

From Chaos to Clarity: The Essential Guide to Analytics Governance

Executive Summary

In today's data-driven landscape, organizations increasingly recognize the critical role that analytics plays in driving growth, strategic decision-making and competitive advantage. However, the exponential growth of data and analytics tools has introduced chaos through new complexities, often overwhelming traditional management methods. The absence of effective analytics governance creates significant risks such as data inaccuracies, operational inefficiencies, security breaches, regulatory non-compliance and diminished user trust.

This comprehensive white paper provides an in-depth exploration of analytics governance, highlighting why it is essential, its key components, practical use cases and detailed implementation strategies, so you can bring clarity to your company in the decision-making process.

The partnership between InterWorks and Wiiisdom uniquely addresses these governance challenges, combining deep expertise in analytics infrastructure, comprehensive data strategies, bespoke and specialized solutions for automated content management, validation and certification.

Why Analytics Governance Is Essential

In recent years, the adoption of self-service Business Intelligence (BI) and the push towards a data-driven culture have surged significantly. Self-service BI tools empower business users to access and analyze data independently, fostering a more inclusive and faster approach to data insights. Similarly, a data-driven culture encourages organizations to base decisions on data rather than intuition, leading to more informed and strategic choices.

However, these advancements also introduce new challenges for companies, such as ensuring data accuracy, maintaining data security and managing the increased demand for data literacy among employees. Balancing these issues is crucial for leveraging the full potential of data-driven initiatives. Through a <u>comprehensive</u> <u>survey</u>, InterWorks identified several key pains points that data and analytics leaders frequently encounter: governance, strategy, user adoption and automation.

Companies adopting these strategies need to tackle these emerging challenges. As more content is generated and critical decisions are made based on this data, issues such as the duplication of information and source of truth, performance bottlenecks and security risks become more prevalent. These challenges can lead to inefficiencies and vulnerabilities, resulting in a loss of trust among stakeholders. In the worst-case scenario, these challenges can lead to poor decision-making, loss of control over the platform and data and a decline in user adoption. This may drive employees back to using shadow BI practices, where they rely on unofficial tools and processes, further exacerbating data governance issues and undermining the organization's data strategy.

Organizations may lose control over content, making it challenging to maintain data quality and consistency. Innovative technology implementations can fail or be delayed due to governance issues, and improper access rights can lead to security breaches. Manual tasks and maintenance consume considerable time and resources, while poor cataloging and metadata management can result in the loss of valuable knowledge.

All the investments and efforts in data governance can be undermined by a single poor decision based on an inaccurate dashboard. The consequences of poor analytics governance are then evident and can be costly. For instance, Citigroup faced a \$136 million fine from US regulators due to persistent data issues.

According to <u>Wiiisdom CEO Sébastien Goiffon</u>, the average tenure of a Chief Data Officer is between 1.7 and 2.5 years, reflecting the challenges in delivering effective data and analytics strategies, which often leads to frustration.

<u>Gartner Hype Cycle for Data and Analytics Governance, 2024</u>, reveals that while 72% of surveyed CDAOs say that they are start with business outcomes, only 46% have strategic value-oriented KPIs for their D&A governance policies, practices and procedures. <u>KPMG research</u> shows that 4 out of 5 CEOs do not trust the data they base their decisions on, despite it being a top strategic priority to become more data driven.

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Finally, <u>BARC Research</u> indicates that the adoption and usage of BI and analytics tools is only at 25%, with as the second barrier to adoption trust in data, highlighting the need for better governance to drive higher adoption rates.

To address these challenges, implementing analytics governance is crucial. It ensures that decisions are based on reliable analytics assets (semantic layer, dashboards, reports, Al-generated content), which represent the last step of the analytics process – the top of the iceberg – and are built on accurate data overseen by proper

A Comprehensive Understanding of Analytics Governance

We have discussed analytics governance, but what exactly does this concept entail and what are its key components? Let us explore the fundamentals and understand its significance in ensuring effective data management and decision-making.

According to Wiiisdom's research on the <u>State of Analytics Governance in 2025</u>, the results illustrate how analytics governance serves as an umbrella term, encompassing a wide range of interconnected components, ranging from security to automated testing passing by lifecycle management and metadata management. It represents a cultural and operational shift, embedding disciplined oversight into every analytics initiative.

etadata Auditing		62.8%		
BI Content Dictionary/Catal	ogue	59.3%		
Regulatory Compliance	46.9%			
Lifecycle Management	45.5%			
BI Content Testing	44.8%			
Version Control	41.4%			

The State of Analytics Governance 2025: What comes to mind when we speak about analytics governance?

According to Gartner, "<u>Analytics governance (including self-service analytics) is</u> the setting and enforcement (with a workflow) of governance policy along the analytics pipeline, from the ETL (start) to the sharing of analytics insight (end)."

To get a deeper understanding of analytics governance, we can also explore the framework created by Tableau, named <u>Tableau Blueprint</u>, which states that analytics governance has two main pillars: the governance of data and the governance of content. We have discussed analytics governance, but what exactly does this concept entail and what are its key components? Let us explore the fundamentals and understand its significance in ensuring effective data management and decision-making.



Tableau Blueprint: Main Components of Governance

More specifically, here are the fundamental areas to explore in analytics governance:

- Analytics Quality and Certification: Establishing automated testing and rigorous validation processes to certify that all analytical outputs are accurate, reliable and ready for decision-making.
- Data and Analytics Security and Regulatory Compliance: Implementing comprehensive permissions management, role-based access and secure handling practices that ensure compliance with data regulations, such as GxP, SOX, GDPR, BCBS239, HIPAA or other industry-specific standards.

- **Comprehensive Metadata Management:** Maintaining an organized, searchable catalogue with detailed metadata to facilitate understanding, collaboration and consistent interpretation across teams.
- Lineage and Impact Analysis: Providing clear visibility into data and analytics flows, transformations and dependencies, enabling informed decision-making and effective change management.
- Lifecycle Management and Content Ownership: Clearly defined roles, responsibilities and structured processes for managing analytical content, from creation and validation to archiving and disposal.
- Roles and Responsibilities, and Permissions Management: Defines clear roles and responsibilities for data access and management, ensuring that permissions are appropriately assigned and maintained.
- **Policies and Process:** Establishes and enforces policies and processes for data governance, ensuring consistency and compliance across the organization.
- **Performance Management:** Focuses on optimizing the performance of data and analytics systems, ensuring they meet the needs of users and support efficient decision-making.

These categories collectively contribute to a robust analytics governance framework, ensuring data quality, security and effective management.

When considering analytics governance at scale, it is crucial to address issues like duplication, content proliferation and performance. Keeping these challenges in mind, there are several additional key components essential for strengthening a successful analytics governance strategy implementation:

- Automation, Integration, Orchestration, Scalability: Implements automation and integration tools to streamline processes, orchestrate workflows and ensure scalability of data and analytics solutions.
- **Monitoring, Maintenance, Collaboration:** Continuously monitors and maintains data and analytics systems, fostering collaboration among stakeholders to ensure optimal performance.
- Version Control, Audit Trail, Documentation: Maintains version control of data and analytics content, provides audit trails for tracking changes and ensures thorough documentation for transparency.
- **Training, User Adoption, Usage:** Provides training to enhance user adoption, tracks usage metrics and analyzes data to improve BI practices and user engagement.

Implementing these processes from the outset makes it much easier to scale analytics governance effectively, save resources and time, and simplify the management process as the organization grows. Starting with a solid foundation ensures smoother operations and better outcomes overall. According to Qulix QA Best Practices, "Fixing a bug post-release is 4 to 5 times more costly than addressing it during the QA process." This principle equally applies to governance processes, highlighting the importance of early implementation to avoid higher costs later.

As a key recommendation, prioritize analytics governance in your decision-making process **from the beginning** to ensure that your decisions are based on reliable and trusted data.

Moreover, with the arrival of innovative technology such as GenAI, the future of analytics governance will request new elements and much stronger governance to not fail the AI capacities.

According to the <u>State of Analytics Governance</u>, most respondents plan to prioritize BI validation to ensure that AI capabilities in analytics tools like Tableau Pulse and Power BI Insights deliver valuable insights.

BI Content Dictionary/Catalogue		57.9 %		
Lifecycle Management	49.7 %			
Regulatory Compliance	49 %			
Permission Management & Security	47.6%			
Metadata Auditing	46.9%			
Version Control 40.7	%			

State of Analytics Governance 2025: The predictions area of investment of analytics governance.

Moreover, the 2024 Gartner[®] Hype Cycle[™] predicts:

- By 2027, 60% of organizations will fail to realize the anticipated value of their AI use cases due to incohesive ethical governance frameworks.
- By 2027, 80% of DandA governance initiatives will fail due to a lack of a real or manufactured crisis.
- "With growing regulation tied to AI, analytics governance is now required, not a nice-to-have."¹

¹Gartner, Hype Cycle for Data and Analytics Governance, 2024, By Guido De Simoni, Andrew White, Saul Judah, 18 June 2024. GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.

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And they identified currently to hype:

- 1. Computational Governance: i.e., application of automation to data governance
- 2. Data and Analytics Governance Platforms: A set of integrated technology capabilities that help govern and steward a range of policies spanning security, quality, access, retention, privacy and ethics ssions management, role-based access and secure handling practices that ensure compliance with data regulations, such as GxP, SOX, GDPR, BCBS239, HIPAA or other industry-specific standards.

Remember, when deploying a data-driven culture and BI platform, especially in self-service mode, analytics governance should be central to operationalization and industrialization, and included in any data strategy implemented at the company:

- 1. Data-Driven: At the core of brainstorming and decision-making.
- 2. Analytics Governance: At the core of operationalization and industrialization.

By effectively implementing these two strategies, you can fully leverage the benefits of your analytics, gain valuable data insights, and make informed decisions, all while achieving your business goals. By adopting analytics governance, organizations achieve consistent quality, reduce risks and unlock greater value from their data investments.

Practical Use Cases and Business Value

So, what tangible benefits can you expect from implementing analytics governance? Business values can range from mitigating risks, establishing trust and ensuring data reliability at the final stage of the data journey to breaking down silos, scaling analytics, accelerating delivery and reducing operating costs.

In this section, we aim to highlight specific and common use cases of analytics governance, demonstrating how implementing these concepts can enhance your data management and decision-making processes.

Generative AI Analytics Readiness

Generative AI (GenAI) has become a hot topic due to its ability to generate new insights and automate analytics discovery, transforming how organizations approach data analysis. This technology can automatically identify patterns, generate visualizations and provide actionable insights, making data analysis more efficient and accessible (e.g., Tableau Pulse, Power BI Quick Insights, ThoughtSpot).

However, to fully leverage the benefits of Generative AI, it is crucial to implement good practices to avoid the "garbage in, garbage out" (GIGO) problem. Ensuring high-quality input data is essential, as poor data quality can lead to inaccurate or misleading results.

Best practices include:

- **Data Quality:** Ensuring high data quality means that the data used in reports is accurate, complete, consistent and timely.
- Data Structure/Modeling: Effective data modeling organizes data in a way that optimizes performance and scalability. It helps in creating relationships between different data tables, making it easier to analyze and derive insights.
- **Asset Cataloging:** It becomes crucial for documenting Al-generated and user-generated content, ensuring transparency, accountability, efficient data management, trust and compliance in decision-making processes.
- **Certification:** Certifying Al-generated content is essential to ensure accuracy, maintain user trust, detect anomalies and comply with regulatory standards, preventing strange behaviors over time.

These best practices are crucial for making reliable decisions and maintaining trust in the BI system, comprehensive data governance frameworks, and continuous data validation and quality checks. These measures help maintain the integrity and reliability of the insights generated by AI, fostering trust and confidence among users. By adhering to these practices, organizations can maximize the potential of Generative AI while ensuring that the insights produced are accurate, relevant and valuable.

By standardizing data definitions and implementing automated testing of analytical content, organizations ensure decisions are based on accurate, reliable insights. This alignment leads directly to improved strategic outcomes and higher confidence in GenAl analytics across the enterprise.

Regulatory Compliance

A regulated environment refers to industries or sectors that are subject to stringent laws, regulations, and standards to ensure safety, quality and compliance. These environments face several challenges, such as maintaining data integrity, ensuring compliance with complex regulatory requirements, managing extensive documentation and audit trails and implementing robust security measures. Additionally, they must continuously monitor and validate their processes and systems to meet evolving regulatory standards, which can be resource-intensive and demanding. <u>Check out our</u> <u>GxP paper for any additional information on the challenges faced by these industries.</u>

These environments naturally implement analytics governance concepts to comply with their regulation:

- Audit Trail and Documentation: Maintaining detailed audit trails and documentation of all data-related activities ensures accountability and transparency. This is vital for demonstrating compliance during regulatory audits.
- Versioning and Change Control: Implementing version control allows for systematic tracking of changes, ensuring that all modifications are documented and reversible. This helps maintain data integrity and compliance with regulatory requirements.

- Rollback and Asset Integrity: The ability to roll back to previous versions of data or reports ensures that any errors or issues can be quickly rectified, maintaining system reliability and compliance.
- Data Cataloging, Including Ownership: Maintaining a comprehensive data catalog with clear ownership details ensures that all data sources are well-documented and easily traceable. This transparency is crucial for regulatory audits and compliance.
- Support, Monitoring, SLA and Certification: Implementing robust support and monitoring frameworks, along with Service Level Agreements (SLAs), ensures continuous availability and performance of BI systems. Certification processes validate that the systems meet regulatory standards.
- Data and Content Lineage: Tracking data lineage provides a clear view of data flow from source to destination, helping to identify and resolve issues quickly. This visibility is essential for compliance with regulations that require data traceability.
- **Qualification and Validation of the Environment:** Ensuring the robustness of BI systems through qualification and validation processes (such as GxP) guarantees that the systems meet stringent regulatory standards.

Industries such as healthcare and finance particularly benefit from stringent governance frameworks that automate data validation, lifecycle management and regulatory adherence, substantially reducing risk exposure and ensuring consistent compliance.

Enterprise Reporting and Self-Service Analytics

In a data-driven organization, enterprise reporting and self-service analytics must coexist to maximize data utilization. Enterprise reporting ensures consistency and accuracy for critical decision-making through standardized reports from a core data model. Meanwhile, self-service analytics empowers users to explore data independently, fostering innovation and agility. Distinguishing between these approaches is essential to maintain the integrity of critical reports while promoting a culture of data literacy and empowerment.

You might want to implement:

- Lifecycle Management: Managing the lifecycle of reports from creation to archiving ensures that reports remain relevant, up-to-date and compliant with regulatory requirements.
- Critical Reports Monitoring: Regularly generated reports serve as a dependable foundation for strategic decision-making, necessitating thorough monitoring and validation to ensure their content and accuracy. High-quality, accurate data is essential for trustworthy reports. Ensuring data integrity helps in making informed decisions and maintaining confidence in the reporting system.

- **Support, SLA and Certification:** Establishing support and monitoring frameworks, along with service-level agreements (SLAs), ensures that reports are consistently accurate and reliable. Certification processes can further validate the quality of the reports.
- **Performance Management:** High performance ensures that users can quickly access and analyze data and reduces the time to market for decision-making.
- Automation and Policies: With a large user base, automation and well-defined processes are essential to avoid human error, manage content proliferation and build trust in the analytics. Manual management is impractical and inefficient for such a vast pool of users.
- **Permissions and Security (RLS):** Implementing robust permissions and security measures, such as Row-Level Security (RLS), protects sensitive data and ensures that only authorized users can access specific information, maintaining data confidentiality and compliance.

Trusted, certified analytics content significantly improves user adoption rates, minimizing shadow BI proliferation and increasing organizational consistency and efficiency. Users trust governed analytics, boosting organizational confidence and fostering a robust data culture.

Embedded Business Intelligence

Business Intelligence (BI) embedding has become a pivotal strategy for organizations seeking to enhance their data capabilities. There are two primary use cases for BI embedding:

- 1. Centralization and User Experience: InterWorks' global survey of analytics users reveals a strong desire for easily discoverable analytics through unified search across tools. According to Forrester, "25% of organizations use 10 or more BI platforms, 61% of organizations use four or more and 86% of organizations use two or more." Organizations embed BI tools to centralize data access and improve the user experience through personalized menus and homepages, as well as seamless integration with everyday systems. This approach streamlines workflows, making it easier for users to access and analyze data without switching between multiple platforms. It fosters a seamless and intuitive experience, enhancing productivity and data utilization, as well as analytics adoption.
- 2. Analytics Product Selling: Independent software vendors (ISVs) offering analytics products leverage Embedded BI to share data and insights with their customers. Implementing robust analytics governance safeguards customer data and enhances your reputation. Additionally, integrating lifecycle management into your CI/CD process minimizes human error, improves delivery quality and boosts your company's credibility, while optimizing your resources usage.

By understanding and leveraging these use cases, organizations can effectively implement BI embedding to drive better decision-making and improve overall user satisfaction.

Analytics governance plays a crucial role in this process thanks to:

- Access Rights and Security: Proper management of access rights and security is essential for protecting sensitive data and ensuring compliance with regulations. By defining clear access controls, businesses can prevent unauthorized access and data breaches, safeguarding both internal and external data assets, which is even more important for ISV company.
- **Certification:** BI content must meet established standards for accuracy and reliability. By certifying dashboards and reports, businesses can guarantee that users are accessing trusted and validated data, which enhances decision-making and builds confidence in the analytics platform.
- Data and Analytics Quality and Robustness: High data quality and robustness are crucial, especially for external-facing content provided by Independent Software Vendors (ISVs). Ensuring that data is accurate, consistent and reliable helps maintain the integrity of analytics, preventing errors and misinterpretations that could negatively impact business decisions and customer trust.
- Lifecycle Management: Effective lifecycle management helps avoid errors by ensuring that data and analytics content are effectively managed from creation to retirement. This includes version control, regular updates and timely deprecation of outdated content, which reduces the risk of using incorrect or obsolete data in decision-making.
- **Assets Cataloging:** By maintaining an organized catalog of data assets and assigning ownership, businesses can perform impact analysis, track data lineage and ensure a single source of truth for your KPI definitions.

<u>Curator by InterWorks</u> is an excellent example of the benefits offered by a centralized portal. It unifies all your analytics into a single, customizable platform, enhancing user experience and data accessibility.

Getting Started with Analytics Governance

We have explored the importance of analytics governance, delved into its key concepts, and examined various use cases. Now, it is time to focus on implementing successful analytics governance. Remember, this should be an integral process from the outset and throughout all data and analytics initiatives to ensure consistency, reliability and compliance.

To ensure effective analytics governance, it is essential to adapt processes and current steps to align with the governance concept, rather than the other way around. Dedicated support from top management is a game changer to drive progress and avoid clinging to outdated processes for the sake of comfort. As an extension of data governance, analytics governance requires careful oversight by data leaders to prevent undermining the integrity of data usage and manipulation within the analytic layer.

However, as we have discussed, each use case has unique requirements. Our primary goal in this section is to ensure that anyone facing issues or challenges related to analytics governance can find value in our content. We aim to empower readers to take actionable steps and feel more confident in addressing their analytics governance needs after reading.

As with any project, we recommend starting your analytics governance strategy by identifying and documenting these key elements:

- Document your current or foreseen pains and their root causes
 - $\hfill\square$ At the team level
 - □ At the company level
 - □ At the executive level
- Document your current or foreseen risks and impacts
 - □ Document past issues in the company
 - □ List risks based on your analytics (data leakage, improper access rights, wrong decision making, failure of team/company initiatives, etc.)
 - □ List impacts of these risks, as well as costs
 - □ Define mitigation for these risks
- Define your main written objectives for your analytics governance strategy
 - Review the main long-term strategies and initiatives at the company/team level
 - □ AI initiative
 - \Box Move to the cloud
 - □ Self-service enablement
 - □ External-facing content
 - □ Automation strategy
- Identify or define clear governance roles inside the company
 - □ Creation of a new role and new team (e.g., CDAO)
 - Delegated to QA team or BI team
 - □ Delegated to the end-users
 - Top-down strategy vs. bottom-up
- Identify strategic budgeting to support analytics governance
 - □ IT budget
 - \Box CDAO budget
 - Business budget
- Research on analytics governance and state-of-the-art solutions
- Research on risks, their priorities and their mitigation

- Evaluation and documentation of current analytics governance processes
 Manual ones
 - □ Automated ones
 - □ Missing processes
- Define requirements and constraints for implementation
 - □ Technology constraints (SaaS vs. on-premises, data location, etc.)
 - □ Internal skillset
 - □ Product buying vs internal development
 - □ Recruiting vs Internal knowledge vs. partner help
- Current products available in the company
 - □ Products to govern (BI Platforms, databases, Excel, ETL, AI, embedded)
 - □ Products for analytics governance
- Research products available on the market
- Timeline for analytics governance implementation
 - □ Go in a step-by-step approach to support your cultural changes
 - Deploy governance measures gradually, beginning with areas of greatest need.
 - □ Leverage user feedback and measurable outcomes to continuously refine and expand your governance framework.

We will now outline how to get started with each main concept, allowing you to select the instructions that best fit your needs.

BI Content Certification

As content grows continuously, it becomes increasingly challenging to discern trustworthy information and make informed decisions. The presence of multiple sources of truth can lead to trust issues and poor decision-making, which in turn can strengthen shadow BI. To mitigate this, implementing a clear certification process for several types of BI assets can help differentiate between ad hoc analyses and unmonitored dashboards from enterprise-grade reports that adhere to quality standards.

- Research certification capabilities in your current products and state-of-the-art certification capabilities
- Define the content type that you need to certify
 - Database
 - □ Semantic layer (e.g., published data sources, semantic model, etc.)
 - □ Analytic layer (report, dashboard, worksheet, pages, application, etc.)
 - □ Computations
- Classify your content according to its criticality and governance requirements
 Gold, silver, bronze categorization
 - □ Enterprise reporting vs. ad hoc reporting vs sandbox
 - □ Most viewed content, executive and top management dashboards, operational dashboards vs. common dashboards

- Define a certification plan for each category defined above
 - $\hfill\square$ Certification level (red, orange, green vs. rating vs. scoring)
 - □ Frequency of certification
 - Every day
 - After each data refresh
 - On-demand
 - After each release or updated version
 - □ Owner and responsible for the certification
 - If decertification occurs, who should be contacted?
 - $\hfill\square$ Certification process
 - Automation vs. manual
 - Approval request
 - Troubleshooting when decertification
 - Certification content (user experience, data quality, performance, features, layout, branding, computation definition, etc.)
- Define the monitoring and regulatory compliance expectations
 - □ Audit trails and documentation
 - □ Analytics on certification and validation strategy
 - □ Rollback
 - □ Support and SLAs
- Define the architecture criteria of your solution and the required integration
 - □ Automation of the certification
 - □ Alerting in case of issues
 - □ Actions to take if decertification occurs
 - □ Integration in current processes (e.g., CICD, ticketing system, release, etc.)
- Research existing products on the market that satisfy your requirements.

These elements should help you shape your certification process and give you the first steps to develop your strategy.

Performance Management

Facing the same challenges of growing content and adoption of your platform or reports, you need to ensure your performance is monitored and as expected for your end users. This is critical to increase user adoption while monitoring your costs.

- · Identify the root cause location of the performance issue
 - □ Platform issue (overloaded, too small sizing, peak hour)
 - Semantic layer issues (too voluminous data sources, too complex, too many layers)
 - Report issues (too many calculations, too complex visualizations, too many filters, data sources too slow in live connection)
- Regularly monitor your content
 - $\hfill\square$ Load testing and performance testing on the platform
 - □ Load testing on assets connecting live to a database



- □ Rendering duration validation
- □ Content validation (size and performance)
- Define best practices policies
 - □ Maximum size of a model
 - □ Maximum rendering duration for a report to go live
 - □ Maximum number of rows, columns, tables
 - □ Maximum data refresh duration
 - □ Maximum number of concurrent refreshes
- Implement governance policies
 - □ Technical policies
 - Scale-out policy
 - Scale-up policy
 - Automatic scale-up or down policy (cloud features)
 - Chargeback based on usage
 - □ Business policies
 - Best practices implementation
 - Lifecycle management policy (stale content)
 - Data refresh policy
- Analytics on the performance drivers
 - Number of assets on the platform
 - Added content published? Respecting the policies?
 - Content getting out of control?
 - Stale content?
 - □ Size of the content (number of rows, columns, tables, size)
 - □ Rendering duration over time
 - □ Number of connections on the database (data refresh + live connections)
 - □ Data refresh duration over time
 - □ Manual refresh frequency
 - □ Trend and forecasting of performance issues (overall increase in rendering duration, refresh time, CPU consumption, etc.)
- Define the architecture criteria of your solution and the required integration
 - □ Automation of performance monitoring
 - \Box Alerting in case of issues
 - $\hfill\square$ Actions to take if performance issue occurs
 - Cancel some data refresh
 - Disable some data refresh
 - Scale-up of capacity
 - Quarantine of dashboards and users
 - □ Integration in current processes (e.g., CICD, ticketing system, release, etc.)

This list should provide you with the first steps to identify in the context of analytics governance performance issues and how to track them, locate them and proactively implement automated policies to keep your performance under control.

Data and Analytics Security, Regulatory Compliance and Privacy

From the outset, it is essential to consider all operational aspects of a solution, including security. Whether for regulatory compliance, operational efficiency or privacy concerns, ensuring proper access to analytics is crucial. Adhering to the principle of least privilege — granting access only to what is necessary — helps maintain security without compromising functionality.

- Identify the security features existing on your various products
 - □ Roles (BI platform roles, e.g., Creator, Contributor, Member, etc.)
 - BI Permissions (e.g., export content, download data, view or edit content, etc.)
 - Platform settings (publish content externally, SSO, authentication, sharing of content, etc.)
 - □ Row-level security and object-level security
- Define your personas, having different access rights
 - □ Executives vs. top management vs. team members
 - □ Regional access vs. global access
 - Overall content access vs specific analytics access
- Define your permissions and sharing methodology
 - □ Sharing methodology: embedded in a portal, sharing links, workspaces/sites access, item access, Power BI applications
 - □ Permissions inherited vs permissions per item
 - □ Access rights provided to user vs. group
 - SCIM implementation: automatic management of groups through Active Directory
- Define your roles and responsibilities
 - □ Who is managing which permission and access at which level?
 - □ Database responsibilities
 - □ Platform responsibilities
 - □ BI content creators' responsibilities
 - □ Workspace and site administrators' responsibilities
- Define a proper structure for your content to ease the maintenance of access rights
 - □ Based on content responsibilities (view vs. edit vs. admin)
 - □ Based on security requirements (RLS, OLS, subset of analytics content)
 - □ Based on consumption (embedded, project level, Power BI applications, etc.)
- · Users have access to only what they are authorized
 - Users see only the data that they are entitled to see
 - Users can edit and impact content only through their roles and responsibilities
 - □ Who can access what and how (access through a group, link, user)?
- Automate your security
 - $\hfill\square$ Automatic attribution of licenses based on a role
 - □ Automatic access rights management through groups



- □ Validate the access rights regularly to reports and data
 - Internal mobility
 - Employee leaving the company or recently hired
 - New role in the company
- Audit and track changes
 - Change on permissions should be easily identified and track with a justification if necessary
 - □ Exceptions should be documented, justified and explained
 - Temporary elevation of privileges or temporary access should be enforced and monitored
- - \Box Alerting in case of issues
 - □ Actions to take if security breach occurs
 - Turn off access rights
 - End the risky session
 - Review the authorization concept
- Integration in current processes (e.g., CICD, ticketing system, release, etc.)

This checklist should provide you with a good overview of the security points to address and how to address them in the context of analytics governance.

Cataloging

As the volume of content continues to grow and evolve, maintaining consistency across all analyses and ensuring a single source of truth becomes increasingly challenging. Additionally, when new employees join or existing ones leave the company, valuable knowledge can be lost, making it difficult to understand how measures and KPIs are calculated and defined. Therefore, two crucial criteria for effective cataloging are comprehensive documentation and the ease of finding information:

- Gather all the current existing documentation and cataloging products existing in your team or department
 - □ Ensure that all the current key elements documented are identified
 - □ Identify all the common and missing properties that you want to govern and include in your process
 - □ Create a first template of your analytics asset cataloging
- Define all your analytics metadata across your platforms
 - □ Asset metadata: name, clear **business** description and location
 - □ Asset type: dashboard, report, measure, column, KPIs, table
 - □ Asset responsibility: Owner, team responsible, etc.
 - Asset quality: certification, certification level, custom fields, SLA or support level
 - □ Asset freshness: last update time, refresh frequency, etc.

- Define a central location to store these metadata
 - □ Accessible by your stakeholder (team, report consumer, whole company)
 □ Versioned
 - $\hfill\square$ Up to date, with automated process if possible
- Define efficient catalog search and tags
 - Ease of use: tags can be used to relate a group of assets to a domain or a subject
 - □ Improved asset discovery: assets in a domain should be easily discoverable and shared with the proper identified stakeholders
- Define the architecture criteria of your solution and the required integration
 - □ Integration of the product in your technical architecture
 - □ Analytics on top of your cataloging
 - □ Actions to be taken if cataloging is not properly fulfilled
 - Educate the team
 - Monitor empty fields and shadow BI
 - Automate processes to ease the governance framework
- Integrate analytics cataloging in your workflows
 - □ Identify the potential catalog automation that could be put in place
 - Improve your process for clear documentation and overview of your analytics asset
 - Encourage collaboration by promoting the use of the catalog and providing training on how to use it effectively
 - Ensure the catalog is integrated into daily workflows, making it a central part of data management and decision-making processes

Tip: You can start at your level with a simple Excel shared with your team before optimizing and improving the solution over time.

Lineage and Impact Analysis

In addition to cataloging all your analytics assets, consider adding an extra layer of governance through analytics lineage. This feature significantly simplifies impact analysis and change management by ensuring that the effects of changes are well understood, end-to-end and communicated throughout the analytics assets. This approach reduces downtime and support needs while enhancing trust in your analytics.

- Investigate the current lineage capabilities in your product as well as your understanding, e.g., Tableau Data Catalog, Power BI lineage, etc.
- Analyze your day-to-day issues to understand which impacts are not well-monitored
 - Bad communication between teams (data engineering vs. BI team and data analyst)
 - Unforeseen impacts, not captured in current product features (column deletion impact which visual, report page, worksheet)

- Identify and gather your current process
 - □ Process in place to manage change management
 - □ Communication inter-team for any changes
 - □ Validation process of changes and evaluation of impacts
 - □ Rollback methodology in case of impact, and assets to rollback
- Research products on the market to create lineage across your products
 - Operational products
 - $\hfill\square$ Local files
 - □ Databases and data warehouse
 - □ BI platform
 - \Box AI and ML models
- Visualize the data flows across your system up to your analytics
 - Tip: Check an example of lineage in dbt direct acyclic graph or Power BI lineage tab

With these topics in mind, it will be a breeze to understand the impacts of one change in any part of your systems until the most important layer: The analytics and its decision-makers!

Lifecycle Management

When creating content, it is essential to establish a proper lifecycle management for all your analytics assets. This lifecycle should encompass their creation, promotion to production and eventual decommissioning since they no longer serve their intended purpose.

- Define the lifecycle management of your analytics content
 - □ Requirement gathering, goal of the analytical product and scope
 - □ Creation of the content
 - □ Validation, UAT
 - □ Approval and promotion in production, go live
 - □ Maintenance including performance, evolution, ownership and improvements
 - □ Monitoring of performance and usage
 - □ Decommission and archiving at the end of its lifetime
- Define the process, and roles and responsibilities of your analytics asset

 Who is responsible for creation, maintenance, promotion, validation, go-live?
 How this process is implemented and automated
- Research products in your company and on the market to implement proper lifecycle management (look out for Continuous Integration and Continuous Development "CICD")
- Define the architecture criteria of your solution and the required integration
 - □ Automation of promotion between environments
 - □ Alerting in case of issues
 - □ Policy around lifecycle



- Approval to go live
- Validation requested to go live
- Stale content management
- □ Integration in current processes (e.g., CICD, ticketing system, release, etc.)
- Define your version control strategy and implementation
 - □ Business versioning of your content (e.g., Tableau Version Management)
 - Technical versioning of your analytics asset (git)
 - Rollback methodology to a previous version
 - Regulatory compliance: Auditing and documentation of your different versions

Industrialization

In any new domain, a common oversight is the failure to industrialize processes and ensure ongoing system maintenance. Deploying a new strategy should always come in mind with these concepts in mind:

- Monitoring and maintenance
- Collaboration and version control
- Documentation and audit trail
- Policies and process
- Automation
- Training
- Communication

For any new, existing or revised processes, ensure you always follow this checklist.

□ Define roles and responsibilities

- Define the process and how you will validate its application
- □ Review all the steps of your process and policies, and how they can be automated to scale up in the future
- Define the documentation that must be implemented for audit and regulation compliances
- Define the collaboration approach to your policy and how people will work together to implement it (backup during holidays, process documentation, approval, etc.)
- Define a proper training structure to onboard easily and at speed your users so that your analytics governance stays efficient for the whole company
- Ease at the maximum your strategy implementation by providing automation, products, and knowledge to your teams (most of the time, too many constraints or too time-consuming new tasks will only generate shadow practices that will fail the implementation of your strategy)
- □ Create analytics on top of your analytics governance strategy (KPIs, policies status, etc.)
- □ Define an architecture and a framework that are futureproof (scalable, accessible to other teams, flexible, matches company guidelines)

By leveraging these elements, you can gradually implement your analytics governance strategy and processes while staying focused on your primary objective.

InterWorks and Wiiisdom Advantage

InterWorks and Wiiisdom collaborate to deliver a holistic approach to analytics governance, uniquely positioned to address the most pressing governance challenges.

InterWorks' Services

InterWorks offers a comprehensive range of services tailored to support every facet of your analytics journey:

- **Consulting and Strategy Development:** Guiding organizations through data strategy formulation, tool selection, analytics enablement and governance framework creation.
- Data Infrastructure and Architecture: Designing and implementing robust data solutions, including data lakes, warehouses, ETL/ELT pipelines, cloud infrastructure and modern data architectures.
- Visualization and Analytics Platform Expertise: Deep proficiency with leading platforms such as Tableau, Power BI, Snowflake, Databricks and more, helping organizations derive maximum value from their analytics investments.
- Managed Services and Operational Support: Proactive monitoring and management solutions (e.g., KeepWatch) ensuring infrastructure reliability, performance optimization, and seamless user experiences.
- **Custom Solutions and Development:** Building tailored analytics applications, embedded analytics (Curator by InterWorks), and bespoke integrations to enhance analytics adoption and effectiveness.

Wiiisdom

Wiiisdom is a software vendor, specializing in governance solutions for analytics and BI content to restore trust in data-driven decision making. Wiiisdom enables organizations to implement automated testing, content lifecycle management and continuous monitoring to ensure BI and analytics leaders always make reliable decisions.



Our Combined Strengths

Together, InterWorks and Wiiisdom deliver a unique, comprehensive governance solution that:

- Automates and streamlines governance processes
- Ensures analytics accuracy and trust
- Reinforces regulatory compliance and security
- Drives increased user engagement and adoption

Our joint approach transforms analytics governance from a challenge into a strategic advantage, helping organizations harness their analytics potential fully.

Getting Started with Wiiisdom x InterWorks

Transform your analytics governance with confidence. Reach out to InterWorks and Wiiisdom with your needs and discover how our partnership can deliver clarity, trust and sustained success in your analytics initiatives.

Tell Us Your Analytics Governance Needs

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Ryan has a love for anything data and code. As a platforms architect at InterWorks, he is driven to share how data and design can coexist to produce beautiful and meaningful analyses.