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FINANCIAL SERVICES

IFRS 9

Implementation Methodology Guide

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IFRS 9 introduces a three-stage impairment model for computing expected credit losses on loans that is more forward looking in design.

One of the key factors that contributed to the financial crisis of 2008 was the approach taken by banks to determine losses on bad loans under the extant IAS 39 guidelines. The IAS 39 accounting standard's incurred loss model had several shortcomings, which included:

• Loan losses were not recognized until there was an objective evidence of impairment. The delayed recognition was cited as a major weakness of the impairment model (too little too late).

• The incurred loss model exaggerates the pro-cyclical effects of banks' capital regulation, which had the potential to trigger systemic risk and impact global financial stability. Typically, credit losses tend to be at their lowest just before the start of an economic downturn when actual losses begin to emerge and mount.

• IAS 39 was also criticized for allowing banks to adopt different approaches for impairment computation for similar financial instruments, depending on their classifications.

• The incurred loss approach was backward looking in nature and did not take into account changes in the macroeconomic environment in computing the economic value of loans.

Several high profile bodies including the G20, Basel and Bank Supervisors realized the need to plug the gaps in the loan loss provisioning standards prescribed by IAS 39. They entrusted the IASB to come up with a revised standard – IFRS 9. The IASB has been working since November 2008 on IFRS 9 and structured the project under three phases:

1. **Classification and Measurement**
2. **Impairment**
3. **Hedge Accounting**

IFRS 9 amends the existing guidance on Classification & Measurement by introducing a new category – Fair Value through Other Comprehensive Income (FVOCI) – while dropping existing categories – Available for Sale (AFS), Held to Maturity (HTM) and Loans & Receivables.

IFRS 9 introduces a three-stage impairment model for computing expected credit losses on loans that is more forward looking in design. It requires banks to set aside provisions for expected credit losses on the origination of the loan (a loss is factored in on day 1). The standard also has a new guidance for hedge accounting, which will be effective starting January 2018, subject to its adoption by the respective countries.

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IFRS 9 Impairment Model

Impairment requirements under IFRS 9 are applicable to debt instruments and loan commitments that are not measured at fair value through profit and loss, financial guarantees, lease receivables and contract assets. Equity investments are not within the scope of impairment computation as they are measured at fair value.

Under IFRS 9, banks have to classify all financial instruments in scope for impairment computation into three buckets – Stage 1, 2 or 3 – depending on the change in credit quality since initial recognition.

Stage 1 includes accounts where there is no significant increase in credit risk since initial recognition or accounts that have low credit risk on reporting date. For accounts in Stage 1, interest is accrued on the gross carrying amount of the instrument and a 12-month expected credit loss (ECL) is factored into profit and loss (P&L) calculations.

Stage 2 comprises accounts with a significant increase in credit risk since initial recognition but which have no objective evidence of impairment to date. Interest for accounts in Stage 2 is accrued on the gross carrying amount, however, a lifetime ECL is factored into profit & loss calculations.

Stage 3 includes accounts that demonstrate evidence of impairment on the reporting date and for such assets, interest is accrued on the net carrying amount (net of provisions) and a lifetime ECL is factored into profit & loss calculations.
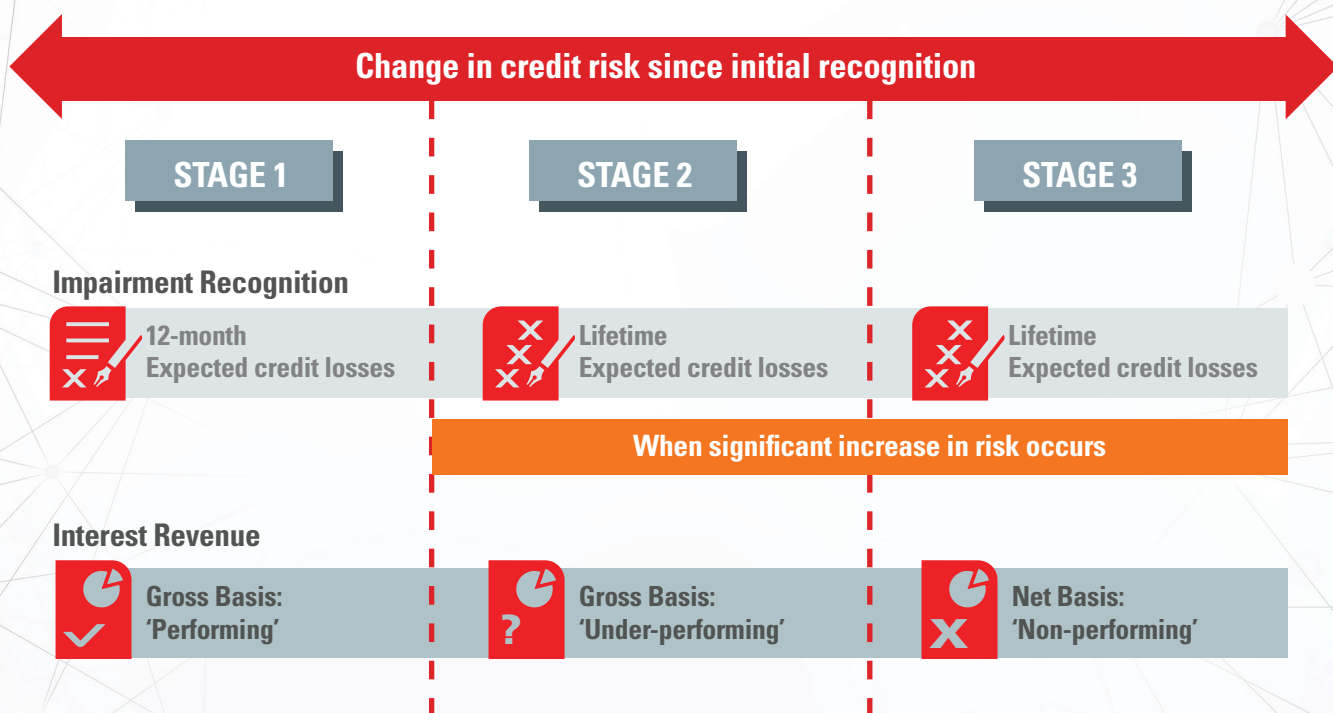

Figure 1: IFRS 9 Impairment Stages

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Key Challenges in IFRS 9 Implementation

IFRS 9 has been in the making for a while, and with the publication of the final guidance in July 2014, regulators, executive management at banks, and investors have been taking a close look at its potential ramifications. The regulation goes beyond mere computation of expected losses or provisions and addresses a much broader gamut of issues needing board and executive management consideration.

One direct financial consequence of the regulation for banks is lower operating margin and profitability, stemming from higher provisioning required, as well as impact on a bank's capital, liquidity and leverage. Banks face pressure on net interest margins on a risk adjusted basis. Given the competitive landscape, they may not be able to pass on the higher costs of provisioning to customers, thereby taking a hit to their bottom lines. There will also be additional capital requirements that banks will be required to maintain due to the new standard's impairment provisioning guidelines, dealing banks with a double whammy in the form of declining margins along with a higher capital outlay required to support and grow the business.

Expected credit loss (ECL) numbers from IFRS 9's three-stage approach fall in between the IAS 39 incurred loss approach and fair value accounting. IFRS 9 tries to capture the changes in the economic value of a loan by discounting the expected cash flows at the effective interest rate. However, it does not capture the changes in the interest rate post the loan origination.

At the time of origination, IFRS 9 overstates the loan loss allowance (as a day 1 loss) and as the credit risk deteriorates, it understates the loss allowance. However, there is a jump in loss allowances when the account moves from stage 1 to stage 2, due to a significant deterioration in its credit risk, which is a real concern for banks as this will require additional provisioning. This in turn will dent profitability and the bank's ability to pay dividends.

Figure 2: IFRS 9 loan loss allowances versus IAS 39 incurred loss approach

Another key challenge that banks will have to contend with is the incorporation of forward-looking macroeconomic data like GDP, unemployment rate, housing price index, interest rate, inflation, and technology. These require banks to build models that take into account idiosyncratic and systemic factors. Banks will need to consider current modeling capabilities, systems and processes in place as well as the availability of timely data pertaining to macroeconomic indicators.

Last but not least, banks will need to put in place an appropriate data governance program to source for the right data that IFRS 9 requires. IFRS 9 expects banking institutions to consider historical, current and forward looking forecasts in their ECL computations. Banks will be required to aggregate data owned by risk, finance and treasury functions that are of the right level of granularity and quality so as to make them available for ECL processing.
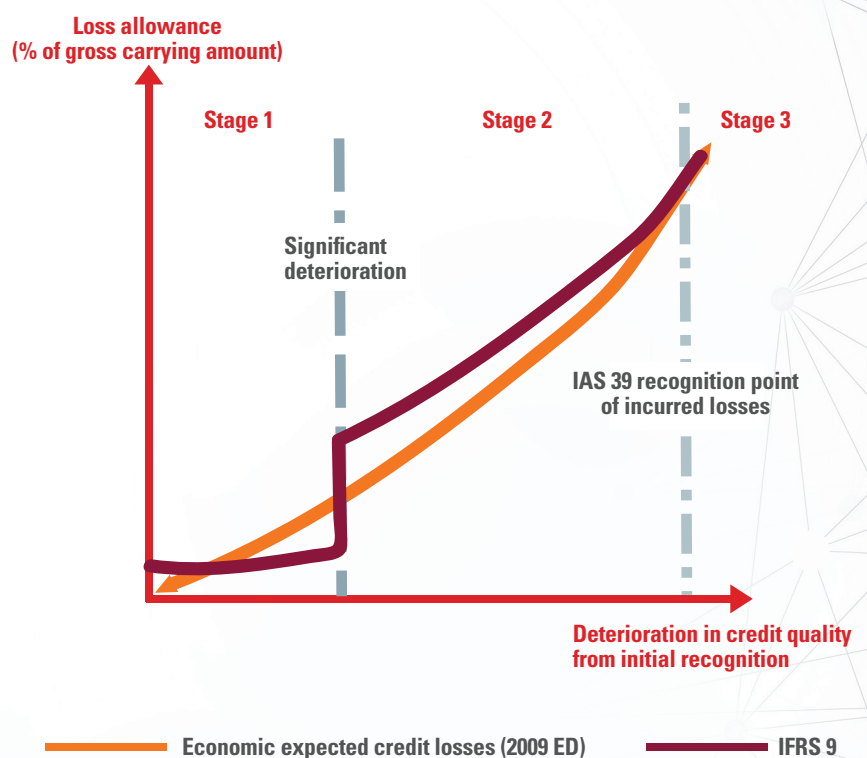
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Consequent to the implementation of the BCBS 239 regulation on risk data aggregation, most banks have established a decent data governance programs to support risk data reporting at the enterprise level. Banks can leverage these existing investments in data infrastructure for BCBS 239, however, they still need to address the additional data requirements for IFRS 9 outlined in Figure 3. As the deadline for becoming compliant draws closer, there are a number of prerequisites that banks should be paying close attention to, to help facilitate a smooth transition to IFRS 9.
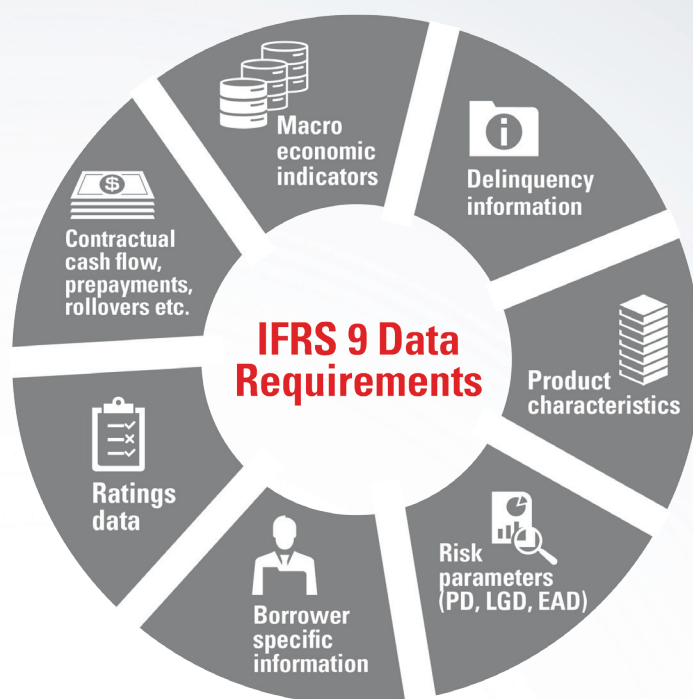

Figure 3: IFRS 9 Data Requirements

IFRS 9 Implementation-
Key Considerations
Modeling

Banks need to build and calibrate models for probability of default (PD), loss given default (LGD) and exposure at default (EAD) for ECL computations. Given the objectives of IFRS 9 accounting vis-à-vis regulatory capital management (under Basel guidelines), PD, LGD and EAD models used for capital computations can only be used for IFRS 9 ECL computations after incorporating germane adjustments.

Key differences between Basel and IFRS modeling related requirements:

	BASEL	IFRS 9
Definition of default	• 90 days past due on a credit obligation and or • Borrower unlikely to pay without the bank turning to recourses such as selling collateral	• No formal definition of default, however, banks are expected to define default in line with existent credit risk management practices, incorporating qualitative indicators like breach of covenants. • Rebuttable presumption that default does not occur later than 90 days past due, unless there is reasonable and supportable information to demonstrate that a more lagging indicator is appropriate
PD	• Long run historical average over an economic cycle –TTC • 12-month PD estimation for stage 1 and lifetime PD for stages 2 and 3 • Considers forward looking information (macroeconomic overlay) on reporting date • Regulatory floors	• Point in time (PIT) estimates reflecting entity's assessment of current and future economic cycles, covering the life of loan • 12-month PD • Periodic use of stress testing to recalibrate the models • No prescribed floors
LGD	• Downturn LGD, reflecting periods of high credit losses • Recoveries discounted using bank weighted average cost of capital • Regulatory floors	• Considers current and future economic cycles covering the life of loan • Cash flows discounted using EIR • No prescribed floors
ECL	• PD x LGD x EAD	• PD x PV of cash shortfalls. For Stage 1 accounts, 12-month PD is used and for Stage 2 and 3, life-time PD is used

Terminology: EAD – Exposure at default | EIR – Effective interest rate | LGD – Loss given default
PD – Probability of default | PV – Present value | TTC – Through-the-cycle

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Cash Flow Information

Expected credit losses (ECLs) are probability weighted estimates of the present value of the cash shortfall under all plausible scenarios. A cash shortfall happens when there is a difference between a contractual cash flow and an expected cash flow. Cash flow information needs to take into account prepayments, extensions, rollovers, and call and put options that happen during the normal course of business. Banks offer a plethora of products and services with their own unique contractual cash flow characteristics. Sourcing for accurate cash flow information for the purposes of computing ECL and EIR is a significant challenge to most banks.

Accounting Integration

IFRS 9 provides specific guidance on income recognition as well as on provisioning, both of which have far reaching impact on existing systems and processes that banks follow. Interest will need to be accrued using EIR. However, banks today accrue interest in their core banking systems using the instrument contract rate. Banks also need to make changes to their accounting processes to cater to ECL provisions, and to make entries in the general ledger (GL) on the reporting date.

Models for Computing ECL

As IFRS 9 is principles based and does not offer any standard model for computing ECL, banks are therefore required to come up with their own models for ECL computation.

Data Management

In order to comply with IFRS 9, banks need to be able to identify the data requirements and also the source systems that they originate from. Cash flow information, collateral data, exposure information, obligor rating data, and macroeconomic indicators are some of the data requirements of IFR 9. Banks need to have a clear data governance model to ensure the availability of high quality data at an acceptable granularity to run ECL computations and reporting.

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Recommended Approach and Checklist for IFRS 9 Program Rollout

The implementation timelines for the program are in the range of 18 to 24 months, though a longer duration may be required depending on the bank's readiness and the approach chosen.

IFRS 9 is an enterprise-wide initiative that cuts across risk, finance, IT and lines of businesses. It is therefore important to have a clear strategy with a well-defined governance structure to ensure a smooth rollout. The standard has a number of important individual components that need to be managed and delivered through specific work streams.

Some of the key work streams include:

- Standards & policy definitions
- IFRS 9 models build, macroeconomic forecasts & stress testing
- Model audits
- Regulatory reporting
- Accounting integration
- Loan loss forecasting and provisioning engine
- Data management, across risk and finance data
- Integration with bank systems

Checklist for IFRS 9 Program Rollout

1. Assess Current State & Gaps

The program should start with a detailed impact assessment study to understand the current state, benchmarked against the requirements imposed by IFRS 9.

The outcome of the study should be a gap analysis statement detailing the changes required in policies, processes, data requirements, risk and accounting system touch points, changes in accounting process and disclosure standards.

2. Define the Policy & Processes

In crafting IFRS 9 policies, implementation teams need to determine the financial instruments in scope, review credit policies and ensure cross-functional governance.

3. Choose ECL Approach & Model Development

Expected loss (EL) calculations will move up the priority list for banks as a compliance issue, and this will require the implementation of robust modeling. The ECL approaches could be cash flow based or looking at forward exposures, provision matrix, roll-rate and others. Banks also need to consider whether they are able to develop specific models or enhance existing Basel models and whether current models include forward looking data required by IFRS 9.

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4. Evaluate Impact on Stakeholders and Future Capital Requirements

It is estimated that IFRS9 will result in a marked increase in banks' provisioning requirements from current levels. This is expected to significantly impact banks' bottom lines and will clearly flow through to their risk appetite, pricing of products and their ability to support customers with their own balance sheet. Banks will need to manage the expectation of investors, customers, and business partners through this transition. Given the likely capital constraints, business lines will need to manage their capital more efficiently.

5. Technology to Accelerate IFRS 9 Compliance

IFRS 9 is about process, governance and methodologies but the effective use of technology will be a key enabler. An extensive parallel run to ensure a smooth transition from IAS 39 to IFRS 9 in the run up to January 2018 will need to be in the plan. CIOs should audit their data assets and understand potential of data within the context of the new governance and operational frameworks they will be required to implement.

6. Execute Data Governance & Regulatory Reporting

The knocking down of silos between finance and risk is one of the key operational tasks required to deliver IFRS 9. This needs to be embraced as a strategic opportunity in leveraging commonalities across finance and credit risk data. Executed with energy and rigor, this can deliver improved risk monitoring and oversight, greater forward visibility and better transparency to outside stakeholders through enhanced and more accurate market disclosures.

Crafting the Policy & Processes	- Determine financial instruments in scope - Review credit policy - Classification – Business Model & SPPI - Adoption of practical expedients - Cross functional governance
ECL Approach & Model Development	**Modeling** - PIT PD (12-mth & LT PD) - LGD, EAD - Macro economic Overlay - Stress Testing **ECL Approaches** - Cash-flow based - Forward Exposure - Provision Matrix - Roll Rate
Accounting Integration & Provisioning	- Amortization of fees, expenses, discounts - Accrued Interest computation - Provision, Unwinding - Reclassification - Modifications & write-offs - Gains/Losses on account of FV changes
Data Governance & Regulatory Reporting	- Cash-flow data – contractual & behavioral - Rating, Collateral, Counterparty data - Integration of Accounting engine and GL system - Attribution analysis - Allowance reconciliation - IFRS 9-Disclosures: quantitative & qualitative

Figure 4: Focus Areas for IFRS 9 Implementation

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Stakeholder Responsibilities & Timeline for IFRS 9 Implementation

Implementation of an IFRS 9 program is a complex exercise requiring strong coordination between the various stakeholders within the bank. The IFRS 9 project management team will play an important role in mobilizing the program and working with finance, risk & IT teams to come up with a clear charter, plan and governance model.

Finance Team: Focus on provisioning & reconciliation
The finance team should be responsible for defining the chart of accounts (COA) structure in the general ledger for capturing provisions as well as reengineering the current accounting process to facilitate computation of interest using the EIR. The team should also come up with a process for validating provision numbers, reconciling them with the regulatory provisions and making the necessary capital adjustments.

Risk Team: Focus on modeling and gap analysis
The risk team should focus on making changes to the modeling infrastructure – designing, building, hosting and validating models for PD, LGD, and EAD as per IFRS 9 standards. In addition, the team should document the approaches for computing ECL for accounts to be assessed on both an individual basis as well as collective basis. Though the standards provide for practical expedients, care should be taken to justify the reasons for adopting them as these are the most likely candidates for regulatory scrutiny. Necessary credit policy changes articulating stage classifications as well as movements across the stages need to be put in place after due review and approvals.

IT Team: Focus on system integration, data provisioning & mapping to business requirements
The IT team should be responsible for sourcing and aggregating data for provisioning and integrating risk and accounting systems for computing loan loss provisions. provisions and making the necessary capital adjustments.
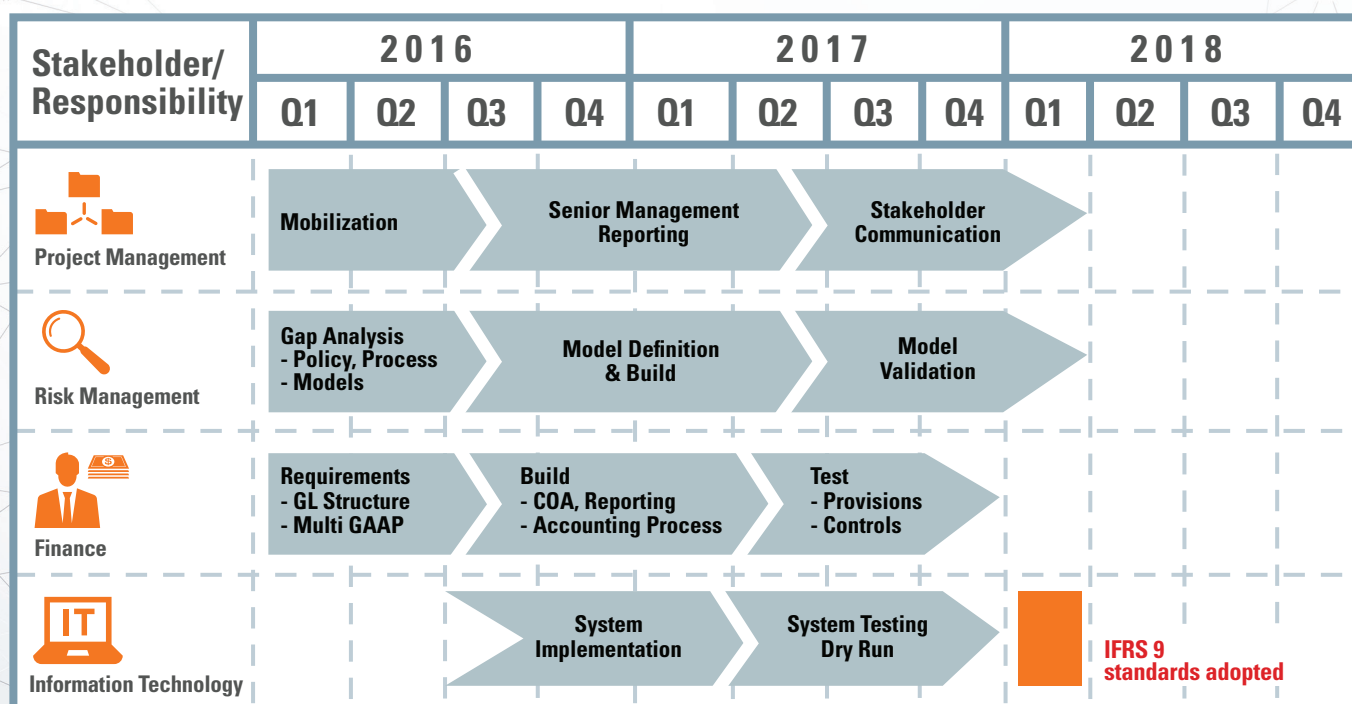
Stakeholder/ Responsibility	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project Management	Mobilization		Senior Management Reporting			Stakeholder Communication						
Risk Management	Gap Analysis - Policy, Process - Models		Model Definition & Build			Model Validation						
Finance	Requirements - GL Structure - Multi GAAP		Build - COA, Reporting - Accounting Process			Test - Provisions - Controls						
Information Technology			System Implementation			System Testing Dry Run			IFRS 9 standards adopted			

Figure 5: Stakeholder Responsibilities & Timelines

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Oracle's Proven Methodology for IFRS 9 Implementation

Managing the transition to IFRS 9 compliance is a complex affair, as it needs to be coordinated across the risk, finance, treasury, compliance, customer analytics, and data management functions.

It requires subject matter expertise in each of the above areas, as well as experienced input from technical architects, product experts, and engagement managers.

A well defined implementation approach that encompasses the entire lifecycle of the project is critical to ensure urgent compliance deadlines are met.

Implementation of IFRS 9 calls for an integrated operational framework starting from:

- Creating the ECL model
- Risk & finance data collection and analysis
- Capital management
- Compliance and reporting
- Results being reflected in profit & loss and shareholders' equity

The Oracle Unified Method (OUM) is a proven methodology for IFRS 9 that includes guidance on knowledge transition, and inbuilt approaches for agile delivery in large programs.

Oracle's proven methodology has also enabled one of the largest Australian tier-1 banks to become the first globally to achieve IFRS 9 compliance and assume market leadership as a first adopter.
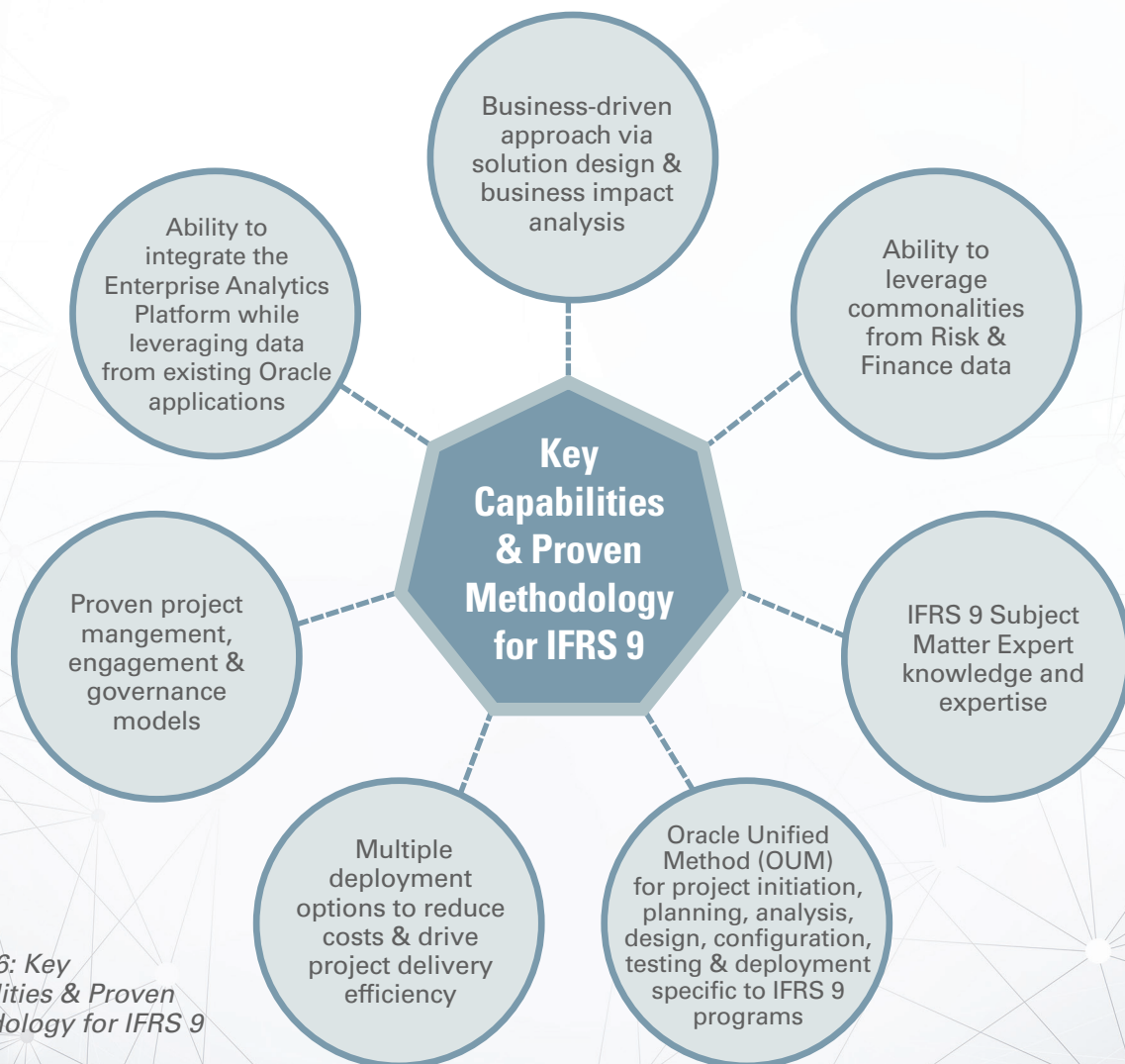
Figure 6: Key Capabilities & Proven Methodology for IFRS 9

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Oracle's Consulting Framework for IFRS 9 Implementation

Oracle Financial Services Analytical Applications (OFSAA) Consulting's end-to-end IFRS 9 implementation framework covers all relevant areas including:

- Data management
- Modeling & stress testing
- Classification
- Expected credit loss computations
- Accounting and ledger Integration
- Reporting

The OFSAA Consulting team has also set up an IFRS 9 model office which can be used as a sandbox for testing relevant IFRS 9 use cases or day-in-the-life scenarios.

The team has built specific approaches for computing ECL in line with IFRS 9 guidelines, covering applicable financial instruments and defined processes for ECL accounting and integration with banks' general ledgers. The group has a rich inventory of collaterals, design templates, architecture reference models, deployment options, and project plans that are effectively leveraged by consultants during implementation, as well as prebuilt rules for credit migration or deterioration that can be readily deployed.

OFSAA Consulting has been involved in large enterprise change initiatives in tier-1 and mid-sized banks across the USA, Europe, Asia-Pacific, Middle-East, and Africa regions for years. The organization has assisted banks world over to meet their regulatory requirements, specifically around Basel II/III, transaction/fraud monitoring & compliance reporting, asset liability management, liquidity risk reporting, stress testing and regulatory reporting.

Oracle's Solution for IFRS 9

Oracle provides a framework for making the calculations needed to ensure compliance with the standard.

The solution is designed to take data from a staging area that is common across all Oracle Financial Services Analytical Applications (OFSAA) installations and enable its reuse for analytical needs. An advanced engine computes cash flows at an instrument level, which are then used by the impairment module for provision calculations.

The solution also provides for prebuilt rules and workflows for stage assessment. These rules are based on commonly based assessment criteria such as rating migration, days-past-due migration, industry classification and PD migration. Additionally, the solution allows users to configure additional rules based on their own models for stage assessment.

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Integrated Cloud Applications & Platform Services

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