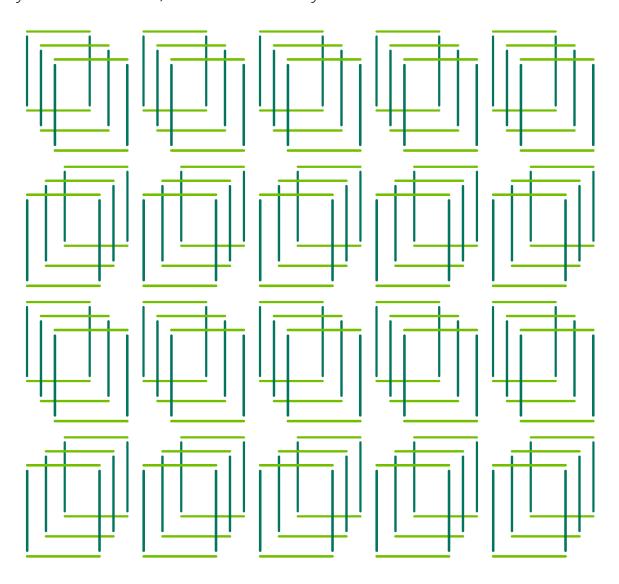
For Better Self-Service Analytics, Turn to Smart Catalogs

Most businesses have yet to optimize the value of their organization's data. That can change with a smart catalog that makes data accessible, easy to understand, and contextually relevant.









What will happen to a business that fails to transform itself into a digital organization? It won't realize its full potential—or it will face even worse consequences.

A business that can't effectively leverage its data to drive digital transformation is in danger of wasting away—unable to increase revenue, expand operations, or invest in new opportunities. When a business is unable to discover the right data, assure its credibility, or allow business users to seamlessly access and analyze information in near real time, it cedes ground to competitors that are more adept at these processes and able to move at the accelerating speed of business.

Plainly, no CEO wants to be caught short because their businesses aren't able to discover and access the data they need for critical purposes. The new world of business requires that companies better understand savvy and demanding customers and deliver value to them through customized interactions and personal data transparency. Organizations must gain greater insight into market factors affecting their industries and determine how best to capitalize on them. Businesses must be able to monitor and interpret the moves their rivals are making that may affect their own R&D strategies.

Leaders know that their businesses need to become data-driven if they're going to retain their status as—or become new winners in—their industry. In its report, "2019 CIO Agenda: Secure the Foundation for Digital Business," Gartner reports that 45% of more than 3,000 respondents are increasing investment in BI and data analytics solutions, a strategy for rebalancing their technology portfolio toward digital transformation for improved product delivery.

Direct digital transformation investment spending is significant, too. In fact, it will represent \$5.9 trillion between 2018 and 2021.

Problems Currently Plaguing Business Users

What are some of the issues that plague business users in efficiently accessing and analyzing data so that it becomes swiftly actionable? The list includes:

- CEOs may mandate that their organizations be data-driven, but don't always understand the need to invest in tools that empower employees to meet that demand
- Unfamiliarity with data outside their own information "perimeter," as information tends
 to be buried in different systems or siloed in departments across the organization. Value
 diminishes when only a single source for specific requests is checked
- Requirements that business users send tickets to IT asking for sample data for their analytics requirements. Without knowing the business case, IT often pulls the wrong data and provides it in its raw state
- Decrease in data scientists' and data analysts' productivity as they have to spend time
 finding authoritative data sources and cleaning and organizing data instead of discovering
 patterns and trends and communicating their findings to stakeholders
- Inability to access reliable data the business wants/needs and to act on it in real time

As a result of these issues, business users become data-disorganized and enterprise efficiency and effectiveness are compromised. Business missions drag on when it is not possible to get the right, required data in real time and in accessible formats. Too often, then, executives wind up making decisions at least partly based on instinct and using whatever information they do have—even if it is inexact. A 2018 KPMG study revealed that 67% of CEOs put their own intuition over data-driven insights.

Moving on to Self-Service Analytics

Such troubles could be minimized if business analysts were able to have a complete view of all the data already trusted by users in various roles across the organization. In such a case, business users would be able to comfortably and confidently perform self-service analytics underpinned by a simplified data model and uncomplicated data access. They'd enjoy a smoother way to create data references for workbooks, reports, and dashboards for visualizing complex data sets.

When a technology solution allows fit-for-purpose data sets to be surfaced on the fly and recommended to business users for immediate access in a consumer-friendly form, users can avoid wasting time searching for trustworthy data.

With metadata defining data sets in context, business users can also avoid being put in the position of not knowing which of multiple reports—each one named "customer lifetime value," for example, but each one also using different formulas—is the best one for their particular analytics requirement.

Catalogs Build Data Empowerment

The backbone of self-service analytics is a smart catalog designed with the user experience in mind. A smart catalog is the key that opens the door to the business user experience by providing a single, coordinated, and trusted source of data intelligence—whether that data resides on-premise, in the cloud, both, or across multiple clouds. A smart catalog is a better approach than creating multiple catalogs, perpetuating data silos rather than creating a unified view and hub for finding, understanding, and procuring data for the entire organization.

Without a metadata-informed catalog that puts data into context, a business user can pull perfectly good data for analysis and still come up with the wrong answer. Overall, business users of all roles and levels of experience will be at a loss to search for, find, understand, access, and collaborate on the right data to improve analytics and positively affect enterprise performance.

With a smart catalog in place, however, there are no gaps related to awareness and access as there are when business analysts and scientists are confined to working with fragmented data sets in silos, thereby unable to find and field important relationships with other data sets. Now there is trust from business users in the data sets that inform analysis. This can be done in a visual way for intuitive analytics that promote strategic and real-time decision making.

With a smart catalog, data citizens are empowered to maximize the value of data.

Defining Must-Have Catalog Functions and Data Set Delivery

The most effective catalog solutions ultimately will take advantage of machine learning and artificial intelligence to classify data assets in data lakes to be used for self-service analytics by way of metadata tagging. Automating the matching of technical terms with business terms and letting users trace data lineage both promote trust in data and support data searches at scale.

Smart catalogs should support immediate classification and recommendation-driven pointers to potential data sets that may be useful for particular self-service analytics requirements. A colleague-focused, crowd-sourced, and ad-hoc approach should be used to relay what type of certified data sets may relate to a business issue and what related data sets may also exist.

When this approach is taken, as it is by a mature solution, the way is paved for fellow employees to weigh in with reviews, ratings, and information that describes the data profile so that the business user can judge whether it is in line with his or her needs. Colleague input can aid in directing business users away from data sets that aren't well-curated or that may no longer be appropriate for an analytics use case. For example, say a new cloud ERP system has replaced a previous on-site solution, and as a result of the migration, some data sets should no longer be used. In its most evolved form, this approach can be thought of as a "data shopping" experience—it mirrors e-commerce sites that use similar tactics to make it easy for users to find and choose which product is best suited to their needs.

The beauty of solutions that adhere to this colleague-driven approach is that workbooks or reports that attain high ratings may gain the attention of business users who never would have thought about using those data sets. Just as important is the fact that, as more people touch the data sets, they should improve thanks to users adding their own contributions to ratings and reviews. It's a form of Data Governance in and of itself.

Ideally, smart catalogs will provide a seamless way for business analysts to request the subject matter expert who owns a particular data set to onboard that set—giving it a contextualized, classified, and identified form for access by business users. With a standard catalog, unless the catalog vendor has done the work in advance of providing an automated way to match data set owners to data sets, it can take weeks to find the responsible party or parties. When business analysts ask SMEs for access to data sets, the workflow in place will require them to provide answers about why they need the data, how long they plan to use it, and which other business users will have permission to access it.

Why Choose Collibra Catalog?

Collibra Catalog is built to satisfy all the must-have functions for self-service analytics backed by smart catalogs:

- Supports complex operating models and organizational structures
- Streamlines access to and analysis of data
- ► Enables complete transparency into trusted data sets
- Clears up ambiguity of data whether on-site, in the cloud, or in hybrid environments—with a federated approach
- ► Lets business users discover the best data sets with crowd-sourced ratings and reviews
- Provides comprehensive insight into data lineage
- ► Ensures that business decisions are backed by consistent data interpreted in the right context
- Can sit atop tactical solutions so that firms can continue to use the tools they like while applying a single set of business terminology
- ► Enables compliance with data set usage, privacy, and retention policies
- Bolsters AI and ML tools in the cloud, providing trusted data sets for training

Real-world Value of Collibra

An IDC study sponsored by Collibra showed that companies using the vendor's technology realized:

- ▶ 520% 3-year ROI
- ▶ 7 months to payback
- ▶ \$18.9 million higher gross revenue per year
- 23% higher gross productivity by Business Intelligence and analyst teams
- ▶ 69% less time to locate data/reports



67% of CEOs put their own intuition over data-driven insights.



Only 14% of business stakeholders make thorough use of customer insights, because most companies don't have access to their data.

That's part of being cautious. Even though catalogs can be tied to all data sources, they must have a way for SMEs to create rules and processes to ensure that only authorized parties can access data sets that hold private or otherwise sensitive data that is subject to internal, industry, or government regulations. There's a growing need for companies to exercise proactive behavior around existing or proposed data privacy regulations.

It's not only Europe's General Data Protection Regulation (GDPR) that is upping the game on consumers' data privacy rights. California Governor Jerry Brown signed the Consumer Privacy Act of 2018, which goes into effect in 2020. And Apple Chairman Tim Cook has said that the U.S. government should pass "a comprehensive federal privacy law." Right now, the Privacy Bill of Rights has been introduced in the Senate with the goal of giving consumers more control of their data and requiring companies to be more transparent about how they use and secure that information. In the best scenarios, a smart catalog would streamline workflows by building in the right processes and rules for business and consumer access to private data and all other workflows.

Data catalog vendors also need to be considerate of the tools that data citizens are accustomed to using in the analytics process. Solutions should seamlessly integrate with the environments and platforms users are already familiar with while powering self-service analytics features and functionality behind the scenes. The data catalog should also deliver deep visibility into the overall analytics ecosystem to help users see a macro view of data, allowing them to focus on the information that matters.

When a catalog vendor's solution is able to integrate with well-regarded data visualization tools, with many connections to data sources and an ability to transform data into interactive dashboards, business users also gain the value of tracing how and by whom reports were created, allowing them to trust and share reports with others.

The Cloud Matters to Self-Service Analytics

Enterprise-ready catalog capabilities make it easier to administer complex policies, manage diverse datasets, and provide data set availability from any system—remote desktop, mobile phone, IoT device, and more—via the cloud to extend the finding, understanding, collaborating, and trusting of data that resides in the data lake.

Leveraging the scalable public cloud as data and workloads migrate to it—with all the protections for lineage diagrams and regulatory reporting intact—presents a powerful opportunity. Clean and enriched data can then move reliably between various data stores and into data lakes for serverless data discovery and processing. Cloud-ready data will perfectly coordinate with the growing migration of data sets to the cloud.

A smart catalog's connections with cloud solutions also enhance a company's ability to adopt technologies that are built into the cloud, such as Machine Learning and Artificial Intelligence. Feeding ML and AI with data from a catalog helps train these tools to learn what type of data the business relies on and then recommend new, appropriate data sources for a job.

Getting Results that the Business Needs

With self-service capabilities coordinated by smart catalog tools, business analysts and business users can be confident in the conclusions they draw—and in presenting their data-driven conclusions to C-level executives. Now they can show that their results can be trusted and that their analysis of business problems and opportunities are not based on potentially faulty or incomplete data.

Catalogs with high-end features, in sum, make it possible to:

- Access data from well-curated and classified content-rich data sets across the organization—from on-premise to multi-cloud environments
- Present solid data sets that business analysts and business users can review and accept or reject based on crowd-sourcing
- And draw clear boundaries around data access, all to the benefit of self-service analytics

This clearly fulfills the CEO's desire for the data-driven results that are the engine of digital transformation.

Letting users leverage smart catalogs so that they can perform mission-critical, self-service analytics is the smartest, quickest, and most accurate way to set a company up to be one of the winners in today's business environment—an environment that is marked by a state of continual change with no way to stay in step without the right technology solution in hand for self-service analytics.

References

- IDC FutureScape (information from Forbes): <u>Worldwide Digital</u> <u>Transformation 2019 Predictions</u>
- 2. KPMG Growing Pains: 2018 Global CEO Outlook
- 3. Microsoft (A Forrester Commissioned paper): Extending The Value Of AI To Knowledge Workers
- 4. Data Science Central (via Forrester): <u>A Step-by-Step Guide to Build a Data Catalog</u>



48% of workers say it is challenging to drive insights necessary to do their job from available data.



59% of workers say they struggle to find the sources of information they need.



63% of workers lack confidence in making optimal decisions based on the insights available to them.



Collibra is the Data Intelligence company. We accelerate trusted business outcomes by connecting the right data, insights and algorithms to all Data Citizens. Our cloud-based platform connects IT and the business to build a data-driven culture for the digital enterprise. Global organizations choose Collibra to unlock the value of their data and turn it into a strategic, competitive asset. We have a diverse global footprint, with offices in the US, Belgium, Australia, France, UK, Czech Republic and Poland. For more information, visit collibra.com.



