Software Development Life Cycle (SDLC) Framework

**Version: 2**.1

**Effective Date:** June 30, 2025

**Framework Owner**: Thomas Foresta, EVP, Chief Information Officer

**Next Scheduled Review Date:** TBD

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# Overview & Purpose

BCSB has designed and implemented this Software Development Life Cycle (SDLC) framework that outlines principles and practices that provide structure, drive consistency, promote security and ensure the quality of in-house developed software products. It is based on a standard iterative process that describes who does what, when, and how in a system development and deployment project.

The SDLC framework provides a systematic way to organize and control the tasks associated with software development projects. In combination with sound project management, the SDLC improves the capability of application projects to deliver as expected, on time and within budget.

This Framework establishes the minimum requirements and responsibilities for Bristol County Savings Bank (BCSB).

# Scope

This document describes the elements of the three classifications of solutions in a common and consistent way. This is an iterative process that evaluates the business need for the data or information. Bristol County Savings Bank’s SDLC process could be described as “hyper-agile” because analysts are on the front lines of business where they can more effectively and efficiently solve the problems of the business in both concept and practice. The SDLC provides a standard approach that results in the production of a well-documented, reliable, quality solution. The three classifications of solutions that this SDLC regulates are:

* 1. **Business or Operational Reporting (Queries)** – basic request that is fulfilled by the business

/ data analyst that is primarily a query for summary data or list. The requestor completes the “report request form” and then submits via a dedicated email. All queries are managed by Business Services and maintains a tracking log for all requests.

***Form Location: X:\X-Files\Business Support Services\Internal Report Request***

* 1. **Rapid Application Development (RAD)** – is an approach that enables automated code generation through visual building blocks are moderate or advanced request that uses automated processes that combines, change or calculates data for reporting. All development is managed by Business Intelligence and maintains initiative tracking.  
     ***Form Location: \\00-DA1\Home\Share\Data & Analytics Initiatives\Project Management\SDLC Certification Process\02\_RAD Initiatives***
  2. **Projects (EPMO Definition)** – A project is defined as a temporary endeavor,  
     aiming to create a unique result, enabling the creation of quantifiable benefits (business value) initiated by leaders of the organization in alignment with the Strategic Plan  
     ***Form Location: X:\X-Files\EPMO\5\_Templates as of June 2024***
     + For projects that involve the development of software, the updated **Business Intelligence Project Workbook** is required. The workbook outlines specific SDLC phases that must be followed throughout the life of the project.
     + These phases include:
       - **Project Start**
       - **Development or Acquisition**
       - **Implementation and Assessment**
       - **Closing**
       - **Maintenance**
       - **Disposal**



* + - These structured phases ensure compliance with FFIEC guidelines & consistency with Project Management Policy.

# Definitions

Terms specific to the framework should be listed and defined here.

|  |  |
| --- | --- |
| **Term** | Definition |
| **Application Owners** | The Project/Product Manager, the Executive Sponsor, and the Technical Leader are jointly and collectively identified as the Application Owners. |
| **Application Project** | The Enterprise Project Management Office (EPMO) defines a project as a temporary endeavor undertaken to create a unique product, service, or result. By extension, an Application Project is a temporary endeavor undertaken to create a unique application product, be it a new application or the upgrade of an existing application. |
| **Artifacts** | Artifacts are the tools, documents, or forms used to support and document critical phases of work. The SDLC process produces artifacts that are associated with it (i.e. needs analysis, feasibility requirements, design documentation, test plans, etc.). |
| **Phase** | Phases represent the sequential evolution of an application project through time. The Phases of this SDLC are Inception, Elaboration, Construction, Transition, and Production. |
| **Rapid Application Development (RAD)** | An adaptive solutions development model that prioritizes rapid prototyping and quick feedback over extensive pre-planning. RAD allows developers to quickly create iterations to a solution and helps ensure that the final product aligns more closely with the business requirements. |

# Roles & Responsibilities

**Application Owners:** The Application Owners are responsible for executing this SDLC and submitting the resulting artifacts to the EVP, Chief Information Officer or 1st Vice President, Senior Business Intelligence Officer. This submission consists of the names and signatures of the Application Owners, and the actual artifacts. (Artifacts are the documents, diagrams, etc., that are created as a result of following the SDLC.)

**Application Owners and Enterprise Project Management Office (EPMO)**: The Application Owners and the Enterprise PMO must jointly consider this SDLC as an integral part of the overall project plan.

**CIO**: The CIO is responsible for enforcing this Framework.

# Development Framework & Process

Bristol County Savings Bank’s SDLC is a process used by development teams to design, develop, and deliver business and operational solutions. The SDLC framework & process includes:

* **Discovery:** Understand and document the solution requirements from the stakeholders.
* **Design:** Create a design of the solution, define the deliverables that are expected.
* **Implementation:** Write the queries or workflows for the solution based on the design.
* **Testing & Validation:** Test the solution to ensure it meets the requirements and is acceptable quality.
* **Deployment:** Release the solution to the end-users.
* **Maintenance:** Monitor and update the solution as needed to improve quality, reliability, and performance, or add new features.
* **Change management procedures:** Change management procedures have been established by the bank to ensure that changes to infrastructure, environment and software are properly documented and approved before implementation.
* **Risk Management:** If identified during the planning phase, a risk assessment will be performed that will determine the depth and breadth of activity during a project as well as related involvement by the IT and Information Security Functions.
* **Certification & Accreditation (C&A):** Project must also go through a process to ensure that risks are managed; the system has appropriate security controls; and that vulnerabilities within the system have been discovered and remediated. The scope and degree of C&A should be determined during the planning phase and based on an initial assessment of risk.

# Framework Statement/Requirements

This SDLC is meant to operate under the umbrella of the Chief Information Officer. The Information Technology Department is responsible for overseeing the Bank’s software development activities. Unauthorized or improper use of the Bank’s technology assets is strictly prohibited unless permissible by law.

# Key Contacts for Questions & Interpretation of Policy

Questions should be directed to EVP, Chief Information Officer or 1st Vice President, Senior Business Intelligence Officer.

# Framework Compliance & Governance

* Bank employees are responsible for adhering to the guidelines specified within this Framework as well as the Code of Ethics and all other bank policies, which govern employees’ behavior and responsibilities.
* The Information Technology Department is responsible for overseeing and monitoring adherence to the Framework throughout the organization.
* The Information Technology Department shall follow the vendor management and risk management protocol regarding the selection and management of all third-party vendors.
* Department Heads and Supervisors are responsible for enforcing the Framework within their respective areas.
* For questions about the framework or to report a suspected violation, please contact EVP, Chief Information Officer or 1st Vice President Business Intelligence.
* Any employee found to have violated this Framework may be subjected to appropriate disciplinary measures, which will be determined at the Bank’s sole discretion and may include, but are not limited to, additional training; counseling; oral or written reprimands; warnings; probation or suspension with or without pay; demotions; reductions in salary; termination of employment or service; and restitution.
* The Bank’s Whistleblower Framework prohibits taking negative action against any employee for reporting a possible deviation from this Framework or for cooperating in an investigation. Any employee who retaliates against another employee for reporting a possible deviation from this Framework or for cooperating in an investigation will be subject to disciplinary action, up to and including termination.

# Approval & Exception Requirements

Exceptions to this framework may be granted on a case-by-case basis by the EVP, Chief Information Officer or 1st Vice President Business Intelligence in conjunction with Enterprise Risk Management (ERM).

# Audit Review

The Software Development Life Cycle (SDLC) framework is subject to review by the Internal Audit department on a periodic basis in accordance with the scope of the Internal Audit plan approved by the Audit Committee of the Board of Directors.

# Revision History

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| --- | --- | --- | --- |
| Revision Date | Version No. | Author | Description |
| 11-01-2023 | 1.0 | William Muto, Business Intelligence | New SDLC framework and framework. |
| 10-09-2024 | 2.0 | William Muto, Business Intelligence | SDLC framework and framework. Modifications & adjustments. |
| 06-30-2025 | 2.1 | Chad Doorley,  Business Intelligence | Revision to align with EPMO Redesign |