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RESEARCH NOTE AN INITIAL LOOK AT KALIDO DATA GOVERNANCE DIRECTOR

THE BOTTOM LINE

Nucleus Research took a closer look at Kalido Data Governance Director to understand how companies can use it to manage data policies and improve data quality. Analysts found that a common platform for defining and enforcing data policies can automate labor-intensive processes and make data such as personally identifiable information more secure.

Kalido Data Governance Director helps companies to define, model, track, and manage business data across operational systems, data warehouses, master data hubs, and other existing data repositories. The goal of the application is to operationalize data governance with a consistent structure for authoring, approving, applying, and measuring compliance with data policies.

HOW IT WORKS

Kalido Data Governance Director is a Web-based application housing initiatives and policy libraries and policy compliance metrics.

The first step in data governance is defining data policies – measurable rules for a set of data elements, such as customers, suppliers, and products, in context, for use in a business process. Those policies are common across the organization regardless of where the data is stored. Common types include security policies, information lifecycle policies, and data quality policies. For many organizations, the data may be in multiple systems – for example, customer data could be in a CRM application but also in an accounting system.

Business analysts author data policies in Kalido's initiatives library. The policies include:

- Business rules that define the business requirements for the data, such as "each customer on an order has a mailable and accurate billing address."
- Logical rules that tell how to determine whether or not the data is compliant with the business rule, such as "all customer address data fields in the accounting application are correct."
- Technical rules that tell how and how often the logical rule will be tested. The test could be manually reviewing the data, importing data from a data quality report, or running a custom script to analyze the data.

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Once a data policy is authored, a workflow routes it through appropriate review and approval steps and it is stored in Kalido's policy library where it is published and communicated.

Role-based user interfaces for administrators, analysts, and business users allow them to view the policies and tasks associated with their responsibilities. Authorized users can view the policies in the library but cannot make changes to the rules. Managers can monitor compliance with data policies through the Kalido dashboard and drill down to track any issues if a technical test indicates that data is out of compliance. Noncompliance may trigger a new workflow for data policies to be altered or added.

Nucleus Research has followed the evolution of business intelligence and analytics for some time, and has worked with a number of organizations facing data governance challenges. To better understand Kalido's approach and the related benefits of centralized data governance, Nucleus analysts participated in a detailed demonstration of Kalido Data Governance Director and conducted in-depth interviews with a number of companies participating in Kalido's Lighthouse program for early adoption of the solution.

THE CHALLENGE

Organizations have enterprise applications to track and store transactional data, but it is often difficult for users to extract and analyze data from those systems without altering it. Many companies have invested in business intelligence, analytics, pivot tables, and customized spreadsheets to extract and manipulate data to support better decision making. However, this often leads to multiple, inconsistent versions of data. Nucleus found that many companies implement data governance to address a number of data challenges:

- Many business intelligence initiatives are bottom-up, departmentalized, and driven by either IT or business analysts.
- A project-driven approach has resulted in multiple silos of information, ad-hoc manipulation of data by different users and groups, and multiple sources of the truth.
- Increased integration between systems and efforts to consolidate business intelligence applications and data warehouses have exposed multiple versions of data and data definitions.
- As more data is exposed to more users more rapidly, data quality becomes a more obvious and pressing problem.

Companies look to solve these challenges by implementing data policies and data quality management tools, but without a common framework for maintaining them, Lighthouse participants told Nucleus that their traditional IT practices and business activities were often at odds with data governance:

- *"We're a policy averse company in that unless there's a regulatory requirement, the business is less inclined to be prescriptive about how we manage our data. With a heterogeneous system and a lot of manual processes, it was a lot to capture and document policies, attach them to parts of the organization, and have a loop back on quality and compliance."*
- *"Any view of data governance or ownership is managed in a disparate fashion, and similar groups are doing similar things in an uncoordinated manner. The*

IT function and mature data governance are somewhat at odds. You can embrace data governance in an island-like fashion and then expand out from an operational standpoint ... It really needs to be centralized. Driving from the bottom up is almost impossible to coordinate."

- *"The appreciation of data and the understanding of it and the level of conversation and documentation is not where it needs to be. We deliver IT projects but we look at the documentation and it doesn't talk about data. We don't understand the data landscape."*
- *"We're not any different from any other large company in that we have multiple different systems and databases attached to them and no common keys between them."*

Organizations also struggle with data governance because lack of executive attention, turf battles over data, unclear ownership, and ineffective communication of data policies make operationalization of data governance costly and ineffective. For these and other reasons, Nucleus finds many organizations are very early on the path to mature data governance. However, those exploring Kalido and data governance had identified a number of potential benefits – beyond just the intangible benefit of better data quality – that a consistent data governance initiative would deliver.

BENEFITS OF BETTER GOVERNANCE

The obvious benefit of better data governance is better data quality, but in making the business case for a broad data governance initiative, organizations have to tie specific benefits to their investment. In analyzing the goals of Kalido customers, Nucleus found a number of quantifiable benefits from improved data governance including improved business process efficiency, reduced data cleansing costs, reduced cost of compliance, reduced operational costs, and improved customer satisfaction.

Increased productivity

Without a defined process for creating, communicating, maintaining, and monitoring data policies, data stewards can create policies but are often challenged to ensure they are implemented and maintained. Nucleus analysts found that Kalido provides a single platform for data policy creation, communication, and monitoring to make data governance more efficient:

- Data policy templates can be reused, reducing the time needed to author policies.
- Workflow capabilities automate the approval process, reducing the time to identify who is needed for review and approval and capturing the audit trail for future reference.
- Publishing capabilities ensure approved policies are communicated to the appropriate users and accessible for review, reducing ad-hoc distribution of policies and the time spent searching for policies and ensuring version control.
- Once implemented with logical and technical rules, alerts and dashboards automate notification of data problems to the appropriate data stewards so they can identify the cause and take action to correct it.

A common foundation for defining, implementing, and enforcing data governance can also reduce the need to clean and validate data on an ongoing basis. For most

organizations, this results in reduced outside data cleansing costs; increased productivity for analysts, business users, and IT staff; or both. Lighthouse participants said:

- *"There are clearly productivity benefits [from data governance]. We can give business people who are playing governance roles direct access to the data. The only way you see it now is when it's pumped out in a report. This will give the right people the right access to the right data, and they can request changes straight in the [application]."*

Usability is critical to increasing productivity from any enterprise application, and data governance is no different. Beyond initial definition and deployment, intuitive tools that enable business users to change data without IT intervention will maximize adoption and, ultimately over time, data quality.

Reduced cost of compliance

Automating data governance and having clearly documented and implemented rules in place for data governance can accelerate the validation and delivery of business data for regulatory requirements and compliance audits. Rather than depending on specific individuals or ad-hoc reviews, Kalido stores policy creation audit trails and tracks and monitors policy implementation and maintenance, so companies can demonstrate an auditable end-to-end data policy management process. Lighthouse participants noted the policy management and monitoring components would reduce the time and cost needed to ensure compliance:

- *"We have a policy, it's been communicated, that's only 80 percent. We wanted to have a well running policy management function before next year. As we get audited it will be a much less painful process."*
- *"Defining the data policies, making them centralized in one tool, and being able to communicate where they are and integrate them with related processes and measuring compliance will improve our communication with the stakeholders of financial data."*

Companies exploring data governance will find that the potential reduced cost of compliance depends on the number of systems and user groups manipulating data today, the current cost and time to meet compliance requirements, and the regulatory requirements of their industry.

Improved business process efficiency

A complete and correct view of business data and confidence in enterprise data at the departmental level can drive faster decision making and enable managers to identify opportunities to manage and reduce operational costs. One user that currently has business users request changes of the data by sending a form to the IT team said, *"We have a big team just processing data entry. They get requests and have to interpret the requests because they don't have a common language. Doing it within MDM will take out the steps of people typing information into forms."*

Reduced risk

Nucleus analysts find that lack of data governance means many managers make decisions on incorrect, inconsistent, or incomplete data. Lighthouse participants exploring data governance recognized the benefits of reducing risk when managers

can more quickly make decisions because they can analyze complete and valid business data:

- *"In a highly regulated environment, the ability to centrally and efficiently draft and manage our policies downstream will help mitigate risk and better ensure oversight and enforcement of regulations coming our way."*
- *"As we're governing better we see fewer errors getting out and even the errors that do get out [are resolved quickly] because we know whom we need to talk to."*

Nucleus finds that often organizations initiating data governance efforts know that they have exposure to risk but are unsure about the depth of that exposure. Authoring security policies within Kalido can be a good first step to understanding and discussing overall risk exposure. Learning from the best practices of other organizations that have more mature data governance can help to identify and evaluate the potential risks that may be reduced by effective data governance.

Improved customer satisfaction

Many companies create workarounds for sales and other customer-facing staff because of poor quality customer and product data. Improving data quality through data governance can reconcile inconsistencies, accelerate responses to customer inquiries, and enable sales and customer service to be more efficient and accurate, improving the customer experience.

Support for growth

Ultimately, the efficiencies and results of improved data governance enable organizations to spend less time reconciling and discussing data and more time on top-line growth opportunities. Lighthouse participants said:

- *"People have a job description and they can't fulfill it 100 percent of their time because they're investigating and resolving issues. Once you start practicing data governance much better you can increase the time they can spend on what they should be doing."*
- *"There's more focus on the topline. The thing that happens with data governance is that you can manage one subject area – capturing the rules and trying to make them available."*

BEST PRACTICES

Organizations exploring data governance with Kalido identified a number of best practices that were guiding their efforts to maximize return from their investments:

- Balance pilot with global centralized vision to leverage the economies of scale of a common platform and automated tools while achieving quick wins with users.
- Communicate objectives and desired results in business terms so improvements are measured not just by increased data accuracy or policy compliance but in returns that resonate with shareholders and management.
- Deploy a common usable toolset to ease user adoption, expose data to key groups, and drive collaboration between business users, data stewards, and IT administrators.
- Drive business-led descriptions so that both business and IT are driving implementation, ongoing management, and compliance.

- Move from policy definition to automated maintenance and feedback so data governance becomes not just a required task but a means to more rapidly plan and implement new projects.

DEPLOYMENT KPIS

Managers considering a data governance initiative should baseline the benefits prior to deployment. Measuring the values of key performance indicators (KPIs) prior to the deployment and estimating their expected and worst-case values a few quarters after the go-live date can drive the framework for a business case for investment and adoption. It also allows data stewards, IT, and stakeholders to agree on milestones to be achieved by the project and criteria for success. Metrics project champions should consider include:

- Increased productivity. Data governance can impact different business groups' productivity as well as that of IT. Using direct observation or interviews, estimate the amount of time each group spends on data review, validation, and correction. After the deployment, survey workers in each of these groups again to determine how many fewer hours a week they dedicate to data governance efforts. Keep in mind the total time saved will not necessarily translate into new work completed by these employees. A reasonable correction factor of 50 to 75 percent should be used to translate from time saved to time worked. You should also keep in mind that in some cases, time saved by one group (such as IT) may initially create additional work for another group (such as business users), so productivity benefits will change over time.
- Reduced data cleansing costs. Before data governance efforts, data cleansing costs are typically absorbed by IT, administrative staff, or external outsourced system integrators or service providers. These costs may be distributed by application or department. Reviewing both ongoing expensed consulting costs in operational budgets and overall IT administrative staff time will identify potential cost savings areas; budget plans for such areas after deployment should be targeted for incremental reductions to ensure cost savings are realized. In many cases, even a small percentage of outsourcing or other fees across a variety of departments can deliver significant benefit.
- Improved customer satisfaction. Although customer satisfaction is often a more long-term and indirect benefit of better data governance, an initial milestone for customer satisfaction is likely a reduced amount of time customer-facing staff such as sales and customer support personnel spend responding to customer inquiries. As in the case of productivity, surveying user groups or gathering data from CRM systems on response times and escalations and surveying again a few quarters into the deployment can measure the scale of benefits. Surveyed is often a better measure than simply reporting from a CRM system as many companies don't differentiate between active employee time spent on resolution of a customer issue and the total time to resolution. Although both should improve, active time is a more direct and recognizable measure.

CONCLUSION

As business users expect and demand more rapid access to enterprise data, organizations are recognizing the gaps in their data governance strategies and the potential benefits of automated data governance. Nucleus analysts found that a

single platform for data governance with repeatable templates and workflows such as Kalido Data Governance Director could help organizations to operationalize data governance. The first step in effective data governance is having a consistent process for authoring, approving, and managing data policies; Lighthouse participants found Kalido Data Governance Director could support that consistent process. Short-term benefits Lighthouse participants expected include reduced data management and related operational costs and increased productivity. On a long-term basis, improved data governance can drive improved decision making, reduced risk, and business growth.