BCBS 239: Bracing for Change and Capturing the Opportunity
Core Reform: Understanding BCBS 239

One core regulatory initiative that aims to give greater transparency to the risk picture, yet has kept a low profile in Asia Pacific (APAC), is the Basel Committee on Banking Supervision (BCBS) document, “BCBS 239 – Principles for effective risk data aggregation and risk reporting (RDARR).”

Representing the first time regulators have mandated technology-driven regulation, BCBS 239 is a result of the work spearheaded by the Basel Committee and the Financial Stability Board (FSB) to provide guidance to enhance banks’ ability to identify and manage bank-wide risks. Crucially, the principles seek to elevate data aggregation capabilities to a level where supervisors, firms and other users (for instance, resolution authorities) of the data, are confident that the reports accurately capture risks in the time of a crisis. As a result, existing gaps in RDARR can hopefully be closed.

First issued by the BCBS in January 2013, the principles structured rulebook has very real and wide-ranging impacts for banks operating globally and in APAC. BCBS 239 pertains not only to the short-list of Global Systemically Important Banks (G-SIBs) but, as outlined in the report, “It is strongly suggested that national supervisors also apply these Principles to banks identified as Domestic Systemically Important Banks (D-SIBs),” as in the case of MAS in Singapore.

“The requirements of BCBS 239 present an opportunity for financial institutions to look beyond basic compliance and unlock strategic value across the organization”

Craig Davis, Partner, KPMG in Singapore
In 2008, the G20 committed to fundamental reform of the global financial system, with the intention to stymie a repeat of the global financial crisis (GFC). As risk management became the main tool to combat vagaries causing financial volatility and systemic turmoil, multilateral bodies and international regulators cooperated through extensive dialogue to enhance the robustness of risk management processes.

As the GFC highlighted, the banks’ incapacity to understand quickly and accurately their overall exposures and other key risk metrics influencing central decisions of the bank, represented a fundamental weakness and gap within the financial system. Without such competences, executive management cannot obtain an accurate and in-depth picture of the risks the bank faces. Without targeting such risk opaqueness, banks and subsequently the global financial system are exposed to acute uncertainty.

Other Root Causes Prompting Basel Committee on Banking Supervision (BCBS) 239 Include:

- **Immature Data Processes**
  - GFC showed insufficient investment in data and infrastructure
  - Data processes could not influence critical decision-making, especially so in systemic crisis situations

- **Management Blindspot**
  - Boards/Senior management not questioning veracity
  - Incoherent risk appetite policy
  - Data lifecycle escaping scrutiny

- **Bad Models or Bad Data**
  - Poor models are usually an indication of poor data
  - Inadequate model performance – RWA divergences
  - Mistrust of risk models at the highest levels of management

- **Data Not Valued**
  - What is the value locked in risk data itself?
  - Capital optimization?

- **Risk and Data Aggregation**
  - No single source of truth
  - Manual processes

- **Silo Mentality of Responsibility**
  - Non-vertical ownership
  - Enforced through policy/politics, and unwilling to change
  - Business/IT perspective generate sub-optimal outcomes

- **The 80% – 20% Problem**
  - Not perceived as a problem but the cost of doing business
  - A lack of motivation internally to change despite models underperforming
  - Standard practice and technology no longer suitable

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Proposed Timeline: Demanding

The banks, particularly Systemically Important Banks (SIBs), face an aggressive timeline (Figure 1) to comply with Basel Committee on Banking Supervision (BCBS) 239. For instance, G-SIBs have until early 2016 to implement the principles in full. At the discretion of local regulators, D-SIBs may also be required to adhere to these principles within three years after they are designated as D-SIBs.

The timeline challenge is further compounded by “simultaneous adoption” or the need to apply the principles on a consistent basis across a group. The deadline for IT implementation falls within deadlines for other regulations, making significant demands on existing bank resources.

Figure 1: Timeline Implementation

Implications of Compliance Failure

There are numerous consequences if banks fail to comply with the principles and if data and infrastructure platforms are not revamped to align with the impending BCBS 239 regulation.

— **Regulatory Penalties and Increased Capital Charges**: Supervisory tools ranging from information-gathering powers to the enforcement of penalties and capital add-ons if regulated G-SIBs or D-SIBs fail to comply with the Principles.

— **Regulatory and Reputational Risk**: Aside from possible specific supervisory measures against banks that don’t get it right, deficiencies reported in early assessments of BCBS 239 often figure in “break-up-the-banks” arguments.

— **Loss of Competitive Advantage**: Enhanced risk and finance data and technology platforms should become – and for many financial institutions are becoming – a core part of business’ strategic decision making. Acting on the principles embedded in BCBS 239 will help banks upgrade RDARR, bringing improved insight and risk management processes to companies.
**BCBS 239 Compliance: Triggering Value**

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<thead>
<tr>
<th>Setting the tone – Taking regulation beyond box-ticking to a Strategic Enabler</th>
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<tr>
<td>Although the principles-based framework does have downsides, the ability for banks to interpret and construct bespoke approaches to strengthen their RDARR can be viewed as a great opportunity. Banks have the flexibility to interpret BCBS 239 with strategic scope and creativity, and set the tone for their own regulatory agenda.</td>
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<tr>
<th>Data strategy and driving continuous value</th>
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<tr>
<td>Data becomes a tool to compete and a virtuous cycle occurs – risk data continuously informs strategy. Strategy and informed decision making is driven by confidence in the Information. Banks can now think about monetizing the information advantage in their possession. Time to market shortens and data becomes cheaper, faster, better and safer.</td>
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<tr>
<th>Empowering Senior Management</th>
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<td>Ensuring you have a complete understanding of all data across the organization provides a platform to better understand your potential risks at any point in time. Greater value is derived from stress-testing – data becomes an asset – powerful and dependable, automated, less arduous and free of error – providing senior management and the board with confidence in strategy and decision making.</td>
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<th>Know your client inside out</th>
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<td>Having the power to analyze all touch-points between the bank and your client provides insight on potential future behavior, allowing more targeted cross-sell opportunities whilst early warning indicators can help to prevent risk before it occurs.</td>
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<tr>
<th>Transparency and Granularity across the organization</th>
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<td>Increased transparency minimizes risk Blind Spots. It also provides banks with a detailed understanding of all the touch-points across their business units, enabling management to understand business process inefficiencies, technology consumption, and ultimately the true cost-measurement of running the business.</td>
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<th>More Risk Sensitive Models</th>
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<td>Better models can potentially result in lower capital, provide greater confidence in quantitative analysis and drive more efficient usage of external data and optimized internal collection. Banks become agile in their use of capital whilst identifying opportunities to unlock hidden value across the organization, for example within their collateral inventories.</td>
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<th>An opportunity to deploy cost-effective technology and simplify the technology footprint</th>
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<td>Utilizing pay-as-you-use storage and processing power, such as the cloud, for data storage and on-demand analytics lowers capital expenditure and technology investment. It also allows for decoupling of interdependencies, drives technology rationalization resulting in a leaner and simplified architecture.</td>
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<th>Organizational Culture Transformation</th>
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<td>The vertical ownership of Risk Data from all stakeholders and business originators through reporting, modelling and capital estimation will drive teamwork, foster integration and ensure that all outcomes are jointly owned.</td>
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<th>More effective Regulatory Compliance</th>
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<td>Effective program management – across Basel IV, margin reform for uncleared OTC derivatives, IRRBB, SA-CCR and BCBS 239 – can drive maximum economic value by identifying commonalities between regulatory work streams.</td>
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KPMG: Our Approach - Principle Classification

KPMG’s approach classifies and groups the 14 principles into 4 core areas: IT Architecture, Data Management Framework, Risk Data Aggregation and Reporting, and Organizational and IT Management.

KPMG member firms then follow a modular project model – leveraging our own frameworks and toolkits, in conjunction with bespoke developments and commercial off-the-shelf technology solutions – to enable you to realize your BCBS 239 program objectives.

### A. Topic area “IT Architecture”

| A1 | Risk data models unified or automatically reconcilable across banking group with unified naming conventions |
| A2 | Unified level of detail of data across the group to enable fully flexible reporting |
| A3 | Risk and accounting data to be reconciled |
| A4 | High degree of automation for risk data aggregation, manual steps as an exception only |
| A5 | Strive for single source of risk data per risk type |

### B. Topic area “Data Management Framework”

| B1 | Effective data quality management including automated measurement methods and escalation procedures |
| B2 | Broad-ranging data governance for risk data including data owners from business and IT |
| B3 | Documentation of reporting and reconciliation processes |
| B4 | Automatic and manual quality checks in the reporting process |

### C. Topic area “Risk Reporting”

| C1 | Adaptable and ad-hoc reporting capability with drill-down into various risk dimensions, stress testing |
| C2 | Broad-ranging, timely, dependable and adaptable risk reporting capability across all units and all material risks |

### D. Topic area “Organizational and IT Management”

| D1 | Risk reporting and aggregation to be mapped into IT strategy / implementation roadmap |
| D2 | Independent validation of standard roadmap |
| D3 | Business continuity capability for risk reporting |
### Challenge Approach

#### A1 Consistent data taxonomies
- Group-wide uniform risk data model or automatically convertible data models
- Uniform metadata model
- Uniform naming convention
- Group-wide cataloguing of utilized data taxonomies and metadata
- Design of a uniform risk data glossary and effective data management and if relevant, implementation of a data and metadata management tool

#### A2 Group-wide consistent level of data granularity for flexible adaptability in reporting
- Risk data in reporting is often not flexible and capable of being analyzed group-wide in all "relevant" dimensions
- Implementation of a central data layer for risk data and review of the effectiveness of existing data warehouse (DWH) solution
- Development of applicable “data marts” including professional analysis tools
- Improvements of data granularity and timely availability through utilization of high-capacity/In Memory technology

#### A3 Agreement of risk and accounting data
- Existing reporting silos make group-wide convertibility and reconciliation between risk and accounting data laborious
- Implementation of consistent definitions and methods for the entire bank management
- Implementation of a central data layer for anticipated bank data and accordingly review of the effectiveness of existing DWH solution

#### A4 Group-wide high level of automation in risk data aggregation
- Broad-ranging automation in risk data aggregation to satisfy demanding time requirements (“rapidly”, "intraday" coupled with definitive accuracy)
- Weakness analysis of the existing functions, processes, IT applications and data flows
- Derivation and implementation of technical optimization potential in risk data aggregation

#### A5 Single source for risk data for each type of risk
- Creation of a ‘Single Point of Truth’ for at least each type of risk is advisable
- Design of group-wide DWH (or a respective access layer for risk data) with at least the risk data for each type of risk
  - Uniform supply of risk function with data
  - Consistent source of risk data for analysis and reporting
- IT-strategy, development and implementation plan

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### Data Quality Controls through the journey of data

<table>
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<tr>
<th>Challenge</th>
<th>Approach</th>
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<tr>
<td>— Lack of quantitative metrics and KPIs to determine data quality</td>
<td>— Meaningful actual analysis of the status of data quality</td>
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<tr>
<td>— Automatic measurement of completeness and data quality along the entire process chain</td>
<td>— Establishment of specific data quality (DQ) metrics and KPIs</td>
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<td>— Rectification / escalation of errors using a defined and documented workflow</td>
<td>— Underlying data quality metrics with automated tools for the identification and escalation of DQ errors in delivery routes</td>
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<tr>
<td>— Group-wide uniform and broad-ranging DQM approach with organizational competence, in contrast to local measures</td>
<td>— Identification, prioritization and implementation of urgent measures for improving data quality</td>
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<td></td>
<td>— Design of a DQM function with establishment of responsibilities and competencies</td>
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<td>— Adaptive utilization of “KPMG Data Quality Framework”</td>
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### Data Governance framework without gaps

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<th>Challenge</th>
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<tr>
<td>— Precise data governance with roles and responsibilities frequently not present / defined</td>
<td>— Definition of the governance model for data management with clear roles, responsibilities and communication to the significant parties on the basis of the KPMG blueprint</td>
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<tr>
<td>— Defining roles such as &quot;data owner” for risk data inventories and source data in technical and IT departments</td>
<td>— Strong integration of the management board and senior management via a broad-ranging risk and compliance reporting function</td>
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### Documentation of reporting and reconciliation processes

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<td>— Multitude of undocumented interventions in the current reporting processes</td>
<td>— Analysis of reporting and reconciliation processes in the relevant departments including manual components</td>
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<td>— High manual contribution and overlapping responsibilities and delays in the reporting processes</td>
<td>— Consistent presentation, definition and documentation in the reporting processes</td>
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<td>— Integration of the reconciliation processes in the broad-ranging DQ Framework</td>
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### Assumption of manual adjustments and lack of quality controls and in the reporting process

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<td>— No uniform definition, many manual adjustments and limited quality controls in the reporting process</td>
<td>— Definition and analysis of data quality controls along the process chain to help ensure reporting completeness and consistency</td>
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<td>— Insufficient data quality for risk reporting and therefore no explicit identification and clarification of discrepancies</td>
<td>— Implementation of plausibility checks of key indicators</td>
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<tr>
<td>— A lack of clearly defined and structured data quality tests</td>
<td>— Conception and implementation of necessary technical adjustments for the establishment of controls in the reporting processes</td>
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Simulations and early warning mechanisms in reporting

— Possibility for control and monitoring of emerging trends through projections and stress tests
— Forward-looking presentations on assessment of risks and support of the disclosures not only on current and historical data
— Integration of scenarios for the most important markets and risk parameters and the effects on the bank

— Development of early warning indicators and definition of a system of graded thresholds for which measures take effect when the thresholds are reached
— Integration of business planning and management processes together with risk levels to obtain assessments and projections
— Definition and implementation of scenario analysis, taking into account the institution's risk profile and business model

Possibilities for timely and flexible reporting and analysis

— Increasing the frequency in times of crisis in order to identify response in a timely manner
— Flexible possibilities for analysis, considered as value added for effective and efficient decision-making
— Rotational review of publications' adequacy in normal and crisis times

— Set of measures to accelerate the preparation of reports and define standard processes of the central reporting function and, where appropriate, decentralized deliveries
— Build an efficient IT-supported process to recommend measures
— Development of suitable data marts including efficient analysis tools

Risk Reporting being broad-ranging in its content and qualitatively suitable

— Broad-ranging Risk Reporting in content, covering all significant risk drivers and areas within the organization
— Orientation of the depth and scope of the risk reporting on the size and complexity of bank operations as well as the risk profile of the organization
— Presentation of recommendations for measures and well-balanced relationships between quantitative and qualitative information

— Benchmarking of existing reporting contents, processes and IT landscape
— Through benchmarking, comparison of regulatory requirements and relevance of steering / suitability
— Conception of a reporting framework with group-wide uniformly defined information and transparent presentation for the intended audience
— Assuring the flexible handling on an individual basis by harmonizing structures, contents and forms of display
— Efficient processes and quality of the databases enable more time for commenting / derivation of measures and contribute to the decision process
### Challenge

#### D1 Clear mapping of risk data aggregation in IT strategy and development planning

- Consideration of risk data for annual IT development planning; plans for addressing defects in compliance with standards; availability of adequate resources for implementation
- Consideration and management of risk data already in IT strategy and strategic decisions

#### D2 Independent validation of compliance of standards

- The review of compliance with standards must meet demanding benchmarks
- This validation shall be performed independently (and independently from the external auditor) and is intended to examine the compliance with the principles specified in the standard by the bank

#### D3 Incorporation in business continuity management

- Frequently, when setting up the Business Continuity Management (BCM) policy or the business impact analysis, the available risk data and risk reporting are not sufficiently tested for risk aspects, or risk grading is inadequate

### Approach

#### D1 Testing the sustainability of the IT architecture and the IT strategy of risk management systems

#### D2 Establishment of the organizational unit (e.g. internal audit) or invitations to tender for regular review

#### D3 Review of BCM policy with adequate consideration of risk data provisioning

- Has the entire spectrum of risk data provisioning been investigated in the business impact analysis?
- Is the assessment of criticality, extent of damages and risk-bearing capacity still appropriate?
- Do appropriate continuity strategies and plans for risk data provisioning exist in the event of damage?

- If relevant, adjustment of the business impact analysis and the BCM policy of the bank

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KPMG: A Modular Project Approach

Phase 1
Analysis and Design

1. Quick scan/Tool-supported gap analysis
2. Project Initialization

Phase 2
Short- and Medium-Term Actions

3. A: IT Infrastructure
   - On-going
4. B: Data Management Framework
   - 12 months
5. C: Risk Data Aggregation and Reporting
   - 6-12 months

Phase 3
Monitoring

4. (Special) Audit Regulator Supervision

Phase 4
Long-Term Actions

4. Roadmap Realization
5. Operating Model Re-alignment
6. Data Strategy Realization
7. Scalable Data Architecture
8. Stress Testing
9. Regulatory Management
10. D: Organizational and IT Management
   - 6 months
11. Organizational and Governance
   - 6-9 months

Data Management Framework
Risk Data Aggregation and Reporting
Organizational and Governance

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KPMG: Advisors of Choice

KPMG member firms use a lifecycle framework to help banks comply with the Principles of BCBS 239. Through a multi-step approach, KPMG can identify, design, implement and support banks with their RDARR services. The approach is designed to engage stakeholders to customize RDARR requirements to their business needs and continuously adapt to changes in the business environment.

**Strategy**
Defining the strategy, including the overarching ambition/goal and business operating model
- Strategic and Financial Ambition
- Business Model Strategy
- Operating Model Strategy

**High-level design**
Defining how the operating model needs to be reconfigured to deliver the vision, strategy and value. Determining a course of action to implement the new ways of working
- Enterprise-wide future technology and operations architecture
- Target operating model for execution
- Roadmap definition

**Detailed design**
Capturing the detailed requirements and defining the solution design that will deliver the target operating model
- Requirements Management
- Solution Design

**Build**
Developing, prototyping and testing the changes according to the Solution Design
- Develop
- Test

**Implement**
Deploying the changes and new ways of working into the business
- Deployment
- Release Management

**Improve**
Extracting the value from the transformation, maintaining the value created, and assisting the post-transformation organization to continue to improve performance incrementally
- Transition to Steady State
- Continuous Improvement

**Portfolio, program and project management**
Establishing an integrated delivery program and governance model to manage the ongoing transformation through effective Portfolio, Program and Project Management.

**Leadership and change**
Helping the business to achieve tangible and concrete business results by getting people ready, willing and able to deliver sustainable change at all levels of the organization

**Value delivery**
Defining and tracking how tangible value is built and sustained through transformation, with an ongoing focus on the delivery of outcomes and benefits realization

**Bracing for Change**
This paper aims to emphasize that BCBS 239 will have very real implications for banks; indeed the regulation ushers in not just a technology but a business change.
Although adapting to the Principles will likely require substantial investment and time, successfully aligning to them will strengthen the footing of banks over the long-term. Incorporating positive change and technological upgrades will not only tick the regulator box, it will help banks and senior management make timely, sustainable and better-informed decisions.

**The KPMG Difference**
Through working with KPMG member firms and leveraging our experience and breadth, banks can have a guide through their BCBS 239 journey. The lifecycle framework enables KPMG to draw together multi-disciplinary teams, leading practices, methodologies, insights and project delivery tools in order to help member firm clients achieve transformation.
# KPMG: Toolkits, Frameworks and Thought Leadership

## Transformation
KPMG member firms are able to support you through your journey using frameworks, tried and tested toolkits and bespoke technology solutions. We assist clients in the implementation of our advice and support implementations; we walk the talk!

## Source
This proprietary toolkit combines a deep knowledge base across KPMG’s global network as it brings together complex program management, reference models, best practices and client collaboration tools.

## Governance, Risk and Compliance (GRC) Model
This framework provides an integrated approach for developing and establishing a successful and sustainable GRC framework.

## Regulatory Centers of Excellence
KPMG member firms’ presence at the forefront of regulations affecting client’s businesses helps to reinforce our relevance and expertise. We can provide both local and global regulatory support through local member firms and regional centers of regulatory excellence.

## Thought Leadership

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>Optimizing data management strategies to minimize the potential cost for IT, legal and compliance functions</td>
<td>In this thought leadership paper, KPMG focuses on key areas where data management can be more optimally managed across the organization.</td>
<td>July 2015</td>
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<tr>
<td>Transforming the Regulatory Agenda: A strategic opportunity for the financial services industry</td>
<td>The first in a series of reports from US FS Regulatory Risk Advisory, and our Americas FS Regulatory CoE, looking at the importance of implementing a change management framework that centralizes and synthesizes current and future regulatory demands.</td>
<td>July 2015</td>
</tr>
<tr>
<td>The New Inconvenient Truth – Social Media: Too big for wealth managers to ignore?</td>
<td>As social media is becoming ubiquitous to the financial service industry, clients must take notice of the profound changes that social media will have on their business environment.</td>
<td>July 2015</td>
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## Other Food For Thought

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