An Agile and Adaptable Foundation for the Data Driven Enterprise

erwin Inc provides a model driven, collaboration platform for data-centric innovation that provides the architecture, context, visibility and governance required to optimize business data assets.

Challenge

As organizations strive for data-centricity and a data driven approach to business, they look for new ways of innovating, capturing relevant data streams and turning them into actionable information. With innovation often comes disruption. Big Data and data deployed in the cloud are two of the key disruptors currently impacting the data management space. Like many disruptors, the early promise of these new deployment options causing a complete transformation of how we approach the storage and management of data has not come to fruition. It has given way to a more pragmatic approach that endeavors integrate traditional database platforms with new un-structured data sources in a hybrid data architecture. However, this approach introduces additional risk and complexity to the traditional challenges of enterprise data management.

DATA VOLUME & COMPLEXITY INCREASING

Not only are data volumes growing, with more applications to support, but the complexity of data is increasing as well. Most organizations have more than one database platform, and data is often stored in non-relational database formats such as Big Data platforms, BI tools, ETL tools, spreadsheets, applications, and more. In addition, the security, trace-ability and compliance of data across these disparate platforms continues to grow as a key enterprise data management requirement.

FEWER STAFF AND RESOURCES

At the same time, most organizations are cutting back on IT staff, so that there are fewer resources to manage this increased data volume and complexity. In addition, the skill sets needed to manage any given database platform are highly specialized. It's unrealistic and expensive to have multiple experts for all platforms, and as a result, IT staff are challenged with having to cope with more and more new technologies while "doing more with less".

INCREASED BUSINESS FOCUS

With data at the forefront of so many organizational initiatives such as integration, data quality, and real-time analytics, more business users and non-technical roles have a growing interest in data. While this increased interest is a positive trend, driving increased focus and funding, it's often challenging for these non-technical users to be able to access the information they need in a format that they can understand. This introduces significant risk in an organization's attempts to realize the full return on the business opportunities that these enterprise data assets represent.

NEED FOR COLLABORATION

Successful data management is all about mastering your enterprise data assets and effectively promoting that mastery to ensure data fluency and trust in enterprise data within the business. However this is easier said than done. Organizations continue to struggle to create and maintain an agile data foundation for business collaboration. The goal is to deliver governance and visibility of their enterprise data architecture in the context of business processes and services, applications, organizational structure and supporting infrastructure.

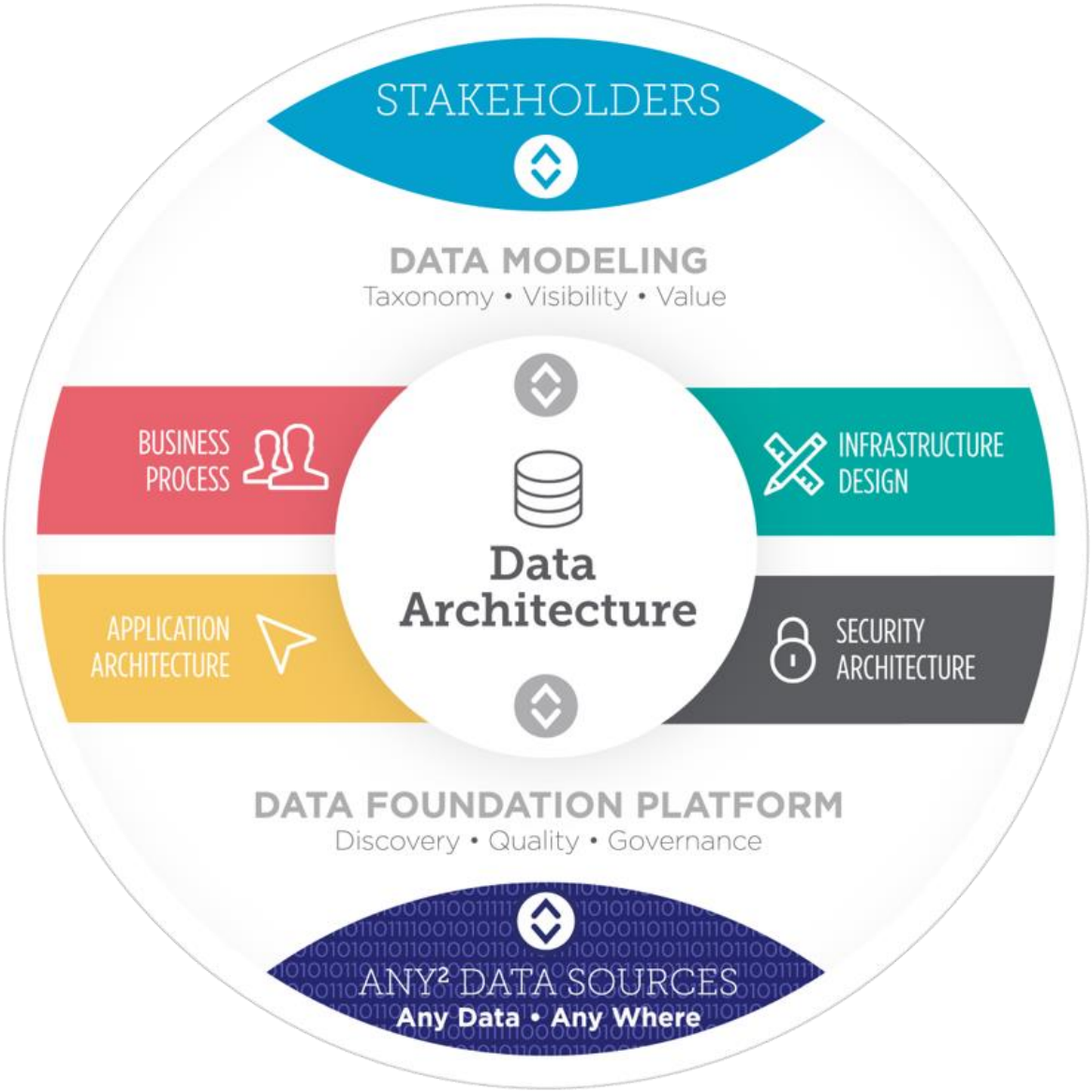

Figure 1: The erwin Data Foundation Platform connects enterprise stakeholders to any data, anywhere to enable innovation, collaboration, accountability and data fluency

Solution

At erwin, we provide the foundation for effective data management through a combination of data modeling, enterprise architecture and data governance. Our "Any^2" approach to designing, documenting, standardizing and aligning any type of data (structured or unstructured) no matter where it is deployed (on premise or in the cloud) provides a detailed, visual information architecture that drives quality, value and efficiency in all of your data management initiatives. Once discovered, captured and documented, this data architecture becomes an essential cog within an enterprise

architecture. This wraps enterprise data in the context of business capability, processes and services, applications, organizational structure and supporting infrastructure. The result is an enterprise model that is easily understood and actionable by the business driving strategic data usage and business value.

MODELING AND METADATA ENABLES DATA DISCOVERY, DESIGN AND ANALYSIS

Whether your organization is undertaking a business intelligence project, building an analytics platform, or a master data management effort, a data model and associated metadata repository can be a central source for core definitions and data structures that can be standardized and reused across these various initiatives. Not only can this help reduce redundancy and "reinvention of the wheel", saving time and money, but it can also help increase quality, as all projects use this common foundation for data definition and metadata analysis.

With **erwin** Data Modeler, business and technical database structures can be visualized through an integrated, graphical model. With built-in interfaces for the majority of the database platforms in the market today, erwin Data Modeler is able to read the technical formats of each of these unique database platforms, and translate them into graphical models rich in metadata. From this model, schema can deployed in an automated fasion and iteratively updated so that new development can be deployed via model-driven design.

Not only can technical database schemas, procedures, and other information be stored in the model, but business definitions and data-centric business rules can be stored as well, so that technical implementations can be better aligned with the needs of the organization. Using an advanced Design Layer Architecture, model "layers" can be created—with one or more models focused on the business requirements that can be then linked to one or more database implementations.

Using the **erwin** Data Modeler Workgroup Edition, models can be stored in a central repository that can provide conflict resolution, versioning, security, standardization, and model organization and hierarchies. Through a central model repository, model assets can be inventoried and re-used across the organization. Using this central repository and its associated conflict resolution and versioning capabilities, modeling teams can collaborate to create common objects that can be reused to help create data quality and consistency.

The **erwin** Web Portal provides an intuitive interface for both non-technical and technical roles to view the information stored in the central model repository. Using simple tools such as web-based internet search and drill-down, model diagram visualization, and graphical impact analysis, users can have an over-arching view of the organization's information assets and the inter-relationships between them. Key to this solution is the ability to perform impact analysis and generate "where used" reports so that users can see how objects interrelate and the impact that a change to one of these objects may have on other objects, projects, and roles.

ARCHITECTURE AND GOVERNANCE ENABLES PLANNING, COLLABORATION AND ACCOUNTABILITY

With **erwin** Data Governance, organizations can design and integrate reusable data governance models such as business glossaries, semantic and dataflow mappings and data system configurations, linking them to the datasource models providing enterprise wide standards,

governance constructs, and trace-ability across your data architecture. Using a model as a central source for business, technical and governance metadata increases the consistency and quality of data. It also improves the agility of IT teams in order to meet the needs of the organization in an efficient, meaningful, and cost-effective way. Using the erwin Data Governance, various data stakeholder across the enterprise can utilize the collaborative review and approval workflow allowing data governance teams to create approved, reusable data glossaries and data terms to promote consistency across disparate data assets.

erwin CloudcoreTM simplifies the management of business and technology information across the enterprise so you can make strategic business and IT decisions based on quality information. This intuitive solution supports wide data modeling in the context of enterprise architecture and deep data modeling and schema generation for understanding data sources.

The ability to visualize and analyze your complex data, applications, capabilities and technologies and more in a graphical format helps promote effective communication between business and technical stakeholders, ensuring that business objectives align with technical capabilities.

Our enterprise architecture software tools enable you to translate business strategy objectives and align IT capabilities, agility and investment decision-making. erwin helps you plan, analyze, manage change and reduce complexity of your business and technology initiatives.

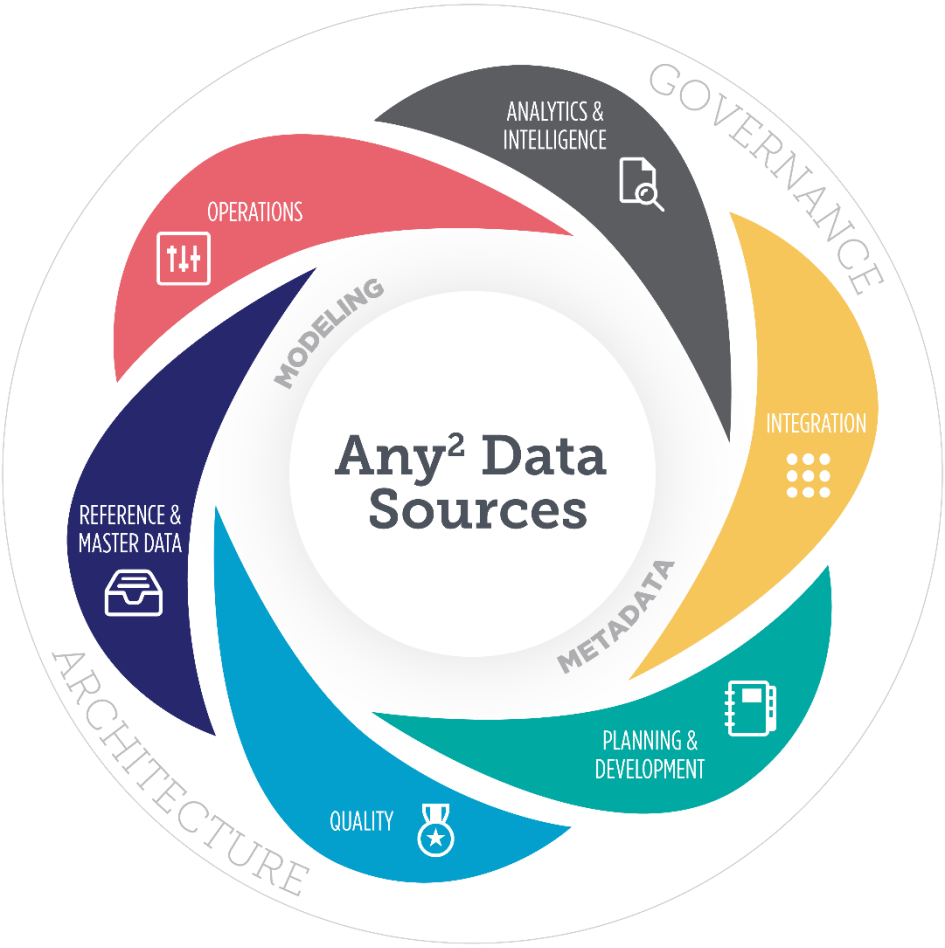

Figure 2: erwin enables mission critical data management initivtives increasing quality and efficiency while reducing risks and the time required to realize value.

Benefits

Providing a contextual, integrated enterprise data architecture that is easily understood and actionable by the business is the key to driving strategic data usage and business value. erwin helps increase efficiency and effectiveness through reuse of common data standards while enabling increased data quality and organizational effectiveness through a integrated and contextual view of strategic data assets.

There is a direct correlation between enterprise data fluency and the ability to maximize the return on the opportunity that data represents in optimizing business operations and strategy. The end goal is a foundation and facility that enables the organizational mastery, visibility and agility required to effectively align any and all strategic data assets with the business they serve. Increasing the level of trust the business has in the data available will drive an increase in the impact that data has on the success the business.

AGILITY, EFFICIENCY AND COST SAVINGS

When team members are able to leverage existing data definitions from a common source, this can reduce redundancy and rework, or “reinventing the wheel”. Rather than creating data definitions from scratch, users can simply “check-out” model objects from a common repository, saving time and money for the organization.

COMMUNICATION ACROSS THE ORGANIZATION

With a common, easily-accessible source of data definitions, in context, a wide variety of users across the organization can more easily communicate and share information. Business users, for example, can research data element definitions, while technical users might reference common database structures.

DATA QUALITY AND CONSISTENCY

Using the erwin, data design and data governance standards can be stored in a central repository, so that glossaries, mappings, models, naming standards, domains, and other common standards can be easily reused and shared across the organization. With all teams leveraging the same information from a common source, team members are more likely to use consistent model object definitions, reducing the creation of disparate and inconsistent definitions across the organization leading to improved data qualityl.

COMPLIANCE AND REGULATION

Regulatory and audit requirements are a major driver of many data management initiatives. Organizations can show accountability for data assets through approved glossaries, semantic and data lineage mapping, repository-driven impact analysis, versioning, and security.

Enabling business agility and innovation through model-driven design, architecture and governance

ASSIMILATING BIG DATA AND THE CLOUD WITH TRADITIONAL DATA SOURCES
At erwin, we break down the data management silos that naturally occur when new technology or new deployment models are adopted. By delivering a data modeling and governance solution that supports Any^2 data – Any Data, Stored Anywhere, we enable organizations to take a unified approach, rationalizing the platform inconsistencies and delivering a single source of the truth for enterprise business data.

EMPOWERING DATA GOVERNANCE AND DATA STAKEHOLDER CONFIDENCE
erwin inc provides a well governed, contextual, and integrated enterprise data architecture that is easily understood and actionable to drive strategic data usage and business value. erwin delivers collaborative, self-service data discovery and governance capabilities that enable stakeholders to understand the data structures, their business purpose, points of integration. Additionally, erwin encapsulates the business rules, alignment and terminology required to effectively govern and leverage data for operational, analytics and business intelligence excellence.

DELIVERING THE 1ST CLOUD DEPLOYMENT OPTION FOR ENTERPRISE DATA MODELING
As the market leader, we understand the challenges and requirements of data management professionals. Those challenges are not always functional in nature. By being 1st to offer enterprise class data modeling via a SaaS/Subscription model, customers can reduce the challenges and cost associated with on premise deployments and ensure their data modeling investment is in line with preferred procurement methods.

Next Steps

Consider erwin if you:

- have a complex data environment that's requires better business alignment and accountability
- have a data governance initiative that requires a method of defining, approving, publishing and integrating the governance constructs throughout your data architecture
- need to collaborate with multiple audiences across the organization, particularly business users
- are considering undertaking an initiative around Big Data, the Cloud, ERP/CRM, Data Analytics and/or Master Data Management (MDM).
- are looking for a collaborative data management solution that can help you reduce costs through reuse and standards while enabling increased data quality and cost savings through a unified view of strategic data assets.

RELATED PRODUCTS/SOLUTIONS:

- **erwin Data Modeler Standard Edition:** conceptual, logical, physical and dimensional model creation and deployment
- **erwin Data Modeler Workgroup Edition:** repository based data modeler collaboration and model lifecycle management
- **erwin Data Modeler Navigator Edition:** read-only access for data model discovery and analysis
- **erwin Web Portal**: web-based collaboration platform to share models and metadata with stakeholders
- **erwin Data Governance:** web-based collaboration platform to share models and metadata with stakeholders and author and integrate data governance architectures and constructs
- **erwin Safyr Option for ERP**: metadata management and model creation for ERP and Cloud applications
- **erwin Cloudcore™**: SAAS based enterprise architecture and data modeling bundle

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