

July 14, 2020

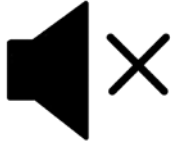
MDM – The many ways to consume Master data

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Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available to view on our **INFASupport YouTube channel** and **Success Portal**. The link will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

Feature Rich Success Portal



Bootstrap trial and
POC Customers



Enriched Customer
Onboarding
experience



Product Learning
Paths and Weekly
Expert Sessions



Informatica
Concierge with
Chatbot integrations



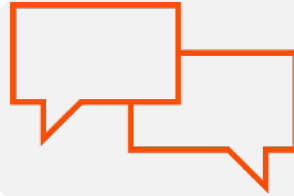
Tailored training and
content
recommendations

More Information



Success Portal

<https://success.informatica.com>



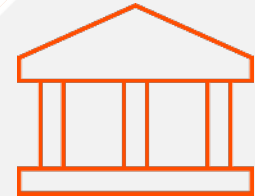
Communities & Support

<https://network.informatica.com>



Documentation

<https://docs.informatica.com>



University

<https://www.informatica.com/in/services-and-training/informatica-university.html>

Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.

Agenda

1

Overview

Why is this critical?

2

Recommended Approach

What does Informatica recommend?

3

Informatica Platform

Informatica Products/Solutions

4

MDM Technical Perspective

Batch, RealTime, UI

5

Demo

Interact with BES

6

Conclusion

Q&A

Intended Audience

- Why this Topic?
 - Based on the fact that some MDM customers are not aware of the different options available to them to consume mastered data
- MDM Project Sponsors
- Business Users
- Technical Users
- Data Stewards
- MDM Architects
- MDM Developers
- New and Existing Business, Technical users of MDM

Overview



Can you easily answer these questions?

How are we measuring the current quality of data across our Enterprise?

How has my MDM project helped me improve the quality of data?

What are my returns because of improved data quality?

How are we Governing/Managing our Enterprise-wide data?

What does great data look like for our business strategy?

Are we enriching our data to get better business decisions and recommendations?

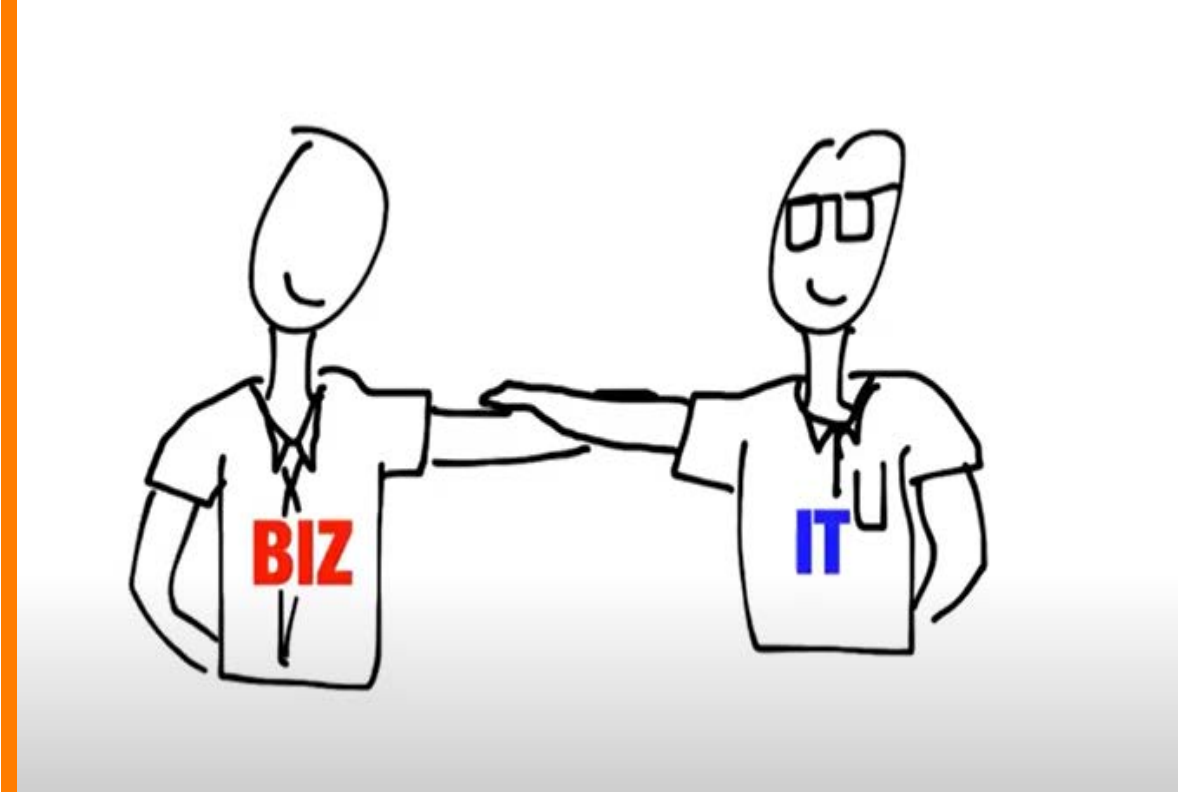
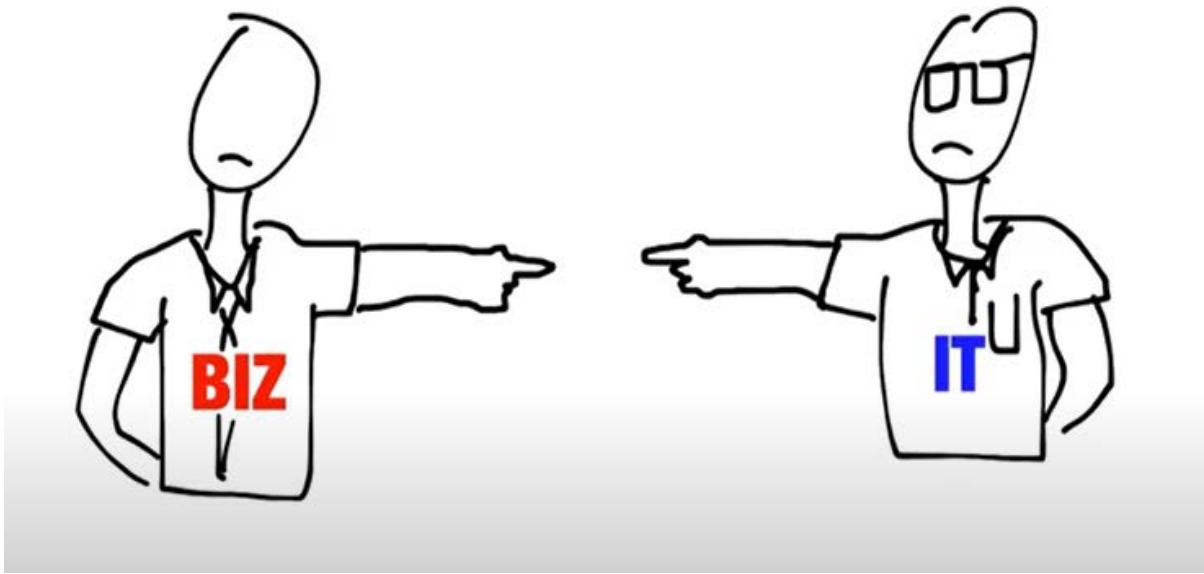
Are we protecting and using our data to comply with privacy regulations?

Do we understand our customers' preferences and concerns?

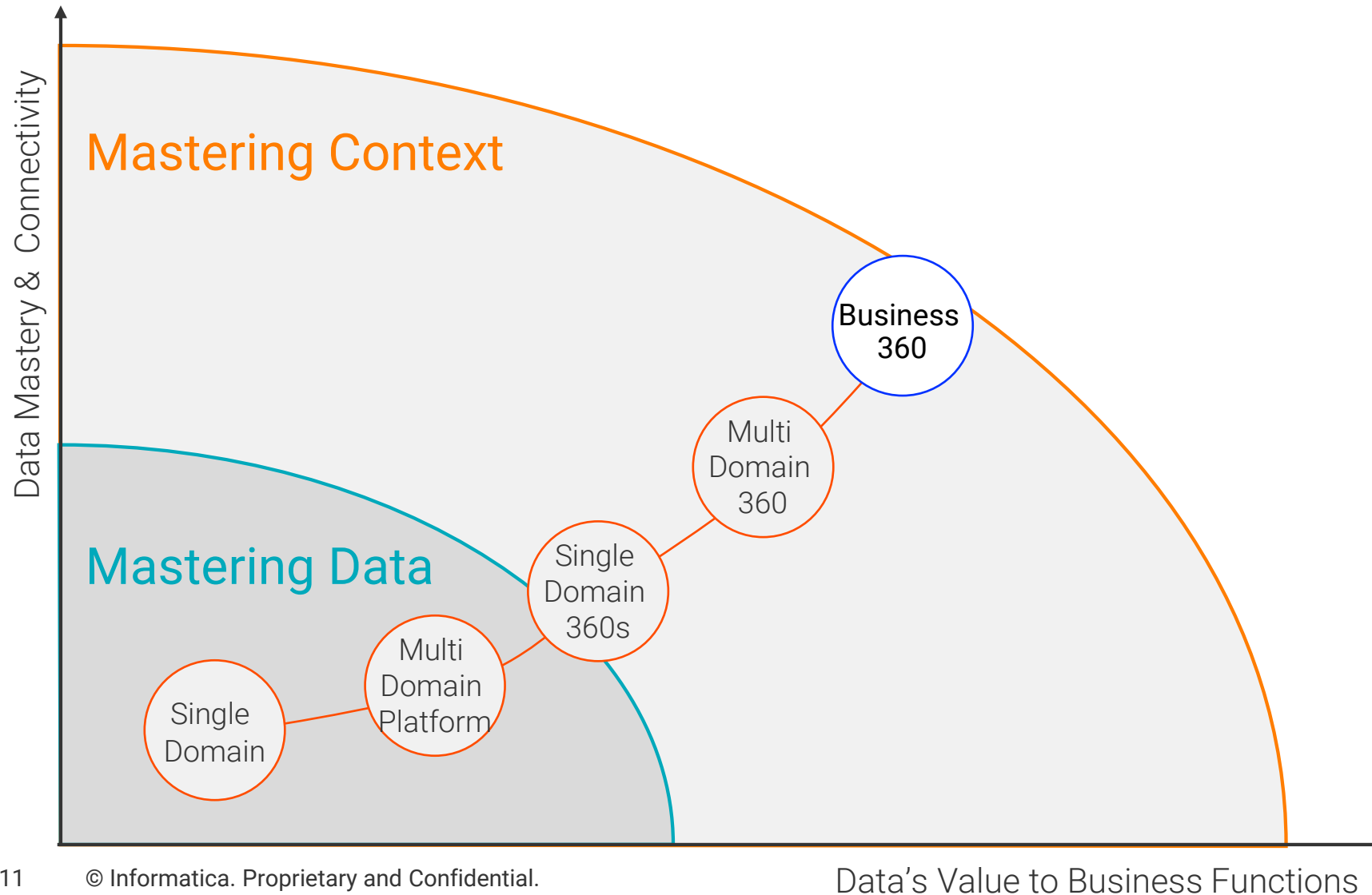
How are we measuring risk? Who in our organization may be able to solve our data challenges?

If not, you would benefit from this Webinar!

Perspective – Sound Familiar?



Master Data Evolves to Master Context for Business



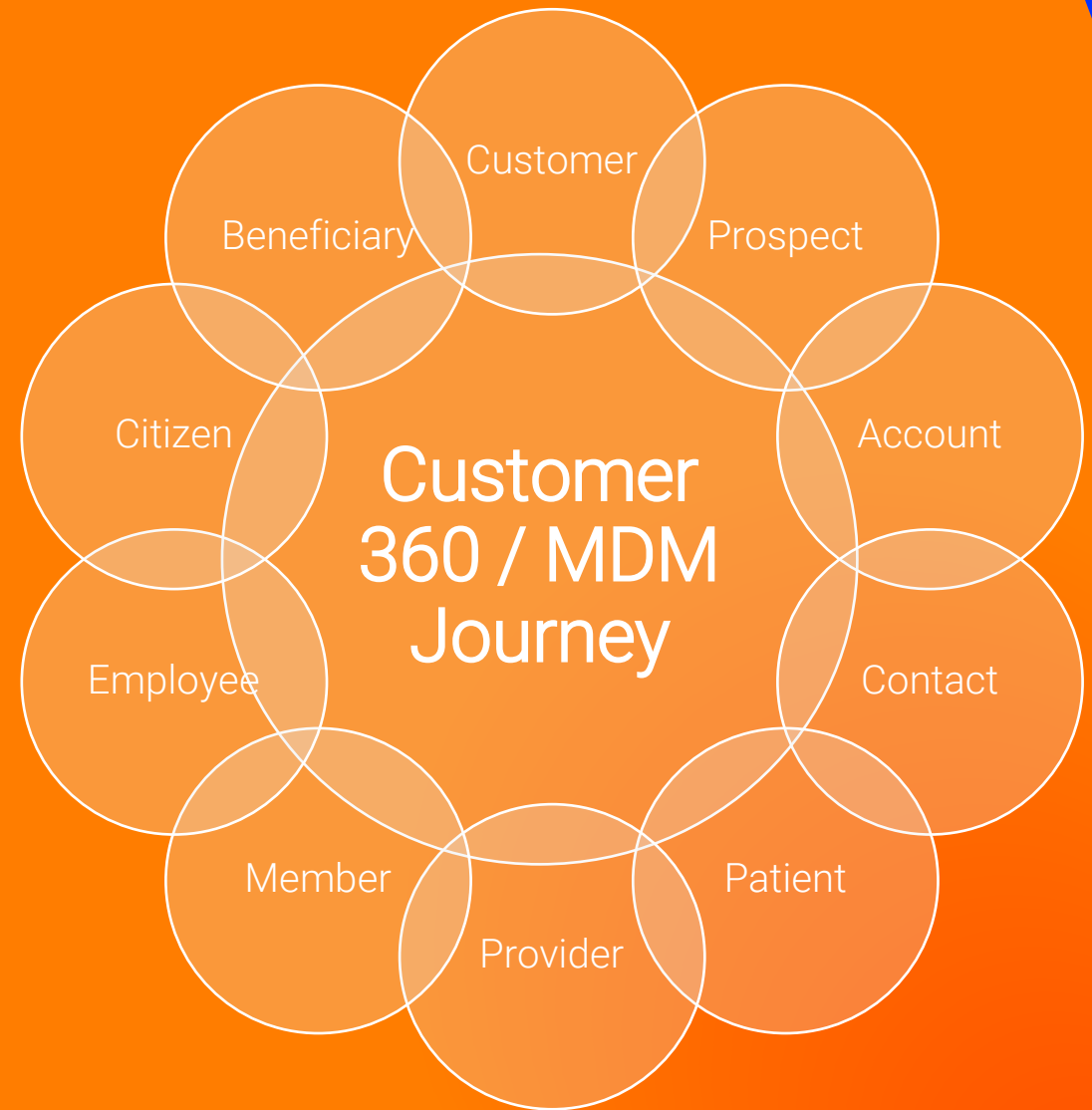
Domain – single business entity

360 – all data related to a business entity, including core + extended data

Context – the ability to both assemble 360s, and present aspects of them in the context of the business process, application, and user

The Concept of a 360

‘Customer 360 / MDM Journey’
means having a complete view of
any entity – individual or
organization – and varies by
industry and company



MDM solution must master data and create a context

Business & Analytical Applications

CRM

Marketing

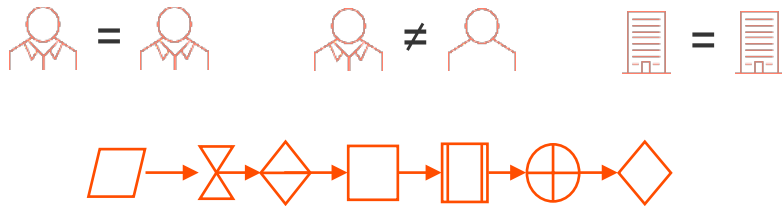
ERP

BI & Reporting

Analytics

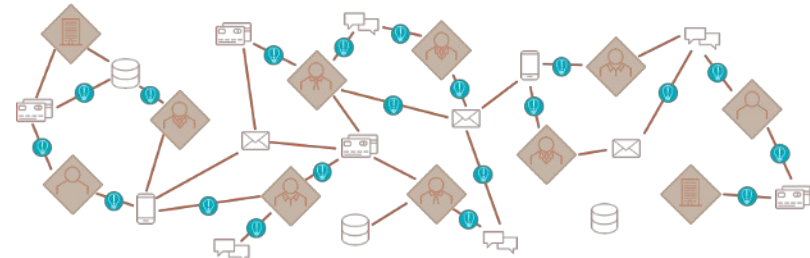
Data Science

Master Data



Create a trusted source of truth
Manages the process of creating & updating master data

Master Context



Connect all data in a 360 Graph
Enriches 360 with analytic insights, calculations and predictions

Existing systems

Accounts

Transactions

Documents

Quotes

CRM

Big Data

Machine
Data

Cloud Apps

Mobile Apps

Data Lake

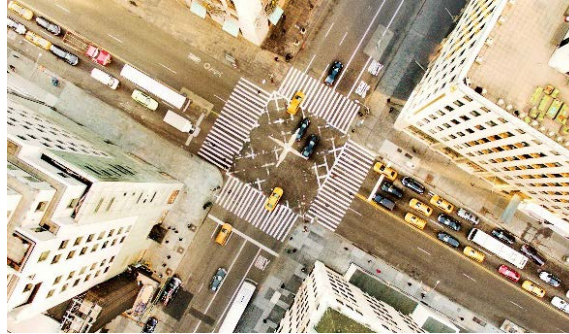
DW

Key Challenges in Master Data Efforts



Product/Solution Fitment

- Not knowing what to expect
- No roadmap or initiative outline
- Lack of business input & involvement



Poorly Defined Scope

- Major customization during implementation and operation
- Flawed or delayed business outcomes



Boiling The Ocean

- Trying to achieve everything in the initial phase
- Lack of technical expertise and incorrect focus
- Loss of business confidence



Lack of Data Governance

- The greatest impact on success is having a common understanding of data & policies
- Delays user adoption and increases time to market
- Biggest hindrance for collaboration

Recommended Approach



MDM is Foundational to Digital Transformation

WHY ?

Strategic initiatives rely heavily on a 360-degree, single version of truth

MDM solution helps you realize rapid success

Build it right first time, modifying 360 model is expensive

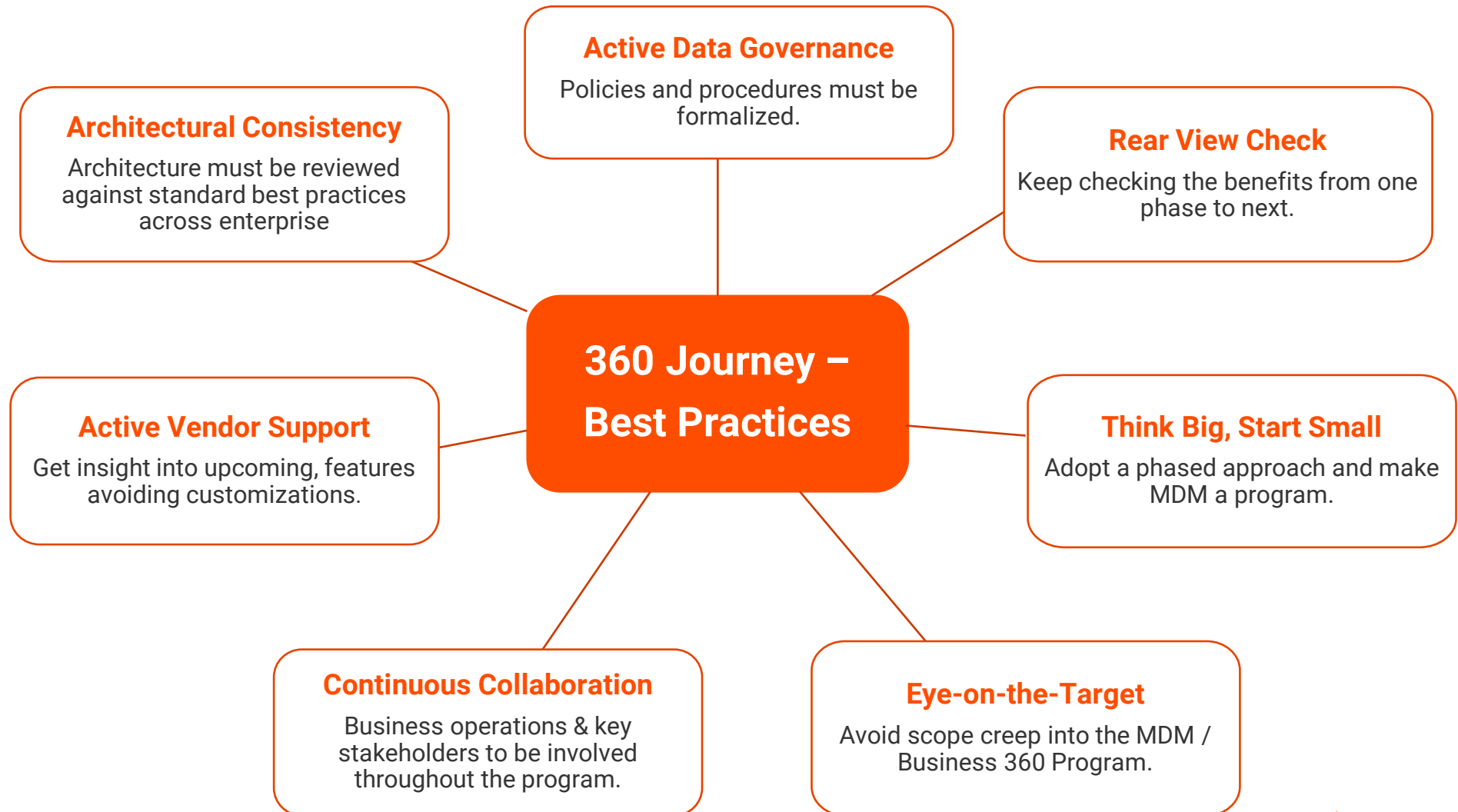
HOW ?

Begin with manageable data sources containing reliable data

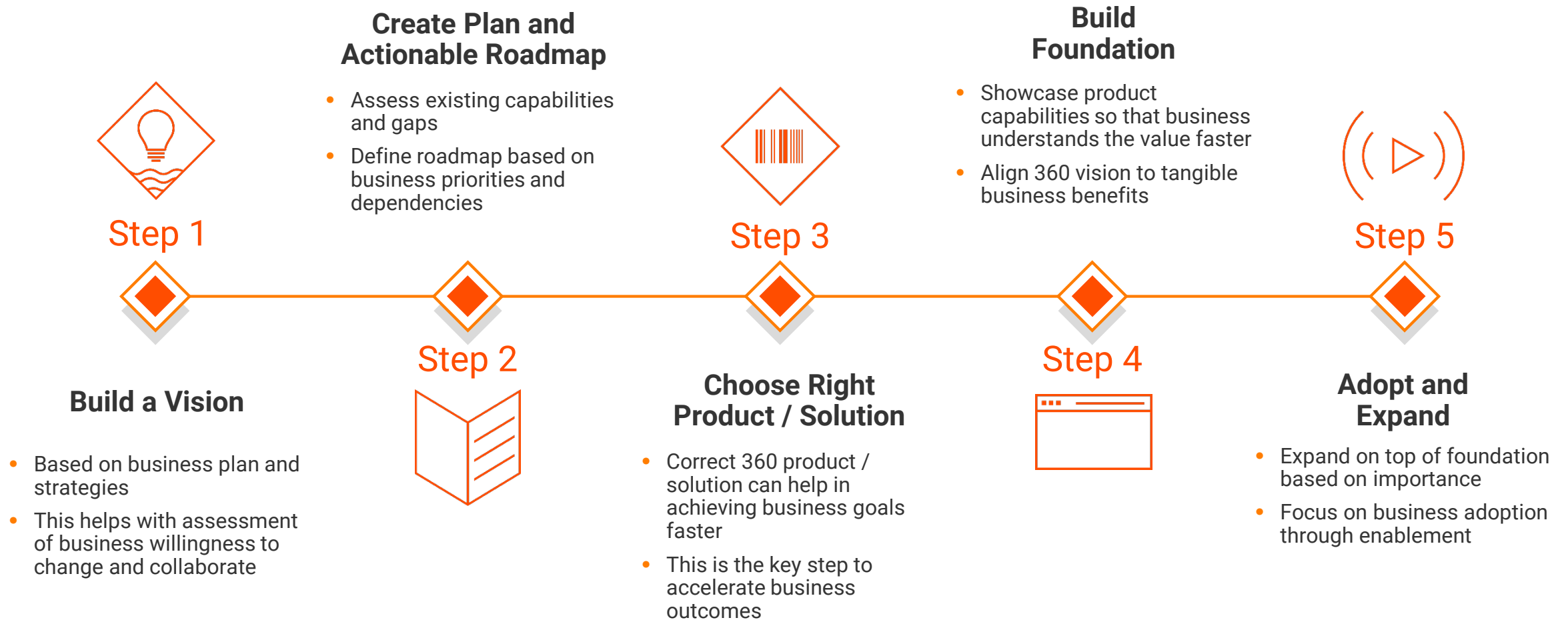
Focus on “high benefit-low effort” use cases for a single domain first

Build business-centric initial solution to support Go-To-Market strategy

Best Practices and Engagement Recommendations

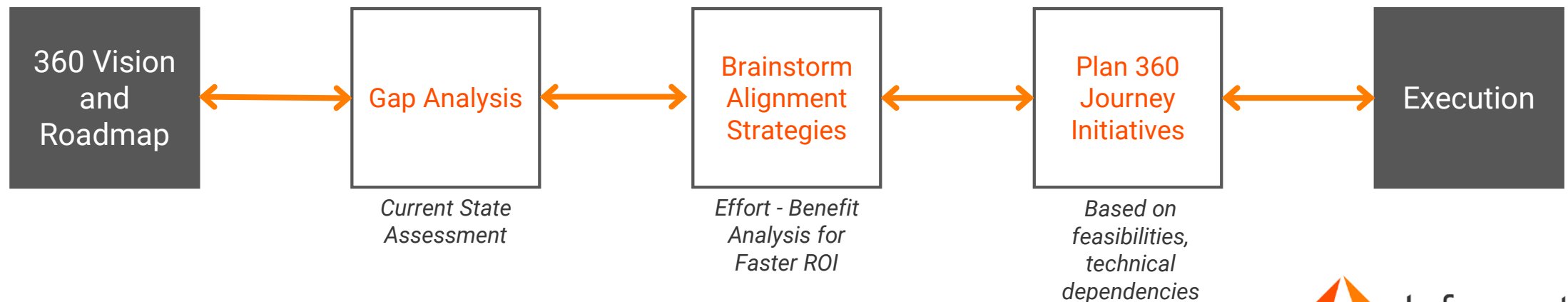


Starting 360 Journey - Approach

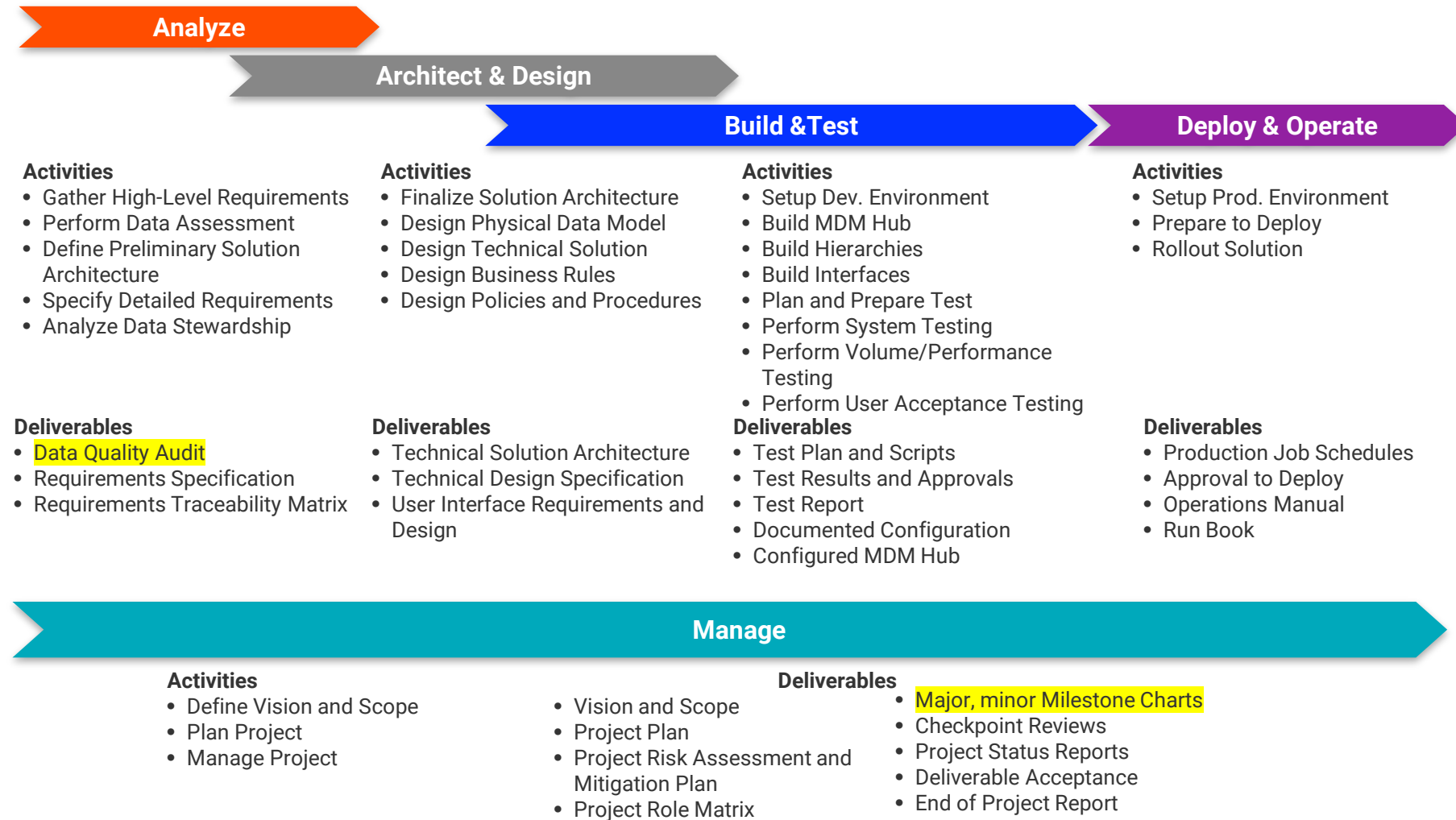




Initiative Planning and Strategy



Velocity Guideline for Implementation



Informatica Platform



Business 360 Solutions Powered by Master Data



Multi-Cloud



On-Premises



CUSTOMER
360



CUSTOMER 360
for Life Sciences



CUSTOMER 360
for Salesforce



CUSTOMER
360 INSIGHTS



PRODUCT
360



SUPPLIER
360



REFERENCE
360

Multi-Domain Master Data Management

End-to-End Master Data Governance

CLAIRE™



METADATA MANAGEMENT



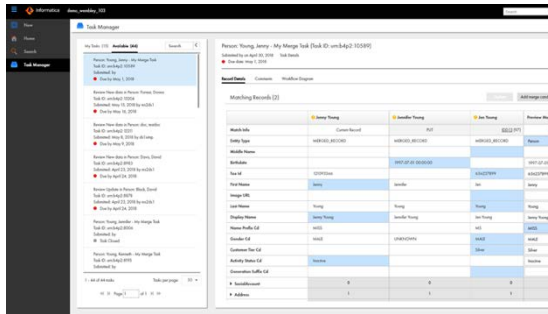
CONNECTIVITY



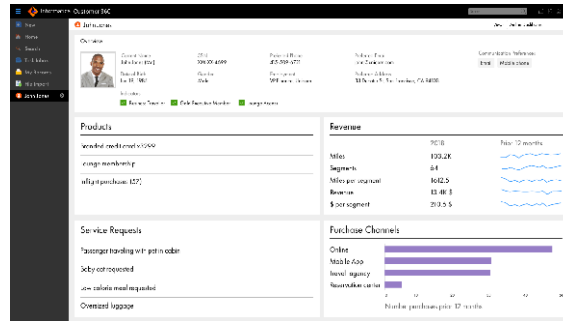
CLOUD-NATIVE, MICROSERVICES-BASED, API-DRIVEN ARCHITECTURE

360 Solutions to Support Top Industry Use Cases

Informatica MDM



Customer 360



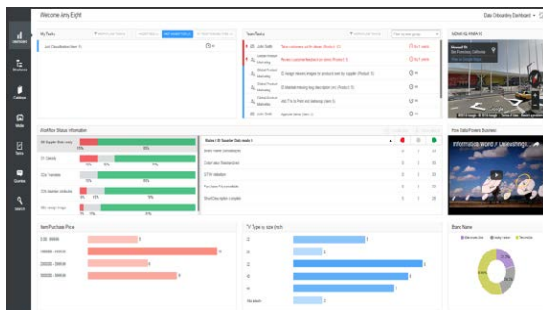
Customer 360 Insights



Cloud Customer 360 for Salesforce



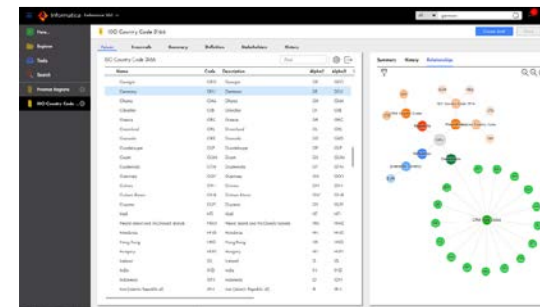
Product 360



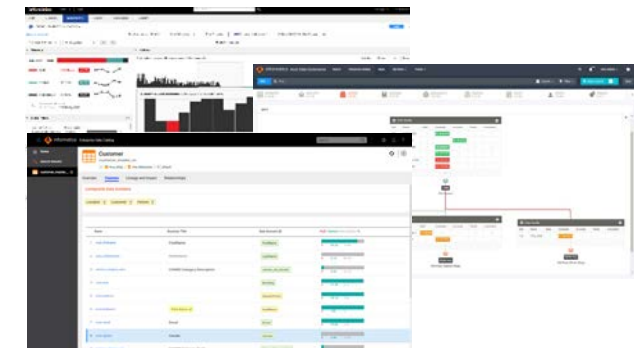
Supplier 360



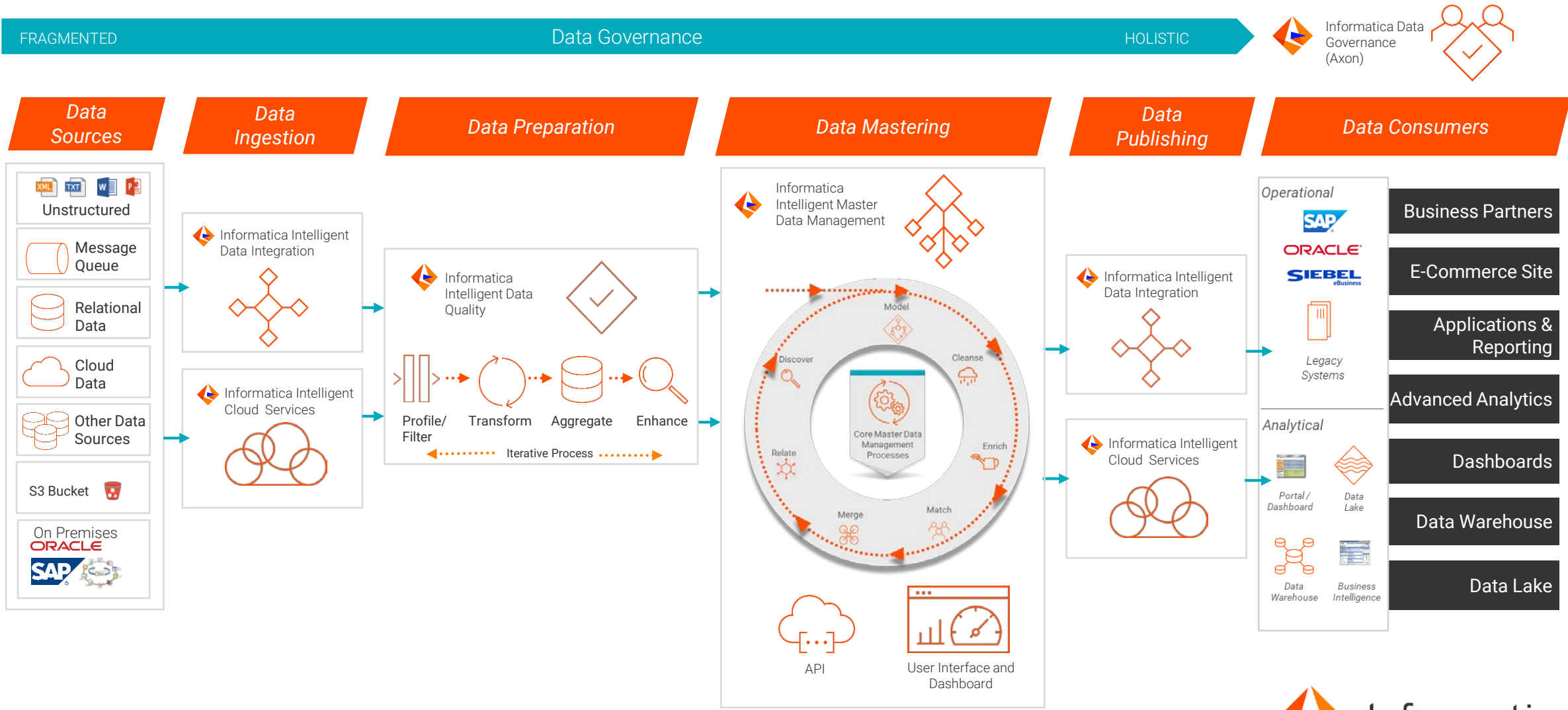
Reference 360

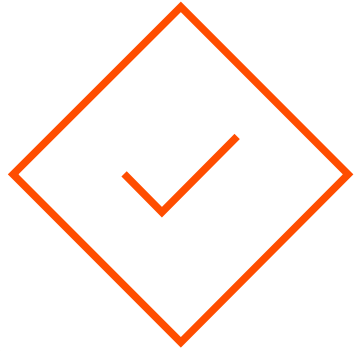


Data Catalog, Quality & Governance



Sample 360 Architecture

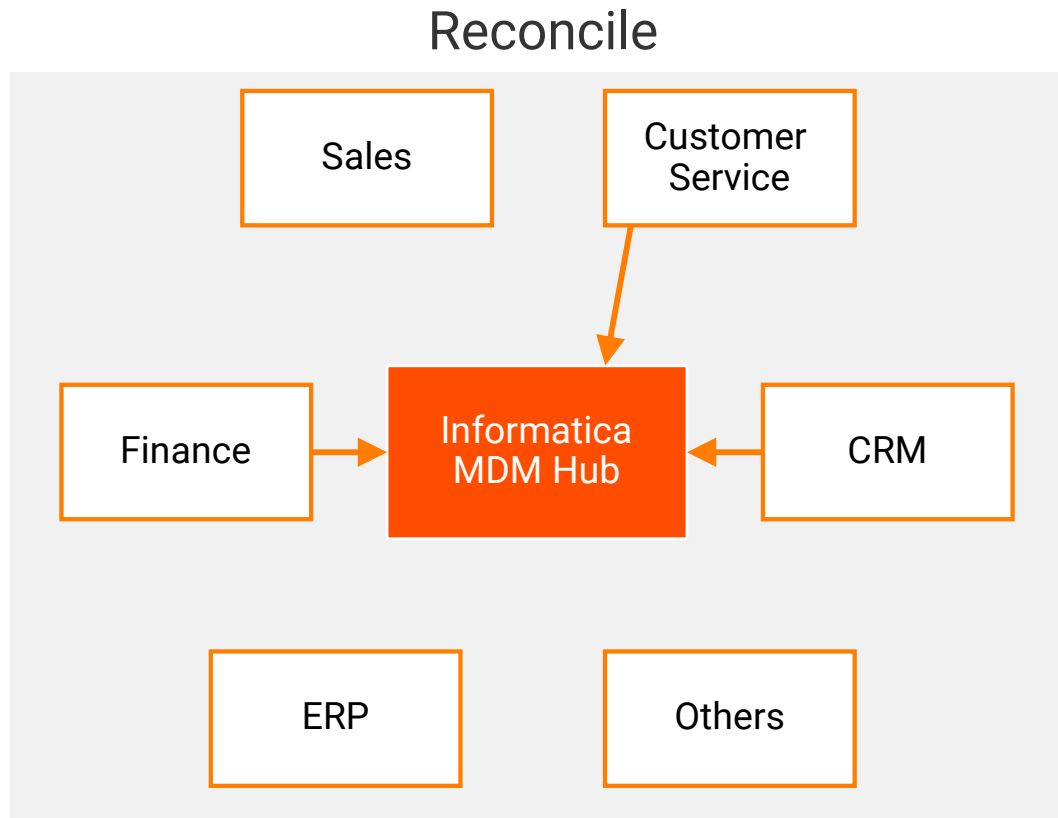




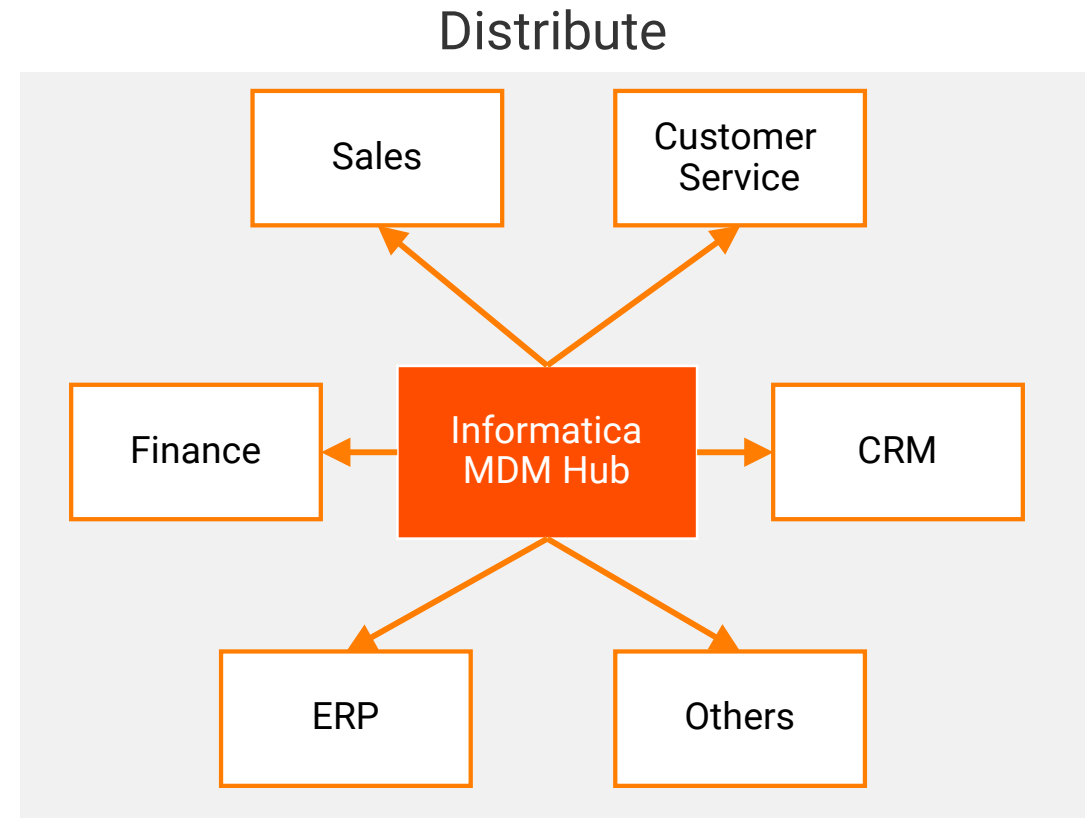
MDM Technical Perspective

Inbound, Outbound

Main Inbound Data Flow (Reconciliation)

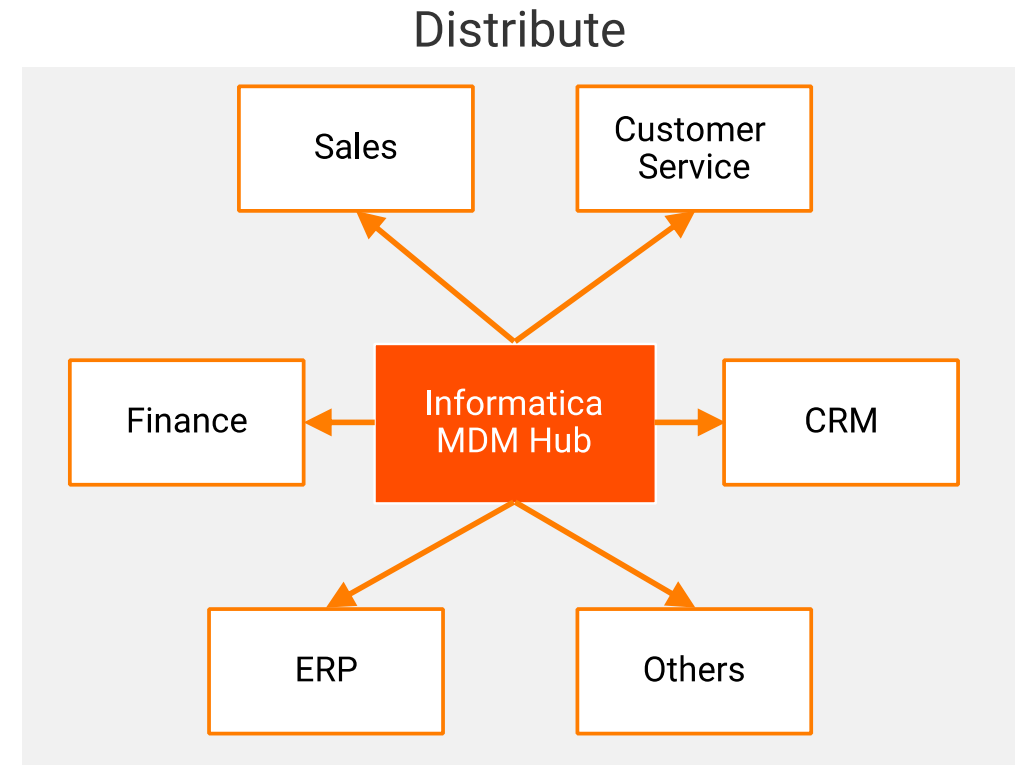


Main Outbound Data Flow (Distribution)



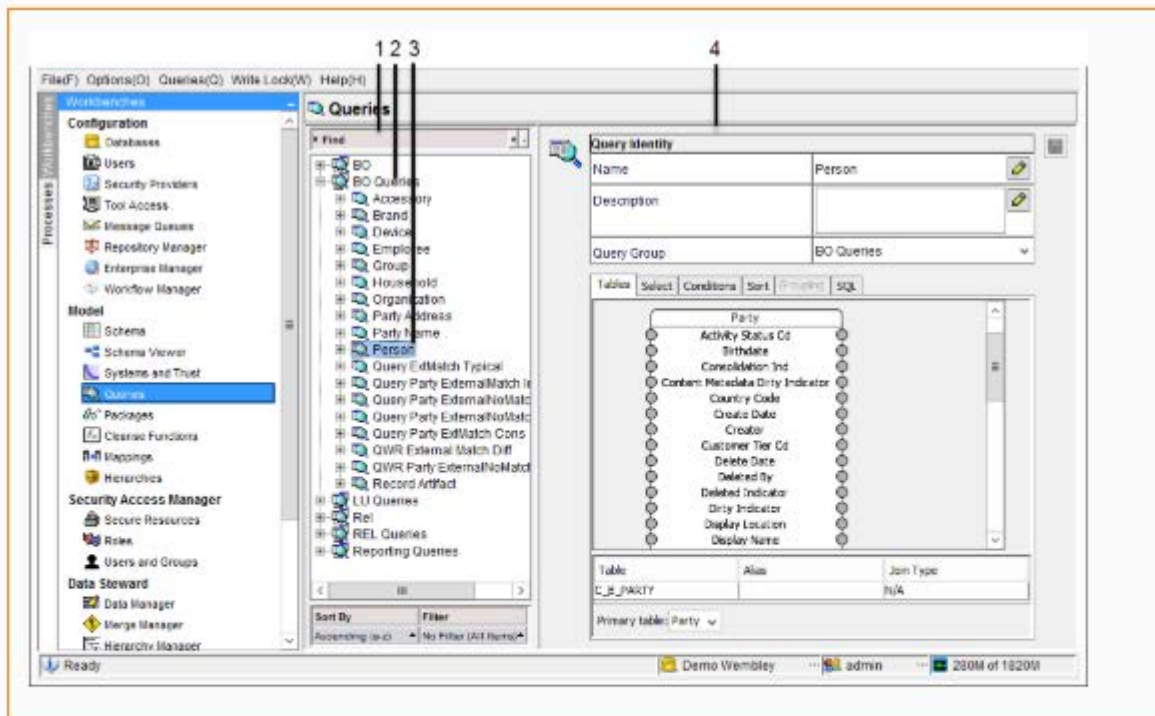
MDM Outbound

- Read from MDM Publish area and send the data to consuming systems
- Keep track of the systems that are integrated with MDM – Both Current / Future State
- Build Executive Dashboards to expose the data quality trend for different domains and how MDM has helped improve the data quality, in order to show case the value
- Prevent bad data from entering at the source systems

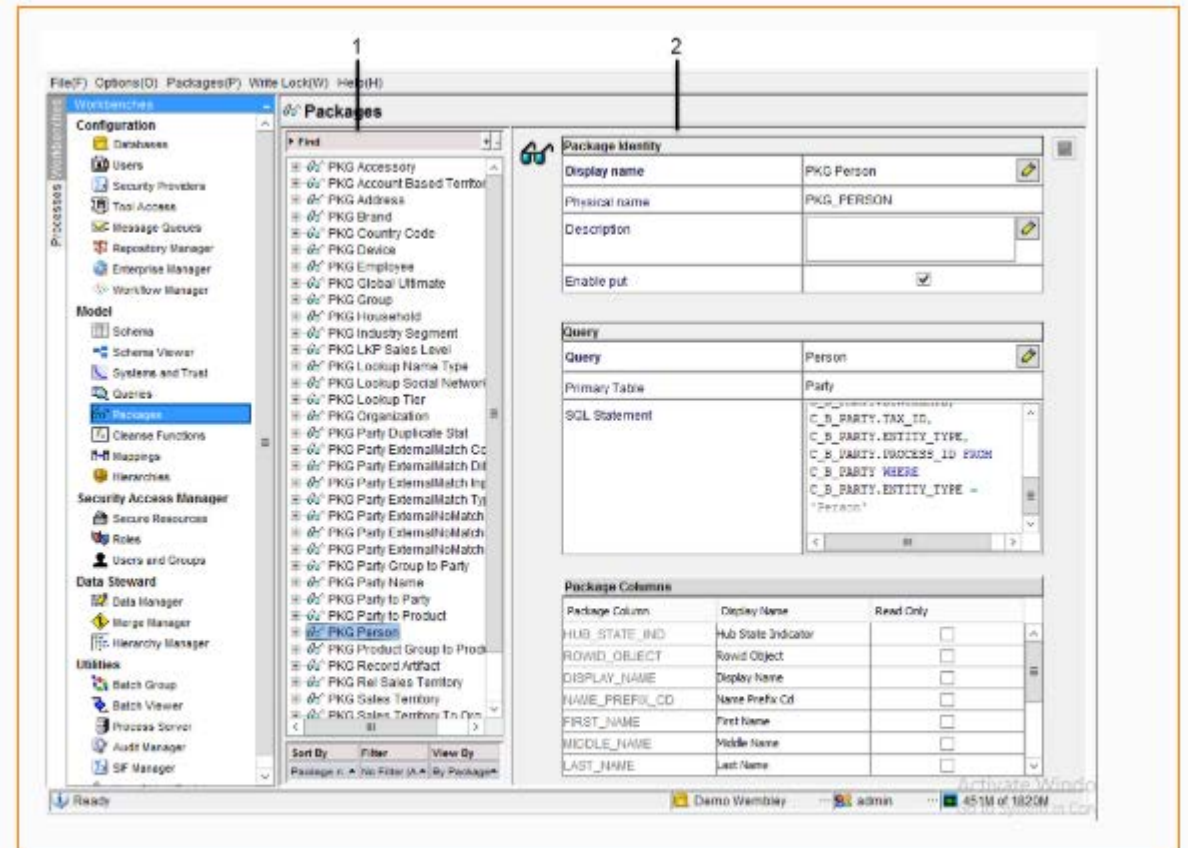


Query & Packages

- Use MDM Query/Packages to join Base Objects
- Database View is created
- Send Mastered data to consumers



1. Navigation pane. Contains user-defined query groups and queries.
2. Query group.
3. Query.
4. Properties pane. Contains the properties for the selected query group or query.



1. Navigation pane. Contains user-defined packages.
2. Properties pane. Contains the properties for the selected package.

Message Queues

- Configure the MDM Hub publish process to generate XML messages about data changes in the Hub
- Publish the messages to an outbound Java Messaging System (JMS) message queue
- Other external systems, processes, or applications that listen on the message queue can retrieve the message and process it accordingly
- See the screenshot for the types of events can cause a message trigger to be fired and place a message in the queue

The screenshot shows the 'Message Triggers' configuration window. At the top, there's a header 'Message Triggers' and a sub-header 'Defined message triggers' with a count of 1. Below this, a list shows 'CustomerOrg Trigger' selected. The main configuration area is divided into several sections:

- Message Trigger Identity:** Includes fields for 'Name' (CustomerOrg Trigger) and 'Description'.
- Trigger Details:** Includes a dropdown for 'Package used to build message' (Package JMS Search Customer Organization) and a dropdown for 'Target message queue' (Aq).
- Specify the conditions for sending a message:** This section is further divided into 'Events' and 'Systems'.
 - Events:** A list of events with checkboxes. The checked events are 'Adding new data.' and 'Delete pending XREF data.'
 - Systems:** A table with columns 'System', 'Triggering', and 'In Message'. The rows are 'Admin', 'DIB', and 'Lookup'. The 'Triggering' and 'In Message' columns are checked for 'Admin' and 'DIB', but not for 'Lookup'.
- Select the columns to monitor for changes:** A section with a checkbox 'Triggers message if any column changes.' and a list of columns with checkboxes. The columns are: Prefix Name, First Name, Middle Name, Last Name, Suffix Name, Full Name, Birth Date, Birth Place, Title, and Date of Incorporation. None of these checkboxes are currently selected.

Services Integration Framework (SIF)

- Services Integration Framework (SIF) is the part of Informatica MDM Hub that interfaces with external programs and applications to implement the request/response interactions
- SIF facilitates inbound and outbound integration with external applications and data sources, which can be used in both synchronous and asynchronous modes
- SIF provides APIs for various MDM Hub services, such as reading, cleansing, matching, inserting, and updating records

The screenshot displays the Informatica SIF interface. On the left, a tree view lists various services such as `getOrsList`, `getOrsMetadata`, `getResourcePrivileges`, `getSearchResults`, `getSiperianObjectCompatibility`, `getSystemTrustSettings`, `getTaskLineage`, `getTasks`, `getTrustGraphData`, `getTrustScore`, `getUnmergedRecordCount`, `getValidationStatus`, `getXrefForEffectiveDate`, `link`, `link2`, `listSiperianObjects`, `merge`, `multiMerge`, `previewBvt`, `promotePendingXrefs`, `put`, `reassignRecords`, `registerCustomIndex`, `registerCustomTableObject`, `registerUsers`, `removeMatchedRecords`, `resetBatchGroup`, `restore`, `searchHmQuery`, `searchLookupValues`, `searchMatch`, `searchQuery`, `Request 1`, `Search Works`, `setPassword`, `setRecordState`, and `syncCustomResources`. The `Search Works` service is selected.

Below the service list is a 'Request Properties' table:

Property	Value
Name	Search Works
Description	
Message Size	896
Encoding	UTF-8
Endpoint	http://ingcdock1:31469/cmx/services/Sif...
Timeout	
Bind Address	
Follow Redirects	true
Username	
Password	

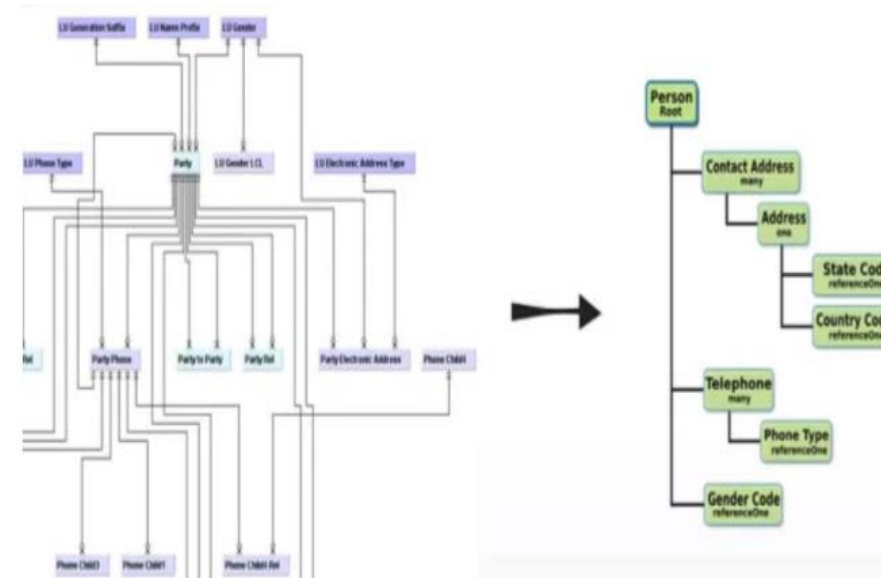
On the right, the 'Search Works' SOAP request is shown in XML format:

```
<?xml version='1.0' encoding='UTF-8'>
<soapenv:Envelope xmlns:soapenv='http://schemas.xmlsoap.org/soap/envelope/' xmlns:urn='urn:siperian:cmx:2006:1'>
  <soapenv:Header/>
  <soapenv:Body>
    <urn:searchQuery>
      <!--Optional:-->
      <urn:username>admin</urn:username>
      <!--Optional:-->
      <urn:password>
        <urn:password>xyz</urn:password>
        <urn:encrypted>false</urn:encrypted>
      </urn:password>
      <!--Optional:-->
      <urn:orsId>PDB01-MS_D02744810A</urn:orsId>
      <!--Optional:-->
      <urn:asynchronousOptions>
        <urn:isAsynchronous>false</urn:isAsynchronous>
      </urn:asynchronousOptions>
      <urn:siperianObjectUid>C_PARTY</urn:siperianObjectUid>
      <urn:recordsToReturn>10</urn:recordsToReturn>
      <!--Zero or more repetitions:-->
    </urn:searchQuery>
  </soapenv:Body>
</soapenv:Envelope>
```

At the bottom, there is an error message: "Error getting response; org.apache.http.conn.HttpHostConnectException: Connection to http://ingcdock1:31469 refused". Below the error message are links for logs: SoapUI log, http log, jetty log, error log, wsrm log, and memory log.

Entity 360 Framework

- The Entity 360 framework uses business entity models to support customizable record view layouts
- A business entity represents an entity with significance to an organization, such as customers, products, accounts, or locations.
- You create business entity models based on the schema information that you defined at Operational Reference Store (ORS).
- A business entity model is similar to a subject area in an Informatica Data Director application.
- Multidomain MDM Provisioning Tool - To configure business entities, business entity views, transformations, etc.



Entity 360 and IDD

Entity 360	Informatica Data Director
<ul style="list-style-type: none"> • Data is organized around Business Entities 	<ul style="list-style-type: none"> • Data is organized around Subject Areas and Aggregated to Subject Area Groups
<ul style="list-style-type: none"> • Configuration of Entity 360 applications are done with the Provisioning Tool 	<ul style="list-style-type: none"> • Configuration of IDD Applications are done using the IDD Configuration Manager
<ul style="list-style-type: none"> • Can have unlimited depth of descendant records 	<ul style="list-style-type: none"> • Subject Areas can include descendants upto grandchild level
<ul style="list-style-type: none"> • Can merge child records at the same descendant level 	<ul style="list-style-type: none"> • Cannot merge child records
<ul style="list-style-type: none"> • Can easily create layouts containing standard and custom components 	<ul style="list-style-type: none"> • Layouts are not easily configurable in Informatica IDD
<ul style="list-style-type: none"> • Hide complexity of MDM Hub table structure from end users through Business Entity Services 	<ul style="list-style-type: none"> • Not available in Informatica MDM IDD

Entity 360 Key Features

- Integrated business entity services
 - A business entity service is a set of operations that run MDM Hub code to create, update, delete, and search for records in a business entity. It is generated directly from the BE data model
- Configurable User Interface
 - Can design user interface layouts that can contain standard and custom components, such as a Twitter feed. Business analysts can easily create layouts targeted at specific user roles.
- Unlimited nesting of descendant records
 - A subject area can include descendant records up to the grandchild level. BE models can have an unlimited depth of descendant records.
- Ability to merge child records
 - With subject areas, you cannot merge child records. With business entities, you can merge child records that are at the same descendant level.
- Simplified and enhanced data search
 - A full-text search on business entities retrieves data faster than a faceted search on subject areas.

Customizing Entity 360 Interface

- Design Entity view components and layouts
- Create new business entity models / Views
- External Components & internal components can be configured. For e.g. Twitter, Similar records etc.

The screenshot displays the Informatica Master Data Management interface for a person entity. The top navigation bar includes the Informatica logo, 'Master Data Management', a dropdown menu, and a 'Global Search' box. The main content area is titled 'James N. Rapp(102)' and features a 'View: Merging Records' dropdown. On the left, a 'Quickly scroll to:' sidebar lists entity components: Person, Address, Name, Telecom, Electronic Add..., and Social Networ... The primary block view shows a composite object with a profile picture and fields for Name, Prefix Cd, Birthdate, First Name, Middle Name, Last Name, Generation, and Suffix Cd. Below this, there are sections for 'Address (2)' and 'Name (2)', each with a table of related data. On the right, a 'Similar Records (4)' section lists related entities. Several orange callout boxes provide additional context: 'Smart Search box available in header in all page views' points to the search bar; 'In page navigation provides an easy way to scroll through the entity.' points to the sidebar; 'Primary block view for showing Composite Object primary identifying information (configurable)' points to the main data block; 'Modules that allow you to provide additional entity information' points to the 'Similar Records' section; and 'Child blocks that display related values. This can be viewed in form or tabular format' points to the 'Address' and 'Name' sections.

Smart Search box available in header in all page views

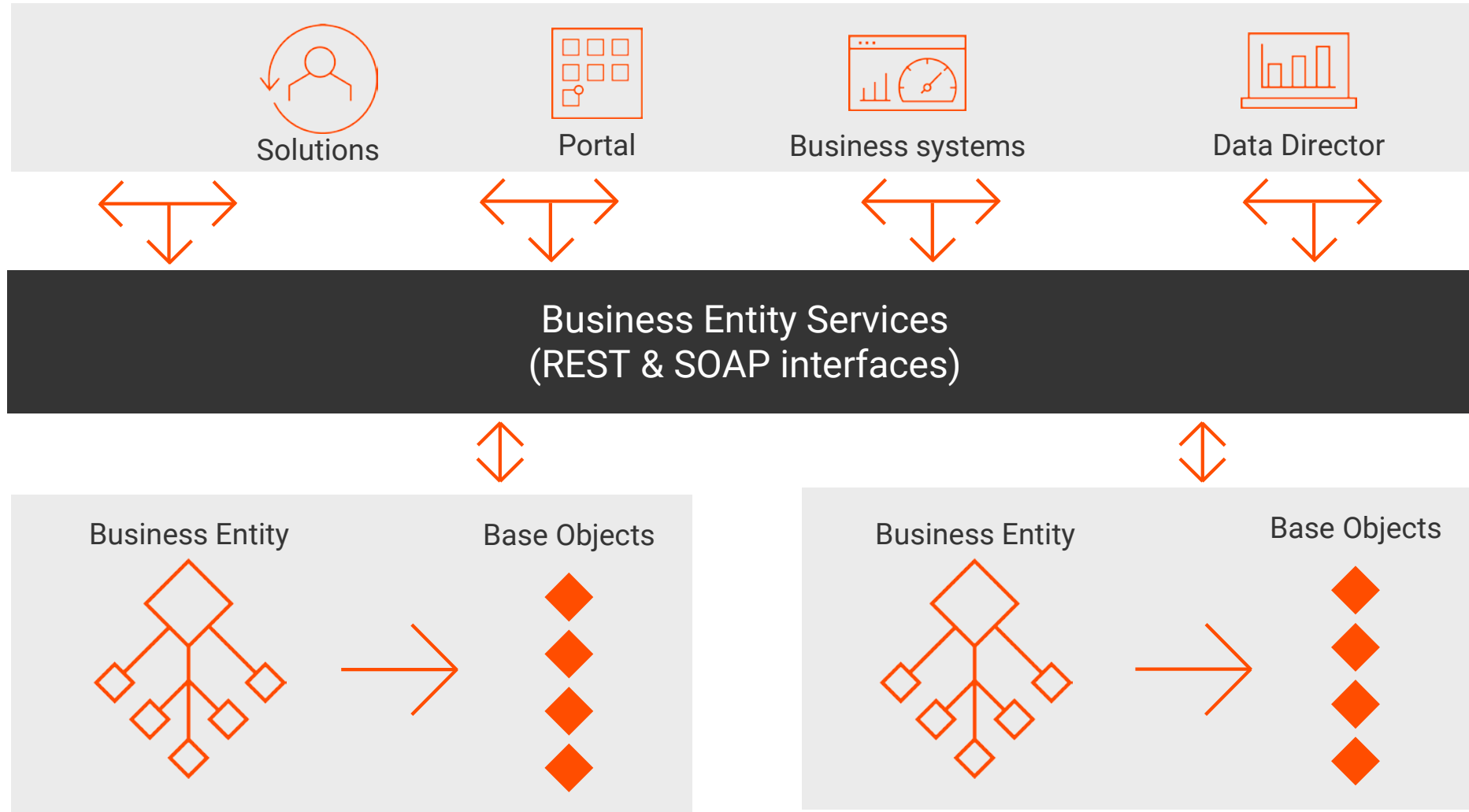
In page navigation provides an easy way to scroll through the entity.

Primary block view for showing Composite Object primary identifying information (configurable)

Modules that allow you to provide additional entity information

Child blocks that display related values. This can be viewed in form or tabular format

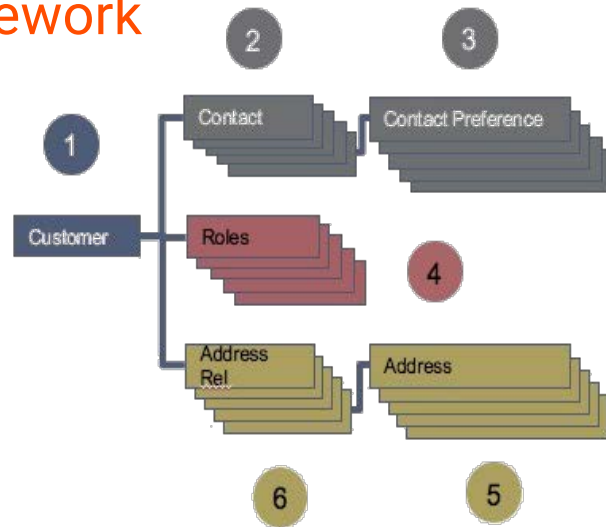
Business Entity Services



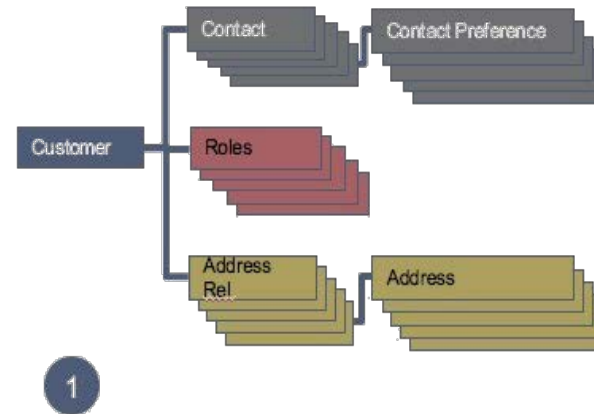
Advantages of Business Entity Services

- Metadata driven – changes in Business Entity model are reflected automatically
- UI, services and database are all tied together
- Product Roadmap - Entity 360 and Business Entity Services are the building blocks for MDM UIs of the future
- Easier to develop against than the Services Integration Framework


Services Integration Framework



Business Entity Services



Business Entity APIs

← → ↺  :8080/cmx/csfiles

localhost-orcl-REPRO

[cs-rest.xsd \(urn:cs-rest.informatica.mdm\)](#)
[cs-base.xsd \(urn:cs-base.informatica.mdm\)](#)
[co-base.xsd \(urn:co-base.informatica.mdm\)](#)
[co-types.xsd \(urn:co-types.informatica.mdm\)](#)
[co-ors.xsd \(urn:co-ors.informatica.mdm\)](#)
[cs-ors.xsd \(urn:cs-ors.informatica.mdm\)](#)
[co-meta.xsd \(urn:co-meta.informatica.mdm\)](#)
[task-base.xsd \(urn:task-base.informatica.mdm\)](#)

[localhost-orcl-REPRO.wadl](#)

[localhost-orcl-REPRO.wsdl](#)

localhost-orcl-C360

[cs-rest.xsd \(urn:cs-rest.informatica.mdm\)](#)
[cs-base.xsd \(urn:cs-base.informatica.mdm\)](#)
[co-base.xsd \(urn:co-base.informatica.mdm\)](#)
[co-types.xsd \(urn:co-types.informatica.mdm\)](#)
[D&BDetailedCompanyProfile_0.xsd \(http://www.strikeiron.com\)](#)
[D&BDetailedCompanyProfile_1.xsd \(http://services.dnb.com/FirmographicsProductServiceV2.0\)](#)
[D&BDetailedCompanyProfile_2.xsd \(http://ws.strikeiron.com\)](#)
[D&BOnDemandEntitySearch_1.xsd \(http://services.dnb.com/CompanyServiceV2.0\)](#)
[D&BOnDemandEntitySearch_0.xsd \(http://www.strikeiron.com\)](#)
[D&BOnDemandEntitySearch_2.xsd \(http://ws.strikeiron.com\)](#)
[NEW_WSDL_0.xsd \(http://www.strikeiron.com/\)](#)
[NEW_WSDL_1.xsd \(http://ws.strikeiron.com\)](#)
[co-ors.xsd \(urn:co-ors.informatica.mdm\)](#)
[cs-ors.xsd \(urn:cs-ors.informatica.mdm\)](#)
[co-meta.xsd \(urn:co-meta.informatica.mdm\)](#)
[task-base.xsd \(urn:task-base.informatica.mdm\)](#)

[localhost-orcl-C360.wadl](#)

[localhost-orcl-C360.wsdl](#)

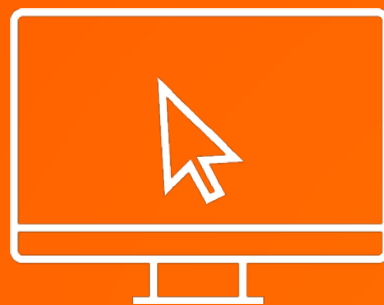
SOAP URL (request in SOAP):

http://localhost:8080/cmx/services/BEServices/localhost-orcl-DS_UI1

REST URL: http://localhost:8080/cmx/cs/localhost-orcl-DS_UI1/Person?action=meta

More MDM Tech Tuesday webinars...

- Migration from Subject Area to Entity 360 in MDM
https://www.youtube.com/watch?v=29be_7cwunU&feature=youtu.be
- Master Data Management using Business Entity Service model
<https://www.youtube.com/watch?v=kQHTI2zFTas&feature=youtu.be>
- MDM Smart Search
https://www.youtube.com/watch?v=8S4P9cj_q5U&feature=youtu.be
- and more at our Success portal: <https://success.informatica.com/explore/tt-webinars.html>



Demo

Conclusion

- MDM is a Program rather than a project
- Early planning and roadmap definition is key
- Choose the right Informatica products based on your roadmap and business priority
 - Aligning business priority and roadmap helps to achieve faster ROI
- Sketch the big picture, but concentrate on short-term gain using foundation deployment approach for early wins. Showcase solution capabilities
- Expand with realistic goals and periodic checkpoint reviews to align & improvise
- Consider total costs, not just product license
 - Include hardware, implementation and user training, operational costs related to data governance and maintenance, and cost of potential delays
- Expose the Mastered data to Business consumers
 - Enable business owners to make the right decisions at the right time for the respective domains
- Demonstrate tangible business value to monetize 360 Solutions
 - Identify tangible metrics to measure before, during and after the implementation

Conclusion – Continued...

- Build a business case for MDM with measurable benefits
 - Actually measure whether you've achieved those benefits
 - Continue measuring and sharing the information widely across the organization

Have a successful 360/MDM Journey...

Questions?



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Thank You!
