Delivering Governed Self-Service BI across the Enterprise
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Key Self-Service BI Governance Capabilities</td>
<td>4</td>
</tr>
<tr>
<td>Top 10 Success Factor Features</td>
<td>4</td>
</tr>
<tr>
<td>Self-Service Governance Framework</td>
<td>4</td>
</tr>
<tr>
<td>1. Foundation</td>
<td>5</td>
</tr>
<tr>
<td>2. People</td>
<td>5</td>
</tr>
<tr>
<td>3. Process</td>
<td>6</td>
</tr>
<tr>
<td>4. Technology</td>
<td>7</td>
</tr>
<tr>
<td>Self-Service BI Technical Implementation Checklist</td>
<td>7</td>
</tr>
<tr>
<td>5. Accountability</td>
<td>8</td>
</tr>
<tr>
<td>Highlighted Customer Best Practices</td>
<td>8</td>
</tr>
<tr>
<td>Volkswagen Group Ireland</td>
<td>8</td>
</tr>
<tr>
<td>Conclusion</td>
<td>9</td>
</tr>
<tr>
<td>Recommended Next Steps</td>
<td>9</td>
</tr>
</tbody>
</table>
INTRODUCTION
The purpose of this document is to provide Pyramid Analytics customers with an actionable, high-level framework, guidance and tips to successfully deliver governed self-service BI across the enterprise. Although ad-hoc reporting tools have come a long way the past few years, most of the tools in the market today have significant governance gaps.

Self-service BI governance involves a partnership between business and IT leaders on how to best empower everyone to make data-driven decisions efficiently and responsibly. Analytics guides interactions, informs decisions, drives processes and ensures better outcomes. In balancing organization and individual needs, a collaborative initiative considers various user perspectives and reporting use cases. Since everyone must participate, governance requires an organizational reporting culture change.

The potential risks of not being able to institute a solid self-service BI governance program include:

- Failure to comply with regulatory, security or privacy requirements
- Bad decisions based on outdated, incorrect, or incomplete data
- Numerous copies of uncontrolled data compromise one version of the truth
- Inefficient, non-reusable data models, business logic and metrics
- Inability to verify the data origins and changes if audited
- Reporting inaccuracy or limitations across time periods
- Loss of credibility if reports cannot be reconciled
- Scalability, maintainability and security issues

"Start with governance in mind on day one."

A self-service reporting system with little or no governance can be expensive and challenging to remediate after self-created data models and reports have been developed. It is far better to start with governance in mind on day one.

Governance is not a one-time project. It is ongoing. Governance should evolve to become transparent in the essence of a conscientious, modern data-driven culture.

Using people, process and tools along with a governance framework, critical data assets can be protected for the organization while also providing highly desired, rapid decision making agility for the users. A good governance process will establish proper change management, training policies, and promote data-driven decision making.

In this white paper, we’ll share tips on what to look for when reviewing self-service BI governance features, how to effectively address gaps and successfully implement governance in your enterprise deployment with Pyramid Analytics.
Throughout the rest of this paper, we will walk through the following topics.

- Key Self-Service BI Governance Capabilities
- Self-Service Governance Framework
- Highlighted Implementation Best Practices

KEY SELF-SERVICE BI GOVERNANCE CAPABILITIES
Enterprise self-service BI platforms do require governance capabilities for agile yet controllable access to data for reporting. Effective governance requires structuring appropriate processes, version control and approval workflows. Here are ten success factor features to consider when evaluating self-service reporting solutions. A more comprehensive technical implementation checklist is provided in the framework section of this white paper.

TOP 10 SUCCESS FACTOR FEATURES

1. Granular permissions for log in, authoring, editing, deletion, sharing, exporting and role based conditional content viewing
2. Watermarking for approved, “sanctioned data sources”
3. Version control, official content migrator and rollback
4. No data lock in – ability to export or migrate uploaded data
5. Data modeling with slowly changing dimensions to accurately report data over time
6. Data lineage for understanding report data sources and changes
7. Collaboration with conversation capabilities to reveal reporting content context
8. Customizable administrative reporting and alerting
9. Integration APIs and embedding capability
10. Administrative utilities for mass deployments

SELF-SERVICE GOVERNANCE FRAMEWORK
The framework upon which self-service BI governance balances information value with organizational regulatory, compliance, data privacy and ethics needs encompasses the following five areas.

1. Foundation
2. People
3. Process
4. Technology
5. Accountability
Without these areas addressed in a self-service BI deployment, governance initiatives fade into a collection of unfollowed guidelines.

1. FOUNDATION
Self-service governance requires commitment, budget and time allocation from senior management for design and apply new reporting processes. Since governed self-service BI is a cultural level change in an organization, executive sponsorship reinforces the strategic importance for adoption. Endorsement visibility also gives program the authority to carry out decisions that cross line of business boundaries.

2. PEOPLE
While each organization is unique and various top-down or bottom-up approaches can be taken, your enterprise self-service BI governance team typically includes the following people.

An Executive Sponsor is responsible for vision and funding. The IT staff will support hosting, operations, and controlled enterprise data source access. The technical BI and analytics teams will provide leadership in establishing an analytics center of excellence, communicating reporting compliance requirements, training and tool usage guidelines. Business unit leaders drive functional requirements of self-service BI platforms and assign departmental subject matter expert leads. This team consists of Power Users that are responsible for the lifecycle of all self-service BI articles in a deployed BI solution such as dashboards/reports.
3. **PROCESS**

To get started with self-service BI governance, consider starting small in a single business unit with a few quick wins or prototyping projects designed by current subject area Power Users to showcase immediate value and learn the basics. Then take lessons learned and incrementally add business units, continually update governance guidelines, and expand the platform across more business units with using a train the trainer approach.

In balancing the risk and value of empowering users with self-service BI, it is helpful to classify the nature and expected report usage for user reference and updated workflows. If a report is for temporary or personal or team usage, minimal governance and approval processes would be used. If a report is permanent and serves a broad audience of decision makers, more control over report data source, calculations, versioning, permissions, and publishing approval workflow would be needed.

Highly governed reporting use cases typically remain in the domain of the technical analytics processonals or leverage highly controlled, approved self-service data sources.

<table>
<thead>
<tr>
<th><strong>Highly Governed Reporting</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Reporting</td>
<td>Permanent</td>
</tr>
<tr>
<td></td>
<td>Push information to users</td>
</tr>
<tr>
<td></td>
<td>Dashboards, Business Intelligence, BPM</td>
</tr>
<tr>
<td></td>
<td>Applications, Content</td>
</tr>
<tr>
<td></td>
<td>Corporate stakeholders</td>
</tr>
<tr>
<td>Business Unit Dashboards and</td>
<td>Permanent</td>
</tr>
<tr>
<td>Scorecards</td>
<td>Push information to users</td>
</tr>
<tr>
<td></td>
<td>All public sites - content is divisional</td>
</tr>
<tr>
<td></td>
<td>Dashboards, Business Intelligence, BPM</td>
</tr>
<tr>
<td></td>
<td>Applications, Content</td>
</tr>
<tr>
<td></td>
<td>Portal administrators</td>
</tr>
<tr>
<td></td>
<td>Divisional business owners</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Minimally Governed Reporting</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit Reporting</td>
<td>Permanent and Temporary</td>
</tr>
<tr>
<td>Project Reporting</td>
<td>Sharing information (push / pull)</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td>Personal Reporting</td>
<td>Short lived, timed expiration</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Permanent</td>
</tr>
<tr>
<td></td>
<td>Personal info</td>
</tr>
<tr>
<td></td>
<td>Pull information</td>
</tr>
<tr>
<td></td>
<td>Divisional business owners</td>
</tr>
<tr>
<td></td>
<td>Departmental business owners</td>
</tr>
<tr>
<td></td>
<td>Departmental business owners</td>
</tr>
<tr>
<td></td>
<td>Portal administrators</td>
</tr>
<tr>
<td></td>
<td>Employees</td>
</tr>
</tbody>
</table>
Pyramid Analytics offers self-service capabilities to business users through intuitive step-by-step wizards and workflows that allow them to be self-reliant. Without IT assistance, users should be able to connect to approved data sources and easily create, publish and share dashboards. Report validation and quality assurance should be performed by empowered business units rather than being "policed" by the Enterprise Analytics team or IT.

Although processes are unique to each organization, all self-service users will require some level training. That is a universal need. Business area owners need education of the self-service reporting tool capabilities, available data sources, required compliance and security policies.

Self-service BI onboarding portals usually include the following types of resources for users.

- Instructions on how to get access to the system and point of contact
- Usage guidelines and data policies
- Available self-service BI tools and when it makes sense to use them
- Links and directions for enterprise data catalog and business unit data sources
- Instructor-led training, “How To” videos, and Lunch & Learns
- Tool specific documentation, best practices, community sites, and feature request links
- Overview of the support process and contacts

4. TECHNOLOGY

Successful technology deployment should adhere to organizational enterprise architecture standards. It is also common to set up a lightly governed, experimental data "sandboxes" for users to get faster access to curated data without impacting source systems.

Self-Service BI Technical Implementation Checklist

The self-service BI platform technical capabilities may need to be supplemented to include the following capabilities and processes.

- Reporting server infrastructure authentication, access and configuration
- Back up and disaster recovery
- Shared data sources and data level security
- Content type restrictions
  - Data connections
  - Reports
  - Dashboards
- Security standards for accessing source data and external data
- Shared data transformation, data load and refresh schedules
- Shared distribution lists for subscriptions
- Shared business data models and rules (Excel or Power BI workbooks, Analysis Services models)
- Map users/groups to reporting roles for managing granular reports level permissions (Viewer, Consumer, Analyst, and Professional) and conditional content triggers
- Sandbox, development and production approval workflows for data source or content stewards
- Reporting or data quality issue management and triage
- Continual usage auditing and tracking
- Customized Governance Dashboard that includes personalized metrics, business logic, and views gathered across a variety of self-service BI solutions aka “BI on BI Dashboards”

5. ACCOUNTABILITY
Lastly for your self-service BI solution to remain successful, continually publish customized governance and adoption reports for executive sponsor and governance leadership ongoing monitoring and visibility. When establishing your organization’s governance program, develop a list of agreed upon success metrics to capture, define alerting mechanisms for violations and design a Governance Dashboard. On the Governance Dashboard, showcase self-service BI platform usage, growth, trends, known issues and current status metrics organization-wide with drill-down to business unit level.

To summarize the pillars of a self-service BI governance framework:

- Secure executive sponsorship and long-term commitment
- Establish a cross-functional governance organization
- Assign responsibility and accountability to governance measures of success
- Apply self-service BI governance technologies by assigned reporting control levels
- Continually monitor self-service BI adoption progress, agility and compliance

HIGHLIGHTED CUSTOMER BEST PRACTICES
Self-service BI implementations can gain enthusiastic, broad adoption from your users while unlocking tremendous value from your data. Blue chip companies worldwide are turning to Pyramid Analytics to responsibly empower everyone to make data-driven decisions. Volkswagen Group Ireland is an excellent example of large-scale implementation achievement with Pyramid Analytics.

VOLKSWAGEN GROUP IRELAND
Volkswagen Group Ireland chose Pyramid Analytics for the scalable architecture and integration with Microsoft SQL Server. BI Office eliminated a six-week delay in monthly KPI reports. Volkswagen started by training eight power users to build dashboards. Then they successfully rolled out Pyramid Analytics to their entire dealer network with minimal training. Today Volkswagen has empowered over 600 internal and external users with governed, actionable self-service BI fostering a data-driven culture. To learn more about Volkswagen Group Ireland, watch the video case study.
To hear how other organizations around the world have effectively deployed Pyramid Analytics to serve hundreds, thousands and in some cases even tens of thousands of information workers, explore the vast library of public case studies. Pyramid Analytics vibrant customer community is also a wonderful resource for finding and sharing implementation tips, tricks and best practices with your peers.

CONCLUSION

In summary, effective self-service BI governance processes are essential to ensure users are viewing high-quality, relevant data for decision making. They also help users understand standards for creating and sharing reports responsibly.

Pyramid Analytics BI Office provides organizations with an intuitive, on-premise administrative framework to publish and share content generated from Power BI Desktop. Once content is published to BI Office, administrators can configure role-based access using group security profiles and track lineage and versioning at the storyboard level to gain complete telemetry on how users are consuming content.

RECOMMENDED NEXT STEPS

For more information about implementing a governed, agile self-service BI solution, please contact us and review the following related resources.

- Pyramid Analytics Trial Link
- Pyramid Analytics Community
- Pyramid Analytics Tutorials
- Pyramid Analytics Custom Dashboard Analysis Services Project https://projects.invisionapp.com/boards/EA337P4SHQDGZ/
- Instilling Confidence in Self-Service Analytics: Governance and Security
- The Challenges of Large-Scale BI Deployments
- When Selecting a Business Intelligence Platform
- Adding Governance to Published Power BI Desktop

“Find and share best practices in the vibrant Pyramid Analytics community.”