

Governance in the Age of Data Discovery

Delivering Trust and Transparency at Business Speed

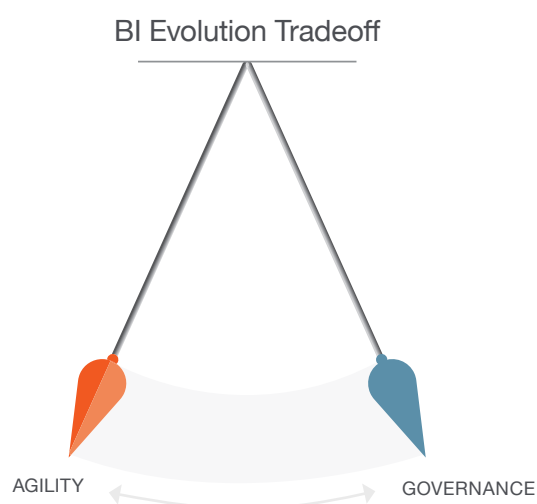




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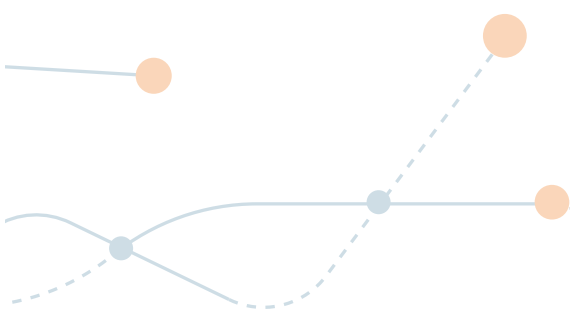
GOVERNANCE VERSUS AGILITY: THE CONTINUED EVOLUTION OF BUSINESS INTELLIGENCE

The business intelligence market is undergoing another major evolution. Historically, the pendulum or climate of the category has traded off between centralized governance of data and the enablement of self-service and agility for the operational lines of business. Today, the industry faces another crossroads in this evolution with the continued adoption of data discovery and contemporary end-user centric visualization products.

In the 1990's, tools such as Crystal Reports were the first platforms beyond Microsoft Excel to deliver higher levels of reporting autonomy to the business by enabling a moderately sophisticated Windows desktop user to create and manipulate key reports and distribute them across a team of business users. In the late 1990's, the proliferation of such reporting tools experienced aggressive growth. While they enabled a new level of line of business data analysis, they often resulted in siloed and inconsistent views of the state of key metrics and data across different groups of users in the organization.

In response to this continued proliferation of new tools, corporate IT organizations took back control over reporting and subsequently, analytics, in order to ensure higher levels of data consistency and trust. As a result, sophisticated BI platforms by BusinessObjects, Cognos, Microstrategy and Oracle combined with data warehouses and data marts to enable IT organizations to inhibit the growth of ungoverned analytical business data. While these platforms created a strong ability to govern data and enable sophisticated BI capabilities, the tradeoff for this ability was a slow and expensive centralized process.

In the mid to late 2000's, frustrated business users began large-scale adoption of what are now classified as data discovery tools. These tools enabled users to reclaim the self-service aspect of data analysis at line of business while offering a wider array of visualization options than those offered by Microsoft Excel. Today, these data discovery products have become popular within the lines of business across global enterprises, just as desktop reporting tools did in previous generations of the BI



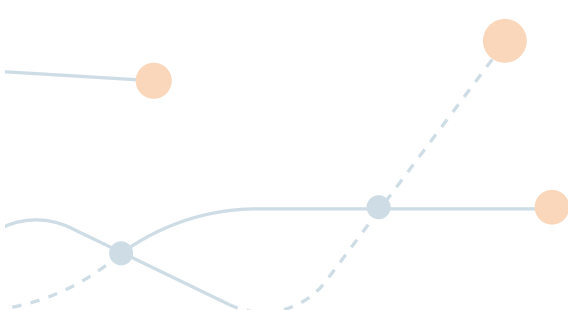


“[Data discovery vendors’] sales strategy has been hugely successful, especially in organizations without strong BI/IT standards for tools and data, and even in some with published standards where business users have high dissatisfaction with incumbent tools, processes, and data.”
-- Eckerson Group

marketplace. Unfortunately, because these tools lack the architecture needed to ensure enterprise-wide data governance, their popularity has resulted in the proliferation of analytical silos creating what analyst Wayne Eckerson calls a “spreadmart effect” that undermines trust in the data.¹ As a result, the need for organizations to refocus on data governance has re-emerged. Enterprise business leaders demand that a new balance of data management must be established. The new model must promise not only governance, but also the ability to easily source, share and manage data across different departments and lines of business with agility.

While legacy BI platforms afford analytical strength and governance, these platforms fail to fulfill the needs of today’s ‘discovery-centric’ users. Heavyweight architectures, high expense loads and sluggish data delivery speeds cripple the ability of legacy platforms to deliver punctual business intelligence at the breakneck speed of the modern business landscape.

¹ Wayne Eckerson, *Making Peace with Tableau (The New BI Leader, Aug 2015)*





“IMPERFECT BUT FAST” ANALYTICAL SILOS DELIVER SPEED, BUT AT A PRICE

Disillusioned by the ineptitude of legacy BI, business users have resorted to data discovery technologies. While data discovery tools provide speedy data manipulation functionality, these tools create analytical silos that hinder the ability to make decisions with confidence. Business users have come to accept data inconsistency as the price to pay in order analyze data without depending on a central BI team. As such, they have adopted the maxim “imperfect but fast is better than perfect but slow”.

“BI has overestimated the need for a single version of the truth for decades,” says analyst Boris Evelson. “If it costs far more to get a single version of the truth, maybe it’s wiser to take a cheaper version which is 80 percent good.”²

In an attempt to propagate this view, many data discovery suppliers downplay the importance of a unified view of a business. They state that the proverbial “single version of the truth” is a myth and not indicative of the realities of today’s business climate.

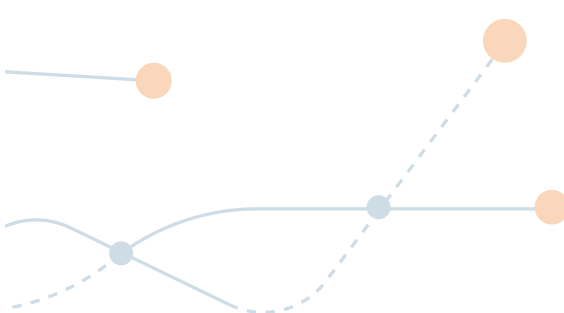
“Through 2016, only 10% of self-service business intelligence initiatives will be sufficiently well-governed to prevent inconsistencies that adversely affect the business.”

—Gartner, Embrace Self-Service Data Preparation Tools for Agility, but Govern to Avoid Data Chaos, Cindi Howson, 17 March 2015

But the reality is that much of the backlash against the idea of a “single version of the truth” is due to the massive effort required to deliver it using traditional legacy approaches. This backlash is further exacerbated by the shortcomings of popular contemporary discovery products. The daunting task of manually delivering a truly governed layer of data includes a comprehensive understanding of core business logic, the ability to build and test integrated data models, tools for performing extraction, transformation and loading (ETL) routines across corporate systems, channels for proliferating enterprise-wide meta data and a demand for governance-centric business procedures.

The acceptance of inconsistent data in favor of agility is rooted in pragmatism, not in a rejection to better governance. Despite having a deep understanding of the perceived level of effort using traditional means, analysts agree that the need for governed and trusted data remains a key issue for today’s CIOs that manage analytically driven organizations:

² Drew Robb, Getting Good BI Without a Single Version of the Truth (Enterprise Apps Today, Aug 2015)





- “Lack of trust is one of the greatest, and mostly unspoken, barriers to success in business intelligence programs.” -- *Howard Dresner, Dresner Advisory Services*³
- “Without appropriate processes and governance, self-service capabilities can introduce multiple versions of the truth, increase errors in reporting and leave companies exposed to inconsistent information, creating a challenge for BI leaders.” — *Cindi Howson, Gartner Research*⁴
- Desktop visualization tools, left unchecked, result in “ungoverned spreadmarts that increase your support costs, undermine data consistency and waste your staff’s time reconciling reports.” -- *Wayne Eckerson, Eckerson Group*⁵

³ Howard Dresner, *Dresner’s Point: In Business Intelligence, Trust is an Elephant in the Room* (SandHill Business Strategy, May 2015)

⁴ Cindi Howson, *Embrace Self-Service data Preparation Tools for Agility, but Govern to Avoid Data Chaos* (March 2015 Gartner.com)

⁵ *ibid* pg 4



TODAY'S REALITY: A NEED FOR CENTRALIZED AND DECENTRALIZED GOVERNANCE

In today's business environment, ensuring BI and analytic success requires acknowledging that some scenarios are more tolerable of imperfect data than others, or don't require a full view of the business. IT and business leaders must recognize that the level and ownership of governance depends on the scope of the use case and reach of data required required to perform the analysis at hand. This means enabling centralized (top-down) and decentralized (bottom-up) governance.

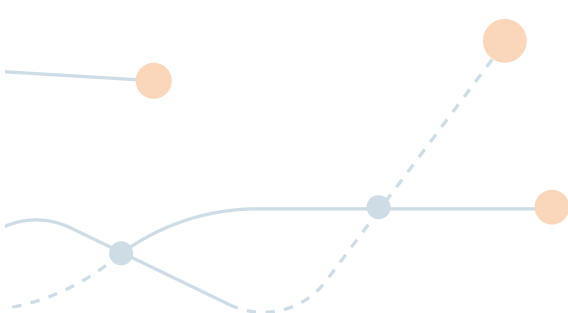
For example, it would be impractical for a marketing analyst who needs to quickly understand which campaigns are generating the greatest number of leads to spend time and energy on governance when all the data needed is available from the marketing automation system. In this scenario, a local, bottom-up view of "the truth" is enough for him to make informed and on-demand decisions, and to then share such insights with users in the same lines of business.

However, for cross-operational corporate-level business performance metrics, people will seek a broader, more complete understanding of the business and the ability to work with trusted, consistent data becomes critical.

"Organizations that view data as 'truth' with common rules and semantics are about 10 times as likely to claim complete BI success as organizations with multiple inconsistent sources."
– **Dresner Advisory Services**

For instance, lead-to-cash analysis requires data from three different departments (Marketing, Sales, and Finance) and three separate systems (marketing automation, CRM, ERP). In this scenario, a consistent and reliable view of the information between departments and systems – one that provides a common definition of "Lead" or "Revenue", for example – is necessary to avoid confusion and conflicting decisions.

In a 2015 study of the global BI market, Dresner Advisory Services found a powerful and direct correlation between success with business intelligence and an organization's state of data (fig. 1, below):



Data Governance Defined

It's important to understand that data governance isn't only about technology. One cannot purchase good governance with the choice of a particular BI software solution. Data governance is a framework that consists of organizational structures and processes to manage the usability, integrity and security of enterprise data. Per Howard Dresner of Dresner Advisory Services, it is a set of "processes and roles of that include standards, policies and procedures for steering, organizing, implementing and executing BI initiatives." ⁶ Organizations that have implemented successful governance practices understand that this is a continuous process that should be owned by both business and IT leaders. That said, not every BI solution in the market is equally capable of supporting good governance. When evaluating BI providers, it's helpful to understand which capabilities are offered by each product to deliver trusted and consistent data across the organization.

"Respondents that say their organization views data as 'truth' with common rules and semantics are about 10 times as likely to claim complete BI success as organizations with multiple inconsistent sources. Even organizations with consistent data at departmental levels are somewhat or completely unsuccessful nearly 70 percent of the time."

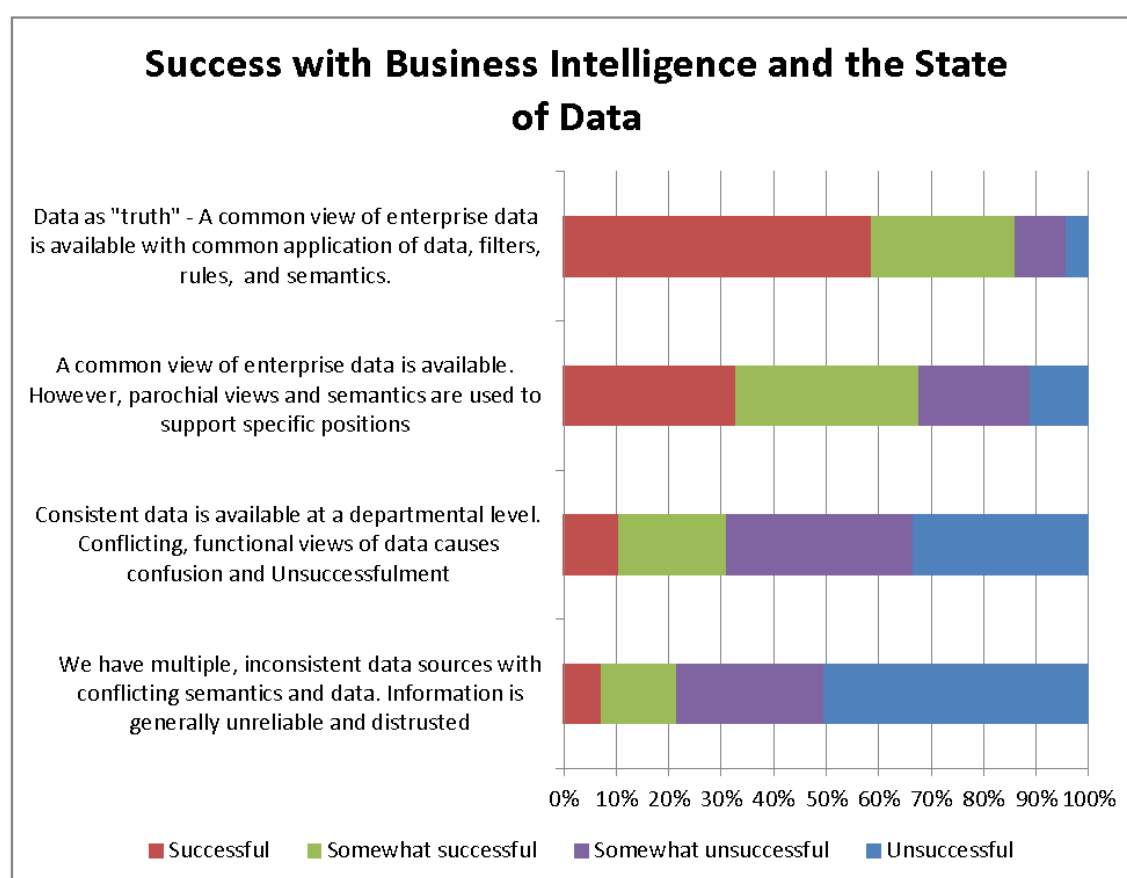


Figure 1 - Source: Dresner Advisory Services, 2015 Wisdom of Crowds BI Market Study

But good governance isn't just about making confident decisions. Not only does poor governance fail to provide trusted data, but it also can compromise regulatory compliance, privacy and security to a disastrous degree.

This is particularly true in the era of Big Data and data lakes, where poor data quality – inconsistency, redundancy, etc. – is a natural consequence of storing massive amounts of data without preparation or organization.

Analytical silos offer speed and autonomy to analysts working with specific, localized use cases. In order to expand the reach of analytics across the enterprise and support business-critical metrics that touch multiple systems, a trusted and global view of the business is absolutely essential.

⁶ Howard Dresner, Dresner Advisory Services Blog, May 30, 2014

AGILITY



GOVERNANCE

THE END GOAL: TRANSPARENT GOVERNANCE WITH THE SPEED YOUR BUSINESS REQUIRES

Transparent governance views the choice between agility and governance as a false dichotomy. The fundamental ideology behind transparent governance is simple--trusted data does not have to be synonymous with restrictive access and obstinate wait times. By implementing transparent governance, organizations can enable local (decentralized) execution with global (centralized) consistency, reconciling speed with trust at enterprise scale.

CENTRALIZED VS. DECENTRALIZED

1

An Example of Centralized (top-down) Governance

Julie is in the office of the CFO to discuss a key product line /P&L center for the company. As this is a new product line for the company, it requires a new set of calculations across different systems that hold information about inventory levels, ship date, pricing/sales volumes, AR, delivery and logistics for out bounding these goods to their distribution partners. In order to ensure compliance with GAAP revenue and internal revenue recognition policies, Julie must work with IT and the company's internal audit.

Once created, the metric "revenue_product1234_new" can be published to all of the key global distributions operations. This will ensure that analysis, revenue forecasting and quarterly rollups are done using the same version of revenue that has been vetted by compliance and audit teams to ensure accuracy and consistency across their 54 different field operations throughout the globe. Data governance is supported, but in a manner that is 100% transparent to key line of business users.



2

An Example of Decentralized (bottom-up) Governance:

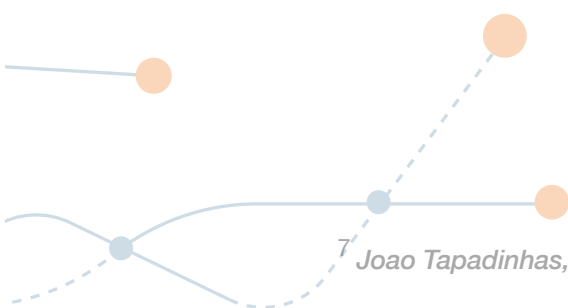
Bob the marketing analyst looks at specific campaign performance in developed markets in NA and notices that for certain demographics, various messages and campaign channels are producing higher than expected results and conversions to revenue. Bob mashes together local consumer data from 3rd party sources to re-test his hypothesis and defines a new variable, called SegmentX_performance_campaigntypeABC.

Bob then can publish this new insight and make it available to his peers for trusted collaboration in other developed territories of business such as the UK, Benelux and ANZ. Since NA is the largest market for the company's products by a large margin, he can then "govern" the newly developed campaign performance metric for the company and promote it to the global level spanning his region, UK, ANZ and Benelux. Bob was able to do all of this without the help or the overhead of an IT interaction. ⁷

According to technology research firm Gartner ⁷, BI and analytics leaders must:

- Establish protocols for access to new datasets in order to identify opportunities to derive additional value from information assets.
- Establish and maintain a team approach that delivers ongoing success by balancing use of skilled resources and development of more localized business skills.
- Certify and manage key input datasets and govern information outputs to align organizational accountability for data discovery with business outcomes, ensure consistent understanding and interpretation, and encourage a data-driven culture.
- Plan to support and operate live data discovery platforms in a scalable, sustainable and resilient manner, including collaborative processes.

⁷ Joao Tapadinhas, Alan D. Duncan, Governance Is Critical for User Empowerment With Data Discovery (July 2015, Gartner.com)





Not every BI product available in the market is capable of supporting transparent governance. From a technology perspective, delivering a unified view of data without sacrificing end-user speed and autonomy begins with modern BI architectures. These are capabilities companies should look for when evaluating BI providers:



Reusability: Enablement of users to create their own measures and dimensions, and instantly make them available to all, while complying with defined security roles and permissions.



Navigability: The ability to search and browse data and business terms (metadata) across all analytic content, including: data sets, visualizations, reports and dashboards.



Security: Multiple layers of security — user-, role-, object-, data-level - during discovery and consumption to ensure the right people have access to the right data.



Networked: A network of interwoven virtual BI instances that share a common analytical fabric, for seamless sharing of measures and dimensions between individuals and groups.



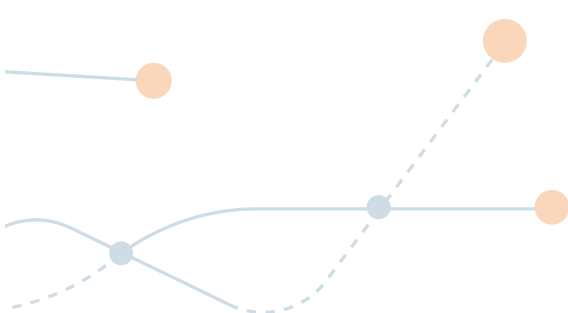
Completeness: Governance and visibility across all data sets, set once, and available forever. Reliable data lineage. No dark data.



Consistency: A single view of governed measures and dimensions, for users in both discovery and centralized use cases.



Transparency at business speed: Delivered without administrative overhead.





CONCLUSION

The pace of modern business world has increased significantly, and traditional BI platforms have failed to keep up with evolving analytical requirements. Business users demanding speed and autonomy have adopted desktop-based discovery and visualization products, circumventing corporate BI standards for tools and data. Unfortunately, while these products deliver speed and ease of use, they lead to the proliferation of analytical silos and decision-making based on unreliable data. Business users, believing they must choose between agility and governance, seem resigned to accept that self-service comes at the cost of imperfect data. However, leading companies know that there is a powerful and direct correlation between business success and having a trusted view of enterprise data. Companies evaluating BI solutions must look for modern architectures that support transparent governance at business speed and deliver a unified view of data without sacrificing end-user autonomy. By implementing transparent governance, organizations can enable local execution with global consistency and reconcile agility with trust at enterprise scale.

ABOUT BIRST

Birst is the global leader in Cloud BI and Analytics for the Enterprise. Birst's patented 2-tier BI and analytics platform enables enterprises to create trusted data while empowering business users to manipulate the information in a fast and easily accessible manner.

Thousands of the most demanding businesses trust Birst to make metric-driven business execution a reality.

Every day we help companies make smarter decisions based on data they can trust. Thousands of the most demanding businesses trust Birst to make metric-driven business execution a reality. Learn more at www.birst.com and join the conversation @birstbi.

