolios.

We also see huge potential to further leverage cloud technology, especially public clouds, to enhance data storage and processing power at significantly reduced costs, especially given the vast amounts of money banks spend each year operating and maintaining in-house hardware. We believe ongoing industry concerns around data privacy and security will be addressed over time as banks become more comfortable with the use of public cloud technology, including the cybersecurity measures that support it.

SECTION 4
STRATEGIC CONSIDERATIONS

We have identified eight considerations that banks need to critically rate ("R8") to determine how well they are positioned to drive their digital transformation efforts and ultimately monetise the tail (see Figure 14). Some of these considerations are controllable (e.g. a bank's desire to support technological adoption), while others are not (e.g. regulations).

FIGURE 14: DIGITALISATION CONSIDERATIONS

	CONSIDERATION	KEY QUESTIONS	EXAMPLE CRITERIA
CONTROLLABLE	1 Resources	• What resources is the bank prepared to allocate to its digitalisation efforts? • Can the organisation support the financial investments required?	• Availability of investment capital for technology build, acquisitions and / or new talent • Current capital and cost structure (e.g. cost-to-income ratio)
CONTROLLABLE	2 Responsiveness	• How responsive is the bank to emerging technological trends? • Does bank's management / organisational construct support new technological adoption?	• Management KPIs, organisational / governance structures, approval processes • Existence of innovation labs, accelerator programs and / or incubators
CONTROLLABLE	3 Resilience	• What is the capability of the bank's current IT infrastructure to transition to newer technology? • What is the current state of the bank's data architecture?	• Target architecture • Legacy systems • Buildout strategy
CONTROLLABLE	4 Risk appetite	• What is the bank's overall risk appetite? • How effective are the bank's current risk management processes?	• Risk tolerance (market, credit, and operational) • Robustness of current risk management processes • Implementation risks
CONTROLLABLE	5 Reach	• How large is the bank's international footprint? • Does the bank offer a wide range of products and services focused on a variety of client segments?	• Geographical footprint / international presence • Range of products on offer • Client coverage universe
CONTROLLABLE / UNCONTROLLABLE	6 Reputation	• What is the overall bank reputation in the market? • How strong is the bank's brand in terms of attracting new customers and retaining existing clients?	• Financial strength (e.g. capital, reserves) • Compliance with regulatory guidelines • Competitive position and industry perception
UNCONTROLLABLE	7 Regulation	• What regulatory bodies (and associated regulations) does the bank need to comply with? • How sensitive is the bank to potential fines / penalties, including its capacity to address them?	• Existing regulators and their compliance standards • Reserves for litigation costs, as well as potential fines and penalties for compliance breaches
UNCONTROLLABLE	8 Readiness	• How willing are potential customers to adopt a digital service proposition? • Is the target market mature enough to support meaningful technological penetration?	• Online penetration rates • Mobile penetration rates • Consumer norms and preferences

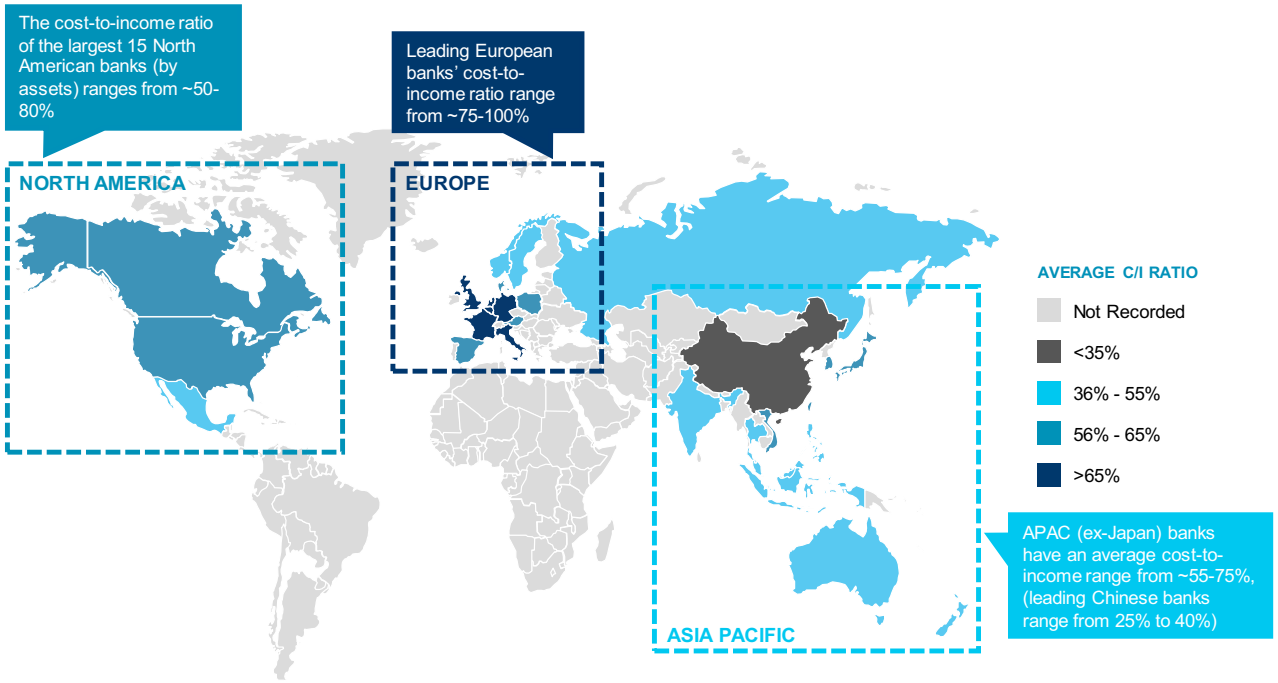
Source: Quinlan & Associates analysis

1. RESOURCES

While there is clearly potential for banks to drive cost savings and revenue enhancements through successfully adopting (and implementing) relevant technologies, the digitalisation journey comes with inevitable upfront costs. As such, firms need to carefully evaluate the resource commitments required to achieve their transformation objectives, including the availability of funding to build internal applications, hire new talent, and / or make potential acquisitions.

The higher cost-to-income ratio of European and North American banks suggests more of an immediate imperative to improve their margins through digitalisation efforts. Conversely, many regional banks in APAC (especially Chinese banks), with their much lower cost-to-income ratios, have considerably more financial buffer to invest in their digital programmes whilst still preserving healthy profit margins (see Figure 15).

FIGURE 15: COST-TO-INCOME RATIOS OF LEADING BANKS (BY REGION)



Source: S&P Global Market Intellignce reports, bank annual reports, Quinlan & Associates analysis

A critical consideration for banks is how to implement their digital objectives. We see three key avenues that organisations can explore (see Figure 16), being:

1. Buy – likely to be costly, but will require fewer internal resources to develop target solution(s);
2. Partner – likely to be cheap, but will require more internal resources to implement; and
3. Build – cost will be dependent on the specific solution(s) being built, but will likely require considerable internal resources to develop and implement.

FIGURE 16: DIGITALISATION AVENUES

	BUY	PARTNER	BUILD
INVESTMENT	$ $ $	$	$ $
RESOURCES*			
BENEFITS	✓ Immediate acquisition of technology ✓ Potential barriers to entry to fend off competitors	✓ Development of tailored solutions ✓ Mentorship opportunities and potential talent acquisition	✓ Development of tailored solutions ✓ Easy integration of legacy system and new systems
DRAWBACK	× Generic solution × Potential compatibility issues	× Time-consuming × Risk of partnership firm leaving and benefiting competitors	× Alternatives may be available on the market × Risk of R&D failure

*Resources refer to non-monetary resources, such as human capital and time

Source: Quinlan & Associates analysis

We understand that banks have allocated significant budgets for their digitalisation programmes; while it does not capture the full picture, Lloyds Banking Group announced that they will invest more than GBP 3 billion (USD 4.2 billion) in IT, and the annual spend on IT at Deutsche Bank and J.P. Morgan Chase are estimated to be USD 4.1 billion and USD 7.4 billion respectively.[19]

Notwithstanding the large sum of money that some banks have earmarked, ill-advised IT investments or poorly-planned execution can lead to adverse impacts on their bottom lines. As such, banks need to determine the most appropriate digital delivery model on a case-by-case basis, depending on the application(s) to be deployed. Consideration will need to be given to a multitude of factors, including the

[19] Bloomberg, 'Lloyds Fixates on Cost Discipline With Push in Technology', 21 February 2018, available at: https://www.bloomberg.com/news/articles/2018-02-21/lloyds-to-invest-4-2-billion-in-digital-push-buy-back-shares?cmpid=socialflow-twitter-business&utm_content=business&utm_campaign=socialflow-organic&utm_source=twitter&utm_medium=social&utm_term=BII%20List%20Fintech%20ALL

urgency of roll-out, the availability of internal talent, and existing capabilities / solutions in the market.

2. RESPONSIVENESS

Despite the benefits of digitalisation being apparent, digital programmes frequently fail due to heavy organisational resistance and internal inefficiencies.

Governance structures that support digital change efforts are often poorly designed. While most global banks already have innovation labs, accelerators and / or incubator programmes in place, many of these efforts are led by dedicated (but often siloed) internal teams, while digital change initiatives at the business unit-level are typically led by business-siloed COOs and project managers. Consequently, business-unit initiatives are often poorly coordinated across the wider organisation, while centralised initiatives such as innovation labs are usually several steps removed from key decision-makers. As a result, many digital initiatives fail to either align with the priorities of other departments or directly engage key stakeholders, particularly those on the front-line. Moreover, as many digital transformation efforts are designed to automate employee processes, there can be significant resistance to change, especially when governance structures include employees whose jobs are likely to be at risk. Empowering these individuals and securing firm-wide buy-in are crucial in ensuring the success of any change programmes.

Employee incentive structures also fail to support digitalisation efforts at many organisations. This is because conflicts inevitably arise when management is tasked with executing longer-term change programmes (which yield minimal to no returns in the short term), while trying to achieving their next quarterly revenue or cost-savings targets. This is further exacerbated by ineffective KPIs linked to digital change objectives.

Beyond this, thought needs to be given to the most appropriate digital delivery model. At its core, banks need to decide whether it makes most sense for them to leverage digital capabilities to enhance existing businesses or processes, create entirely new digital business lines, or launch an entirely segregated digital bank such as the numerous virtual banks we see operating in markets like the UK and Australia.

Given their vast scale, global banks can have unwieldy and painstakingly slow organisational coordination. Moreover, ineffective prioritisation of digital initiatives across the organisation, including frequently prioritising the build-out of digital distribution channels over back-end infrastructure, regularly leads to ineffective implementation. We believe smaller, regional players, with nimbler organisational constructs and governance structures are in a much stronger position to implement change.

3. RESILIENCE

One of the most important determinants to the success of a bank's digitalisation efforts is the resilience of its existing technology and infrastructure.

Nearly all IT executives we spoke to in the banking industry cited legacy systems as one of the main reasons why their digital transformation initiatives failed. In short, they highlighted the fact that many of their bank's existing systems were incompatible with newer, digital applications. As a result, vast amounts of time and resources were spent on integration efforts (as opposed to rolling out the new application(s)), impacting implementation timelines.

Digital rollouts are also heavily affected by a bank's data architecture, including data quality and standardisation. Poor MIS leads to an inability to appropriately leverage internal data via digital applications. This includes incomplete or inaccurate data, as well as having no single source of truth, symptomatic of a bank's fragmented data architecture. A common example of this is conflicting data between business units due to different internal reporting standards.

While some institutions are looking to overhaul or replace their core banking systems to address legacy technology issues, we believe there are alternative solutions. For example, we see huge untapped value in leveraging application programming interfaces ("APIs") to address system compatibility issues facing many institutions today, by allowing legacy systems to communicate with newer, digital applications. However, we still believe in the merits of standardisation and for firms to maintain a strong core banking system.

4. RISK APPETITE

Banks attempting to capture the tail need to carefully assess the credit, market, and operational risks of servicing smaller, less-established accounts.

In addition to understanding their overall risk appetite, banks must critically evaluate the robustness of their current risk management processes; no matter how well-automated a bank's digital proposition is, the sheer volume of clients contained within the tail naturally exposes organisations to an increased likelihood of potential mishaps, particularly with respect to operational risks. These shortfalls need to be addressed before the tail can be considered a viable proposition, such as closing key gaps in a bank's operational controls, addressing lax reporting procedures, or implementing minimum standards of compliance training.

Implementation risks also need to be taken into account. As highlighted earlier in this report, banks can pursue their digitalisation ambitions through acquisitions, partnerships, and / or building their own internal applications. It is here that various risks tied to execution need to be evaluated, such as the firm's expertise in system build-outs, potential consequences of implementation delays, and the risk of intellectual property / proprietary processes falling into the hands of competitors.

5. REACH

It is vital for banks to evaluate their current service offering in detail, including their geographic footprint, product offering, and client segment coverage. By critically evaluating their own service proposition, banks can make more informed decisions around the digitalisation pathway that is best suited to them.

Banks with expansive geographic and product footprints are likely to face greater organisational challenges with respect to their digitalisation efforts, given the need to oversee complex (and potentially overlapping) change projects across multiple jurisdictions, products, and client segments. By the same token, given their wider international presence in key FinTech hubs, these banks will have a much wider network with leading FinTech start-ups around the world, providing them with the access to leading IP and partnership / acquisition opportunities that are unavailable to most regional players.

6. REPUTATION

In addition to evaluating the implications of their reach, banks need to consider how their reputation in the market can impact their digital ambitions.

Reputation is, of course, multi-dimensional. In addition to factors such as general brand perception, banks that are seen as more innovative and customer-centric are likely to fare better in the digitalisation race; put simply, banks known for providing a cutting-edge digital experience and seamless client service, especially for more marginal / tail accounts, will have a competitive advantage in attracting new customers and retaining existing ones.

Talent is a critical part of the digital transformation journey, with developers, data scientists, and application support specialists in high demand. While we believe some global banks have access to a wider talent pool and might offer a more compelling career proposition than less-regarded regional firms from a branding perspective, we recognise their ongoing capacity and headcount constraints, providing a unique opportunity for regional players to step in. Additionally, firms that are seen as being fully committed to driving technological change are likely to offer a more compelling career proposition to technologists than those who regard digitalisation as a secondary strategic priority.

Although the brand perceptions of many global banks have been heavily tarnished since the GFC, our discussions with regional banking executives indicate they are still regarded as preferred service providers and employment destinations when compared to regional players. However, faced with ongoing fines and regulatory breaches (particularly in relation to mis-selling practices), there may be greater scope for regional firms to capture market share from disenfranchised customers, especially smaller accounts which the global banks cut off or refused to onboard as part of their de-risking efforts.

7. REGULATION

Regulatory considerations will be extremely important in shaping a bank's digital strategy.

Despite global bodies such as the International Monetary Fund ("IMF") and Financial Sustainability Board ("FSB") implementing a string of international regulations aimed to create consistency in compliance and reporting requirements globally (especially around cross-border issues such as AML and CFT), there are still significant discrepancies surrounding the stringency of regulatory application across different regions.

Such discrepancies are most clearly illustrated by the differences in fines and penalties for non-compliance. In China, fines for banks breaching AML requirements are set at a maximum of USD 70,000, while individual directors and senior managers can be fined between USD 1,500-7,300 (and up to ten times higher for breaches that lead to actual money being laundered).[20] By contrast, the Agricultural Bank of China was fined USD 215 million in the US for attempting to obscure transactions by Russian, Chinese, and Middle Eastern clients and silencing a whistleblower.[21] US regulators have been particularly aggressive in handing out fines to global banks for dealing with sanctioned countries (~USD 17 billion since the GFC), significantly more than regulators in Asia.

Geographical differences in regulatory scrutiny have generally seen Asian banks face less pressure when forming FinTech partnerships. For instance, there has been a surge in FinTech partnerships between Chinese banks and the major technology players, Baidu, Alibaba, and Tencent. Most notably, Alipay (a subsidiary of Alibaba), has established partnerships with ~20 Chinese national banks. Provoked by several P2P scandals in 2016, the Chinese government has sought to further regulate FinTech companies rather than restrict their development, making them safer for partnerships. By contrast, partnerships between banks and FinTech companies in the US are increasingly challenged by requirements relating to AML and consumer protection, increasing the risk of hefty lawsuits.

[20] Temenos (Asian Banker Research), 'Identifying Anti-Money Laundering Issues In China Banks', available at: https://www.theasianbanker.com/assets/media/dl/whitepaper/Asian%20Banker%20White%20Paper%20-%20China%20Anti-Money%20Laundry%20(English).pdf

[21] Bloomberg, 'China's AgBank Fined $215 Million for Hiding Transactions', 5 November 2016, available at: https://www.bloomberg.com/news/articles/2016-11-04/chinese-bank-fined-215-million-for-lax-controls-by-new-york

8. READINESS

Irrespective of how well prepared an organisation is to pursue its digital objectives, or how accommodating the regulatory climate is, the success of any digital change programme will be heavily dependent on the readiness of the wider market.

Amongst the key questions banks need to ask themselves are how willing potential customers are in adopting a digital service proposition, and whether the target market is mature enough to support meaningful technological penetration. To answer such questions, banks will need to examine a number of factors, such as online penetration rates, mobile penetration rates, and more general consumer norms or preferences.

Digital penetration rates are likely to differ across geographies, products, and customer segments – for example, wealth management clients in developed markets are likely to be more receptive to digitalisation efforts than corporate banking clients in frontier / emerging economies. Banks should leverage this knowledge to prioritise their digital rollout strategies, focusing on the most mature markets that offer the lowest hanging fruit to maximise client uptake / revenues in order to offset initial build-out and / or implementation costs.

SECTION 5
CONCLUSION

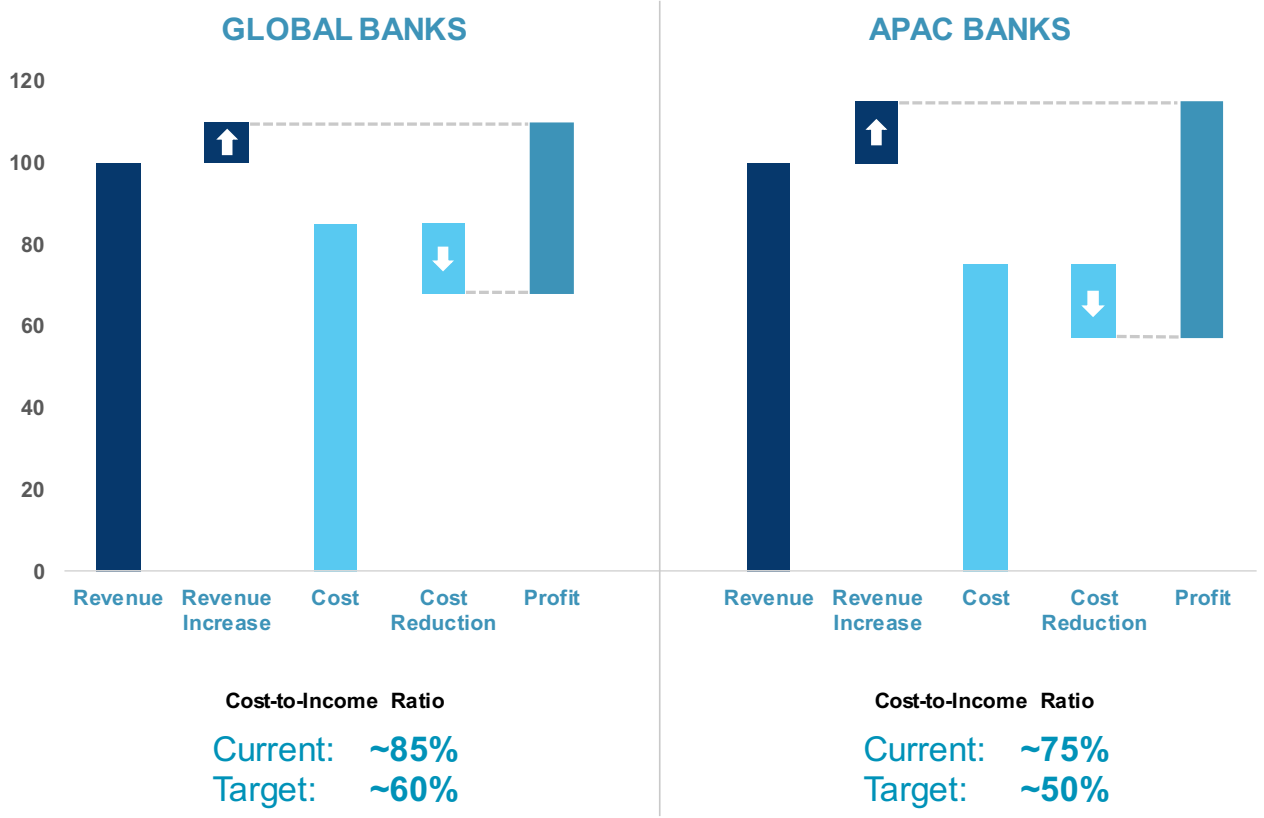
It is clear that the digital transformation process is a complicated one – not only do banks have to deal with many moving parts (both internally and externally), but the journey also takes considerable time, resources, and financial investments whilst offering minimal upfront returns with sizeable execution risks.

Notwithstanding these challenges, the need to digitalise has moved from a strategic option play to an operational necessity in recent years. Faced with competition from a plethora of FinTech start-ups, as well as a growing number of virtual banks, incumbents' business models are rapidly coming under threat from faster, cheaper, and more customer-centric providers.

Increased regulatory scrutiny post-GFC has already forced the top 15 global banks to off-board over USD 13 billion in revenue from 2014-17 as part of their de-risking efforts. The move to cut relationships with tail clients has also been a symptom of archaic business models, particularly around the widespread use of labour-intensive processes, adding considerably to the cost of servicing smaller accounts. With most banks redoubling their coverage efforts on their largest clients in recent years, intense competition is also weighing on margins and individual bank market share. Many of these key clients are also growing at slower rates than a large number of up-and-coming tail accounts, where potential unicorns reside.

While chasing the tail represents an attractive opportunity for banks that can develop an effective low-touch, automated service proposition across the entire client service value chain, we believe the merits of digital transformation are even more widespread. We not only see the most successful players achieving a 10-15% uplift in revenues from accessing tail clients and streamlining sales processes (including automating cross- and up-selling), but we also anticipate a 30% reduction in operating expenses for successful players by 2023. This would see the average cost-to-income ratio of leading global banks fall from ~85% at present to ~60% – and from ~75% to ~50% for leading APAC banks – within five years (see Figure 17).

FIGURE 17: PROFIT IMPLICATIONS FROM DIGITALISATION



Source: BankScope, Quinlan & Associates analysis

There are, of course, limits to the digital transformation process. While we are no doubt living in an increasingly digitalised world, we are still, as social creatures, drawn to interactions with fellow humans. Moreover, given how nascent many of these technologies are, it will be a while before we place all of our faith in robots – because, the fact is, most of us still value personal assurances and a human touch. This is especially the case for businesses that require any kind of creative thought process and judgment calls, such as investment research and corporate advisory. However, the vast majority of processes in today's banking industry, especially in middle and back-office functions, are low value-add and can largely be done by machines. This is a trend that banks can simply no longer afford to ignore. By addressing the digital revolution head on, we see considerable strategic and financial merit in chasing the tail.

SECTION 6
HOW CAN WE HELP?

Our consultants have helped several banks develop their tail strategies and affect wider digital change programmes. Our project work typically involves a number of key steps:

1. EVALUATE

Evaluate the bank's tail client and digitalisation strategy to identify key gaps and future opportunities, e.g.:

- Analyse the client universe in detail to identify key value-accretive and value-destructive accounts, including clients with the most attractive future growth potential
- Market sizing on key digital channels in terms of revenue opportunities and cost savings
- Competitor benchmarking to identify key capability gaps (e.g. geographies, industries, products, compliance processes, etc.) against peers and industry best-practice
- Determine adequacy of internal capabilities to affect change, including legacy systems, data availability and accuracy, IT expertise / talent

2. DEVELOP

Develop an appropriate end-to-end digital and tail client strategy, e.g.:

- Define an end-to-end target-state architecture and operating model that is centred around improving the client experience and aligns with the broader vision of the bank
- Identify the most relevant digital delivery model at each stage of the value chain, and outline all necessary enablers to drive implementation
- Identify the appropriate option(s) for executing specific digital initiatives (i.e. build, partner, or acquire), considering the bank's existing capabilities, risk profile, and core objectives
- Formulate appropriate solutions to address potential roadblocks, such as redefining governance structures and KPIs and addresses weaknesses in AML processes, etc.

3. IMPLEMENT

Implement strategic priorities across the bank and individual units, e.g.:

- Establish and work with an appropriate Project Management Office ("PMO") team to oversee the bank's wider digital change programme
- Develop overall execution plan (e.g. outlining key workstreams, defining rollout prioritisation, identifying project owners / sponsors, and establishing detailed project deliverables with key supporting milestones)
- Connect the bank to a network of relevant FinTech start-ups to understand new applications and their potential use cases at the organisation while assisting with potential partnership for general implementation efforts

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ABOUT US

Quinlan & Associates is a leading independent strategy consulting firm specialising in the financial services industry.

We are the first firm to offer end-to-end strategy consulting services. From strategy formulation to execution, to ongoing reporting and communications, we translate cutting-edge advice into commercially executable solutions.

With our team of top-tier financial services and strategy consulting professionals and our global network of alliance partners, we give you the most up-to-date industry insights from around the world, putting you an essential step ahead of your competitors.

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