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THE COST OF CAPITAL AND THE COST OF BUSINESS: LEVERAGING AUTOMATION FOR ENHANCED CECL COMPLIANCE

ClusterSeven

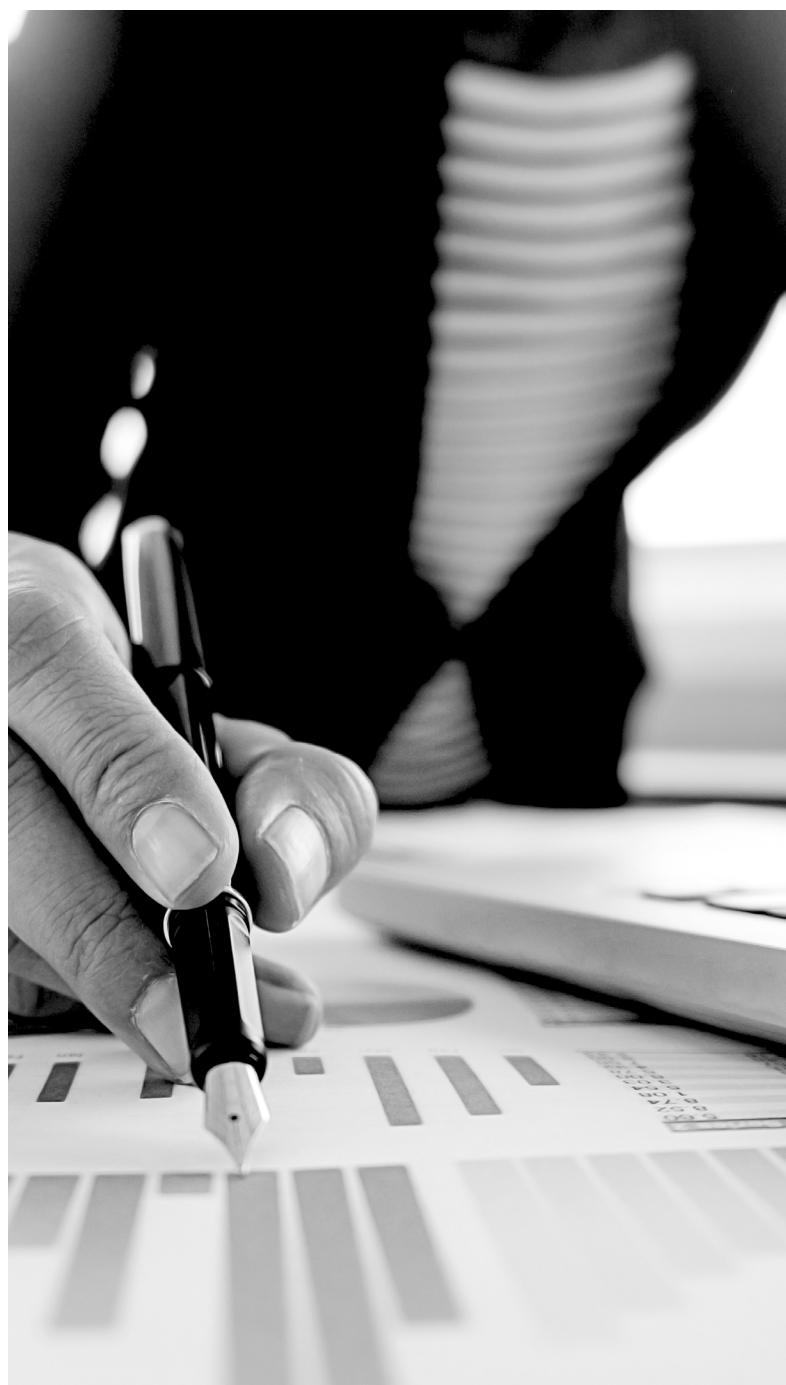
INTRODUCTION

The advent of Current Expected Credit Loss (CECL) reporting as an additional accounting requirement for US credit lending institutions is widely recognized as a significant technical, operational and compliance challenge. The combination of complex modelling, the use of large and changing volumes of portfolio and market data, and the need for consistent, accurate and auditable results means that institutions are challenged with implementing the standard.

As well as being an accounting standard, US banking regulators are adopting it as a regulatory standard. A CECL implementation project therefore impacts an institution's:

- Regulatory compliance
- Cost of capital
- Business costs

This whitepaper highlights the challenges of implementing CECL operationally. It proposes a best-practice approach to ensure institutions deliver CECL on time and cost effectively, while helping to optimize the cost of capital.



CECL COMPLIANCE

The critical data governance and risk management issues of CECL reporting

Regardless of how an institution implements a CECL reporting regime, effective data governance is essential to ensure accurate CECL results. It also forms a key area that will be audited as part the CECL reporting process. There are several issues that need to be considered when designing a CECL reporting process.

Extensive use of uncontrolled spreadsheets

The historical, current and future credit models, data and assumptions used within CECL reside on multiple systems and databases across the enterprise. Re-configuring, testing

and validating these systems to deliver CECL likely requires more time and resources than institutions can spare. If they resort to spreadsheets for their power and flexibility to model, test and validate, they open themselves to the risks inherent in spreadsheets.

Unlike existing enterprise applications, these spreadsheets will not be controlled, tested or validated. This increases the likelihood of errors and raises audit issues.

In smaller institutions, the situation may be more clear-cut, with spreadsheets forming a significant part of core business processes. This is not necessarily a critical issue because CECL was designed to be calculated exclusively on spreadsheets if required, but the data governance issues remain.



CECL COMPLIANCE

Reliance on external data sources

The models used to calculate CECL make significant use of credit risk data, including probability of default (PD) metrics, loss given default metrics (LGD), and economic metrics such as GDP and inflation metrics. These metrics come from a range of external sources and must be updated regularly to ensure the CECL models remain current. If this data is embedded in a CECL spreadsheet model, these data links become potential sources of error.

There must be robust data integration capabilities to manage the export, transform, and load process (ETL), and to flag errors if there are failures that cause stale or missing data. If not, institutions will suffer from issues of accuracy and transparency.

Widespread use of integrated spreadsheets, macros and formulas

The final CECL results are based on credit loss models covering historical, current and future models, which will likely be spreadsheet-based. These feature highly

complex models, with extensive use of formulas, powerful macros and integrated spreadsheets, and with extensive data lineage. Errors, omissions and changes to these spreadsheets presents risks that materially impact the accuracy and auditability of the final CECL results.

Business, reputational and regulatory impact of errors

CECL demands that institutions realistically assess their loss provisions in order to cover potentially non-performing loans. Even small changes in the economy significantly affect the risks of a loan over its lifetime, which then impacts the overall level of loan provisions an institution must have in place. CECL will impact the volatility of profits for many institutions.

Uncontrolled spreadsheets, with their inherent risks, generate errors that drive greater volatility, or even the need to restate earnings, potentially causing a range of business, reputational and regulatory headaches that institutions want to avoid.



CECL COMPLIANCE

Audit and regulatory risk

The models, data, assumptions and the results are all auditable, to be published in the annual report. Auditors will review the results, as well as the assumptions, models and data to ensure they are accurate and reasonable for the business. They will also seek evidence of the data and model governance and controls, to ensure full transparency. Given the complexity of calculating CECL, demonstrating this governance and control to external stakeholders in a timely and cost effective fashion will be challenging. The cost of achieving this manually would be prohibitive.

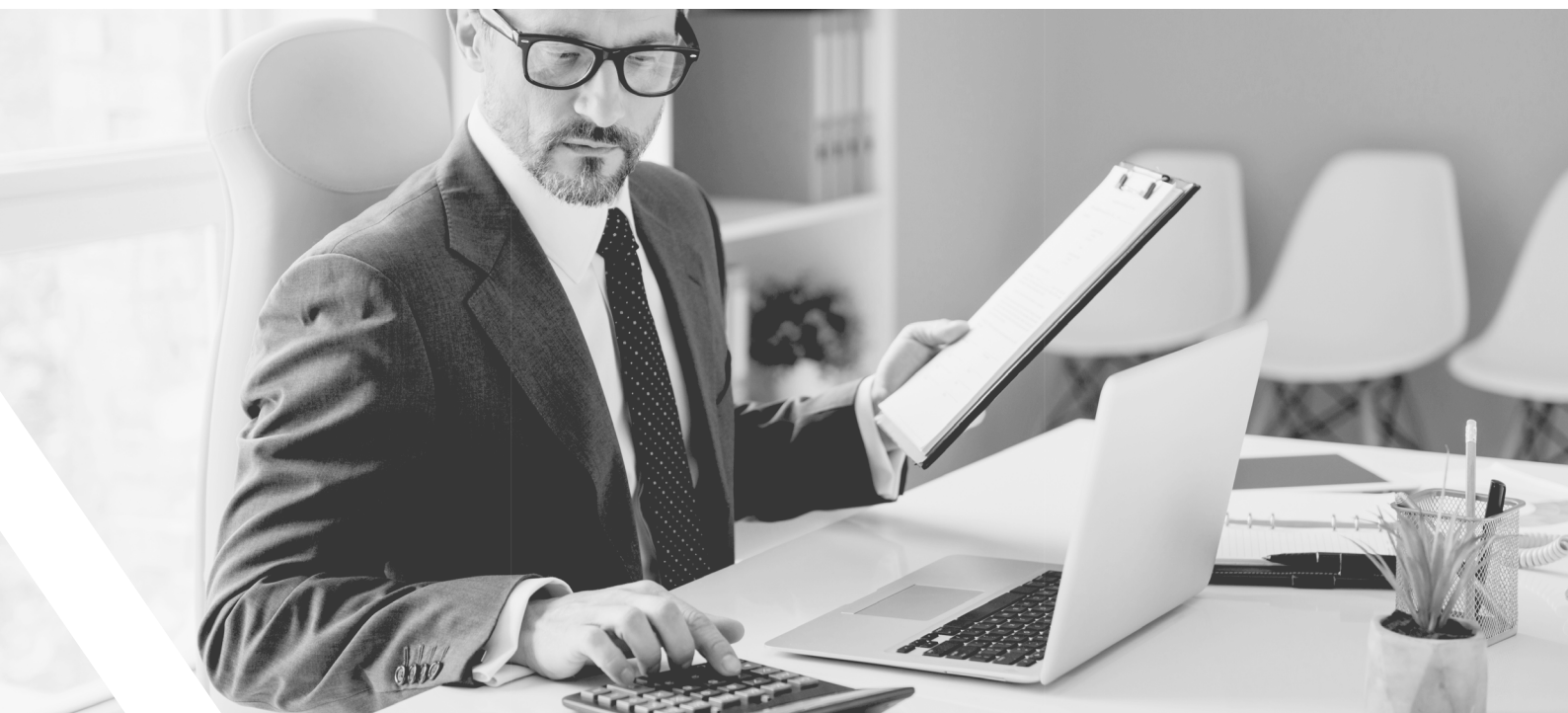
Enhanced policy management requirements

CECL is a cross-business discipline that covers IT security, data management, compliance, model management, as well as finance management and regulatory compliance.

An institution will have policies and procedures in place to support all these functions. However the integrated nature of delivering CECL requires a joint approach to implementing the CECL policy standards. It needs to ensure that a unified CECL policy does not compromise existing standards and policies across the business. Furthermore, as the business changes and policies are adapted, potential policy conflicts need to be identified and addressed in order to prevent operational, regulatory or accounting issues from emerging.

Enhanced compliance requirements

It's also important to ensure that policies are simply adhered to for the benefit of management, auditors and regulators. Delivering compliance in an integrated CECL policy framework requires a centralized compliance framework, with automated processes to capture compliance definitions, compliance review and remediation, workflows as well as approvals and reporting workflows.



A BEST-PRACTICE APPROACH TO CECL COMPLIANCE MANAGEMENT

For most organizations seeking to comply with CECL, there is a premium on utilizing existing applications and processes in order to keep disruption to the business to the absolute minimum. CECL regulations allow institutions to use spreadsheets exclusively to calculate and deliver their results. Many institutions use spreadsheets to manage their CECL implementation and to manage their core business processes.

With the spreadsheet risk fully under control, the practical approach is to utilize a centralized policy and compliance framework, that brings together all the elements that support the entire process – technology, security, definition, and more – into a unified environment.

1 Identify the CECL spreadsheets

Effective CECL reporting depends on having proper foundations, so identifying all key CECL spreadsheets is vital. These spreadsheets may cover credit loss models, covering past, present or future scenarios, and historical loss data, including probability of default (PD) and loss given default (LGD) metrics and more. And they aren't all in one place: these spreadsheets will be located throughout different departments, business units, and even countries. Furthermore, the various spreadsheets may consist of different versions, use different formats, and even varying definitions. In this cacophony of competing claims to truth, there is ample risk that some data will become inaccurate or simply get lost.

2 Risk-assess your CECL spreadsheets

Having a systematic risk assessment model for CECL allows people across the business to objectively determine which spreadsheets require the closest scrutiny.

Risk management must target the most critical areas. Otherwise, efforts become slapdash and inconsistent, and institutions will find themselves spending even more time assessing their spreadsheets. Identifying these risks should form the basis of an effective CECL project implementation model. What's more, this risk assessment simultaneously develops the risk management, audit and governance framework that institutions must adhere to.

In a CECL framework, all the spreadsheets will be important, but some will be more important than others. Identifying these key spreadsheets is not straightforward. The significance of a spreadsheet may depend on how many other spreadsheets are linked to it, how many formulas and worksheets it contains, and/or the complexity of its formulas and macros.



A BEST-PRACTICE APPROACH TO CECL COMPLIANCE MANAGEMENT

3 Monitor and audit your CECL spreadsheets

After CECL spreadsheets have been identified and assessed, institutions must monitor key CECL spreadsheets. When spreadsheets are edited or updated, these changes must be identified in order to show the material impact on the final CECL results, as well as the project implementation. The absence of approved changes need to be easily identified as well, to ensure that the project remains on track.

These changes need to be easily identifiable, auditable and reportable, so that the risk management and governance framework central to calculating CECL is fully supported. However an institution approaches this challenge, it is important that the risk and governance management model is considered as a pre-requisite of a CECL implementation framework, alongside data management, loan loss modelling, as well as systems integration and design.

As well as ensuring accuracy of the final results, this approach ensures that the CECL models are fully aligned with the audit and data governance requirements of CECL. It also helps ensure that the CECL implementation project proceeds smoothly and efficiently and is delivered on time.



THE SOLUTION: TOOLS FOR EXECUTING A COMPLIANT CECL FRAMEWORK

CECL regulations allow institutions to use spreadsheets exclusively to calculate and deliver their results. Many institutions use spreadsheets to manage their CECL implementation and to manage their core business processes.

Equally, a centralized policy management and compliance framework that easily maps on the existing environment and processes is also important.

Despite the complexities involved, there are a few tools you can use when contemplating a streamlined and efficient CECL management framework.

► Discovery

CECL project teams will span multiple business units, countries and business functions. They will involve teams from the modelling, compliance, reporting, audit and portfolio management teams. It is likely that these teams will start their CECL projects informally before the formal start of a company's CECL implementation project. These teams will likely use different terms, definitions and formats, and will almost certainly use spreadsheets initially as a working model at the start of the project.

This offers ample scope for the introduction of spreadsheet risk into a CECL project. When the project formally starts, these spreadsheets will figure largely in the planning. Identifying these spreadsheets is both time consuming and error-prone if completed manually. An alternative approach could be to leverage a sophisticated spreadsheet search model that overcomes the challenges of having multiple formats, naming conventions, and definitions.

Once the CECL spreadsheet environment has been defined, the next step is to understand how these spreadsheets are interlinked. These interdependencies, or the data lineage, are a central element of risk assessing the most important spreadsheets, as a change in one spreadsheet can inadvertently change another spreadsheet, without anyone being aware.

Depending on how a spreadsheet estate is configured, it is perfectly feasible for a single change to impact multiple sheets, potentially having a material impact on the final CECL results, as well as their auditability. This data linkage analysis would likely be too difficult and error-prone to be completed manually. The optimal model would be for automated "spidering" capabilities to identify the critical links between spreadsheets, to highlight the most critical spreadsheets, and the areas of the greatest spreadsheet risk in the CECL calculation process.



THE SOLUTION: TOOLS FOR EXECUTING A COMPLIANT CECL FRAMEWORK

► Inventory Management

With the scope and complexity of the CECL spreadsheet estate fully defined, the next step is to introduce the first level of management control, by checking all the relevant spreadsheets into an inventory management system. This both defines those spreadsheets that need to be considered under CECL and allows the CECL project team to risk-assess the spreadsheets as low, medium and high risk.

Twin drivers – systematic risk management and business efficiency – mean that automation is the optimal solution for managing this process. This ensures that a risk assessment of the entire CECL estate is accurate and consistent, reducing the chance of key spreadsheet risks slipping through into the development or production environment. Put simply, the more formulas a spreadsheet possesses, the more macros it uses, the more spreadsheets it links to and the more external data sources it is connected to, the more important the spreadsheet. If a spreadsheet has any of these characteristics, it needs to be monitored extra closely.

Another consideration is the materiality of certain spreadsheets, regardless of their complexity. If a change to a simple spreadsheet has a material impact on the accuracy of the overall results, any spreadsheet risks associated with it should be monitored closely.

Criteria, reflecting these points, can be applied to the CECL estate, to categorize systematically the CECL spreadsheet estate into low, medium, and high risk to the CECL project and reports. CECL projects teams can triage their efforts and focus their main efforts on making sure that their most critical spreadsheets are proactively monitored. This inventory model has the benefit of creating a framework that can provide the attestation capability that auditors may wish for when determining whether the CECL results are a fair reflection of the position of the business.

► Monitoring

Once the highest risk, and most critical spreadsheets have been identified, institutions must create a framework to proactively monitor them. This process can be delivered manually, but the complexity of the spreadsheets involved and the risk of missing flagged issues means this might not be the ideal approach for most banks.

The structured nature of many of the spreadsheets used in CECL lends itself well to automation. This eliminates the chance of potentially serious spreadsheet risk issues being missed, efficiently and effectively. The power and flexibility of a spreadsheet, especially in a CECL context means that a diverse, esoteric set of spreadsheet functions will be used in building the CECL models and reports. This will require a powerful, functionally rich search model to capture these functions and any changes. This model will need to be able to capture, at the very least, changes to macros, new functions, new data, stale data, missing data, new or broken spreadsheet links, cell error, additional worksheets, or use of hidden cells.

Proactive alerting to potential spreadsheet risk issues is central to keeping the project and the CECL compliance on track. In a complex CECL spreadsheet environment, plenty of alerts will be generated, so it will be useful to have an alert filtering process that makes analyzing the alerts practical. It should be possible to filter from multiple perspectives, including by business unit, by formula type, by macro, and by links.

Reporting capabilities are also essential to provide timely reporting for project managers, as well as to provide the foundations for the auditing requirements that will be a feature of CECL Compliance. This capability also provides scope for potentially reducing the cost and effort involved in auditing.

THE SOLUTION: TOOLS FOR EXECUTING A COMPLIANT CECL FRAMEWORK

► Integration

Each phase – the discovery, inventory management and monitoring – can each be delivered using a range of toolsets and applications. However, there is value in delivering them as an integrated whole, as it ensures that the critical spreadsheet risk data is fully captured through each phase. This end-to-end spreadsheet risk management approach ensures all the critical spreadsheet risk information is consolidated into one environment, with reduced scope for errors and omissions. This reduces project risk and provides the most effective framework for auditing the spreadsheet estate in CECL reporting.

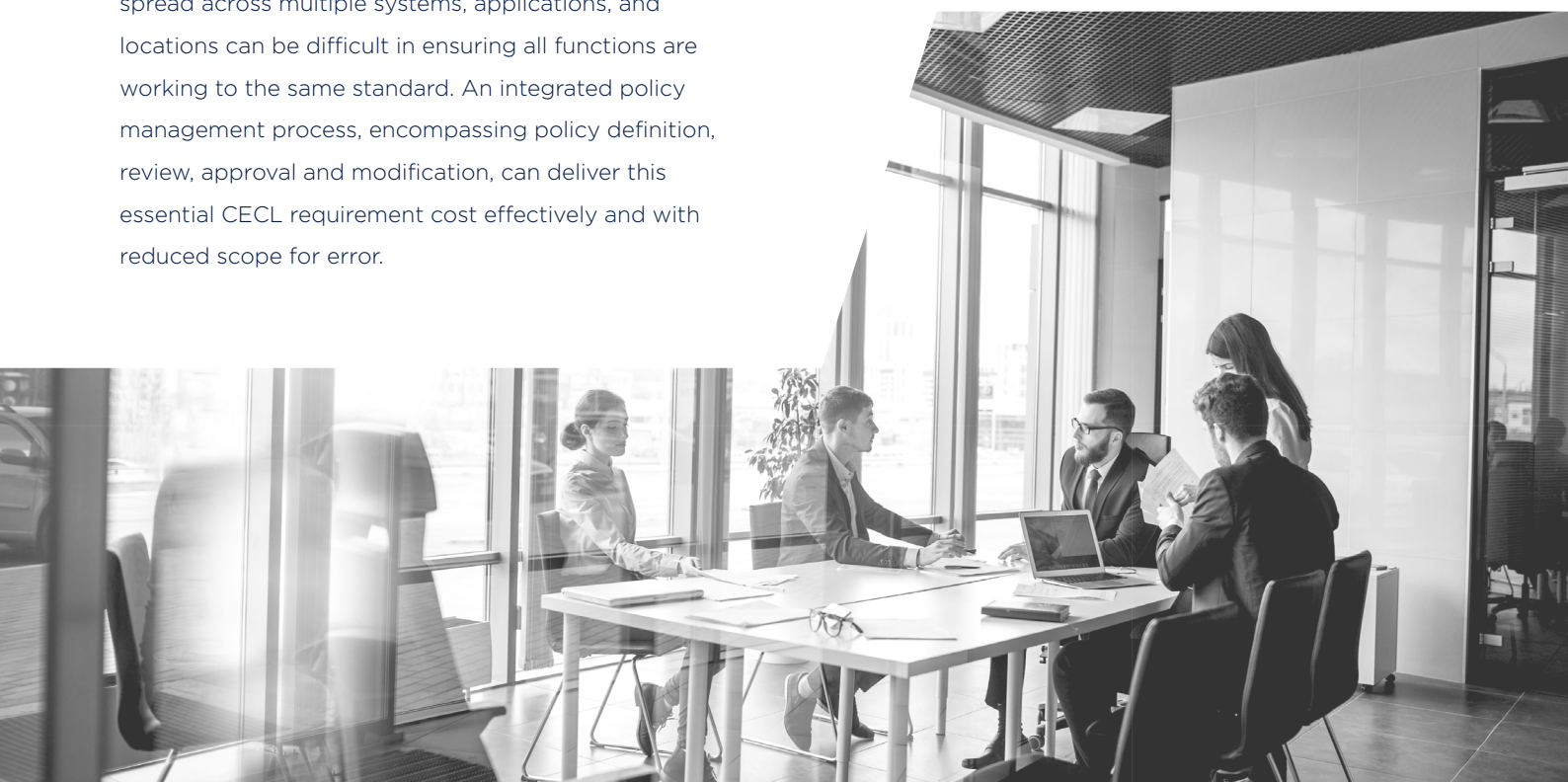
► Centralized policy management

The multi-disciplined approach to implementing and maintaining CECL can be a driver towards having an Enterprise Policy Framework in place. While each function will have its own policy process, having all documentation and files (including multiple iterations) spread across multiple systems, applications, and locations can be difficult in ensuring all functions are working to the same standard. An integrated policy management process, encompassing policy definition, review, approval and modification, can deliver this essential CECL requirement cost effectively and with reduced scope for error.

► Centralized compliance management

With so many moving parts involved in CECL compliance, and the need to keep everything accurate, consistent and up to date, a centralized, automated compliance process can help to keep everyone demonstrably working to the same policy, to the same standard. Aligned with the policy management framework, it can provide staff with configurable standardized and configurable Q&A processes that can ensure people are adhering to the right standards, while also allowing exceptions to be captured, reviewed and remediated.

Automated reports can be created to demonstrate compliance against data quality standards, IT standards and change management standards, for example, for management, auditors, and regulators to review.



THE BUSINESS VALUE OF ENHANCED CECL COMPLIANCE

It's easy to focus on the compliance issues of CECL, but there are practical commercial reasons for enhancing and optimizing CECL compliance.

In a period of sustained low interest rates, which seem set to continue in 2020, the need to optimize the capital structure of a bank is key in maintaining its profitability, delivering new services and achieving corporate objectives.

As well as delivering compliance, this approach to implementing CECL framework has the added benefit of being cost effective, and helping a bank to optimize its cost of capital.

There is a premium in delivering accurate, timely results that management can be confident in when making decisions about making investments, launching new

products or engaging in M&A activity. The framework can help to provide insight into how a loan portfolio or a market segment may perform under an array of scenarios, helping make fully informed decisions, but only if the results are consistent over time using accurate, transparent information.

Clearly, there are business benefits using an automated management process for CECL. As well as reduced scope for errors – and their costly and time-consuming remediation – this approach reduces the need to buy and deploy new applications to deliver CECL. It can be used utilizing skill sets with little additional training, while minimising the disruption to the business.

CONCLUSION

While CECL can present a challenge for any institution, there is also opportunity to implement its standards utilizing existing systems, applications and processes, as well as by adopting automated solutions. Approached the right way, they can deliver an end-to-end compliance process for CECL.

WHY CLUSTERSEVEN

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Cost-effective – Utilise our templates and easy-to-use configuration tools to make implementing your MRM cost-effective, with minimal use of external consultants.

Unique – Our MRM solution encompasses all modeling environments at financial institutions, as well as offering seamless integration into Excel and Access-based models, tools & calculators.

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Customizable - With elegant, configurable dashboards, dynamic workflows, and integrations to third-party BI tools, ClusterSeven can meet all of your reporting, audit, and analysis needs.

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With Mitratech Enterprise Compliance Suite (ECS), you can not only enjoy top-down visibility and oversight but also embed data privacy and information governance enforcement at the operational level throughout your business.

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