

Merrilton Bank:

Data and Information Governance Banking Analysis

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# Scenario

You are a junior credit analyst at Merrilton Bank, which has branches across several states in the United States. Your supervisor has called a team meeting and shared the agenda from leadership in the attached “Merrilton Bank Case Study.” Your supervisor has asked each team member to write a response to leadership’s agenda items that will ultimately propose an infrastructure to support the new loan program. Your supervisor will utilize the team’s feedback to prepare for the meeting with the bank’s executives and other leadership.

# Objective

Using the “Merrilton Bank Case Study,” analyze the bank’s data governance status and gaps and provide recommendations for a meeting agenda by doing the following:

- A. Describe the status of the Merrilton Bank’s essential data governance components about people, technology, process, and content.
- B. Describe data governance gaps related to each of the four essential data governance components (i.e., people, technology, process, content) that manifested as a result of the current crisis in the case study and the recent opportunity to administer a new line of loans.
- C. Discuss the origins of the gaps identified in part B and the data governance opportunities to achieve data information and governance readiness to successfully administer new loan products, including the following:
  - the bank’s ability to respond to a sudden surprise of this magnitude based on the origins of the identified gaps
  - the bank’s readiness to effectively administer new programs based on the origins of the identified gaps
  - relevance of existing standards and processes for reporting, compliance, data protection, and security
  - opportunities to apply best practices to current and envisioned data governance elements, including processes and operations, to elevate the bank’s emergency readiness
- D. Provide recommendations for four agenda items from the case study that you will present in the team meeting from the scenario.
  - Justify each agenda item recommendation from part D in the context of the enterprise and the analysis you conducted in part C.

# A: Elements - What's the current state?

## People

**Business Analytics Department:**  
Manages and maintains data models

**Data Scientist:**  
Trains data models and ensures validity

**Data Warehousing Department:**  
Manages historical data

**IT Department:**  
Provides technical support for the Business Analytics and Data Warehousing departments

## Technology

- Mobile app
- Data marts in a data warehouse
- Automated application scoring technology
- Fraud detection tools

## Process

An automated scoring model is used to determine applicant eligibility.

There are two departments, Business Analytic and the Data Warehousing, that manage current and historical data used by the scoring model. Each department operates under their own policies and procedure.

Additional departments, IT, HR, Accounting, and Professional Development, are used in supporting roles for the aforementioned departments, but do have not influence or operate under the same policies and procedures.

## Content

The content is hosted in silos and a centralized data warehouse. It is used to determine eligibility of loan applicants.

The type of content includes:

- **Risk model:** assesses product associated risks, loan repayment probability, & estimated loss,
- **Application Scoring model:** automated model for determining loan eligibility from the application pool.
- **Historical data:** uses previously collected data in order to assist in predicting future likeliness of customer behavior.

# B: Gaps - What's needed?

## People

### **Data Governance Board:**

Develop and enforce enterprise-wide policies and procedures in relation to data governance

### **Data owners:**

A representative from all departments to participate in the creation of data governance policies and procedures. They will be responsible for keeping their department's data secure and compliant, but also the integration of data with all other departments.

### **IT Department:**

Provide any updated infrastructure needs and update disaster recovery plan as needed for the intake of the SBAP product. Manages data loss prevention, assist in implementing data security best practices, and work with other departments to advise on the technical side of protecting against fraud and abuse.

## Technology

The creation of **new or revised data models**.

The employment of **cloud services**.

The reconfiguration of the current **fraud detection tool**, or a new solution.

A standardized **reporting tool**.

## Process

**Data Collection:** Gather additional required data from various local offices to determine default status, rate thresholds, and diversity profiles for businesses that were approved for a loan.

**Reports:** Establish and validate loan operations and other data reports, according to NIST standards, to share with the Department of Treasury.

## Content

**Data Integration:** Cross-departmental data synchronization and open lines of communication

# C: Gap Origins - The Why

## People

The gaps originate from a lack of collaboration in decision-making amongst the bank's departments; Business Analytics, Data Warehousing, IT, HR, professional development, & accounting. They are each siloed and when it comes to data, there is a lack of integration and standardized policies which leads to ad-hoc changes. This weakens data integrity thus the ability to properly calibrate and audit the data.

## Technology

**New/revised models:** To continue automating the determination of loan eligibility, the models in place will no longer be effective based on the subset of data points the federal SBAP loan application requires.

**Cloud services:** There is an anticipated need for increased storage capacity, larger datasets, and hosting the actively developed cloud-native mobile app. It will also allow for high availability and can be integral in the protection of data via a disaster recovery and data security plan.

**Fraud detection:** The tool will need to be reconfigured, or a new solution deployed, to incorporate the historical and behavioral data of borrowers.

**Reporting tool:** For the Department of Treasury to confirm that loans are in compliance with the best practices of the NIST standards, being distributed equitably, the status of default rates, and other KPIs, a robust reporting tool will be required to share the information when requested.

## Process

**Data Collection:** To comply with the SBAP loan issuance and reissuance, the additional required data surrounding defaults, repayments statuses, and diversity must be gathered.

**Reports:** To continue to issue the SBAP loans for borrowers who are eligible for renewal, the bank must establish KPIs and standardize the reports to be provided when requested and for audits. The reports can also be used internally for self-audits.

## Content

**Data Integration:** This will provide necessary information to understand the big picture of how to successfully deploy the SBAP loan product. It will aid in deduplication (occurs when data is siloed), maintaining security of the data, and being in compliance with all policies and procedures. The information will be available for all parties.

## C: Gap Origins - The Why (cont.)

Based upon the gaps, Merrilton Bank will have to address certain areas of its current state to be fully prepared for the SBAP loan program. However, it is achievable as they already have a framework in place. They have the relevant resources including data, expertise, people, and technological tools, but the identified areas need to be strengthened in order increase effectiveness. It will require restructuring the current data processes for consistency, collecting several additional yet crucial data points, and implementing new standards and industry best practices to be applied to all departments for alignment. Maintaining those attributes allows the bank to position itself for current and future program opportunities.

# D: Recommendations

## **SBAP-only unit**

Although Merrilton's departments are currently siloed, I would advise that a separate unit is created to handle the SBAP loans. However, this unit will be comprised of employees represented from all departments in order to share data, collaborate, and work on the gaps of the loan product so that it is in compliance with the Department of Treasury's stipulations. By starting out with a small group and allowing them show an improved and streamlined workflow through the use of data governance, the procedures and policies can later be implemented and disseminated company-wide

## **Reporting responsibility**

The Data Warehousing department should be the responsible for supplying and validating reports. They are well versed in the historical data and it is innately the practice to use system of a data warehouse to analyze trends, relations, and form reports based on the findings of patterns.

## **Additional infrastructure**

Additional infrastructure will be required. A cloud platform such as Azure, AWS, or Google can be setup to take care of the need to ramp up quickly and in a cost effective manner. They include services to...

- ensure high availability,
- store, process, and analyze large datasets,
- create logs for auditing and government compliance, and
- provide security detection and prevention.

Using this type of platform as opposed to an on-premise setup would save time, money, cover gaps in the current infrastructure, and easily scale to accommodate future needs.

## **Usage of current data collection, storage, and analytics tools**

The current data collections can be reused. The SBAP loan application questions are a subset of the bank's current loan application. As for storage capacity, it will need to be increased to take on the influx of data created by the new program and for keeping historical data. As previously mentioned, a cloud platform will be the best option as opposed to an on-premise solution due to timing, cost, and scalability. Current analytics tools may need to be replaced. Adjustments to the current models or new models may be required for continued accuracy and effectiveness in predictive capability and validity.



Thanks for  
viewing

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