

DATA MIGRATION AND QUALITY IMPROVEMENT

Kenway Consulting Defined and Implemented Data Transformation to support an improved future state

CLIENT PROFILE

Industry: Healthcare

Solution: Data Governance, quality improvement and migration

Client: Healthcare solutions provider

An industry-leading healthcare solutions provider faced a worst-case scenario when it learned that the strategic partner it had leveraged to help collect and aggregate data was not only terminating its agreement, but was also going to become a direct competitor in just 12 months. As the company quickly began to evaluate new solution partners, it realized that one of its largest obstacles was getting all of the data from the existing solution provider and migrating that data to the new solution provider.

Further complicating the situation, the data set about to be migrated had data quality issues that increased the operational costs for data setup and reporting. As the amount of data had grown over the years, it became harder to draw correlations between the data sets, resulting in less effective analytics and insights, and a reduction in business user trust. In order to mitigate these concerns, the company's leadership team decided that it was finally time to address those data quality issues as part of the migration, even though it would complicate an effort that was already on a tight and critical timeline. Lastly, given that the existing solution provider was about to become a direct competitor, it had little incentive to assist in the transition. The company anticipated that the solution provider would only offer support that was contractually required and, as a result, turned to Kenway for help.

1

***High Cost for
Data Setup***

2

***Ineffective, Analytics
and Insights***

3

***Requirement to
Migrate data***

The Solution

The solution that Kenway recommended was based on five critical steps:

1

A discovery effort to understand the data provided by the solution provider

2

Collaboration with the client's Data Governance committee and working groups to define and gain consensus on business and data quality rules

3

Design and development of a data migration and transformation process to take the data from the data structures within the current state solution provider, and transform it into the data structures required by the future state solution provider

4

Data steward review and correction of data issues resulting from the data quality rules applied during the data migration and transformation process

5

Ongoing assessment of new scenarios, and escalation to the Data Governance committee to confirm the appropriate application of business rules

What We Delivered

Discovery

Kenway evaluated several options for acquiring the necessary data from the existing solution provider, and weighed them against timeline constraints. Discovery on the data to be migrated determined that tens of thousands of data files covering more than 20 data domains would need to be extracted from the existing platform and transferred to the new solution. From our analysis, we determined that we needed to consider individual data attributes, as well as the age of the data that would be included, as part of the migration effort. This was because not all data attributes had enough value to warrant carrying them forward, when weighed against the cost of time spent cleaning and addressing data quality concerns. This was also true for some of the older data, which lost much of its analytical value over time. Our recommendation, given the manual nature of the data transformation, was to focus on only the most valuable data attributes within a more recent timeframe. Additionally, while evaluating the structure of the files and the attributes, we developed a baseline set of business and data quality rules. Ultimately, we facilitated agreement of the baseline set of rules by driving discussions and reviewing several iterations with the Data Governance committee and working groups.

Data Governance is the organizing framework for establishing strategy, objectives and policy for effectively managing corporate data. Data Governance consists of the processes, policies, organization and technologies required to manage and ensure the availability, usability, integrity, consistency, auditability and security of a company's data

Common Challenges Faced by Organizations



"Our **customer data is a mess**, making it difficult to understand the breadth and depth of our relationships."



"We don't have consistent definitions of data attributes across business units."



"We're **not able to respond accurately** to regulatory requirements."



"The reports we export from our systems are incomplete and inaccurate."



"We **aren't able to fully assess** the profitability of specific business units, product lines and customer relationships."



"Our teams aren't able to provide executive management summaries in a timely manner due to manually intensive processes."

What We Delivered

Migrate & Transform

A Python-based data migration process was rapidly developed. This allowed for some foundational business rules and transformations to be applied so that the data quality could be improved prior to loading the data files into an intermediary repository running on an Azure platform. More substantial business rules and data quality rules were then applied in this intermediary repository to further cleanse the data. A data quality report that detected issues was provided to data quality stewards, who then reviewed and applied any necessary remediation to the identified issues. The modified data quality reports were then uploaded back into the repository, and rechecked against all the data quality and business rules. Once that data was cleared with no issues, it went through a final transformation to be prepared for the data structure of the target destination within the new solution, and loaded to that system. After each data set reached the new solution provider's platform, the client team was able to navigate into the new tool and perform a final QA review, and complete some remaining configurations within the new platform.

Audit, Balance & Control

During each step of the process, audit, balance and control best practices were applied through automated procedures and daily reports to ensure data integrity. Data that was brought into the process at the entry point was matched up with what was coming out of the process at the end. Additionally, reconciliations were performed to include the data with issues that was intentionally filtered out or cleaned along the way. This audit information was provided to the data quality stewards and business users so they had full visibility into the transformation of the data into the new tool.

Process Transparency

Due to dependencies and priorities, some data sets had to be migrated sooner than others during the overall timeline. The process was broken down into 16 distinct steps. The processes that Kenway developed accounted for the prioritization, and we reported updates on a daily basis to show the overall progress of the approximately 2,000 data sets as they moved through each of the 16 steps. This provided full visibility and transparency into the status of the transformation, allowing client management to shuffle and pivot resources (e.g., data stewards) as needed, based on shifting business priorities.

THE RESULT

With continuous and collaborative efforts between Kenway and our client, the project was completed in just under 12 months, even though it was originally estimated to take nearly 18 months. Kenway was able to establish a process and technology stack that allowed our client to focus on migrating the most valuable data first, and enabled the rapid redeployment of resources to the most pressing areas as the client's business needs changed. Luckily, our client had made significant, year-over-year investments in maturing its Data Governance capability and, because of that, was able to effectively mobilize its organization to gain consensus on the data quality rules that were ultimately implemented. As a result, the client not only addressed the immediate problem with its antagonistic vendor but also dramatically improved its data quality on the new solution platform. Rather than falling victim to the typical garbage-in and garbage-out pitfall, our client further advanced its position as a leader by helping its clients drive greater value and insights in a data driven, decision-based market. Kenway's effective partnership with the client allowed both parties to evaluate all viable options, and quickly move down a path that led to meeting the project objectives by the critical date driver.

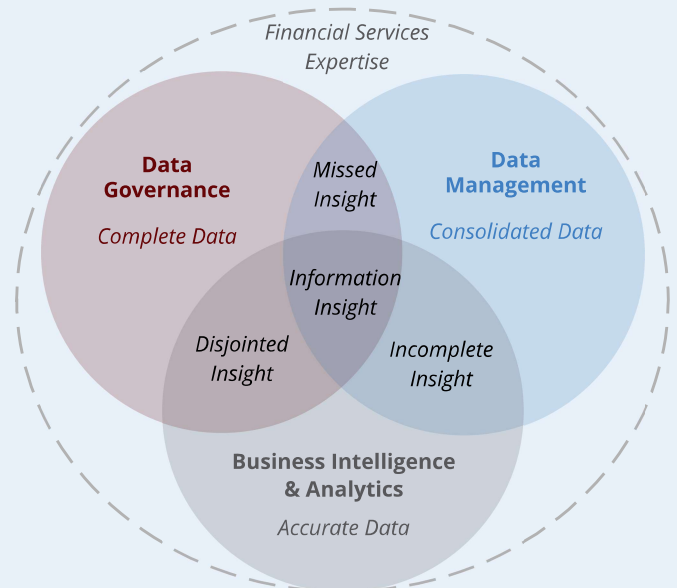
HOW CAN KENWAY HELP YOUR ORGANIZATION?

Kenway focuses on the people, processes and technology surrounding your data ecosystem to create the best solution for your organization.

Kenway's capabilities focus on defining and implementing processes to help you govern your data from the point of origin to the point of consumption, and to the point of retirement. By taking this approach, we believe that data can be managed in a way that minimizes cost while maximizing the organization's ability to ensure data quality.

Kenway's Data Governance framework will:

- Enable you to pinpoint key problem areas across your business processes
- Create a tactical approach for addressing issues through Data Governance principles
- Provide insight from your data to drive key strategies and business decisions
- Ensure your data meets Data Governance policies
- Ensure your data is accessible



Contact us today to get the most out of your data!