



The Need for an Intelligent Data Platform

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We're All in the Business of Information

Increasingly advanced amounts of information need to be incorporated into business operations for those companies who aspire to be industry leaders today. Leaders continue to fine tune business based on data, allocating resources selectively across the organization and its initiatives. To accede to this strategy requires an unprecedented amount of accessible information.

While human judgment remains vital, the nature of business judgment is changing. It must grow to utilize more information and it must utilize that information more deeply. We're all in the business of information. It is the way a business utilizes its information today that will set it apart.

Businesses need more information, cleaner information, and more accessible information on better performing platforms than their competitors to survive and thrive. At the same time, the competitive battlefield is quickly moving from traditional, alphanumeric data to **all** possible data which includes a step up to the unstructured high-volume data that is big data.

When you add in third-party data, the body of data available to each company to get under management is mind-boggling.

Information – the value associated with data – can be yet another story. Information should have all of the characteristics of comprehensive, clean, accessible and well-performing. Information is data under management that can be utilized by the company to achieve goals. The main issues in bridging the divide to information and to competitive advantage is where this white paper comes in.

In this paper, I will review information's importance to business, connect data architecture to business success, define data maturity and discuss how to architect information and improve data maturity efficiently with an Intelligent Data Platform.

The Business of Data

The earth generated about 4 zettabytes of digital data in 2013. IDC forecasts that we will generate 40 zettabytes (ZB) by 2020. Now, all that data isn't used, but increasingly, more of it is. And it's not just stored once. Data with value is branched off into

numerous databases across multiple companies. In only the last few years, as much data has been generated as had previously ever existed.

Many industries do not ship products or buy raw materials. The products and raw materials are data. Data is the asset produced by insurance, financial, healthcare and other service industries, but furthermore all industries produce data and need to analyze it for its competitive advantage. Information differentiates all from competitors.

Information quality impacts all stakeholders, internal and external.

Information is used and reused.

In short, information is a key business asset.

Platforming Data

Platforming and architecting data has never been so difficult and yet so crucial. The recipe for success begins with a good, well-rounded and complete architectural approach. Architecture is immensely important to information success. You can architect the environment in a way that encourages data use by making it well-performing, putting up the architecture quickly and having minimal impact on users and budgets for change or you can incur usage loss and inefficiencies.

In a study by KPMG¹, 60% of CEOs see disruption as an opportunity. We should see data disruption the same.

The big challenge facing anybody trying to drive new business initiatives is delivering data at the speed the business requires while dealing with:

- Data volume growth
- Data complexity growth
- Technology change, new analytics technologies, new applications, new data storage technologies, new cloud systems

¹ *U.S. CEO Outlook 2017: Disrupt and Grow. June 13, 2017.*

Users of information are increasingly getting involved in information architecture. They are contributing to weighing the tradeoffs, assessing their workloads in deep ways, selecting methods of data movement and levels of redundancy, determining what constitutes data quality and selecting tools.

It is the responsibility of those who are aware of the possibilities for information in the organization to coach the organization in those possibilities in how to USE the information wisely.

If you're waiting for the current state of affairs to get more settled, know that is unlikely to happen. The time is now to take information architecture to the next level.

Architecture components of data integration, data quality, master data management, data security, cloud services and big data will anchor the successful organization.

Information must come together in a meaningful fashion or there will be unneeded redundancy, waste and opportunities missed. Every measure of optimizing the information asset goes directly to the organization's bottom line.

There must be a "true north" for this enterprise information architecture. There is no "one size fits all" reference architecture. There are different starting points and different target interim ending points for architecture. It never really ends. Each company is at a different level of maturity and will wish to advance at a different pace and many companies are not going to be able to move at the speed desired without new skills in place.

Due to the volume of possible data stores and necessary components of the modern successful information architecture, leading vendors are responding with a bundling of components to fast-track platforming decisions and efficiently take on a wider expanse of the information architecture. This is the essence of an Intelligent Data Platform.

Even organization leaders can take a tactical approach to the execution of the requirements. However, it does not necessarily take longer to satisfy information requirements in an architected fashion. If architecture principles and technology possibilities are not considered beforehand, the means to satisfy the current requirement may be inappropriately defaulted to the means to satisfy the last requirement.

The approach to information architecture is:

1. Have a “true north” in mind for a 5-year information architecture, understanding that it is subject to change
2. Commit to an Intelligent Data Platform as part of the architecture
3. Organize new information requirements into workloads
4. Pursue the architecture on a workload-by-workload basis, optimizing the workload and setting up the environment for efficient future initiative support
5. Perform all work with an eye towards delivering return on investment (ROI) to the business at the lowest total cost of ownership (TCO)
6. Add lots of judgment to the process throughout

ROI can happen through short-term financial bottom-line impact or through information-borne innovation that yields ROI later. That is what information management should be all about – not speculation, fun exploration or a book standard. It’s about business.

Once we have established, as a business, that a workload has high, positive ROI (relative to other possibilities for the investment), we establish the architecture for it that meets the performance, agility and scalability requirements with the lowest TCO. As such, some of this paper is focused on conveying the capabilities of each platform to help you allocate workloads appropriately – with the lowest TCO!

How Modern Business Challenges are Data Challenges

Here are a couple examples of modern use cases that must be done in their respective industries and are overwhelmingly data-first initiatives.

Insurance and Telematics

Consider the opportunity of telematics. These are automobile systems that combine global positioning satellite (GPS) tracking and other wireless communications for various purposes: automatic roadside assistance, remote diagnostics, etc.).

Telematics have serious traction in the auto insurance industry, most famously by Progressive Insurance. If a consumer opts in by placing a sensor device in their car, which feeds its data to the insurance company, they can save money on their insurance if certain safe driving parameters are met. These devices capture fine movements of the car and the car's location, both of which decrease the odds to very minimal that the insurance package would be less than profitable to the insurance company.

Telematics presents opportunities to monitor and adjust premiums for individuals with personal auto policies as well as commercial fleets.

The big opportunity is to encourage safer behaviors that benefit both the Insurance company and customers, potentially saving lives by incenting safer driving habits. The presence of a device in the vehicle, like a mobile phone, provides driver behavioral data. Combined with weather, geographic, and traffic information, it provides a continuous flow on the state of the vehicle and the safety of the passengers and cargo. Telematics analysis streamlines vehicle and fleet risk scoring, providing valuable input into underwriting decisions and opportunities to review premiums for necessary adjustments based on actual driving behavior.

By integrating telematics analysis into the enterprise data architecture, as opposed to treating it as an isolated capability, add a new dimension to the comprehensive understanding of a customer and the value of the relationship with that customer. In addition, enterprise capabilities such as data visualization and customer experience portals can make the most of the telematics insights.

The architecture response to the telematics challenge is to route all mobile phone, Enhanced GPS and GPS data into a data lake where vehicle scoring is done and fed to a

data warehouse. The insight and action from the analysis there is used in pricing, product and underwriting decisions.

This modern use case is almost all about harnessing this data and listening to what this new class of data is trying to tell the company.

Retail Customer 360

The concept of customer data as a competitive advantage is relatively new to many retail organizations. As the retailer begins to better understand customers and how to maximize the value of customer relationships, the Customer 360 data asset increases in importance. With customer data in hand, the firm can pursue CRM/1-1 strategies more quickly and at lower cost in an integrated data and analytics environment.

Becoming more customer-centric is a critical success factor both to increase satisfaction and to up-sell and cross-sell during many customer interactions, including sales, especially at a completion where a customer may be aware of related products or satisfied with the company and with propensity to expand their relationship to additional products. For many today, there is not a smooth integrated experience.

Opportunities for upsell and cross-sell are not sought out effectively during the sale. Next best offers are not part of the interactions. Telechannel, chat, web, and personal contact experiences are not integrated across most retailers. This gap must be filled to remain competitive and to maximize the value of each customer relationship. Much of this gap requires customer relationship management (CRM) strategy and applications, but other key data & analytics architectural components play a key role.

This initiative creates a definitive, robust, and authoritative customer master, becoming a robust source of record for the enterprise. By using a master data management (MDM) system, data stewards managing customer information and data about the roles that customers play have a single place to manage data. Management of customer data also includes robust name and address hygiene capabilities to keep customer addresses up-to-date and accurate.

Customer 360 also provides a means for taking this data across the enterprise. Various groups gain extensive access to information about customer locations, behaviors, demographics, store relationships, and other information critical to building more

valuable relationships, and to find new customers that are likely to be valuable. This is heavy data integration.

A rewarding customer experience requires significantly more near real-time integration and, increasingly, predictive analytics than exists in most organizations today. Customers don't want to confront internal organizational boundaries. They want a customer experience that's about them, and their needs. When they update information about themselves, such as a change of address, they expect to do it once. If they call to update their contact phone number, they expect to see it reflected on the website within minute of completing the phone call.

An Enterprise operational data store is a key component to achieving this level of near real-time integration. Improvements must be made today to smoothen the transition of customer communications between silos and get customer data in place to succeed across the enterprise.

Data Maturity Means Business Maturity

In the competitive arena of information management, we have seen the bar set higher every year for every level of data maturity and competitiveness. Indeed, as the Haitian Proverb goes, “Beyond the Mountain lie More Mountains.” However, unlike mountain ranges, new “mountains” in terms of information capabilities are continually being created by the vendor community and highly mature organizations. Once you get to a peak, you look out and there is another peak. For example, coming soon to being a parity item, and distinctly on the data maturity spectrum, is artificial intelligence. It’s a plus when your key vendors are helping to pave that path for you.

Top performers realize they need more data under management for their business. They continually grow the data science of their organization. They realize times have changed from last-minute single-use data pulls and even from the “everything goes into a data warehouse” mentality. Today, it’s all data, including third party data, with quality and speed - and architecture and maturity, which set up future uses efficiently. Any technologist would do well to take themselves out of a complete “support” mindset and into a leadership mindset for the initiatives they are uniquely positioned to champion into the organization.

Top performers realize they need more data under management for their business.

These data-based initiatives are the cutting-edge competitive initiatives that will set the organization apart.

When you are “in the know”, as an information professional should be, there is the obligation to create these initiatives. Increasingly, it is being expected of the information professional. In addition to the traditional top item of IT - user satisfaction - top performers need to initiate within their company as well as raise the information foundation of the company to deal with current and future initiatives efficiently.

These acts of leadership must be done outside the confines of a budget. Budgets come for project support. Leadership is opportunistic and happens within the budgetary framework of the projects. Every day there is opportunity to lead and mature the data environment.

That mature data environment would be mature across the dimensions of technology, data strategy, architecture and organization. Each pillar must be raised. Just as you cannot skip data maturity levels, you cannot raise single pillars without the others. For example, you cannot have a highly mature data strategy with remedial technology.

Data quality, master data management, data security, cloud services and big data will anchor the successful organization. And with a modern architecture, there will be an abundant need for data integration.

There will be a plethora of data storage options utilized in a highly mature environment that is effectively matching workloads to platforms. In addition to the data warehouse, there will be a Data Lake, probably in Hadoop or S3, numerous column stores and in-memory/memory storage stores, master data management, streaming data, and NoSQL and NewSQL operational stores in addition to legacy relational stores. Data will be a major point of executive conversation. Data Governance will be pervasive, authoritative and support initiatives. Data quality will be scored (and high). Initiatives will be done by true agile methods and with accompanying organizational change management.

This high data maturity is what supports the business of information, demonstrates the emerging business leadership and addresses the modern business challenges.

Information Architecture is Key to Business Viability

Maturity underlies positive digital transformation. Whether by our choice to adapt and adopt or external forces that thrust disruption upon us, organizations must drive these initiatives to remain viable. Improving financial performance and competitive positions are the effect of striving technologically towards deeper customer relationships, efficient operations, personalized experiences, and detecting anomalies. The right information at the right time to make the right decision has been the mantra of information management since its infancy. That has not changed much, but the relationship of human and machine interaction and who is producing and delivering data, timing its arrival, and making the decision to take action is shift more from human to machine. The nature of data analysis and decision making is shifting, even outside the business world.

However, most organization's information ecosystems are not architected for an advanced transformation of this very real and present paradigm shift.

Regardless whether you are making a decision to do a major reroute of a supply chain or what movie to go see this evening, or whether this decision is made with artificial intelligence or a human brain, the need to have trusted reliable data remains. The information must be architected to arrive at the best possible conclusion. Taking the movie example, the information architecture of a decade ago was picking up the newspaper to check show times. But this data is siloed. It does not possess weather data, traffic data, crowd indexes, dinner reservation availability, or even your sentiment of other moviegoers. If you could bring all that data together in one place, you could quickly make the right decision. You could even *automate* the decision. Thus, a 30-minute discussion and contemplation of what movie, when and where to go, if to even go at all, could be condensed into an instantaneous decision. Now think of the impact in a real-life business situation.

Any good architectural design will have a blueprint, a schematic of everything needed to complete the structure. You wouldn't build a house and forget to plan for, say, the electrical wiring. To ensure nothing key is overlooked, let's go over the key components of a modern information architecture and give business rationale for its importance.

Diverse Data Ingest and Integration

A modern information management architecture must be able to handle all kinds of data. It's not just traditional business data conveniently stored in other relational databases, but *all data*. The combination of data from many sources—both external and internal—is driving a new wave of insights and innovations.

The architecture is at the ready to capture data from even highly fragmented sources, regardless of structure, volume, technology platform, or location. This is critical for today's complex enterprises. The architecture consumes:

- With any structure (or lack thereof)—Structured, semi-structured, unstructured
- Using any integration method—Batch, real-time, streaming, API
- Having any metadata—Application-, pattern-, product-based
- From any source—Databases, web apps, mobile apps, big data systems, sensors, social media, et cetera
- From any location—On-premises, remote, cloud, hybrid, third party, public

Data Under Management

However, we are not talking about just a data lake, or a dumping ground for all data. The data must be transformed and managed into a trusted, secure, governed, accessible form-ready for timely and actionable decision making. Just because data is coming in from anywhere and everywhere does not excuse us from applying the same discipline and care towards its quality, completeness, and security than we would our general ledger.

Thus, your modern architecture must include the capacity for master data management, data governance, data quality, and security. However, these are not simplistic implementation of various tools. Do not get caught in the trap of thinking, "Oh, we've got that covered" with these very important disciplines. In fact, if they are not mature, they *must* mature. Question to ask include:

- Can your business users quickly identify data that has prescribed data governance and compliance requirements?
- Can your data stewards easily assess and visualize the quality of data?

- Can your data security professionals detect data misuse, protect sensitive data, and demonstrate that appropriate detection and prevention mechanisms are maintained?
- Can your system admins leverage predictive maintenance and performance optimization algorithms in data management processes?

If you answered “No” to any or all of these, key support structures in your architecture may need bolstering to achieve your modernization goals.

360° Views

We have already explored the use and power of Customer 360°. The same needs are true for Product, Supplier, Store Location, and other key entities. Modern architecture for digital transformation will see data managed from end to end. This means from the moment it is sourced to the time it materializes in a 360° view, each piece of data is managed. Data has business value—and even though it is sometimes difficult to quantify—value is multiplied and gained when data is leveraged, enhanced, and made available. The 360° view is the modern architecture’s materialized insight of experience. How is a customer’s experience with us, our products, our locations? What is our experience with our suppliers?

360° views don’t just happen without the underlying architecture of end-to-end data management, and the business value of the diverse data we are integrating and managing is not realized without effective 360° views and other advanced uses.

Artificial Intelligence Enablement

Such an advanced use in the modern architecture is the enablement of artificial intelligence (AI). In a 2017 study commissioned by Teradata, shortcomings in architecture and infrastructure ranked higher than lack of talent or budget as barriers to AI implementations. AI foremost needs data - quality data provided by a robust architecture. The architecture for AI has several hallmarks. First, it is built on an enablement strategy.

Business priorities and current capabilities are identified in all AI use cases. Second, modern architecture will enable AI in the data pipeline, not just as an analytic end point. This huge point cannot be overemphasized, because it is often overlooked. AI can be

applied to data moving from sources into the information ecosystem *prior to* consumption and analysis. This can include assessing data similarity, auto-tagging, recommendations to users searching for data, and discovering structure in raw data, but also future possibilities, including self-integration and development action recommendations. Few IT budgets seen growth since the financial crisis of 2008. Yet the volume and complexity of data have, as well at the technology change. How will you compete? AI provides a way to do more with the same or less resources when used to automate data management.

Modern architecture will enable AI in the data pipeline, not just as an analytic end point.

Get your data act together. Beginning with a look at your architecture for transformation is critical. It may be the key to your business' future viability.

The Intelligent Data Platform Response

In the recent past, many of the critical capabilities of the modern data management platform have been largely out of reach for many organization. Even more challenging, or downright impossible, was to find all these capabilities integrated into one solution. It simply did not exist. Enter the platform approach.

By definition, a platform is a foundational technology (or stack of technologies) that are used as a base upon which other applications, processes, and uses are developed. Up until this time, information management platforms have been singular purpose—a data warehouse platform, a master data management platform, a data governance platform, and so on. A multifaceted, full spectrum, end-to-end data management platform was not even an option.

The platform approach should be a strong consideration for any organization seeking to build it up the critical data management capabilities we discussed in the previous section.

First, the platform approach brings the key data management capabilities to the organization. A true platform will be data source, data volume, data variety, and data structure agnostic—thus it enables the integration of highly diverse data. A platform also brings all key data together with facilitates 360° views of customer, product, vendor, and so forth. A platform also is a foundation for current and future applications—including artificial intelligence and machine learning algorithms—to accelerate the productivity of all users.

A platform brings a full suite or stack of data management tools to cover all key disciplines—whether the data is master or transactional, operational or analytical, heavily governed or quality assured through automation, big data or a golden record, real-time and streaming or batch loaded, used for reference or for compute-intensive operations...a platform is robust and flexible enough to handle it all.

Second, a platform reduces the complexity of data management in an increasingly complex data environment. CIOs and other data leadership face an ever-increasing challenge of new data and evolving business questions. They must balance innovation and a rapidly expanding use case portfolio with less-than-rapidly expanding (or stagnant or even shrinking) budgets. With a platform approach, it can be a welcome challenge, because a platform can decrease the complexity of managing all data—opening the

possibility to new data and uses without an expensive capital outlay and acquiring expensive talent to develop and support the new technology. It is time to stop thinking of data integration, data quality, master data management, data security, and so on as separate applications, but more as steps in a data management pipeline. A platform can provide a consistent UI and function so that the platform works consistently from data management function to function, lowering the learning curve and accelerating productivity.

Third, it unifies approaches and rallies practice and discipline around a unified approach. Rogue or shadow IT are becoming more prevalent. Often the intention is well meaning, but too often shadow IT emerges when the centralized technology structures are seen as too cumbersome or too slow to respond to business demand. This splintering and disenchantment of IT in the organization causes a host of problems such as unnecessary costs, unsupported and unsanctioned solutions, and overlapping services and technologies. Even more problematic is the lack of unity and discipline with data. Multiple copies of key data and incongruent data definitions and business rules will haunt an organization with many pain points.

However, on the other side of the coin, the spirit of innovation should not be squashed, but enabled. A platform approach gives a foundation to build on, but also a unified one where best practices in data discipline can be managed. Rogue IT groups can innovate and build what they need, but they do it in the confines of a unified platform leveraging unified, managed, and governed data. Code reuse and transferable skills become more possible in a more standardized environment. A good platform should provide a set of tools for any kind of data.

Finally, the platform approach enables future innovation with data and future proofs us against inevitable shifts in data technology trends. It used to be that every year brought new trends and technologies in the data world, now it seems to shift every quarter. The innovation and resulting changes never ends. Even if Hadoop is old news, and Python becomes obsolete, a platform approach provides a framework agnostic and a protection against shifts in technologies, data, programming languages, and other facets of information management. A legacy application built on an older technology remains supported by the platform, but a new application using cutting-edge (or bleeding-edge) technology can be plugged into the platform and leverage the same managed data and services as the legacy one.

A platform with advanced capabilities will provide automation. For example, new data could be automatically recognized and onboarded into the information ecosystem. Automatic integration could occur for known data types and sources. Intelligent suggestions for reuse based on prior work.

A platform approach is simply a smart way to go. Reduction in cost and complexity and expanding use and innovation are critical to enabling *and sustaining* business viability with information management. Just as the work of hundreds of blacksmiths were turned into an assembly line, a platform can enable the same automation in your data.

Sequencing Initiatives Utilizing an IDP

An advantage to the Informatica’s platform approach to data management is its modularity. Piece by piece, block by block is a smart way to build out the platform—especially from the ground up. Integration, 360° domain views, master data management, security, big data, and so forth can be thought of as individual Lego™ blocks—arranged, stacked, and connected in a configuration and on a timeline that suits the enterprise’s needs, desired pace, and budget. The key is to do it strategically. A roadmap to build an integrated data platform is crucial, and the proper sequencing of the components is a critical success factor. **Think big** (about the platform and the overall data landscape), **start small** (with one or two components you can manage and achieve and early win), and **scale fast** (by using the momentum to overcome data and organizational inertia and continuing to build out and grow the burgeoning platform).

First, think big. You must envision the data management platform you want to build. What capabilities does your business absolutely need to be successful in its competitive market? What is most likely to disrupt your industry in the next 24-48 months? What technologies are going to get you ahead of that curve? When it’s clear what you are building *towards*, you can begin building the base required to get there. We all also know innovation and disruption can happen fast, so the foundational platform must give you the speed and agility to develop and deploy a new application or technology quickly. If you adopt a new emerging technology that will change the game among your industry peers, you can be bogged down by 6 months of “data conversion” or “data quality woes” to get it off the ground. The data needs to *be there* and waiting for the future applications that will connect, consume, and produce additional data.

First, think big.

Second, start small. Step back and strategically assess where you are. Ask yourself what are the data risks to moving new business initiatives forward. Are you in “spreadsheet purgatory” plagued by “spreadmarts” and Death-by-Excel? Consider getting your key data under management with master data management. Are you overwhelmed by an influx of data volume and variety that is either being ignored, unanalyzed, or even worse, discarded? Consider a smartly-constructed data lake. Do you have no way to get it into that lake and disperse it amongst key technologies? Start with integration. Is the data of such poor quality and reliability that the business doesn’t trust it or it is unsuitable to build on? Get going with a data quality component. Picking the right place start should be more thoughtful than a blindfolded dart throw. Consider professional services that can

Second, start small.

help assess your current state and pave a roadmap for success and platform build out. They can assist you in starting with an important business problem with clear benefits, but that is scoped for fairly quick success.

Third—and this is the exciting part—scale fast. Gaining momentum with an early success and with a strategic roadmap in place, you can grow and expand into the full-stack end-to-end data platform that will empower your business initiatives with the data it needs to evolve, adapt, and even disrupt. This is data capability maturity at its highest level—optimized data management. Scaling fast does not mean outpacing your maturity, but harnessing the platform and its maturity and rapidly developing, deploying, and pivoting off it. With Informatica Intelligent Data platform, data is an asset and the possibilities are maximized.

Third—and this is the exciting part—scale fast.

Keys to Intelligent Data Platform Success

Stay Business-Focused. While the domains of data integration, data quality, master data management, data security, cloud services and big data are instrumental in achieving business results, they are not the end product that business needs. Your business needs bottom-line results – ROI. ROI can happen through short-term financial bottom-line impact or through information-borne innovation that yields ROI later. The initiatives you advocate should not be “master data management”, “big data” and the like. They should be closer to ROI as in “targeted marketing”, “fraud elimination”, etc.

Lead from Data. As noted before, Data Leadership is Business Leadership. As a data professional, be bold. In many organizations, the data professionals hold the keys to company viability and success, yet the business does not always recognize that. Utilizing new approaches like an Intelligent Data Platform are essential to keeping data maturity going. Get the data act together for your company such that the data is “screaming out” what needs to be done with it. This is the high calling of the data professional today.

Sequence Appropriately. I gave this a treatment in the earlier section due to its importance. Some elements of the sequencing of the initiatives of the Intelligent Data Platform are easy to do, how initiatives set up other initiatives and, of course, the business importance. Keep in mind you are sequencing *business* initiatives, not technology initiatives. You just happen to be building the intelligent data platform out as part of the initiatives.

Keep in mind you are sequencing *business* initiatives, not technology initiatives.

Consider The Staff. Team member numbers, skills and ability to dedicate to the initiatives must be considered in building the roadmap to the intelligent data platform. I recommend a Navy Seal approach with fewer, experienced resources that can operate at the speed that the business ultimately requires. Furthermore, the intelligent data platform cannot be accomplished without an intense focus on the many and growing technical bases that can be used to store, view and manage data. There are many now, more than ever, that have merit in organizations today, which is why I advocate companies have a Chief Data Architect, or similar, position to govern the introduction of new data technologies.

Approach That “True North” Architecture Every Day. You will be either moving your data maturity up or down every day and remember the maturity level credentials continually change. Artificial intelligence looms. Momentum matters and can take the organization swiftly to higher data maturity if maintained. Historically data has not been central to IT architecture. That is fundamentally changing as the business sees the value of data to provide competitive differentiation in terms of better customer

experiences, better patient healthcare outcomes, better operational decisions, etc. Elicit business help and support in growing the data maturity.

Revisit the Target Architecture Periodically. For the volatile and fast-changing, yet very important business asset of data, the target architecture should be revisited every 6 months to ensure the plans are in synch with the best approaches and technologies the market has to offer. An intelligent data platform that can grow in a modular fashion approach helps to enable rapid changes in data management priorities while minimizing disruption to productivity.

Exhibit Leadership. Change never comes easily. Yet, data foundations at organizations need rapid and consistent change today. Continual advocacy of the intelligent data platform and other approaches deemed essential is going to be required. Lead with a good helping of positive attitude, delegation, vision, motivation and goals and your journey will be exciting and productive.

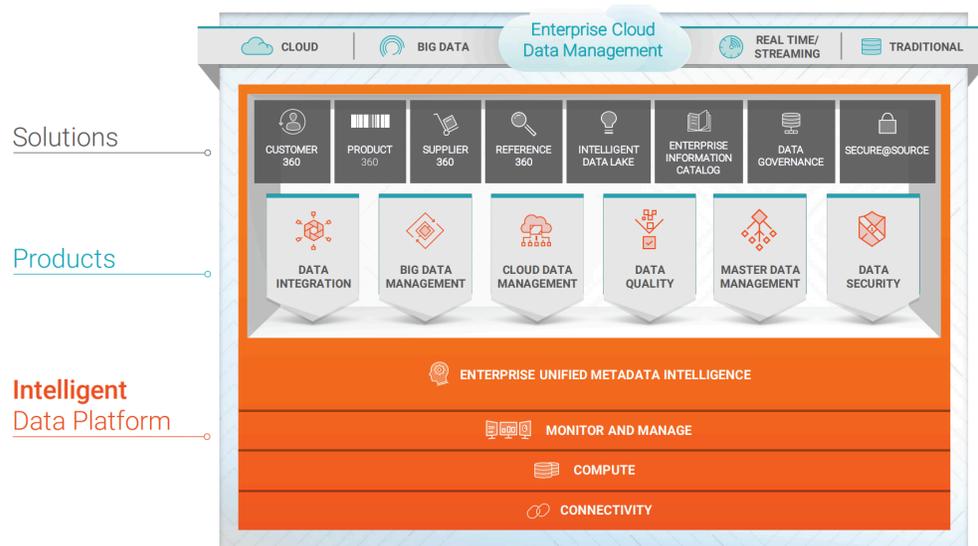
The Informatica Intelligent Data Platform

The Informatica Intelligent Data Platform (IDP) is an integrated end-to-end data management platform to spur data maturity and enable business initiatives with the right data at the right time. IDP also aims to decrease complexity by providing a unified platform for enterprise data, connectivity, metadata, and operations. This brings the entire realm of data management under a single umbrella.

The IDP rallies the enterprise around a simplified and unified data management capability, because it accelerates the development and deployment of new data management projects. It is based on a next-generation, no-coding user experience across all of the data management capabilities of the platform. No more data conversions, expensive data integration development, or quality issues. The “data” bar on technology project Gantt charts shrink considerably.

The IDP also provides a powerful and consistent set of capabilities for managing data wherever it lives—on-premises or in the cloud—and what it is—from master data to big data. The Intelligent Data Platform is also modular allowing you to start with any single component and grow at a pace that makes sense for the organization. Relatively few organizations are going to get funding to go do a whole new data management architecture at once. Investing in it and building it out as they deliver new business initiatives and their needs grow are more typical.

The following diagram illustrates the different components.



What likely will set the Informatica IDP apart, however, is its artificial intelligence (AI) capability—the CLAIRE™ engine. CLAIRE™—or Cloud-scale AI-powered Real-time Engine—uses AI and machine-learning powered by enterprise-wide data and metadata to automate aspects of data capability maturity and significantly boost the productivity of all managers and users of data across the organization. CLAIRE™ uses (and augments) metadata—the technical, business, operational, and usage data about data—to intelligently accelerate data management capabilities in the Intelligent Data Platform.

CLAIRE™ currently enables intelligent discovery of data similarity, discovery of domains and classification via tagging, entity detection and definition, data recommendations, discovery of data structure, and anomaly detection. Informatica plans to continue to integrate into additional parts of the platform over time. By automating these capabilities with artificial intelligence, you can see how rapidly data management capabilities are propelled forward and new data acquisition is accelerated.

Data-centric business initiatives are built on a foundation of data and data management maturity. Remaining competitive and leading in today's business climate requires building a competent data management capability to fully leverage the power of data and deliver data at the speed the business requires. Data management is challenging even under ordinary circumstances, but under the extraordinary circumstances of the modern world, conventional approaches cannot meet the challenge or scale into the future.

Standardize on an end-to-end data management platform that uses the power of your data, metadata, and advanced capabilities like machine learning and AI to remain in front of digital transformation that is changing our world. Data provides the foresight to become more agile, realize new growth opportunities or even invent new things, and will be leveraged not just once, but again and again. Get your data act together with the Informatica Intelligent Data Platform.

About the Author

William is President of McKnight Consulting Group. He is an internationally recognized authority in information management. His consulting work has included many of the Global 2000 and numerous mid-market companies. His teams have won several best practice competitions for their implementations and many of his clients have gone public with their success stories. His strategies form the information management plan for leading companies in various industries.

William is author of the books *Integrating Hadoop and Management: Strategies for Gaining a Competitive Advantage with Data*. William is a popular speaker worldwide and a prolific writer with hundreds of published articles and white papers. William is a distinguished entrepreneur, and a former Fortune 50 technology executive and software engineer. He provides clients with strategies, architectures, platform and tool selection, and complete programs to manage information.

About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in Enterprise Cloud Data Management, we're prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.