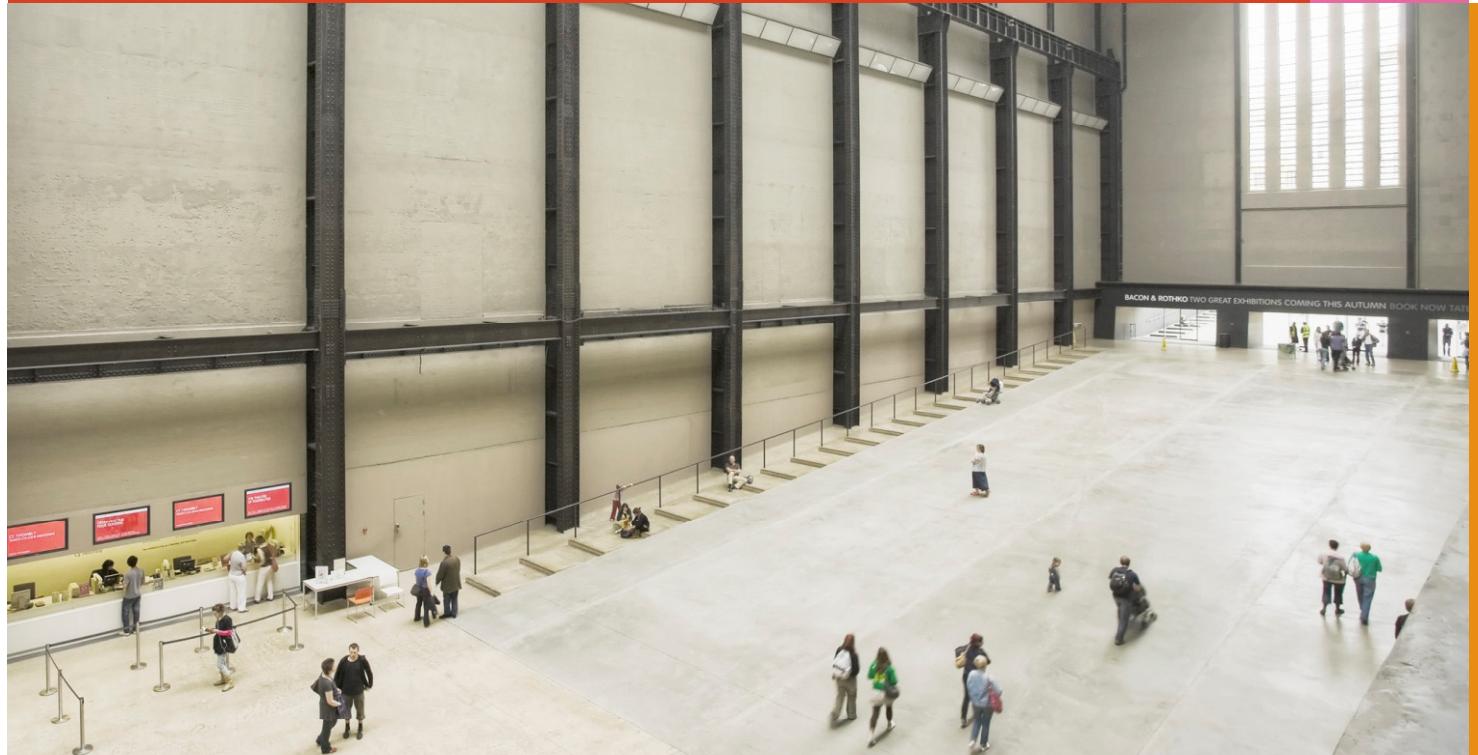


Look Before You Leap:

Analyze Customer and Business Impact Carefully Before Implementing Product Changes



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Section 1

Point of view

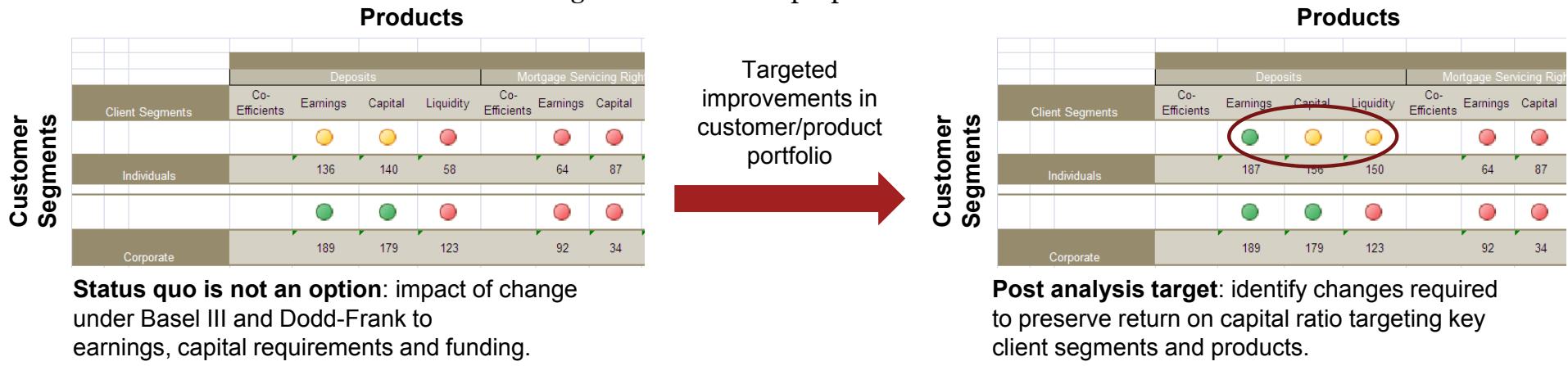
Point of view

Executive summary

Aftershocks from the credit crisis of 2008 are still being felt in the form of changes to the regulatory landscape. As currently drafted, Basel III and Dodd-Frank have the potential to increase the cost of doing business—as a result of the need for increased capital, funding, and compliance costs—that together, could impact profit margins and returns on equity. Several articles and studies have already described strategy revisions undertaken by financial institutions to: (1) update the expected return profiles of their businesses in the proposed environment and make decisions to continue “as is,” (2) modify their approach, or (3) exit a business or product.

PwC has developed a holistic framework combining an assessment of the potential impact on earnings, capital, liquidity and risk from the latest regulations, directives and proposed rules with customer experience drivers. Business leaders can use this framework to help inform their strategic decisions on businesses and products. The magnitude of sustained change presented by evolving regulation and markets also offers decision makers with a timely opportunity to enhance client and product governance processes. Our observations of financial services institutions suggest that the sheer volume of changes has outstripped the institutional capacity for and resources devoted to change management, resulting in some decisions being finalized with limited information or integration of marketing and sales data with finance and risk data. This leaves financial institutions vulnerable to sub-optimal allocation of scarce resources and a long-lasting negative impact on customer experience, hampering growth and profitability.

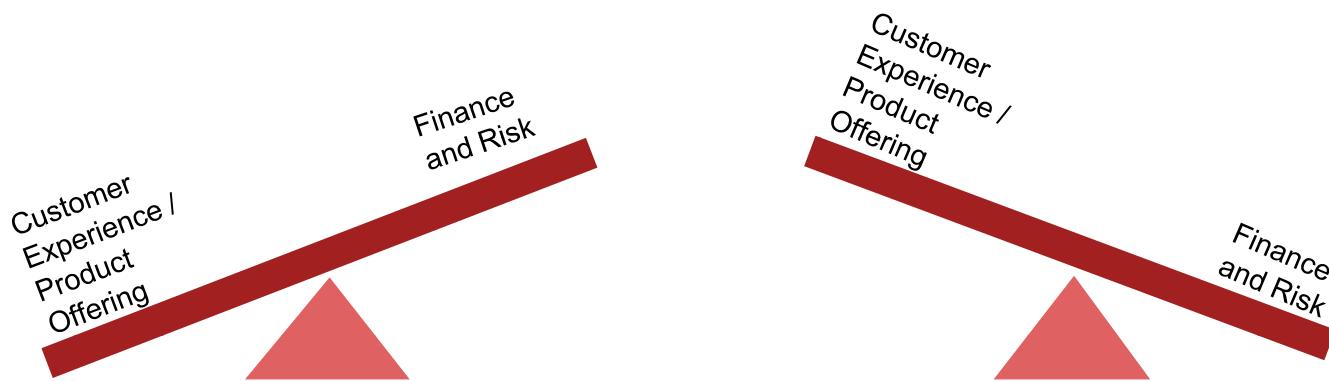
By applying this framework to five products through case studies included in this document, PwC sets out a series of strategic and tactical initiatives to assist leaders in moving the “dials” in the proper direction.



Point of view

Current processes used to balance customer impact with product offerings and pricing are not adequate. Key stakeholders and important data are either not integrated into, or may be missing from, the decision process.

Generally, financial institutions have separated the decision-making processes used to manage customer experience from those processes used to monitor capital usage. Aggravating this condition, clients have grown more sophisticated while cross-selling has grown more important. Given the pressure from external stakeholders (e.g., regulators and investors), strategic analyses combining key capital, funding, and risk management decisions with customer experience should be developed.



New product approval committees have been used by banks for many years to review and prepare for the roll outs of new products and services. The reviews are generally limited to changes in current offerings. These committees should assess new **and** existing products and services by **drilling-down into capital and funding allocations required by the products targeted for particular customer segments.**

Finance and Risk functions operate at the line of business, region, and group levels. However, it is rare for these functions to have sufficient data to **enable insights to be drawn regarding individual products, segments, or customers.** When gathered, we have found that this information is aggregated on an ad hoc basis and is not embedded in a financial institution's data production cycles or financial reporting. It is rare to find capital calculation and allocation at the product or customer level executed in "production mode."

Point of view

New regulations are forcing financial institutions to re-examine their mix of businesses. Despite the difficulty in obtaining data at the proper level of granularity, these reviews should include the impact on customer experience.

The new regulations, directives, and standards required by Basel III and Dodd-Frank are likely to reduce profit margins and increase capital requirements in key business lines. Financial institutions have been updating expected return profiles in the proposed environment and have started to decide whether to: (1) continue “as is,” (2) alter their exposure, or (3) exit a business or product.

This presents leadership a unique opportunity to modify their approach to examining and balancing their customer and product portfolios. PwC helps clients address these challenges with an “end-to-end” framework that sets and maintains alignment between a financial institution’s customer experience priorities and the management of capital, funding, and risk. This framework is not a substitute for enterprise-wide risk management. Winning financial institutions are able to drill down from the enterprise-wide view to link finance and risk insights with customer and product analysis.

PwC reviewed the regulatory impacts on five products.

Highlights of the findings include:

Derivatives—an end-to-end transformation is required to manage OTC/Clearing derivatives flows and pricing new collateral, capital, and liquidity requirements according to client segmentation/targeting strategies.

Prime Brokerage—required increases in capital and liquidity coverage under Basel III will require broker-dealers to examine their portfolio of clients, product sets, and booking models to reduce impact on returns on capital and meet the liquidity coverage ratios.

Deposits—the Basel III liquidity framework directives mean the importance of deposit “stickiness” is greater than ever.

Optimizing the customer segment mix is required, supported by retooled funds transfer pricing (FTP) and deposit pricing frameworks.

Mortgage Servicing Rights (MSRs)—increases in the capital requirements for MSR assets under Basel III, as currently proposed, may influence the competitive dynamics among originators, which will determine whether borrower rates are increased to limit the impact to the return on equity.

Securitizations—changes to the capital rules are affecting market dynamics and market participants. Sponsors and originators should supply investors with timely data that is accurate, relevant, and comprehensive for all global regulatory regimes in which they operate. Data sets should be consistently updated and allow tailored access and reporting.

Point of view

Leaders are beginning to implement a new, integrated approach to managing the dynamic between customer impact, product portfolios, and pricing. Laggards risk greater levels of customer dissatisfaction and, potentially, loss.

The current practice, where marketing and sales leadership within a business line operate without sufficient integration with finance and risk, leaves financial institutions vulnerable to sub-optimal allocation of scarce resources. An integrated approach, including data at the proper level of granularity, supports a much improved result. These reviews should align the increased capital and liquidity requirements of the industry's new regulatory regime and their impact on each financial institution's customer experience.



Financial institutions are reviewing their product mix, target clients, and delivery architecture to decide whether to maintain, expand, or exit certain markets. The strategic framework necessary to analyze such changes should span customer experience, product profiles, and likely competitor reactions, as well as expected impact on capital requirements, liquidity, and earnings.

Banks should expand their product assessments to include client mix as part of the allocation of scarce resources. We expect banks to expand their new product approval processes to begin to evaluate existing products and client mix. Best-in-class processes join CEOs and business line leaders with marketing, operations, finance, and risk to make strategic allocation decisions.

Section 2

Competitive intelligence

Competitive intelligence

The events of the past two years have caused financial institutions to reevaluate new and existing products and services. Insights from several banks, listed below, highlight the current state and the gap between current state and what we believe is required.

Type	Bank 1	Bank 2	Bank 3	Bank 4
New product introduction	<ul style="list-style-type: none">There are two committees to review and approve new products. ▲These committees are chaired by the COO and CAO of the investment management division. Broad representation from all impacted functions are present. ▲Client impact is examined from the standpoint of assessing downside reputational risk. ▲	<ul style="list-style-type: none">There is a New Product Approval (NPA) committee. ■The committee is chaired by the Chief Risk Officer (CRO) and has representation from all impacted functions. ■Client experience is not examined as part of this process. ■	<ul style="list-style-type: none">There are new business committees (NBCs) that review new products. ■Separate NBCs are used within each line of business (e.g., traditional versus alternative product NBCs). ■The committee is run by the CAO, CFO, and COO for each group and consists of Risk, Compliance, Legal, and Accounting. ■Client experience is not reviewed as part of the process. ■	<ul style="list-style-type: none">There is an NBC to review and approve new products. ■The committee is chaired by the risk function and requires sign-off from the front office, finance, and accounting policy and valuation group. ■Client experience is not specifically examined as part of the process. ■
Existing production evaluation	<ul style="list-style-type: none">Existing products are evaluated from a risk and profitability perspective by line of business ownership. ▲On an ad hoc basis, existing products are reviewed by the two “new product” committees. ▲Some client impact reviews are performed, but more from the standpoint of assessing downside reputational risk. ▲	<ul style="list-style-type: none">Existing products are reviewed annually, but not with the same level of rigor as new products. ■Reviews are typically run out of the line of business risk organization. ■Material product changes are reviewed by the NPA. ■Client experience is not included in the review. ■	<ul style="list-style-type: none">NBC performs a financial review of existing products (e.g., sales and profitability) and also reviews when material changes to the product set are proposed. ■The line of business is solely responsible for sunsetting products with no input from NBCs. ■Client experience is not included as part of the existing product review process. ■	<ul style="list-style-type: none">Existing products are evaluated from a risk and profitability standpoint by the line of business. ■Decisions to change attributes or sunset individual products are made at the line of business level. ■The client experience impact of product changes is rarely contemplated. ■

● Leading ▲ On par ■ Lagging

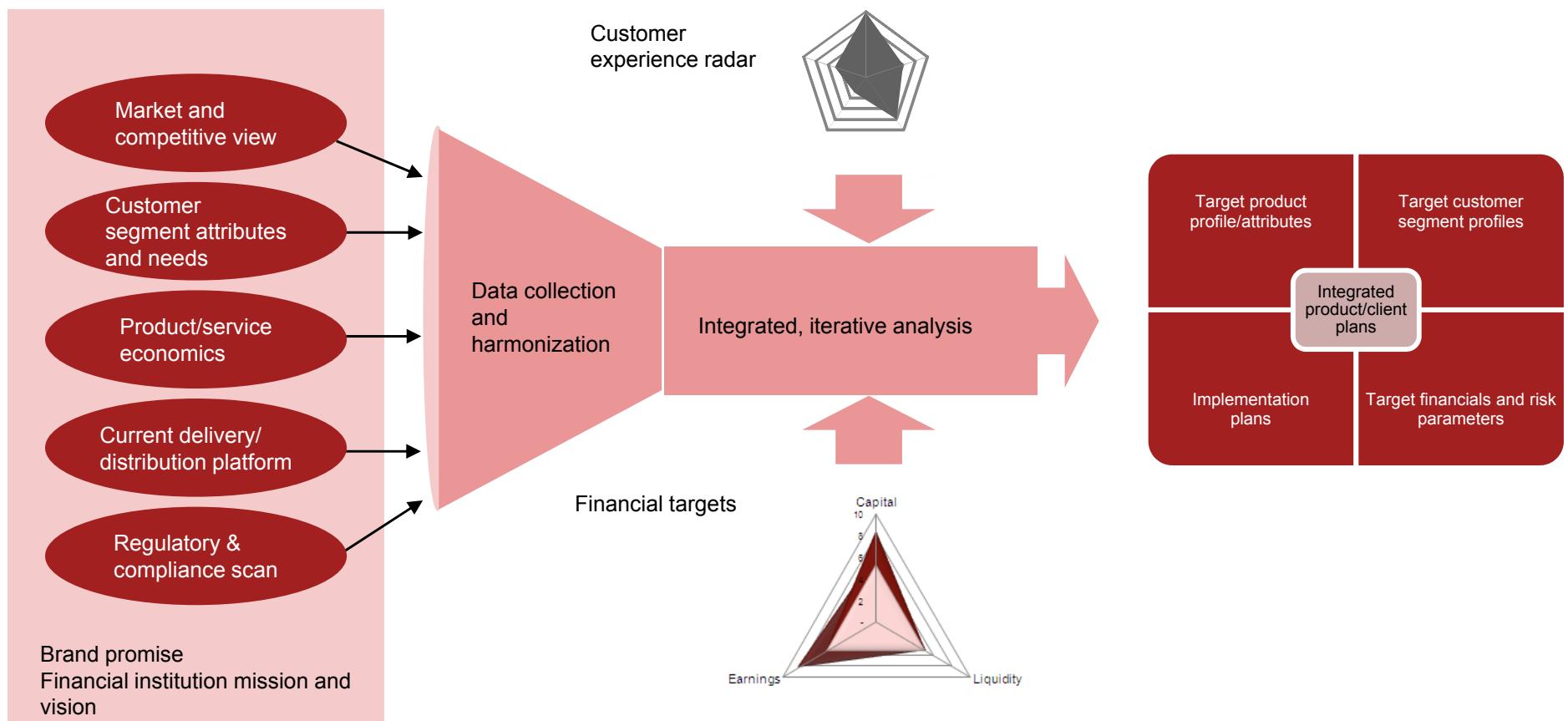
Section 3

A framework for response

A framework for response

Overview

The diagram presents an overview of PwC's approach to addressing the multiple dimensions of the decision-making process. The framework necessary to analyze such changes should span customer experience, product profiles, and likely competitor reactions, as well as expected impact on capital requirements, liquidity, and earnings. Depending on the state of a financial institution's data, the collection and harmonization step may be challenging.



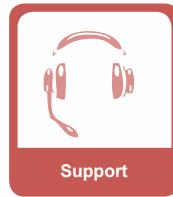
A framework for response

Experience Radar

PwC's Experience Radar surveys customers representative of the US population across 11 industries. Our methodology employs an advanced primary-research technique and assigns values to customer experience attributes at an industry level. The Experience Radar's attributes are applied to both retail and institutional client populations. Potential surplus reflects customer's willingness-to-pay (WTP)—that is, for which attribute would a customer be willing to pay a premium?



Ease of accessing and using offering



Convenience of help pre/post purchase



Value and breadth of offering



Aesthetics, usability, clarity of offering



Personalization of relationship (*)

Potential surplus increase

7%

8%

6%

4%

0%

Examples include

- Branch and ATM location
- Investments made developing easy access across touch points
- Account access across channels
- Ease of issue resolution
- Securities available for loan

- Staff attitude and empathy
- Degree of support for issue resolution
- Single or multiple points of contact
- Security monitoring
- Allocation of balance sheet

- Rewards programs
- Scope of branch services
- Scope of online services
- Service fees
- Safety - perception of bank strength during volatile economic circumstances

- Usability of mobile access
- Brand perception of fairness and clarity of product in market
- High touch client service
- Rate comparison and transparency
- Trade state management portal

- Product development with a focus on needs of target segments
- Alignment of the product and service to the customers' needs
- Degree of personal care in banker relationship
- Customization of product to client portfolio

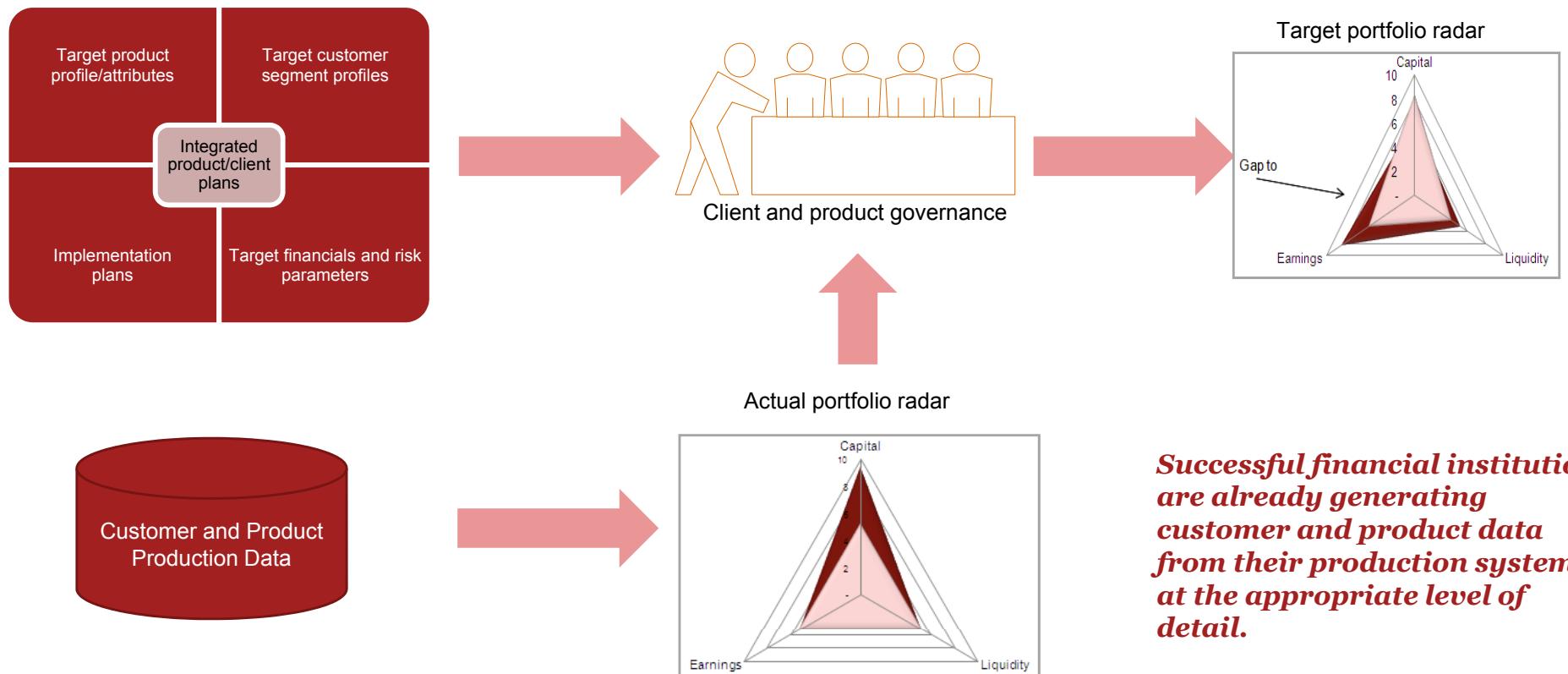
Retail

Institutional

(*) Survey results indicate customers perceive financial services institutions to be too impersonal, but are not willing to pay more for personalization by a wide margin. They have come to expect personalization as part of the base offering.

A framework for response Governance

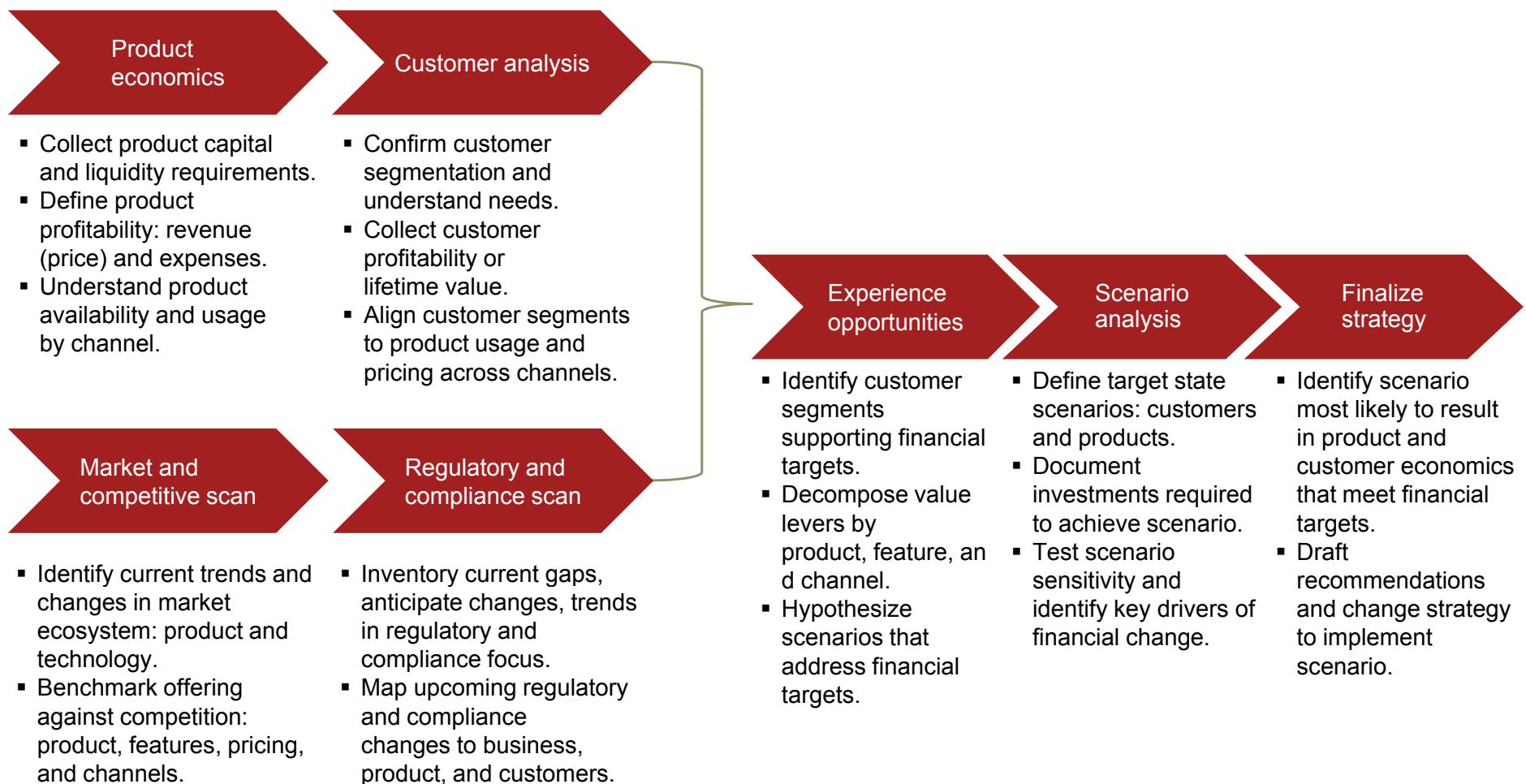
Beyond individual product reviews, banks should assess their mix of clients and products to refine their allocation of scarce resources. Financial institutions are evolving their new product approval processes to begin to govern existing products and clients as well. Best-in-class processes join CEOs and business line leaders with operations, finance, and risk to make the strategic allocation decisions.



A framework for response

Methodology and accelerators

PwC methodology includes an ordered list of activities and tasks, supported by tools and accelerators, to guide clients through the process of starting the combined modeling process and sustaining the changed operation.



A framework for response

Case study—Deposits

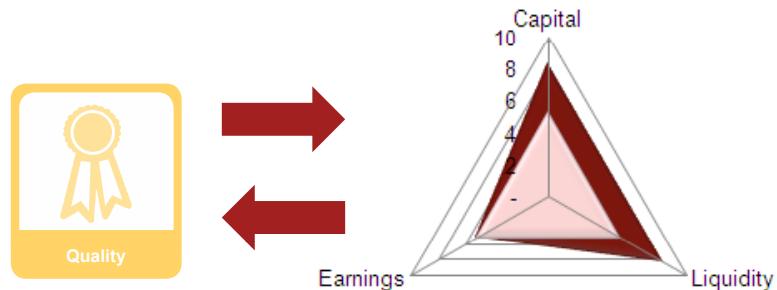
The Basel III Liquidity Coverage Ratio (LCR) will require banks to maintain high-quality liquid assets to cover an assumed thirty-day deposit run-off scenario. The run-off assumptions vary by deposit type and are significantly more pessimistic than currently assumed by most financial institutions. In addition, regulators in individual jurisdictions will have broad latitude to establish even more stringent liquidity coverage requirements for deposit types viewed as not exhibiting “sticky” behavior under a stressed funding scenario.

For example, under the LCR, a corporate banking deposit portfolio will require a supporting liquidity buffer of at least 25-75%.¹ At current funding curve rates, a business line taking in corporate deposits will absorb an estimated 30% reduction in spread revenue credited by the treasury unit.²

This reduction in internal spread allocation reflects the bank-level net interest margin loss resulting from the need to hold low-yield liquid assets to support these deposits.

Key assumptions:

- Baseline funds transfer pricing (FTP) reflecting current market rates and 40% core blend
- 25% of corporate deposit treated as operational (receives 25% buffer)
- Liquidity buffer charge of 0.40%



To respond effectively to Basel III, banks should formulate and implement optimization strategies built on a more in-depth understanding of the deposit portfolio. As discussed in PwC's FS Viewpoint *When Cash Isn't King*,³ successful optimization strategies will position the bank to succeed in targeted, sticky customer segments with attractive Basel III economics. Advanced deposit-management capabilities in the areas of liquidity life assessment, FTP, customer rate optimization, and segmentation will provide a critical foundation for success.

More broadly, banks should move away from a traditional product silo viewpoint and holistically reassess customer segment potential. Banks that fail to target effectively will become competitively disadvantaged in key segments, as mechanical application of liquidity buffer charges results in uncompetitive deposit rates.

¹ "Basel III: International framework for liquidity risk measurement, standards and monitoring." Basel Committee on Banking Supervision, December 2010, <http://www.bis.org/publ/bcbs188.pdf>.

² Based on PwC analysis.

³ "When Cash Isn't King: Driving Deposit Value in a World of Excess Liquidity," *PwC Viewpoint*, December 2011, <http://www.pwc.com/fsi>.

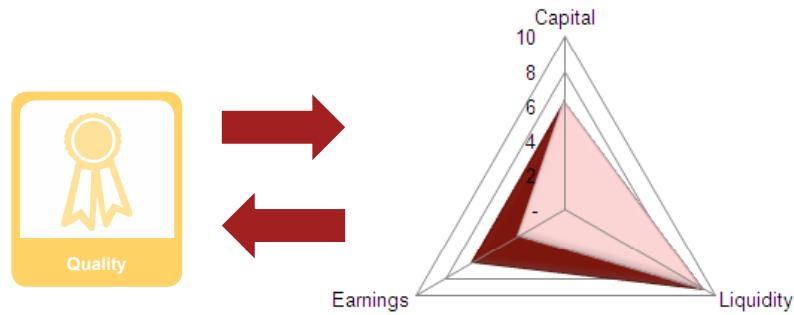
A framework for response

Case study—Deposits

Financial institutions able to differentiate high-value deposits within the portfolio may gain a significant competitive advantage. Winning banks will leverage an in-depth understanding of customer deposit behavior to optimize performance.

Based on PwC's experience, banks can find opportunities to optimize their deposit gathering by:

- Refining enterprise liquidity requirement models based on more deeply segmented deposit behavioral life analysis.
- Incorporating liquidity characteristics of deposits more explicitly into FTP frameworks in order to better align line-of-business deposit gathering to enterprise liquidity objectives.
- Optimizing customer deposit pricing based on elasticity analytics.
- Designing go-to-market plays aimed at gathering high-quality deposits and optimizing Basel III requirements.
 - Product programs
 - Channel strategies



Through these optimization techniques, banks should be able to:

- Manage the overall balance sheet through extension of deposit portfolio liquidity life.
- More successfully drive customer acquisition and retention in profitable customer segments.
- Recoup liquidity buffer spread loss through enhanced deposit pricing (rate reductions and lags).

A framework for response

Case study—Securitizations

The new regulatory requirements establish more stringent capital standards by creating more restrictive capital definitions, higher risk-weights for certain assets, additional capital buffers, and higher requirements for minimum capital ratios.

Required increases in capital and liquidity coverage under Basel III and Dodd-Frank may cause investors and originators to examine their portfolios, product types and booking models to minimize the impact on capital usage, liquidity coverage ratios, and earnings.

Potential actions for investors and originators include:

- Evaluating portfolios for attributes affecting capital requirements, liquidity and long-term funding requirements. Evaluations should address Dodd-Frank and Basel III requirements, as well as implementation of Basel III requirements by global regulators (FSA, FINMA, BaFin and others).
- Creating enhanced risk and capital models and gaining regulatory approval, both for portfolios that form part of current inventory and those that do not, should allow opportunities to be taken in the future.
- Utilizing enhanced reporting, elevating data quality, and achieving enterprise-wide consistency of the definitions of components of default, loss, and other key metrics; operationalizing the capture of consistent data points from internal and external sources.
- Designing and implementing process and system changes to support stress testing, counterparty risk, and capital management infrastructure.
- Developing new capital-planning strategies and monitoring processes and procedures that apply across existing and new portfolios, including pre-execution risk assessments.

Given the complexity of the process, investors and originators may need to invest in the analysis of new products—gaining an understanding of the impact on capital, liquidity, and earnings of existing securities.

For example, a mortgage-backed security downgraded from AAA to B should be deducted from capital, although expected losses may be limited.

Capital allocation may be improved by executing a combination of the following:

- Evaluating underlying exposures
- Identifying related capital impacts, such as Mortgage Servicing Rights for the security
- Analyzing holdings of other tranches from the same structure
- Sharing economics with a non-bank counterparty

A framework for response

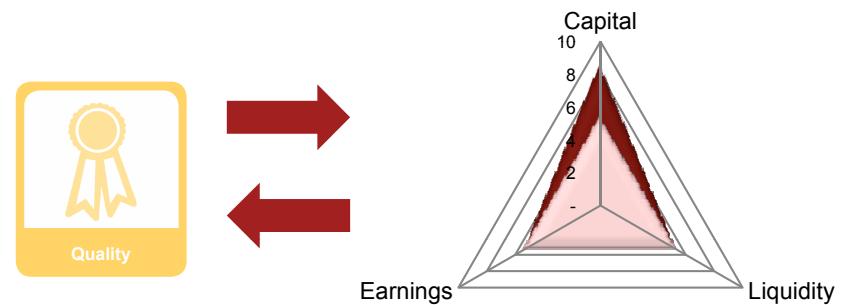
Case study—Securitizations

While the basic capital requirements for securitizations will increase, opportunities exist to apply the advanced Basel II.5 and III approaches that measure the risk of the underlying exposures and may potentially reduce capital requirements.

Financial institutions need to obtain regulatory approval for the advanced approaches, with poor-quality data being a barrier to approval.

PwC has observed the following data problems in the market:

- Fragmented transactional data sources lacking essential population, granularity and attribution.
- Reliance on external data vendors without appropriate checks and balances.
- Uneven availability of reference data in financial institution systems, leading to inconsistent model inputs and outputs.
- Lack of common definitions, terminology and data tagging for a given measure, for example 'default'.
- Inconsistent adjustments made to correct or enhance data issues.
- Inefficient report preparation due to highly manual processes and effort duplication.



The reevaluation of data sources to assess quality and consistency, combined with the creation of a dynamic data hub, allow for the provision of value-enhancing data to critically assess investment decisions and their impact on capital, liquidity, and earnings under any regulatory regime globally.

Sharing this data with customers can enable mutually capital-efficient trades to be executed.

A framework for response

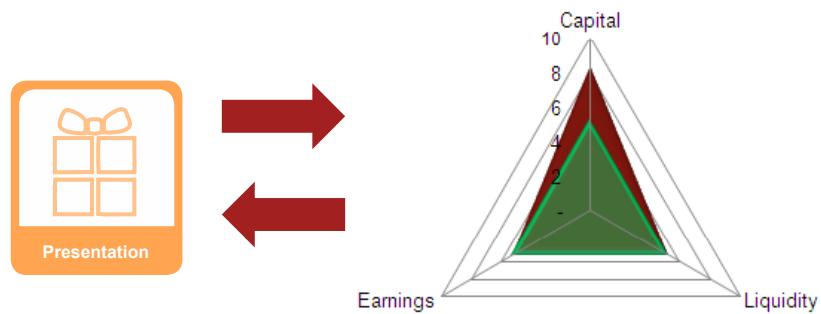
Case study—Mortgage Servicing Rights (MSR)

Based on PwC analysis, under Basel III, the effective capital required for an MSR asset increases from approximately 17% today to 20%-26% if an entity is under the MSR limitation. However, if an entity is over the limitation, the effective capital can be well in excess of 20%-26%. More importantly, the incremental capital required for the MSR on the next mortgage originated is 100%. All other things constant, the increase in capital requirements will reduce the expected return on equity, or originators may have to raise borrower rates to maintain the expected return.¹

For an MSR investor to maintain the same return on equity, given the 100% equity allocation, the company would need to raise borrower rates by approximately 28 bps to improve margins to compensate for the decline in MSR value of 73 bps and maintain the expected return on equity of 30%.

Key Assumptions:

- To provide a high level estimate of the estimated Basel III effect, we used the valuation of a typical MSR contract on a newly originated mortgage based on a 17% equity capital allocation. This MSR had an estimated value of 150 bps. We increased the equity allocation to 100% (reflecting the marginal equity requirement under Basel III), re-valued the MSR, and estimated a revised value of 77 bps. The increase in equity capital produced a significant reduction in value by about half (49%).
- Next we computed the potential reduction in the expected return on equity under the 100% equity capital regime for an MSR that was initially priced under the 17% equity capital regime. The expected return on equity would be reduced from approximately 30% to approximately 10% or about two-thirds.



¹ Based on PwC analysis.

A framework for response

Case study—Mortgage Servicing Rights (MSR)

Assuming Basel III is implemented as proposed, it will create capital requirements that are not consistent among those market participants that are over or under the limitation. As a result, the impact on customers, via changes in borrower rates, will depend on the outcome of the competitive dynamics among individual originators.

Potential outcomes:

- Banks over the limitation raise rates, resulting in lost market share; conversely banks under limitation hold rates steady, minimizing customer impact and gaining market share.
- Banks over the limitation raise borrower rates and so does everyone else, resulting in higher returns on capital for those below the threshold and thereby negatively impacting customers.
- New participants enter that have no or minimal MSRs, and steal market share from those banks over the limitation, thereby minimizing customer impact.

Competitive dynamics may lead to no change in the mortgage rate and no impact to customers, or may lead to a meaningful increase in mortgage rates and therefore a negative customer impact. If banks do not increase mortgage rates, they will then need to find other ways to differentiate themselves from the competition by, for example: (1) focusing on customer experience, (2) selecting the right products to offer to the customers, or (3) choosing the appropriate channel to target their prospective customers.

Actions banks can take to prepare for MSR capital rules:

- **Deferred Tax Liability (“DTL”) treatment**—stay tuned with the regulators’ position on treatment of DTLs associated with MSR assets. If the regulators allow the DTL to be netted against the MSR asset, thereby reducing the size of the MSR asset in the limitation calculation, the likelihood of the MSR exceeding the 10% threshold at many banks is significantly reduced.
- **Evaluate mortgage servicing compensation reform** to determine if new models will help mitigate cost. Reform may result in a model that either eliminates the creation of capitalized MSR assets or reduces the amount of MSR capitalized. Both outcomes reduce the likelihood that the MSR exceeds the 10% threshold prospectively.
- **Evaluate transactions to reduce MSR concentration**—market participants over the limitation may execute transactions to effectively sell some portion of the existing MSR asset such as excess IO transactions and/or outright sales of MSRs.
- **Evaluate potential competitive dynamics** and competitive actions to determine how you might respond and the resultant implications.

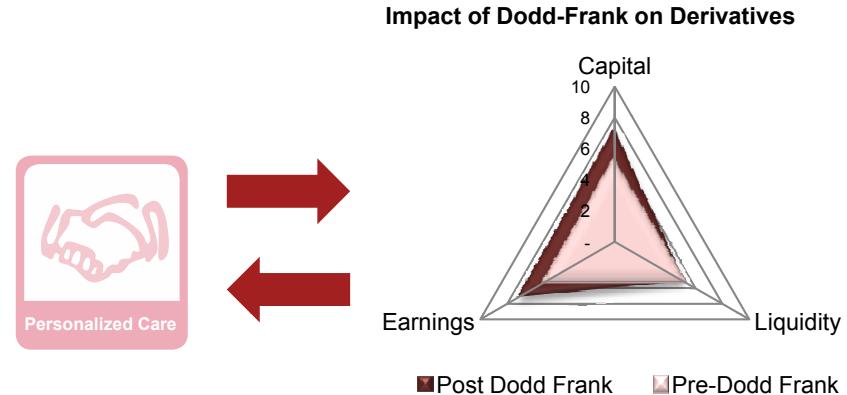
A framework for response

Case study—Derivatives

The current proposed Commodity Futures Trading Commission (CFTC) rules are likely to have the intended effect of pushing non-cleared swaps transactions to central counterparties (CCPs) due to lower margin requirements. An unintended customer impact will add further complexity to what are already complex hedging strategies. The extra complexity will arise from the likely gaps between the terms of the standard swaps and the customers' actual exposures.

Prior to Dodd-Frank, the popularity of bilateral OTC swaps was due, in part, to the customized nature of their terms.

Expiry dates, reset dates, and reference rates, for example, can be aligned to a specific set of customer exposures. Other attributes contributing to their popularity include transaction anonymity (only one counterparty is aware of the position) and ease of execution (customers were able to execute their hedging strategies at once).



The proposed CFTC margin rules set minimum initial margin requirements for non-cleared OTC trades to a 99% confidence level for a ten-day horizon, compared to five and one-day horizons used in the calculation of the requirement for trades cleared through Swap Execution Facilities (SEFs) and Designated Contracts Markets (DCMs), respectively.

The result is an initial margin requirement for non-cleared swaps three to four times greater than cleared swaps. In addition, meeting the revised margin requirements will require customers to post high-quality collateral for cleared swaps. The types of collateral eligible to meet margin requirements will be restricted to cash, Treasuries, Government-Sponsored Entity (GSE) obligations, and farm credit-system bank obligations.

In addition to the altered margin and collateral requirements, dealers may find that the use of scarce capital is not maximized due to data-quality and operational issues that currently reside within their derivative-support processes. Dealers will address this challenge as part of the re-engineering of these processes required to support the cleared-swaps business.

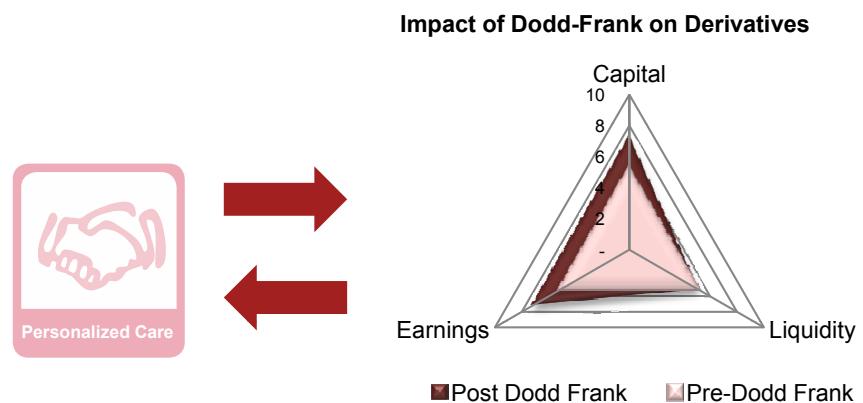
A framework for response

Case study—Derivatives

The change in market structure for derivatives creates both a challenge and an opportunity for brokers and dealers. Based on PwC's experience, there are several potential action steps to alter customer service while allocating scarce resources to gain a competitive advantage. Advantages are likely to arise from leveraging an in-depth understanding of customer hedging strategies and the use of swaps in their businesses.

Potential actions:

- Develop services to assist customers in the optimization of hedging strategies given their exposure profile. These strategies would balance hedging benefits with the proper combination of customized (more expensive) and clearable swaps (less expensive).
- Revisit profitability of capital deployed on CCP memberships and transition to non-clearing FCM role in those CCPs where the opportunity cost of capital used is not supported by the profitability of the business.
- Eliminate CSA data errors in systems to increase accuracy of margin calls, and optimize use of posted collateral.



Where possible, increase the use of listed products that can mimic the behavior of OTC products at a much lower margin requirement.

For example, a strip of Eurodollar futures approximating a client's hedging need requires one-fourth of the initial margin as a percentage of notional than the equivalent OTC contract. As an illustration, the IM requirement for a two-year contract is 85 bps of notional for the futures contracts versus an estimate of approximately 350 bps of notional for an equivalent bilateral swap.

A framework for response

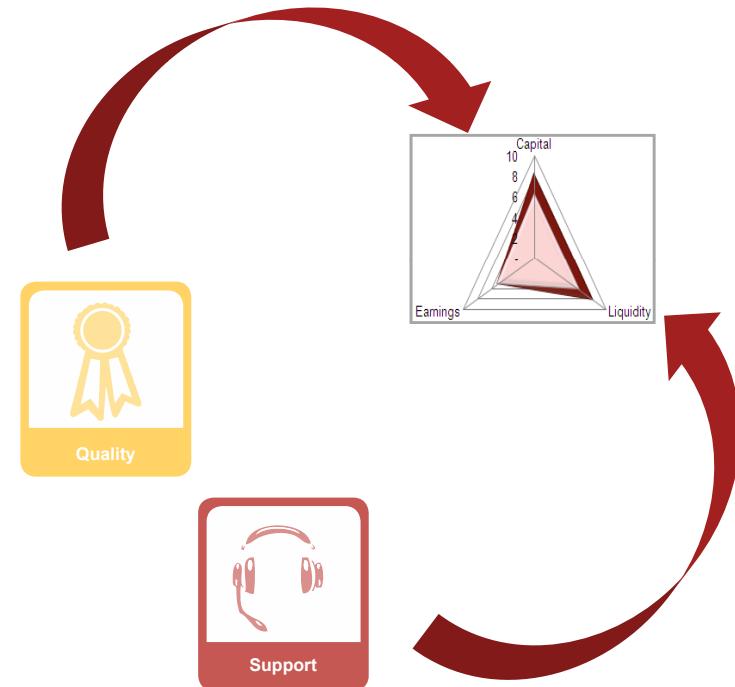
Case study—Prime brokerage

Due to the magnitude of the change, prime brokers are unlikely to be able to simply pass along increased fees to cover the cost of increased capital requirements of Basel III. Prime brokers will be forced to change their operating model.

Basel III impacts prime brokerage in more than one way. First, the LCR will require prime brokers to maintain high-quality liquid assets to cover an assumed thirty-day deposit run-off scenario. The impact of this change to dealers will be driven by their use of free-credit balances to supplement financial institution financing. This is a significant change for the industry.

Second, security financings, after netting, are included in risk-weighted assets (RWA). Dealers will be required to increase capital to support their prime brokerages relative to the size of their RWA balances, after netting support for long against short coverage.

Before Basel III, prime brokers actively targeted clients maintaining relatively larger long and short positions and lower transaction volume. Rationale: margin debit and short cover balances generated more than sufficient income relative to capital requirements while high transaction-volume clients required extra effort in non-straight through processing environments.



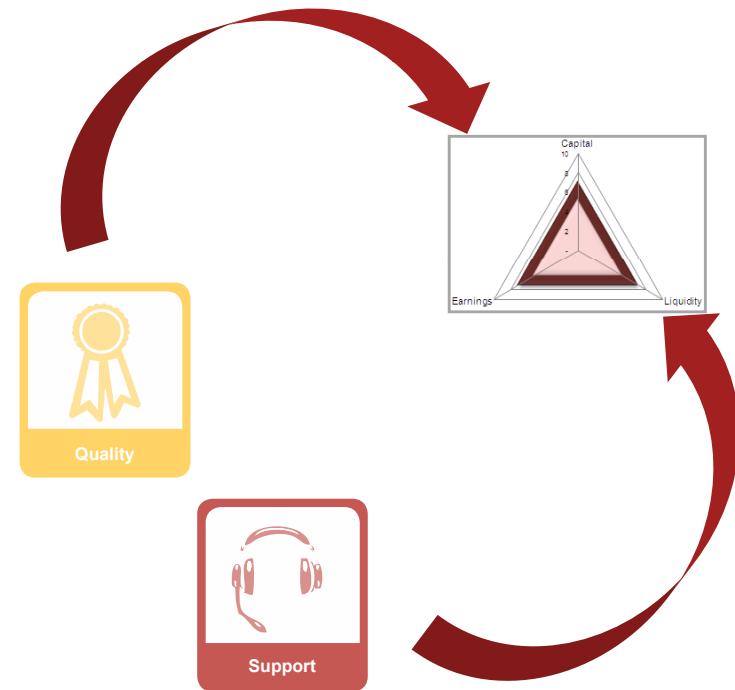
Implementing Basel III has significant implications. In particular, the target client attributes are likely to change. Clients maintaining relatively smaller balances will not require large increases in capital commitment. In addition, clients executing high-transaction volume will generate additional income that covers the cost of service.

A framework for response

Case study—Prime brokerage

To avoid the negative implications to the new return-on-capital profile of prime brokerage, dealers can implement one or more of the following types of strategies:

- 1. Target client profile:** Alter target client profile to serve clients with higher transaction volumes and less leverage. (Example: expand coverage of clients employing 130/30 strategies).
- 2. Product design lever:** Expand use of synthetics as “work around” to allow clients access to leverage while allowing the prime broker to maintain reduced cash balances.
- 3. Organization and operation change:** Merge prime brokerage service with traditional sales and trading channel, modifying client-service models for both channels.
- 4. Legal entity and booking model change:** Convert a portion of transactions (short covering) from principle to agency basis. Extra steps are required to enable “pass through” of securities, including beneficial owner consent, credit agreements, and additional limit and concentration monitoring. Custodians are best positioned to implement this alternative.



A broker-dealer could implement other strategies as well as take a hybrid approach, implementing a combination of strategies. The best approach will be driven by an assessment of the financial institution's client base, current processing platform, and alignment with its future mission and vision.

A framework for response

Case study—Integrated view

With customer impacts estimated and normalized across business units, PwC's approach integrates the results into a dashboard view. This gives leadership an opportunity to view the impact of their allocation decisions on earnings, capital, and liquidity with their impact on the customer experience.

Summary dashboard view

Client Segments	Products							
	Deposits				Mortgage Servicing Rights			
	Co-Efficients	Earnings	Capital	Liquidity	Co-Efficients	Earnings	Capital	Liquidity
Individuals		●	●	●		●	●	●
	136	140	58		64	87	132	
Mass Affluent		●	●	●		●	●	●
	61	64	29		31	43	66	
High Net Worth		●	●	●		●	●	●
	74	76	28		33	45	66	
	●	●	●		●	●	●	
Corporate		189	179	123		92	34	43
Small Business		●	●	●		●	●	●
	64	64	38		47	14	17	

Lessons learned developing an integrated view of customer experience across key financial metrics includes:

- Weighting:** External data expressing importance of different attributes on customer experience requires confirmation of the similarity between the sample set and the bank's actual customers and segments.
- Client segmentation:** Banks do not have a standard segmentation model. In fact, banks typically use more than one model across different lines of business. Initial integration efforts include harmonization of the segmentation models.
- Allocation:** Standardizing the allocation of revenue, expense, and capital commitments across product and customer. Banks generally do not have a standard segmentation model.

Detailed dashboard view

Client Segments	Products							
	Deposits				Mortgage Servicing Rights			
	Co-Efficients	Earnings	Capital	Liquidity	Co-Efficients	Earnings	Capital	Liquidity
Individuals		●	●	●		●	●	●
	136	140	58		64	87	132	
Mass Affluent		●	●	●		●	●	●
	61	64	29		31	43	66	
Access	1.3	8	8	2	0.5	2	5	8
Support	1.7	6	6	3	1.5	3	5	7
Quality	3.0	7	6	4	3.0	5	5	8
Presentation	2.5	5	7	3	0.5	3	5	7
Personalized Care	1.0	8	8	2	3.0	3	5	8
High Net Worth		●	●	●		●	●	●
	74	76	28		33	45	66	
Access	1.3	8	8	3	0.5	5	4	7
Support	1.7	6	6	2	1.5	3	5	7
Quality	3.0	7	6	2	3.0	5	5	8
Presentation	2.5	5	7	3	0.5	3	4	8
Personalized Care	2.5	8	8	3	3.0	3	6	8
	●	●	●		●	●	●	
Corporate		189	179	123		92	34	43
Small Business		●	●	●		●	●	●
	64	64	38		47	14	17	
Access	1.3	9	9	5	0.5	4	2	2
Support	0.7	9	9	5	1.5	4	2	2
Quality	2.0	9	9	6	3.0	6	1	2
Presentation	2.5	9	9	5	0.5	6	1	2
Personalized Care	0.6	9	9	5	3.0	6	2	2

Section 4

How PwC can help

How PwC can help

PwC Advisory

We look across the entire organization—focusing on strategy, structure, people, process, and technology—to help our clients improve business processes, transform organizations, and implement technologies needed to run the business.

Client needs	Issues we help clients address
Manage risk and regulation	<ul style="list-style-type: none">▪ Building a risk resilient organization▪ Managing ERP investment and project execution risk▪ Safeguarding the currency of business; keeping sensitive data out of the wrong hands▪ Ensuring capital project governance and accountability▪ Assessing and mitigating corruption risk in your global business operations
Build effective organizations	<ul style="list-style-type: none">▪ Establishing effective strategic sourcing and procurement▪ Realizing competitive advantage through effective sales operations inventory planning▪ Transforming the close and consolidation process to work for you rather than against you
Reduce costs	<ul style="list-style-type: none">▪ Driving efficiency through shared services▪ Redesigning finance to realize efficiency and competitive advantage▪ Taking control of cost through effective spend management and cash forecasting practices
Leverage talent	<ul style="list-style-type: none">▪ Defining and implementing an effective HR organization▪ Rethinking pivotal talent
Innovate and grow profitably	<ul style="list-style-type: none">▪ Reshaping the IT function into a source of innovation▪ Transforming business information to drive insight and fact-based decision making▪ Evaluating acquisition and divestiture strategies to position for the future▪ Realizing deal synergy and value▪ Developing sustainability programs that add value



How PwC can help

What makes PwC's Financial Services practice distinctive

Integrated global network

With 34,000 industry-dedicated professionals worldwide, PwC has a network that enables the assembly of both cross-border and regional teams. PwC's large, integrated global network of industry-dedicated resources means that PwC deploys the right personnel with the right background on our clients' behalf, whenever and wherever they need it.

Extensive industry experience

PwC serves multinational financial institutions across banking and capital markets, insurance, asset management, hedge funds, private equity, payments, and financial technology. As a result, PwC has the extensive experience needed to advise on the portfolio of business issues that affect the industry, and we apply that knowledge to our clients' individual circumstances.

Multidisciplinary problem solving

The critical issues financial institutions face today affect their entire business. Addressing these complexities requires both breadth and depth, and PwC service teams include specialists in strategy, risk management, finance, regulation, operations, and technology. This allows us to provide support to corporate executives as well as key line and staff management. We help address business issues from client impact to product design, from go-to-market strategy to an optimized economic model, to proper functional practices across all aspects of the organization. We excel at solving problems that span the range of our clients key issues and opportunities, working with the heads of the business, risk, finance, operations, and technology.

Practical insight into critical issues

In addition to working directly with clients, our practice professionals and Financial Services Institute (FSI) regularly produce client surveys, white papers, and points of view on the critical issues that face the industry. These publications—as well as the events we stage—provide clients new intelligence, perspective, and analysis on the trends that affect them.

Focus on relationships

PwC US helps organizations and individuals create the value they're looking for. We're a member of the PwC network of firms with 169,000 people in more than 158 countries. We're committed to delivering quality in assurance, tax, and advisory services.

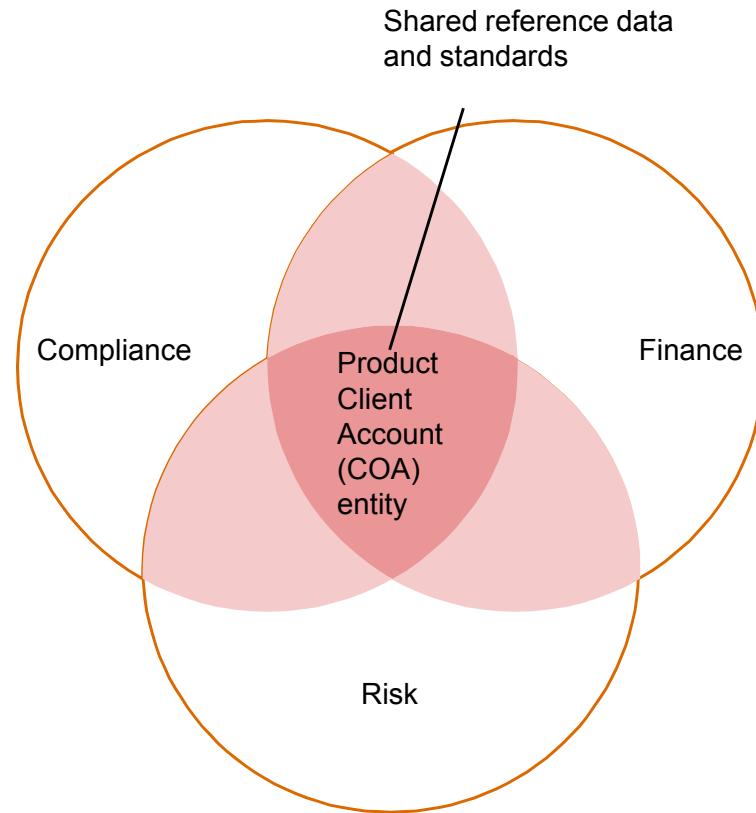
How PwC can help

Unique identifiers and tagging drives complex “aggregated reporting”

Marketing, sales, finance, and risk should share data to support their integrated operations and reporting requirements.

The primary steps for developing shared reference data and standards include:

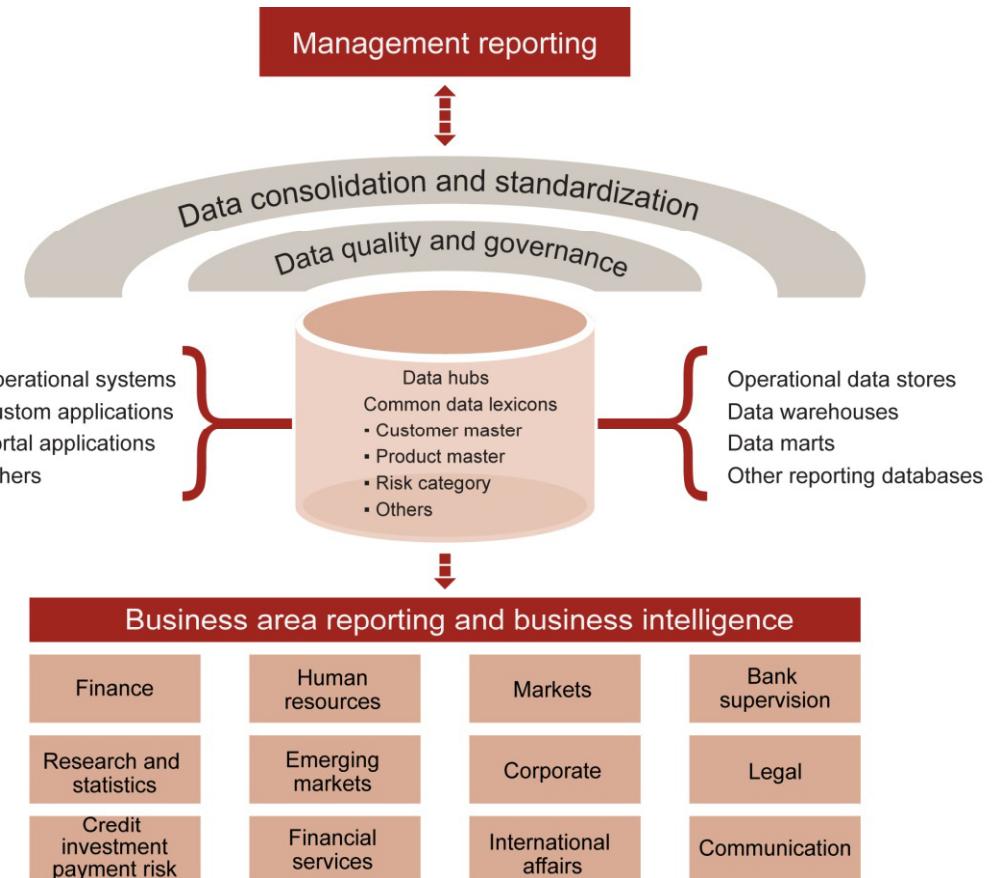
1. Identifying unique and shared data elements.
2. Defining standard and alternative aggregation hierarchies.
3. Documenting standards through a data dictionary.
4. Designing a repository and selecting tools to manage reference data and metadata.
5. Developing a governance and control framework to apply and manage the standards.



How PwC can help

Coordinate and integrate customer experience, finance, and risk data

- Integrated Master Data Hub serving operational and reporting needs for sales, marketing, finance, and risk.
- Data integrated across multiple channels to provide a single view of the customer and products to the business.
- Flexibility to store with core customer and product attributes and business unit-specific attributes.
- Share standardized and consistent customer information across channels where customers are uniquely identified.
- Common lexicons aligned with business needs including customer, product, risk categories.
- Data quality management throughout the process from consolidation, cleansing, standardization, deduping, and enrichment to dissemination/synchronization.
- Data governance with policies, procedures, and monitoring.



How PwC can help

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Appendix

Select qualifications

Select qualifications

Development of a mass affluent wealth management business—retail brokerage firm

Issues

A retail broker-dealer had developed a mass-affluent offering that leveraged a call center-based advisor model. The new client-acquisition model for this business was focused on acquiring existing underserved clients with less than US\$250,000 in investable assets from financial advisors in the firm's private client segment. The institution's mass affluent offering was not market facing, but—given the strong margins and low client attrition associated with the model—management was interested in taking the business to market. The institution engaged PwC to assist with the development of its market-facing organic growth strategy, including: development of the business and operating model; brand; products and services; pricing model; sales and marketing; and channel strategy for the new offering.

Approach

PwC performed an assessment of market trends, competitors, products and services, and pricing, for the mass-affluent wealth segments. This assessment provided the client with an independent benchmark against which it could compare its existing offering.

After completing the market and competitor assessment, we collaborated with our client to develop the business strategy, brand, products and services, pricing model, and sales and market strategy for the mass-affluent business.

Once those components were in place, we developed the operating model—including people, process, technology, key performance indicators, metrics, and locations—and the channel strategy, which addressed online, call center, and in-person delivery models.

Benefits

Early in 2011—after a multi-year development effort and a launch delay caused by the credit crisis—our client successfully introduced the new line of business to the marketplace.

Select qualifications

Market analysis and on-shore strategy review—leading global private bank

Issues

The bank wanted to define its private banking on-shore strategy and adapt its business model to meet emerging market challenges. Management engaged PwC to: (1) identify potential clients and the relevant services that the bank could provide to them, (2) evaluate operational, legal, and tax aspects, and (3) develop the new business model accordingly.

Approach

Working in conjunction with the PwC network, the PwC team provided a detailed analysis of the key neighboring markets and client segments to be approached.

Collaborating with senior management of the branch and their overseas counterparts, we defined a relevant wealth management value proposition based on our findings.

To raise awareness of how solutions could complement the group's offering, we performed an analysis of the private-banking market.

Benefits

The bank gained a holistic view of the current marketplace challenges and opportunities on which to build a new, more robust on-shore strategy and business model. The new strategy-building tools included: a proposed operating model that fit the new business-model requirements, a detailed tax and regulatory proposal for the new legal set-up, IT-security and regulatory concepts, the definition of a strategic roadmap, and a relevant wealth management value proposition.

Select qualifications

New product introduction—global exchange

Issues

Decreased order flow has impacted many securities exchanges. Additionally, increased competition from new trading venues—including dark pools that offer sophisticated traders the ability to anonymously buy and sell large blocks of stock at high speed—is putting added pressure on traditional exchanges. In response to declining volumes, securities exchanges are examining both organic and inorganic growth strategies. As a means of increasing order flow, this global securities exchange was contemplating the introduction of a new mutual fund clearing and settlement service offering. While the exchange had compiled its new product thesis, it engaged PwC to perform a strategy assessment of the offering and collaborate on the creation of a business plan in order to gain the support of the exchange's CEO and executive committee.

Approach

At the outset, the PwC team conducted a business strategy assessment of the client's hypothesis for a new service offering. To help our client better understand the potential impact that this new service offering might have on the key players in the market, we then examined the competitive market forces, the impact on the existing industry value chain, and the regulatory environment. Finally, we performed a SWOT analysis, financial analysis, capabilities analysis, and a go-to-market strategy assessment. Based on our findings, we delivered a fact-based strategy assessment report.

Benefits

PwC's report included the proposed business model, overall revenue opportunity, required one-time capital investment, recurring costs to operate the business, potential competitive response of key players, market entry recommendations, and target operating-model considerations. The report helped top management confirm the validity of the proposed new offering. As a result, our client was able to secure the necessary funding and implement the new offering.

Select qualifications

ETF competitive capabilities and marketplace assessment—asset servicer

Issues

This multi-trillion asset-servicing firm, offering custodial, fund accounting, fund administration, and transfer agency services, sought to determine the impact and value of a potential product offering that would service exchange-traded funds (ETFs). The firm engaged PwC to assess the ETF marketplace with respect to competitive capabilities.

Approach

PwC took a holistic approach that included:

- Analyzing the global and domestic marketplace.
- Assessing the offerings of competing third-party service providers.
- Evaluating existing traditional fund-servicing capabilities to identify leverage points, as well as gaps in functional ETF-servicing capabilities across transfer agency, fund accounting, and custody.
- Preparing a high-level roadmap for successfully developing the capabilities needed by the target segment.
- Performing an industry-practices competitive-pricing analysis.
- Developing a fact-based business case to support the proposed ETF-servicing product offering.

Benefits

Based on PwC's report—which quantified and clearly described the financial and operational impacts and requirements related to servicing this important and emerging product sector—our client was able to formulate and execute its strategy to move forward with the proposed product offering.

Select qualifications

Strategic direction, customer segmentation, and marketing strategy—global private bank

Issues

A global private bank needed a deeper understanding of its strategic positioning in order to design and deploy a suitable private banking marketing strategy. The bank engaged PwC to provide the necessary insights and recommendations to support that objective.

Approach

PwC facilitated a series of senior management workshops that were attended by staff from all areas of the bank—front office, product development, marketing, and investment research. The key takeaways that emerged from these workshops served to inform and define further activities, including:

- Analysis of the external market forces.
- Appraisal of the bank's internal strengths.
- Definition of the bank's mission, vision, objectives, and critical success factors.
- Segmentation of the customer base into five major client profiles.

Benefits

The resulting servicing models and marketing insights—differentiated by client segment and defined in terms of products, distribution channels, pricing strategies, and service levels—drove and populated the bank's more rigorous and targeted new marketing strategy.

Select qualifications

Financial advisor strategy workshop—global broker-dealer

Issues

The senior leadership of a major broker-dealer wanted to develop a cohesive vision for the future, to define how success would be measured, and to determine what challenges would need to be addressed. The institution engaged PwC to assist in refining and reshaping its approach to the private-client marketplace.

Approach

Collaborating with the broker-dealer's senior management, PwC:

- Prepared a hypothesis-driven framework around the key issues and drivers impacting the business.
- Conducted senior management, staff, and financial advisor (FA) interviews and brainstorming sessions around client needs, buying patterns, product positioning, and go-to-market approach.
- Delivered a series of global FA workshops where FA teams were pulled together to identify challenges and approaches to solutions as requested by senior management.
- Conducted debriefing sessions with senior management to transform the insights and recommendations that emerged from the workshops into actionable results.
- Worked with client teams to develop a fact-based business case and define business and technical requirements.
- Supported senior management's efforts to move to a higher level of performance by overcoming budget restraints—earmarking funding to fill identified gaps in personnel, product, and technology infrastructure.

Benefits

Thanks to extensive client research and a compelling business case that gained the consensus of the global leadership team, the broker-dealer emerged with a thoroughly evaluated tactical plan for future growth and profitability.

Select qualifications

Development of customer-experience strategy—leading financial institution

Issues

Although this leading institution enjoyed above-average customer satisfaction, in today's increasingly competitive market it was at risk of losing market share due to low product penetration and ineffective market segmentation. Management engaged PwC to develop an effective customer-experience strategy aligned with the institution's overall strategic plan.

Approach

PwC helped the client tailor a strategy that targeted specific client segments across all lines of business. The strategy emphasized strengthening relationships through cross selling and improved customer experiences. Collaborating with our client, we:

- Interviewed senior executive team members to understand current issues and challenges and determine key drivers and support for various experience drivers and elements.
- Facilitated multiple executive workshops to develop various scenarios depicting what the future state should look like; identified the key elements driving the customer experience and evaluated them in terms of fit with overall strategy and vision.
- Conducted an organizational impact assessment of the required capabilities to deliver desired customer experiences.
- Undertook an analysis to assess the associated cost and benefits related to the delivery of the required capabilities across the customer base.
- Developed an implementation roadmap to facilitate timing and prioritization of required capability enabling initiatives.

Based on our findings, we recommended a viable strategy designed to deliver the optimal customer experience and drive future profitability.

Benefits

Management adopted our recommended strategy, resulting in an immediate 5% increase in profitability.

Select qualifications

Improvement of customer loyalty and financial advisory productivity—global financial services institution

Issues

A US-based global financial services institution wanted to improve customer loyalty and financial advisor productivity and production. To accomplish those objectives, it would first have to enhance both the client experience and front-office technology and tools—a challenging undertaking for several reasons:

- Its advisory revenue targets were not being met in certain client segments and product areas.
- Advisors were burdened with a cumbersome manual sales process that was forcing them to waste valuable time on administrative activities.
- Although its existing private-client broker workstation supported multiple functions, it was under-utilized, given that it was not integrated and provided only mediocre overall performance.

Recognizing the complexities involved in a project of this breadth, the institution turned to PwC for specialized advice and assistance.

Approach

The PwC team guided the institution through a large transformation project that included formulating the vision, improving the customer experience, enhancing the advisor experience, and defining the business processes and requirements. Collaborating with our client, we:

- Created and executed voice-of-the-customer and voice-of-the-FA surveys and interview guides. Based on input from both these interviews and surveys, developed a client-centric workstation designed around a wealth-management workflow.
- Defined client personas across client segments.
- Drew on our findings to develop recommendations designed to enhance customer service and, in turn, build customer loyalty.

Benefits

The updated client-segmentation model provided management with greater insight into customer and advisor needs and preferences that drive loyalty. Front-office business processes are now more customer-centric, and the product-development process was transformed to incorporate client feedback earlier on in the process. Further, the new technology and functional tools enabled the field to operate in a more productive, cost-efficient, and productive manner.

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“Look Before You Leap: Analyze Customer and Business Impact Carefully Before Implementing Product Changes,” PwC FS Viewpoint, February 2012. www.pwc.com/fsi

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