

Proactive MDM: Marrying Master Data with Operational Processes to Elevate Business Value

Executive Summary

As the concept of master data management (MDM) has evolved and risen to mainstream status, most MDM implementations have focused on improving the quality of critical corporate data, creating a single version of the truth and improving analytics. In

In the banking space, proactive MDM performs not just the familiar data cleansing, standardization and de-duplication routines; it also impacts the business processes that integrate tightly with ongoing transactions, thus producing a “living” single version of the truth.

most of these scenarios, the MDM hub acts as an enabler for other enterprise applications, such as customer relationship management, supplier relationship management and enterprise resource planning. This approach is overly constraining and has made it difficult for businesses

to see returns on value of their MDM initiatives. It has challenged organizations to do a better job developing business cases and ROI models to justify funding for their MDM programs.

This white paper explores ways to use MDM proactively across numerous business processes. While we focus on banking and financial services, as well as our experience with helping one major European bank optimize its use of MDM, we also share ROI lessons for companies across all industry verticals.

Proactive MDM

As so often happens with new technologies and methodologies, the banking industry is at the forefront of harnessing the benefits of MDM, although companies in insurance, life sciences and retail are quickly following suit. Banking organizations are beginning to look beyond MDM's traditional benefits of delivering improved cross-sell/up-sell opportunities, enhanced customer insight, multi-channel integration, etc. They now see MDM as an enabler for performing many important business processes more efficiently. Performed by or with the support of MDM, processes such as account opening and payment processing are inherently more efficient, robust and scalable than before.

One of the biggest challenges of implementing a customer-centric operational process is that customer data is usually stored across several lines of business (LOBs), often in several different data repositories. Even within a single LOB, there might be numerous databases and systems charged with handling front-office, middle-office and back-office functions. This has resulted in multiple data records of the same entity, a far cry from the single version of the truth.

In the banking space, proactive MDM performs not just the familiar data cleansing, standardization and de-duplication routines; it also impacts the business processes that



Reactive MDM vs. Proactive MDM

Reactive MDM	Proactive MDM
Does not address process issues around managing master data.	Ability to handle master data business process issues.
Uses a "centralized" or "co-existence" architecture.	Mostly uses a "transactional" architecture.
Mostly used for "analytical" MDM.	Mostly used for "operational" MDM to perform business processes.
Most integrations and data exchanges are run in batch mode.	Most data exchanges with business applications -- such as multi-channel front-end, Internet banking, product processor, payment processing, sanctions screening, call center, middle-office -- are run in real-time or message queuing.
A "washing machine" for wrong data.	"First time right" and other new ways of working and defining the right data with the right people.
Business involvement only when a data error occurs; correction managed by IT.	The business owns and understands its data assets. Data is back where it belongs: in the business.

Figure 1

integrate tightly with ongoing transactions, thus producing a "living" single version of the truth, presented in real-time to business users and/or customers at multiple touch points across the spectrum of customer contact channels (e.g., branch, Web, call center, etc.). In other words, MDM has evolved from an impatient teenager to a more mature adolescent (see Figure 1, above). Selected examples of this chrysalis stage of MDM maturity include:

- Customer on-boarding and account opening.
- Customer registration for online banking applications.
- Risk profiling and Know your Customer (KYC) checking.
- Payment processing.

Let us explore the benefits of operational MDM for customer data -- with its ability to perform certain business processes -- in four different, real-world banking scenarios as successfully implemented by one of Europe's leading banking organizations.

Use Case A: Customer On-Boarding

MDM can provide more value when customer on-boarding is performed directly in the MDM hub. By using its sophisticated match/merge capabilities,

MDM can eliminate the creation of duplicate customers during the on-boarding process. For new customers choosing several products, MDM avoids the creation of multiple customer instances during the account opening process. MDM essentially orchestrates the customer on-boarding process and -- based on the type of customer and product selections -- provisions the customer data to different product processor and account origination systems. This customer on-boarding process is faster, more efficient and customer-friendly.

The customer on-boarding process involves multiple users, sub-processes and multi-level workflows. A business process management (BPM) engine can work with MDM to orchestrate all on-boarding processes, control the workflow and store the interim data before the golden copy is created in MDM.

Benefits

- Customer data is mastered directly in the MDM hub, eliminating the need for other source systems of customer data.
- A single source of customer data ensures that accurate, up-to-date information is available to all downstream systems in real-time.

MDM essentially orchestrates the customer on-boarding process and -- based on the type of customer and product selections -- provisions the customer data to different product processor and account origination systems.

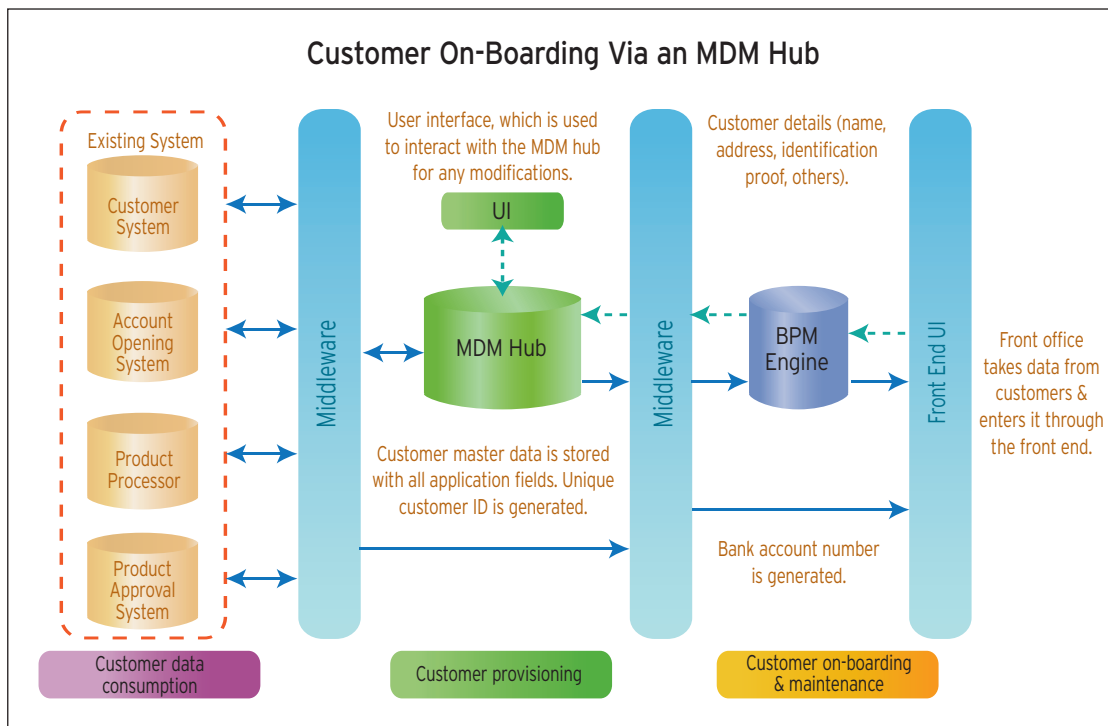


Figure 2

How to Think Proactively About MDM

Answering the following questions may help determine MDM timing, effort and investment:

1. Do your customers complain of disparate information at multiple touch points? What is the effort to reconcile the disparate information?
2. How long does it take you to on-board customers?
3. Are changes in master attributes reflected on all your downstream applications?
4. How accurate are your customer risk-profiling routines?
5. How many duplicate records are in the system? What is the business impact of having these duplicate records?
6. Would you like to speed up your payment processing timeframes?
7. Are the middle office and front office in different silos leading to siloed information and duplicate records?
8. Are your cross-sell and up-sell opportunities limited, due to siloed customer data?
9. Is your organization ready for new compliance regulations touching on customer data?
10. Does your enterprise data warehouse consolidate 360-degree customer data for reporting and analytics?

MDM has transcended its initial reactive purpose of providing high-quality, complete and trusted corporate data, to being a proactive business enabler. This is clearly occurring in the banking industry, where major players are leveraging the process improvement opportunities that MDM helps generate for increased business efficiency and customer service.

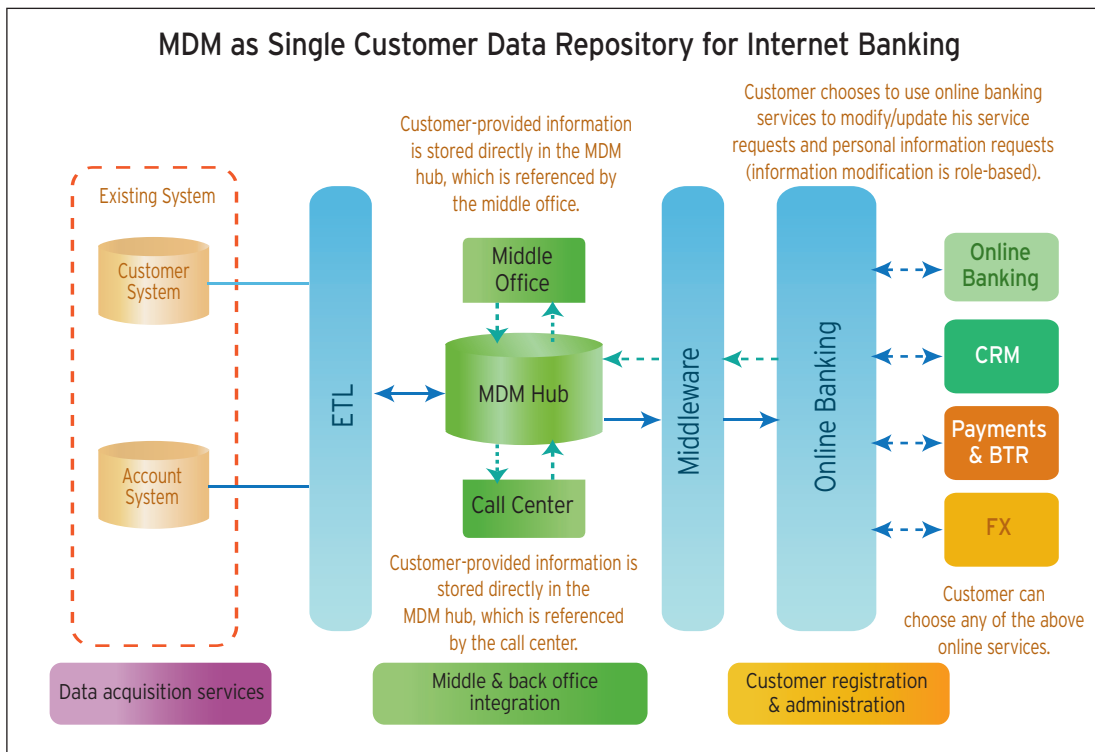


Figure 3

- The customer on-boarding process is faster and more efficient because of MDM playing a centralized role.
- Other bank processes, such as KYC and risk management, can directly access data from the MDM hub as soon as the customer's profile has been entered.
- As all customer profiles are generated in the MDM hub, there is no duplication of customer records. Each customer entry is checked for duplicates before a unique MDM ID is assigned to it.
- Customer service is improved at all touch points through the single view of the customer.
- New data requirements on the customer model can be implemented directly at different levels of the organization.
- Data ownership is clarified. Business people know what they have to do; for instance, that they don't need to fill out a complete customer sheet but only their own partition.

Use Case B: Customer Registration and Administration for Online Banking

MDM can be used in an Internet banking application for customer registration and

administration, servicing various banking services such as cash management, treasury or payments. The MDM hub acts as the repository of enterprise customer data and the data about individual customer product holdings, serving as the trusted source of customer data. The Internet banking channel consumes various MDM services when providing customer and account data to different applications such as customer registration, administration, cash management, etc. MDM provisions customer and account data to these applications in real-time, enhancing the efficiency of these applications.

Benefits

- Customer data mastered in the MDM hub can be used in real-time by various Internet banking applications for other bank processes.
- The time required to carry out bank processes is reduced, leading to higher efficiency and improved customer satisfaction.
- In the MDM hub, master data can be updated from various source systems, such as the call center, the middle office, the back office, etc., which ensures that accurate, up-to-date information is available at all times.
- This approach also helps in effective BI, reporting and analytics by providing com-

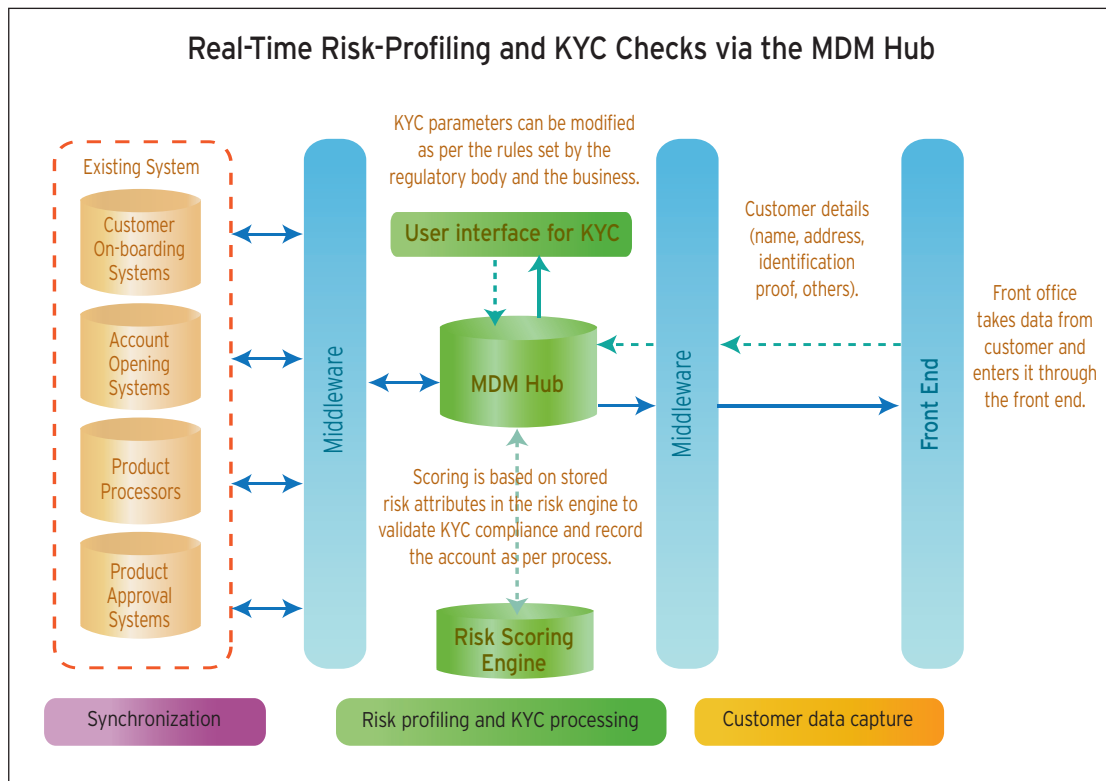


Figure 4

plete, consistent and timely customer data to data warehouse and analytics systems.

- All data integration issues are captured, such as AC Nielsen indicators and Dun & Bradstreet numbers. A single interface is presented to the outside world.
- A single version of the truth for customer data enables banks to execute their business processes in a more efficient way.

Use Case C: Risk Profiling and KYC

The advantage of managing customer on-boarding within MDM can be extended by running risk-profiling and KYC checking processes in MDM, enabling regulatory mechanisms and product decisions for all banking products in real-time. A proactive MDM solution can be extended to calculate the risk score of the customer from the data acquired during customer on-boarding. Based on the risk score, a subsequent routine can perform a KYC check before the customer on-boarding process

In the absence of consolidated data, banks run large-scale manual operations teams, thereby increasing costs and processing time and reducing their ability to deliver faster and better services to their customers.

is completed. MDM can also be used to parameterize risk scores.

By centralizing all these important business processes in MDM, the resulting gains in efficiency and accuracy -- accurate risk scoring, reduced process redundancy during customer on-boarding and KYC, as well as faster KYC process completion -- can generate significant cost savings.

Benefits

- While on-boarding the customer, the data can be shared with the KYC module and the risk-profiling engine, ensuring that the bank immediately knows the accurate risk score associated with the customer.
- The risk score can be parameterized, and the criteria can be changed over a period of time.
- This solution approach supports various banking compliance requirements, such as AML, FSCS, sanction screening, etc.
- KYC helps organizations create better customer segmentation, as well as more focused and cost-effective sales and marketing campaigns.
- A centralized version of risk-profiling, instead of different spreadsheets stored in LOBs, elevates operational efficiency and eliminates errors.

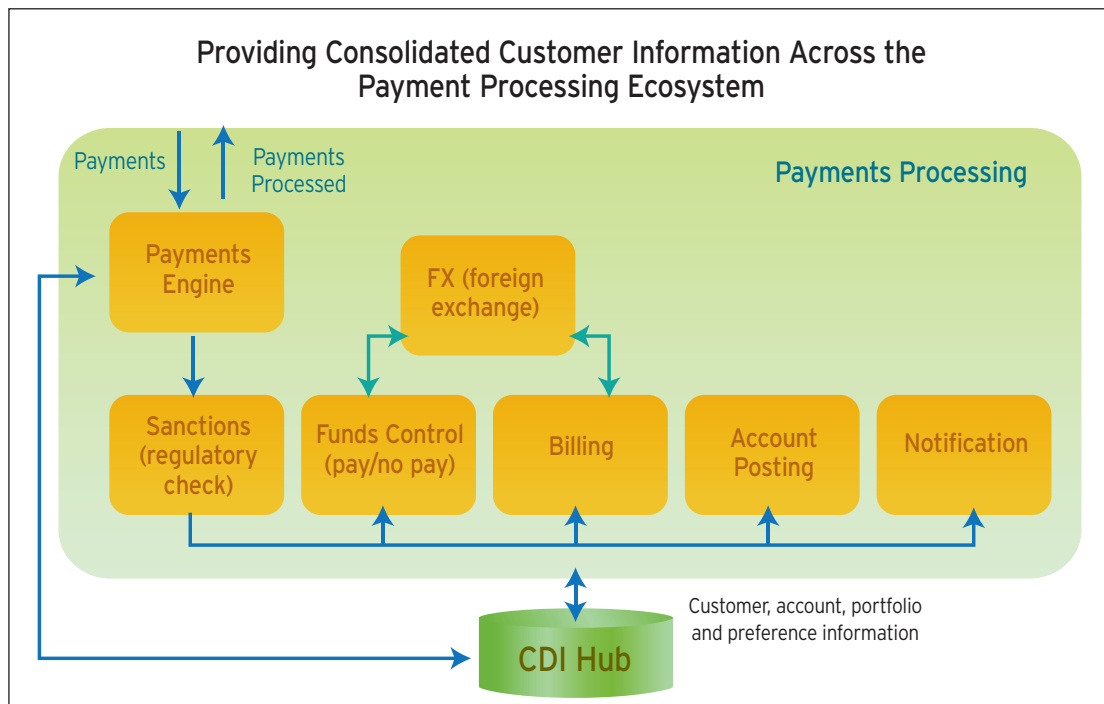


Figure 5

Use Case D: Payment Processing

To deliver quick and effective payments processing, banks need to ensure that sanctioning, funds control, billing and notification capabilities work seamlessly. The process faces numerous challenges, such as a lack of reliable, consolidated information from numerous legacy systems that store customer, accounting and other related information. In the absence of consolidated data, banks run large-scale manual operations teams, thereby increasing costs and processing time and reducing their ability to deliver faster and better services to their customers.

A proactive MDM solution enables an organization to consolidate information across a large number of systems, improve data quality and deliver timely information to the various sub-processes in the payment processing ecosystem. This type of MDM solution not only cuts the required time and effort, but it also reduces customer dissatisfaction over delayed payments.

Benefits

- Accurate customer data and complete trust in the data coming from the MDM hub leads to faster payments.
- The cost of conducting payments is lower when a single global system is maintained,

compared with the use of multiple different aggregator systems across geographies and business functions.

- By having a central repository with a single version of the truth and a secure business process for maintaining customer data, the customer data used for invoicing is accurate and, therefore, will lead to compliance with all the standards required for accurate payments (the right information on the invoice).

Mastering MDM

MDM has come a long way since its inception. Customer data hubs complement BPM and enterprise application integration. Proactive MDM is leveraged to manage business processes across various business functions more effectively. The MDM hub for customer data maintains the customer record in real time. MDM is now being used in conjunction with CRM solutions and customer data transaction systems to help companies derive maximum value from their IT investments. Proactive MDM solutions provide a front end through which master data can be managed.

Across industry, it has become easier to justify funding for MDM projects as they are now seen as a platform capable of carrying out core business processes on top of mastering critical business data.

While none of the use cases at the aforementioned major European bank have gone live, this client (with our help) is well along in creating an MDM infrastructure to help realize the following objectives:

- Simplification of the current customer data management landscape.
- A single identification number for all customers/legal entities.
- Management of customer hierarchies to support risk management and servicing.
- A single global source of customer data, holding core data attributes and registration data alongside product holdings/pointers.
- The ability to manage the movement of customer data between providers and consumers of the data.
- Ability to identify and service a customer globally.
- Ability to satisfy regulatory requirements regarding the global exposure of a large, complex corporate client.

- Elimination of multiple redundant customer data stores in the longer term.

Across industry, it has become easier to justify funding for MDM projects as they are now seen as a platform capable of carrying out core business processes on top of mastering critical business data. The benefits of MDM are realized during the implementation cycle rather than after it. With the onset of proactive MDM, companies can accelerate their ROI. Importantly, the benefits are tangible, immediate and substantial. Immediate benefits include:

- Accurate customer identification.
- Scalable platform for a 360-degree view of customers with product holdings to service commercial customers, globally.
- Platform for customer on-boarding, tightly integrated across channel applications (self-service and assisted, as well as customer desk management) and risk management.

About the Authors

Souparna Giri is a Senior Business Consultant with Cognizant's MDM Practice, with seven-plus years of experience in the IT field. Souparna has a Bachelor's Degree in mechanical engineering from Bengal Engineering College, an MBA in marketing from Great Lakes Institute of Management, as well as rich domain experience in customer relationship management and master data management within the banking and financial services industry. His expertise spans MDM strategy, assessment and roadmap creation; business process modeling; data governance; business process understanding and feasibility studies; vendor evaluation; gap analysis; requirements analysis; functional specification design; and MDM implementation and program governance. He can be reached at Souparna.Giri@cognizant.com.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting and business process outsourcing services. Cognizant's single-minded passion is to dedicate our global technology and innovation know-how, our industry expertise and worldwide resources to working together with clients to make their businesses stronger. With over 50 global delivery centers and more than 85,500 employees as of March 31, 2010, we combine a unique global delivery model infused with a distinct culture of customer satisfaction. A member of the NASDAQ-100 Index and S&P 500 Index, Cognizant is a Forbes Global 2000 company and a member of the Fortune 1000 and is ranked among the top information technology companies in BusinessWeek's Hot Growth and Top 50 Performers listings.

Start Today

For more information on how to drive your business results with Cognizant, contact us at inquiry@cognizant.com or visit our website at www.cognizant.com.



Cognizant

Passion for building stronger businesses

World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European Headquarters

Haymarket House
28-29 Haymarket
London SW1Y 4SP UK
Phone: +44 (0) 20 7321 4888
Fax: +44 (0) 20 7321 4890
Email: infouk@cognizant.com

India Operations Headquarters

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraiipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: inquiryindia@cognizant.com