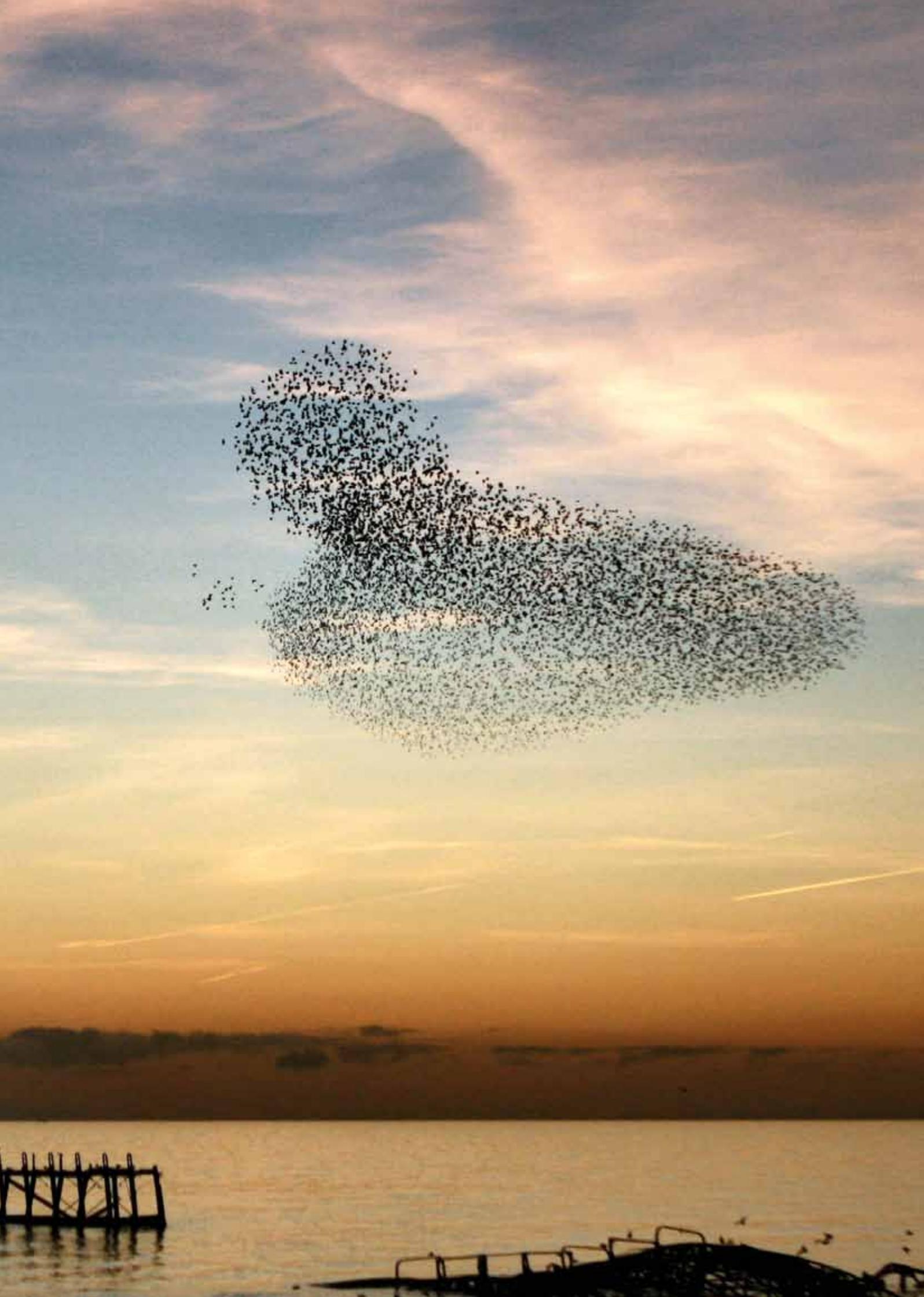


Know Your Customer, Understand Your Business

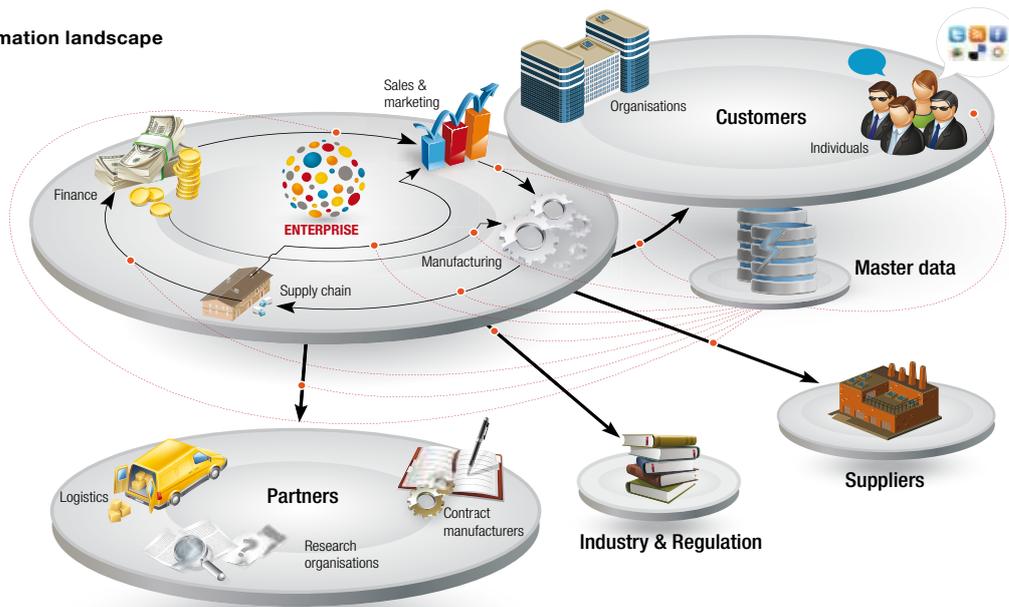
**An MDM approach to effective
customer management**



People matter, results count.



MDM information landscape



Legends

-  Information flow of transactional information and events
-  Translation via master data

Picture this: A parent goes online to order a laptop for her college-bound daughter. After an hour, she finds the process of configuring and ordering her system to be confusing and frustrating. In desperation, she calls the company hoping to have better luck with an actual human being. The sales rep on the phone receives an alert that the caller isn't just another confused web-user; this working mother is the purchasing executive for a large insurance company who currently buys more than \$10m dollars in computer equipment from them each year. Instantly the system flags the parent as a "platinum" customer, presents a new set of available discounts and flags up the daughter automatically as a "gold" customer as a result of her influence relationship. The product configured on the website is automatically pulled up and a series of clear recommendations on alternatives is made. The parent buys the laptop and is delighted when her daughter informs her that a month later she received an offer via Facebook for some discount education software and checking that she was happy with the laptop.

A follow-up call from the corporate sales person enables the company to expand its offerings to the client and deliver a new managed service for computer equipment based on the level of customer service the executive received.

This whole story, from its beginning to its end, illustrates what can be done when a company has comprehensive visibility into their full relationship with their customers. Too many companies have increased costs from flying blind in seemingly routine, every day customer interactions. Treating all customers as equal doesn't work so businesses have a choice: Take control of the problem or leave these decisions to simple chance?

If the opposite of this positive scenario seems more likely, that's probably because it is. Lack of customer visibility is so widely prevalent in business processes worldwide, the issue crops up in some surprising places. For example:

- A social services administrator of a large urban county in Southern California who finds out he's been

sending checks to the family of a beneficiary who has been dead for three years

- A money-center bank that finds they've been paying six times over for the same credit check for more than 30 million consumer and small business customers
- A financial institution which loses a major corporate client due to aggressively chasing their CFO's spouse for a minor credit card overspend during a major corporate renegotiation
- A foster care agency in the UK who suspects that a child in their care is a subject of abuse; but because they can't coordinate information about this child with their education and national health service counterparts, the child dies
- A consumer credit organization, which, in attempting to increase market share, saturates their customers' mailboxes with offers and promotions, eventually accounting for fully one third of the bulk mail volume in the USA.

Information Technology has largely failed to keep up with this information challenge because most information systems are purpose-built to manage processes, but not to manage data. IT makes it easier to open a bank account, move your medical records, change insurers, apply for benefits, and pay taxes. But for the most part, little is done to ensure that duplicate representations of the customer, patient or constituent are not introduced through each one of these interactions, perhaps multiple times. Over time, a tolerance for poor information quality and reliability has an impact on business performance as customers are badly sold to, badly marketed to and badly serviced due to an inability to recognize and track them through successive transactions. Eventually, data duplication and inaccuracy cumulates to a point where organizations aren't even sure how many account holders, patients, or taxpayers they really have, let alone assess their exposure to credit risks, understand the effectiveness of medical procedures or anticipate future demand for services.

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“Know Your Customer”... not just a good idea ... it's the Law.

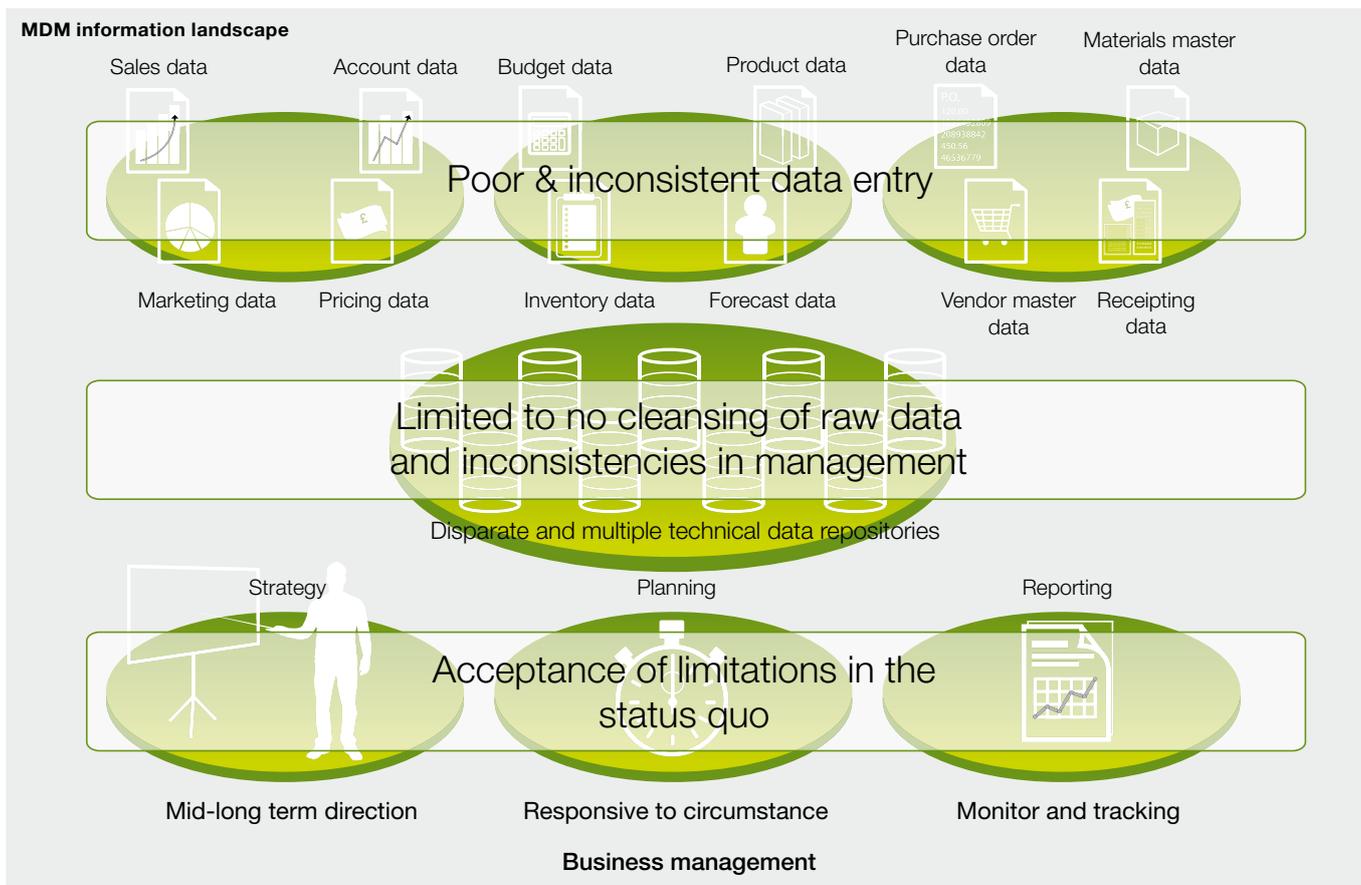
As you might expect from an issue that impacts public safety, not to mention tax revenue, as much as customer satisfaction, a growing number of legislative and regulatory initiatives have been introduced trying to deal with poor quality customer data. A few examples include:

- **The USA Patriot Act** contains provisions dealing with the identification of new customers (“CIP regulation”) in a number of commercial and government processes
- **Anti Money Laundering (e.g. Bank Secrecy Act in USA)** set up to prevent fraud and money laundering require organizations to clearly identify customers within high value transactions
- **OFAC** – the Office of Foreign Assets Control publishes lists of individuals and organizations with whom United States citizens and permanent residents are prohibited from doing business

- **Basel II** requires organizations to maintain adequate capital reserves link to exposure from a potential default from individual or commercial trading partners
- **Data Privacy legislation** that requires organizations to provide all information held on an individual and for consistent access and marketing policies across a whole group
- **FATF** – the Financial Action Task Force an intergovernmental body sponsored by the G7, maintains rules regarding conducting commercial business with Politically Exposed Persons
- **HIPAA** – the Health Insurance Portability and Accountability Act specifies regulations regarding the dissemination of patient information, including medical histories, subject to the expressed permission of the patient.

For most financial institutions, indeed any commercial enterprise that conducts business internationally with government, or deals with medical, legal or financial information, it is no longer an option to institute and guarantee compliance with these and other regulatory regimes is no longer an option. It is a pre-requisite to doing business at all.





Regulations such as these are often broadly categorized under the heading, “Know Your Customer”, or “KYC” for short. It may sound like a marketing catch-phrase, but KYC has real teeth. Failure to comply with these and other regulations can result in financial and law enforcement audits, fines and prohibitions on doing business in certain sectors or countries, even jail for an organization’s executives and officers.

Comply for compliance, or comply for success

The choice on KYC is whether to you look for the quickest way to undertake compliance via back-office reporting, or to look at the most efficient way to balance compliance with competitive advantage. Compliance based purely on cost means meeting the requirements of the legislation, but not delivering any of the operational benefits to your own organization: in effect the legislation becomes a tax on operations. A much more effective business strategy is to consider how

the business can operationally comply with the legislation and thus not only meet the legal requirements but also gain the business advantage that a uniquely identified customer base will give. In other words, while you may initiate a KYC program because you have to, that doesn’t mean you can’t use KYC to make money, lower cost, or in short perform better as a business.

How do you “Know Your Customer”?

Unique identification is a governance challenge. Unique identification is something that sounds simple; all you have to do is ensure that every customer that you deal with has only one record within your systems. In order to do this however you need an enterprise wide understanding of the definitions of a customer. Is it the same in all entities, is a ‘prospect’ a customer or should these be handled differently? This agreement, by the business on the information definition of a customer, is essential as without it none of the technical elements are

going to be based on operational reality or agreed business practice. Then the business must agree on what constitutes a certain or probable match. This is rarely based on a single characteristic so a clear set of business policies are required.

you need an enterprise wide understanding of the definitions of a customer.

The reality is that it is impossible to get every decision right automatically therefore it’s important to also decide on the practice for resolving probable matches within normal operations or as an additional back-office process. Setting the thresholds between certain and probable is an on-going and evolving exercise, not something that is done once and left. These policies should be enterprise-wide and not considered optional based on channel or local whim.

Automating the policies

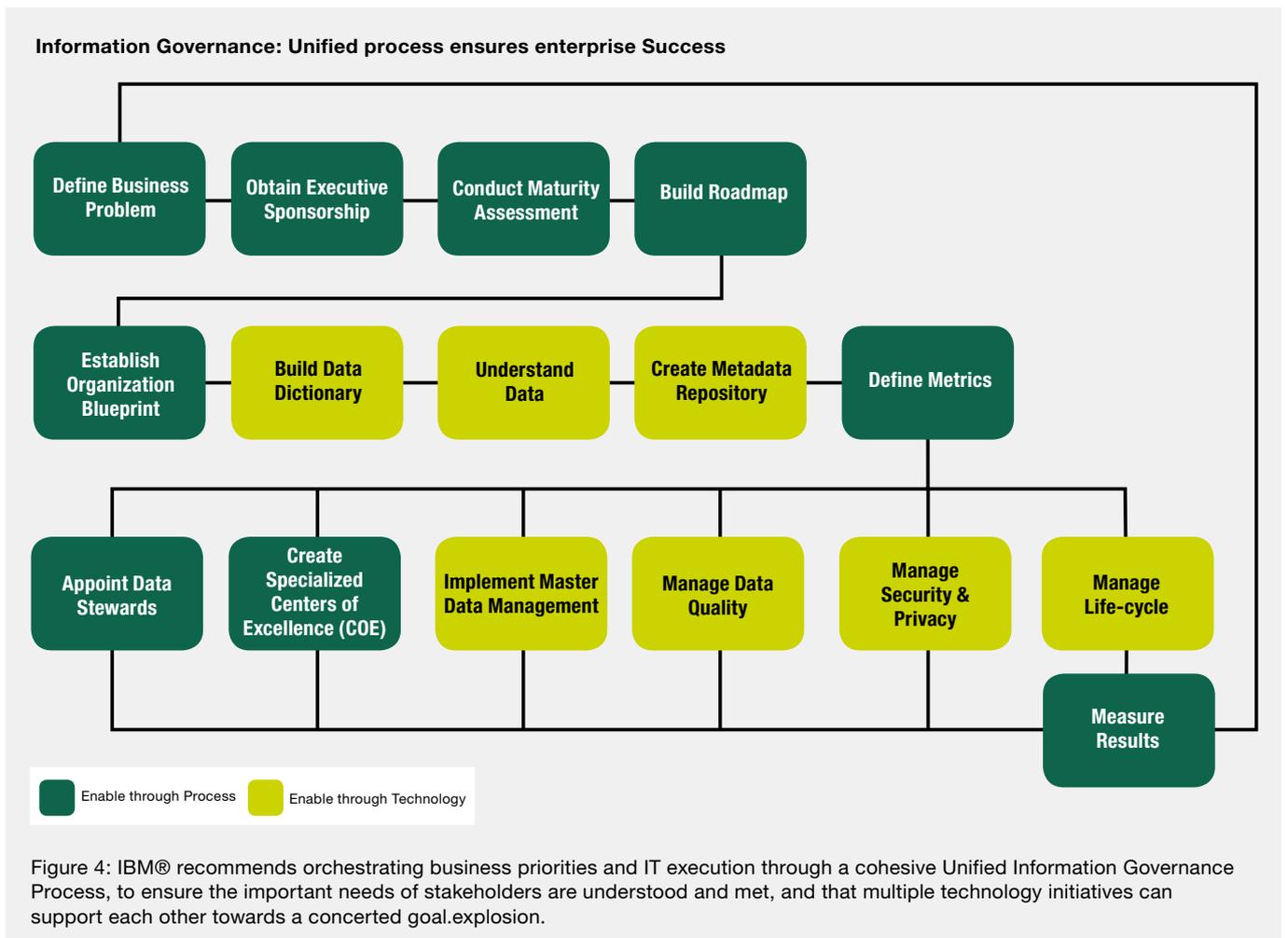
So, as a practical matter, how do you turn the “Know Your Customer” policies into operational reality? It seems reasonable to turn to automation to try to solve at least the customer identification dimension of KYC problems. But automation in itself creates its own challenges. For example, your system will need to get access to customer data across all the systems and online data stores where it resides. It will need to overcome many common data discrepancies (e.g. misspellings, transpositions, out-of-date or missing data) commonly introduced in systems that facilitate customer interactions. And you’ll at all times need to ensure that the resulting, aggregated customer record is correct and validated according to standards your organization sets, both for its internal and regulatory compliance objectives.

Getting to Know You – Identifying the customer from the beginning

Given the volume and variety of customer data typically maintained across an enterprise’s IT systems, automating customer identification and data integration across these systems is the only long term option. It is also essential to start making changes to those processes that create and modify customer data, to ensure the quality, reliability and accuracy of customer information, right at the point of interaction where that information is acquired. It is a good practice to integrate your customer-facing and business process applications with data management and quality management controls, such as “search before create” features that eliminate data duplicates before they’re created, or data quality and validation features, such as physical

address and delivery point validation. These features ensure that customer data is accurate and valid at the time it’s obtained, when a new account is created for the customer, or when the customer independently updates their address information, for example.

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What is Master Data Management?

IBM provides a cost-effective, rapidly deployable solution to complex customer data management challenges

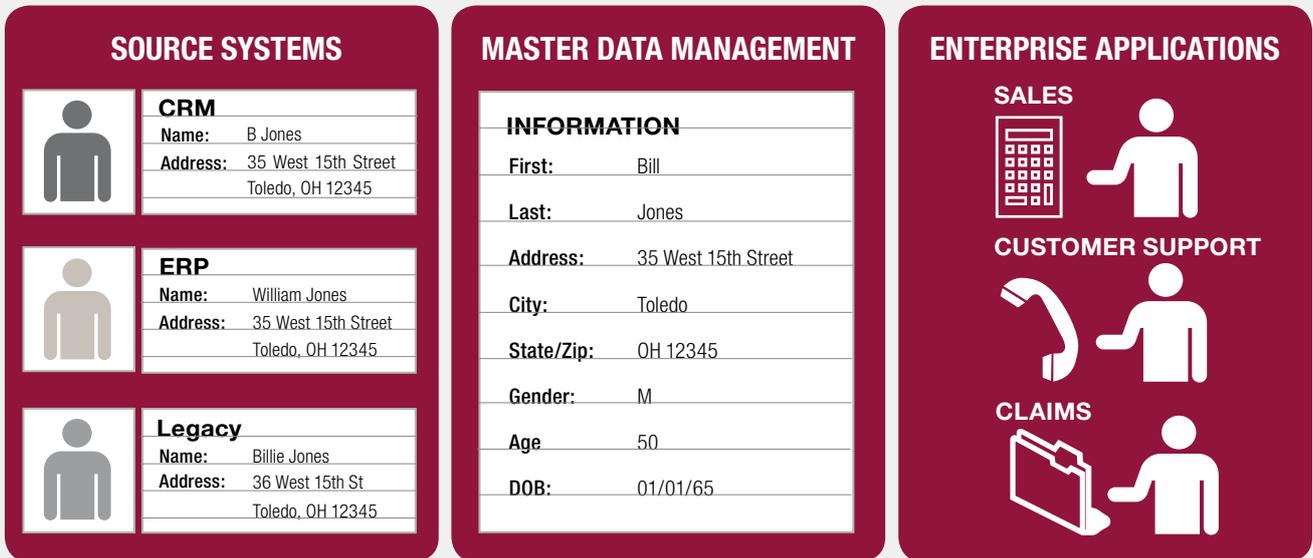


Figure 5: Whether it's a prospect creating a new account, a customer calling the help line, or a patient checking into the hospital, MDM helps connect the different pieces of information about you from all of an organization's systems so that they can have a more complete view of who you are, understand your total value to them, provide better service to you and reduce their operational costs.

IBM® InfoSphere™ has invested heavily in the infrastructure needed to integrate customer-facing “last mile” applications and systems with common capabilities for data integration, reconciliation, validation, standardization and enrichment. One example where this infrastructure has been leveraged quite successfully is in MDM-Powered business solutions for hosted CRM applications. In these solutions, IBM has mastered a number of different MDM, data integration and data quality

technologies into a set of services that ensures the accuracy of data about customers, partners and prospects, as well as the associated contacts for customer organizations. Using a Service-Oriented Architecture (SOA) approach, increasingly common in enterprise data integration, allows for these services to be plugged directly into Software-as-a-Service (SaaS) applications, and for these applications' data to be directly integrated with data from more conventional back-office systems.

In these solutions, IBM has mastered a number of different MDM, data integration and data quality technologies into a set of services that ensures the accuracy of data about customers.

Enter New Account

Search for Duplicates | Continue to Create Account

Account Name:

Street: City: State: Zip: Country: Correct

Address Dr. 200 W Madison St Chicago IL 60606 USA Correct

IBM InfoSphere MDM integration into hosted CRM applications, allowing for incoming customer data to be de-duplicated, validated and standardized before it's introduced.

Master data services are plugged directly into the CRM user experience, ensuring, for example, that redundant customer and contact information is scrubbed, that address and other information about those customers is valid, that augmentation and enrichment with third party information needed for KYC initiatives is available.

IBM's MDM Powered business solutions for hosted CRM applications demonstrate how a complete package of data management systems and services support a specific business goal, ensuring accuracy and relevancy of data used in common customer interactions supported by a packaged applications, like CRM. This business solution is made of a number of technical components, harnessed using a common methodology. But how does this methodology, and the role prescribed by it for each of the supporting technologies, work in a complex and dynamic enterprise IT environment to solve a number of different KYC problems?



How do you know what you know?

Most of us don't have the benefit of starting from scratch. We're trying to improve the reliability of customer information as that information is being updated, as new customers are being on-boarded, in real-time, and reconciling that information against the large volume of existing customer data that was previously obtained, often without quality, reliability or governance controls. Shutting down core business processes that service your customers, and just cleanse and validate this data is simply not possible.

An important step is to start by getting a handle on the scope of your customer data problem. Your existing customer-facing systems and applications contain lots of data, and it's good practice to want to put that data under a microscope, to scan, analyze, profile and report on the completeness of that data, how consistent it is within and across systems and how that data checks out against external reference sources your organization and others trust. This should serve as a baseline against which future improvements can be assessed. You should use this baseline to determine what your priorities should be, which systems are most relied upon, which have the biggest and most pervasive problems, and what quality targets you should set for those systems.

By undertaking these steps, you not only gain an awareness of the customer identification challenge, you also communicate that problem more broadly, in terms that executives

and line-of-business leaders who own customer relationships can readily consume. You also provide the basis by which efforts to mitigate this problem will be understood and judged over time, and how the value of those efforts to the broader organization will ultimately be perceived.

IBM InfoSphere Discovery provides a key set of capabilities supporting the analysis, correlation and reconciliation of diverse sets of customer information, across business processes and applications. Its unique and powerful capabilities enables organizations to automatically describe and document all available customer data sources, identify and cross-reference proprietary systems for classification and qualification of customers and develop rules for mapping and reconciling that diverse data. Discovery is instrumental in determining where data is located and how it's linked across systems, intelligently capturing relationships and determining applied transformations and business rules to deliver a complete customer view. Discovery, when used in conjunction with InfoSphere data analysis, and data cleansing tools, provides a comprehensive platform for the discovery, profiling, qualification and reporting on any organization's information about its customers.

Its unique and powerful capabilities enables organizations to automatically describe and document all available customer data sources,

Major Asia Pacific Bank

A large multi-service bank with several distinct retail brands needed to move from over 70 current customer masters and many different customer management processes down to one standardized approach in order to comply with anti-money laundering, fraud and deposit protection legislation. This also had the benefit of significantly reducing cross brand cannibalization of customers and increasing the accuracy and success of marketing campaigns.

Somebody's got to clean up this mess

Fixing the processes and analyzing the data is great, it gives you a real ability over time to incrementally improve your customer information so going forward the organization will be able to improve and sustain that quality. Unfortunately this doesn't address the other challenge, all of the existing systems and the data within them which fails to meet the corporate or legal requirements.

Because you've taken the trouble to analyze and profile your customer data before hand, you know what the most common data issues are, where the duplication and overlap is, and which systems and business processes are most prone to introduce errors that prevent you from knowing your customer. It allows you to set up your data integration, data quality and master data management platforms with rules and exception processes to dynamically flag and correct the most common data issues you're likely to encounter in customer data.

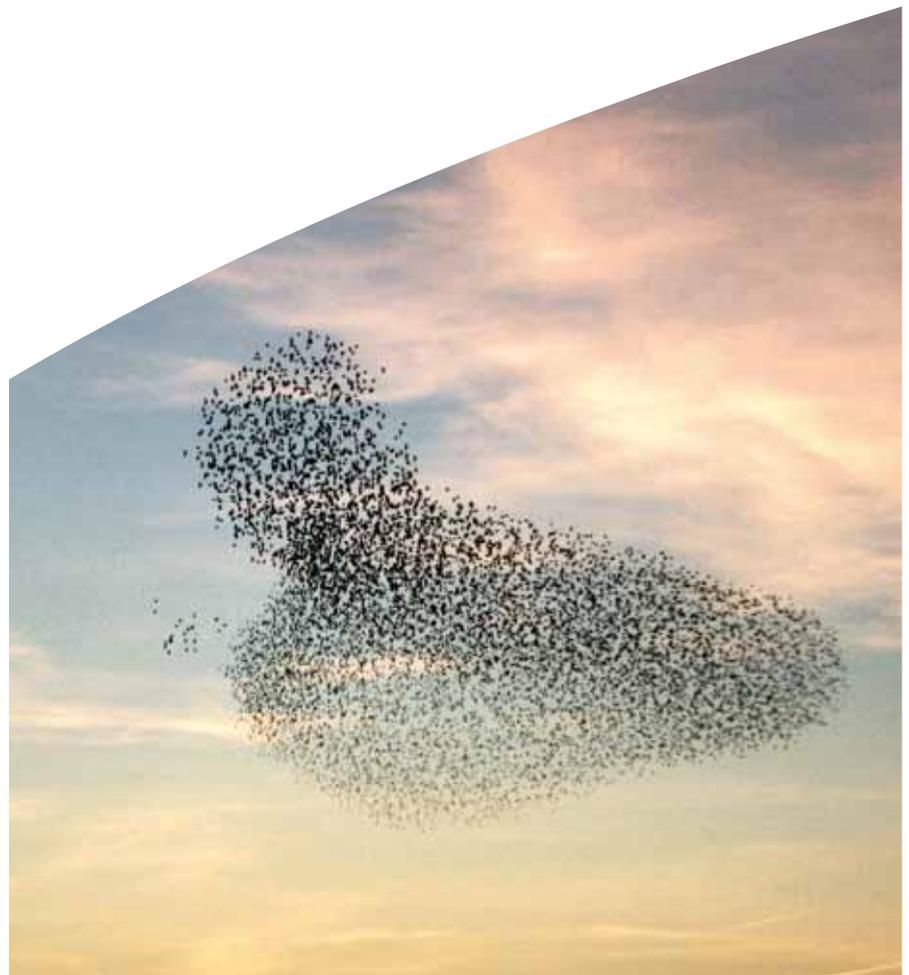
IBM InfoSphere Information Server is the premier data integration, analysis and data quality platform, used every day by the Global 2000 to ensure the completeness, accuracy and reliability of their customer information. Using Information Server, these companies automate acquisition of information across online data stores and business process applications, transform, validate and consolidate that information into centralized, structured repositories, and make that information available to important stakeholders both within and outside their organizations. Information Server incorporates insights acquired previously from Discovery, data profiling and analysis, and can support data cleansing, augmentation and enrichment prescribed by those analyses in its data acquisition processes, both in batch and real-time. In terms of acquiring customer data in support of KYC initiatives, Information Server can be thought of as a great equalizer, overcoming the most challenging integration obstacles

in even the most distributed and technically diverse IT environments, and delivering the information that comprises actual customer knowledge.

Automation may correct 99% of the issues preventing you from correctly identifying your customers, and that's great. If you're dealing with 10, 50 or 100 million customer records, though, that still leaves unresolved discrepancies and unknowns in significant numbers. For these, more opaque, harder to resolve data issues, you can turn to offline processes for data research, remediation and cleansing for resolution. These processes, which are equivalent to processes used by some of the most trusted names in reference data, like Dunn & Bradstreet and Acxiom, will get your customer data to a state of "5-9's" quality and reliability.

"Know Your Customer", Understand your business

Having a high level of quality of customer information is not a goal in itself, ultimately you'll want to leverage the automation you've introduced to cleanse, validate, enrich and match your customer data, across systems and sources, to obtain that single customer view, to help your business recognize and anticipate the needs of your customers. To do this, you'll want to introduce features into your customer-facing systems that allow your line-of-business users, the sales people using CRM, the support reps using your trouble ticketing system and the people executing your fulfillment processes. These users will leverage these features to get real-time access to accurate and relevant customer information they need to serve your customers better, cross-sell and up-sell them better, understand and anticipate their needs more effectively.



IBM InfoSphere MDM provides the platform for turning diverse, distributed customer information into a centralized, reliable store of customer knowledge, and making that information available to diverse audiences involved in KYC and other business initiatives. MDM accomplishes this by first acquiring data, then by leveraging other InfoSphere tools, like Information Server and Discovery, and converting that data into information that conforms to the established standards and practices of the enterprise. For example, MDM will ensure that information pertaining to customer and prospect identity will be available and complete, even for

complex business customers. MDM can ensure that additional information required for compliance purposes, such as OFAC checklist, credit reports and other dimensions of what it means to “Know Your Customer” are included in the central master record. Finally, MDM can make this information available to authorized consumers in business processes where the information is needed, through a robust library of Web services that easily plugs into other application runtimes. MDM provides that “last mile” of capability that not only turns customer information into recognized knowledge, but makes that knowledge

widely available to the constituencies that need it, turning “Know Your Customer” into a practical, day-to-day reality.

Making it work – How to automate understanding

Making these capabilities available to line users of your customer-facing systems is where the organization turns compliance to its own advantage. It is here where IT finally allows you to know your customer at the actual point of interaction where you’re doing business with them. But for most enterprises, customer-facing systems have complex architectures, are geographically distributed and may have distinct differences across business lines.

A successful KYC initiative should deliver this value rather than simply the costs of high quality information. Your customer master data platform must come equipped with the services and interfaces needed to plug into customer facing systems, allow for rapid search and look up, enforce data quality, augmentation and enrichment rules, and validate incoming customer data according to both enterprise and industry norms and standards. Doing so will allow the marketing, selling, fulfilling and servicing functions to operate in a cohesive manner that keeps the customer attached to your brand.

IBM has a strong track record of helping global organizations leverage InfoSphere technologies in support of automating acquisition, synthesis and delivery of organizational knowledge about their customers. The KYC goals to which accurate, relevant and trusted customer knowledge can be applied are as diverse and varied as customer information itself. But one common theme running through each of these goals is the potential value they yield to the organization willing to invest in infrastructure necessary to get beyond simple compliance. InfoSphere software is a critical component for that infrastructure for most of the Global 2000. Perhaps that’s why InfoSphere software is recognized by Gartner Research as a leader in virtually every enterprise software category that’s required to support KYC initiatives, including data integration, data quality, MDM, business intelligence and others.

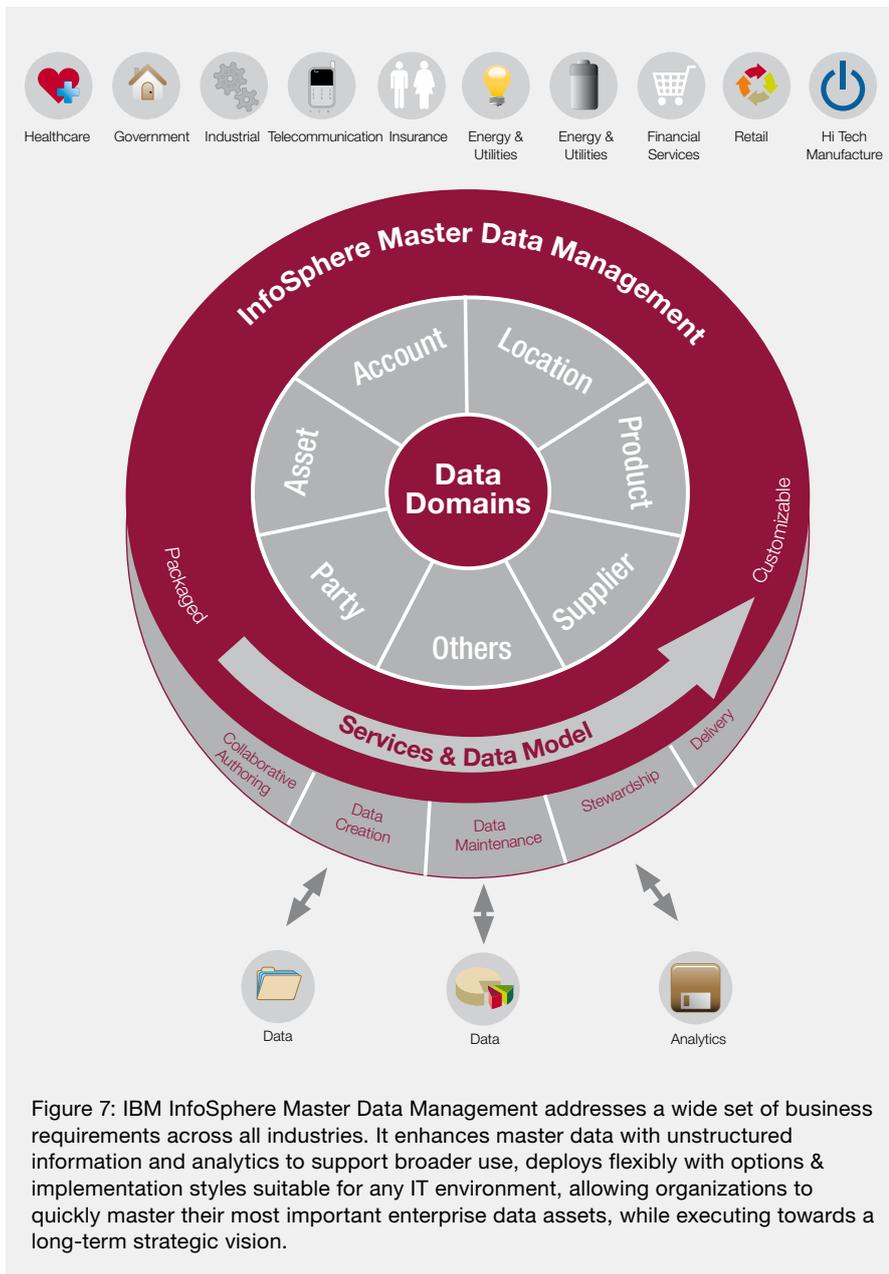


Figure 7: IBM InfoSphere Master Data Management addresses a wide set of business requirements across all industries. It enhances master data with unstructured information and analytics to support broader use, deploys flexibly with options & implementation styles suitable for any IT environment, allowing organizations to quickly master their most important enterprise data assets, while executing towards a long-term strategic vision.

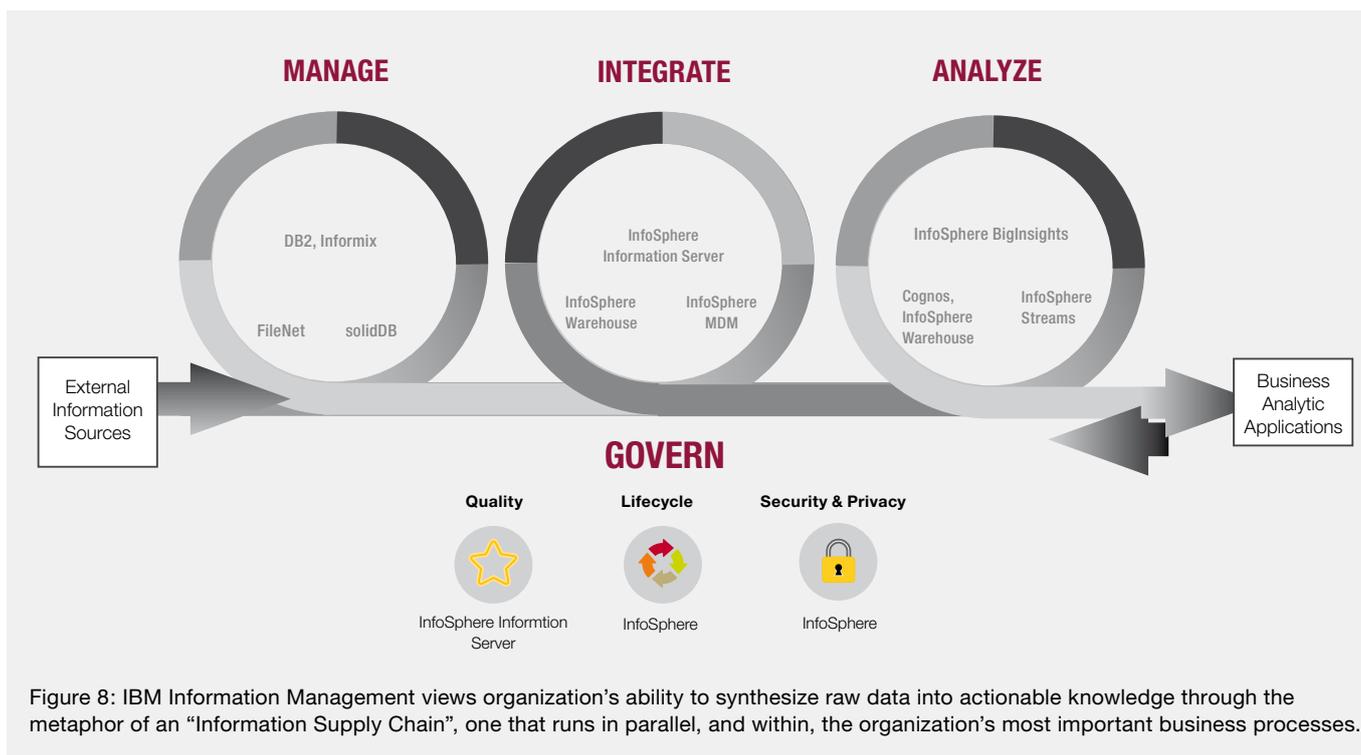


Figure 8: IBM Information Management views organization's ability to synthesize raw data into actionable knowledge through the metaphor of an "Information Supply Chain", one that runs in parallel, and within, the organization's most important business processes.

Sustainable quality over time

To deliver KYC therefore requires:

- Clearly define what KYC means for your business and set up the required governance, policy and standards
 - The identification and prioritization of KYC problems confronting your organization and the expected ROI from solving them
 - Undertake data analysis, profiling and reporting tools to get a quantifiable handle on the customer data issues your organization will need to resolve to meet your KYC goals
 - Introduce automation into your customer facing processes to
- eliminate 99% of the most typical issues affecting the quality of your customer information
 - Leverage offline remediation services to obtain a "5-9's" level of customer data quality and integrity
 - Introduce master data features into the customer-facing business processes to ensure that only high quality, accurate and reliable customer information is used in those processes
 - Leverage master data services in your distributed enterprise architecture to ensure that high quality customer information is universally available and widely leveraged

- Leverage data quality analysis and reporting to quantify improvements in your customer data, as these new capabilities are being rolled out.

Conclusion

How do you get started? We encourage you to take a closer look at Capgemini's business driven MDM approach to solving your most prominent KYC challenges, an approach we've taken into a number of clients worldwide across a broad spectrum of industries. When coupled with IBM InfoSphere's industry leading technologies Master Data Management, Data Integration and Data Quality, these methodologies will allow you to better take advantage of the "carrots" represented by KYC to further understand and anticipate the performance of your business, all whilst avoiding the KYC "sticks". We believe that the track record of Capgemini working in collaboration with IBM will provide you with a strong and effective capacity to leverage your customer information to better understand your business.

US Retailer

A major US retailer has embarked on the Single View of Customer (SVoC) initiative to provide customers with more efficient service, more informed product recommendations and more value-added services like in-home and multi-channel sales opportunities and greater visibility across the lifecycle of their order, thereby improving their experience and their engagement with the retailer. The current solution took over three days to cleanse customer information and this was never fed back into core operational systems.



About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™. The Group relies on its global delivery model called Rightshore®, which aims

to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients. Present in more than 35 countries, Capgemini reported 2009 global revenues of EUR 8.4 billion and employs over 100,000 people worldwide.

More information about our services, offices and research is available at www.capgemini.com

To learn more about Capgemini and IBM solutions that help you to better Know Your Customer please visit the [Information Governance website](#) on the topic or contact bim@capgemini.com

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