

DePaul University
College of Computing and Digital Media

IS 550 ENTERPRISE DATA MANAGEMENT
Group Project Part 2
CASE STUDY – MASTER DATA AT VERT
PRODUCTS

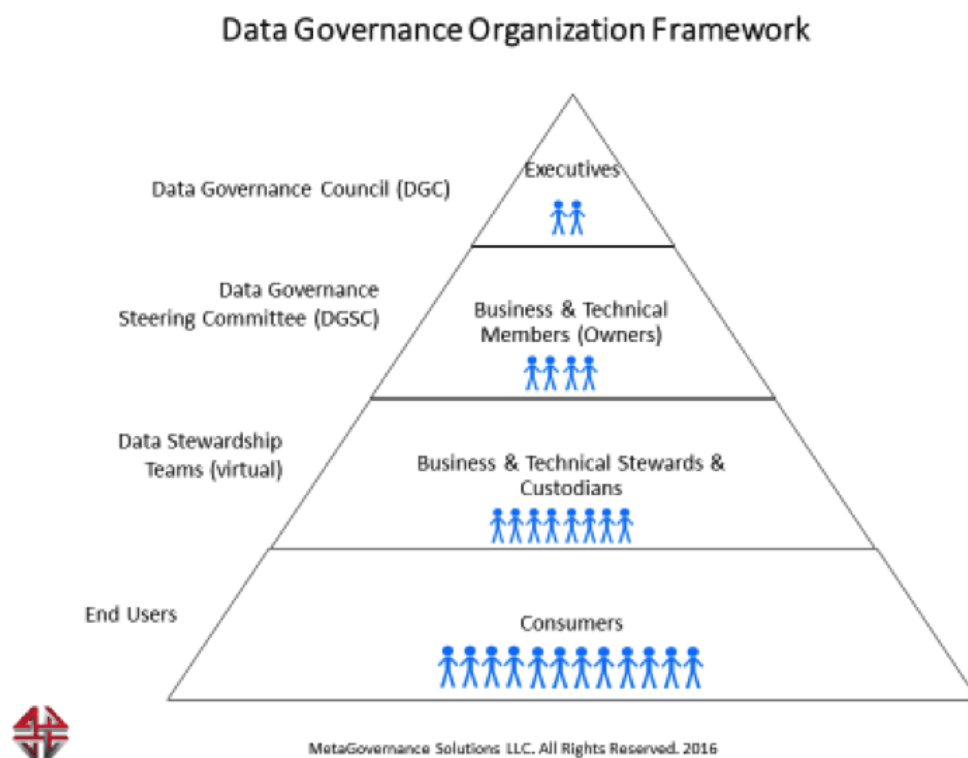
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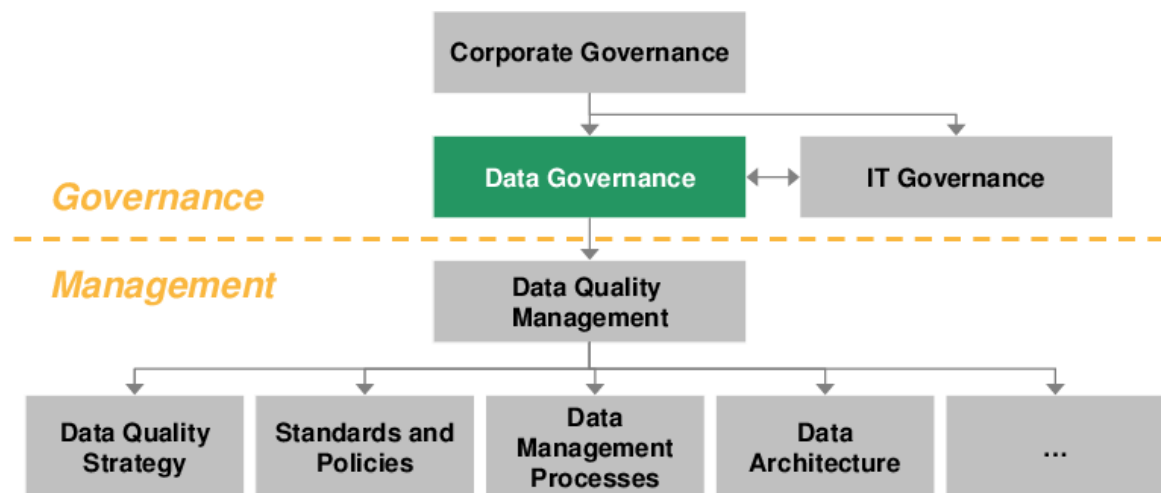
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Proposed Organizational Chart

- 1) Thanks to your help to date, Lisa has recognized that Vert is lacking organizational structures and roles to support appropriate data management. She is thinking that she needs a data governance organization established quickly. She would like you to provide her with a proposed organizational chart showing the key roles she should put in place for data governance. Also, for any roles listed, she has asked for a short paragraph outlining the key responsibilities for that role, along with key skills she should look for in candidates for the role. She believes at a minimum she needs 3-5 roles on the data governance team.





Roles And Responsibilities

Data Stewardship Teams/ Data Stewards: The Data Stewardship Teams are communities of interest focused on one or more specific subject areas or projects, collaborating or consulting with project teams on data definitions and data management standards related to the focus. Consist of business and technical data stewards and data analysts. Data Stewardship is the most common label to describe accountability and responsibility for data and processes that ensure effective control and use of data assets. Some of the activities a Stewardship may take part of our; creating and managing core Metadata: this deals with the definition and management of business terminology, valid data values, and other critical Metadata. They are usually responsible for the data glossary for the organization. Which becomes the way records are stored in the system. They also do things like documenting rules and standards, managing quality issues, and executing operational data governance activities. However, keep in mind that their activities will vary based on the organization. Different organizations conduct business in their own unique way. So, assuming that a Steward will take on all these activities and more would be a bit of a stretch. The Steward should be skilled in data management and have prior experience working in data governance.

Data Architect: Data architect is the expert who formulates the organizational data strategy, including standards of data quality, the flow of data within the organization, and the security of data. It's the vision of this data management professional that converts business requirements into technical requirements. Some responsibilities of a Data Architect include identifying data sources, both internal and external and working out a plan for data management that is aligned with organizational data strategy. Managing end-to-end data architecture from selecting the platform, designing the technical architecture, and developing the application to finally implementing and testing the proposed solution. You should look for a candidate that has experience in data mining, visualization, and learning skills. As well as someone who is knowledgeable in Python, C++, and Java.

Data Governance Steering Committee: First key role would be to have a DGSC, they are the highest authority of the organization for data governance in an organization, responsible for oversight, support, and funding of data governance activities. Typically releases funding for data governance and data governance-sponsored activities as recommended by the DGC and CDO. This committee may in turn have oversight from higher-level funding or initiative-based steering committees. Because they have so much experience and knowledge of the field, they will ensure that the company is operating efficiently and ethically. Having a DG

SC in place will make sure that the data in the company is being used to the best of its ability. And they will see to it that data governance plans align with the organization's overall goals and make necessary changes to make sure the company achieves great success. Essentially finding someone with senior-level experience who has great knowledge of the industry will ensure your governance will operate successfully.

Master Data Management Solution Requirements

- 2) What are the main requirements that Vert would have for a master data management software solution? List 8-10. For each one identified, explain why you believe each of these is a key capability and/or requirement. That is, provide support from the facts in the case (or items covered in class) to support your listing.

The main requirements that Vert should have for a master data management software solution would be the following:

Customer: Vert distributes products to customers all over the world. So, knowing who their customers are is important. Especially because there appear to be so many and in so many different places geographically.

Country: Vert is doing business outside of North America. Distributing products to Canada, Europe, and Australia. So, it would make sense to have a country, as the business isn't just in America. And if Vert plans to continue to expand globally this will help make the process of pinpointing customers easier.

State: To get an idea of the location they will distribute too. Since a majority of Vert's business is in North America; it makes sense to have states. In other countries, there are states so it is something that can be used interchangeably.

City: To pinpoint the exact city they are distributing too. This is another way for Vert to organize exactly where their customers are. This is another essential part of locating their customers.

Delivery Address: So, Vert is able to know where to ship their products. The delivery address may vary depending on how they conduct business. If there is a warehouse that sends the products to the customer, or if Vert is sending them directly to an end customer; it will be important to know the address the products are coming and going from.

Postal Code: This is used to further identify where the business is located. This is another essential field that is needed in order to successfully deliver goods. If there is no postal code; the documentation, billing, and delivery will not be sufficient.

Contact Info of key contacts: This is to ensure that if problems with delivery arise they can be handled quickly. And there will be no confusion as to whom to call or where to turn.

Credit Card Information: Having a credit card on file will make placing orders easier for both parties. Also, there needs to be some sort of payment method to complete sales. If Vert is shipping out their products there needs to be checks and balances. And this will vary from customer to customer but having a card on file will save having to constantly send invoices and then wait to get paid back.

Master Data Management Tools

- 3) Based on your prior analysis, Lisa has realized that Vert is going to need a master data management tool. Research MDM tools on the market today. Select 3 to recommend to Lisa as options she should consider. What are the 3 tools you selected? Why? What areas of data management that we have discussed does each tool address? Include links or footnotes to the vendor websites for each of these tools.

First, let's recall what Master Data Management (MDM) is. MDM is a technology-enabled discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, semantic consistency, and accountability of the enterprise's official shared master data assets. ([Gartner](#))

After doing some research we have found 3 MDM tools that we think are adapted to Vert's needs.

The first one is Informatica MDM & 360 Applications. Informatica is one of the leaders of the Data Management solutions market. It has been recognized as the Leader of the MDM solutions market many times by Gartner. Among the services that the MDM solution of Informatica provides here are a few:

- The solution is cloud-native and can be deployed both on-premises and in the cloud.
- It helps source the data to reduce the number of disparate, duplicate, and conflicting sources.
- It includes data quality, data integration, business process management, and data security functionalities.
- The user interface is for businesspeople (user-friendly)
- Uses no-code and low-code development for the integration and sharing of data.
- Uses AI to provide recommendations for matching and merging data.
- MDM 360 has a microservices architecture, it includes many apps Customer 360, Product 360, Supplier 360, etc. Leaving the choice to the user to leverage the solution capabilities.

The previous information is linked to Informatica 360 which is one of the tools provided by Informatica. However, Informatica at large covers the areas of Data Catalog, Data Engineering Data Integration, API & App Integration, MDM & 360 Apps, Data Quality & Governance, and Data Privacy.

Informatica: <https://www.informatica.com/products/master-data-management.html>

The second MDM tool that we found interesting is Pimcore. In 2021 Pimcore was awarded the designation of Market Leader of the MDM marketplace by Featured Customers. Featured Customer being the world's only customer reference platform for B2B business software & services.

Pimcore MDM solutions provide the following services:

- Compatible with any master data domain.
- Supports both analytical and operational MDM requirements.
- Manage any data: Customer, Product, Employee, Asset, Vendor, etc.
- Pimcore Data Hub: provides a central graphical user interface to transform and prepare data for input or output channels.
- Microsoft/Adobe integration.

In addition to traditional MDM functionalities such as data modeling, data quality, data integration, and many others, Pimcore also offers more original functionalities such as

Enterprise Translation Management, Product Feed Management, and Enterprise Print Publishing.

Also, Pimcore differentiates itself from its competitors by being an open-source software.

Pimcore: <https://pimcore.com/en/master-data-management>

The third MDM tool we wanted to present to you is Microsoft Master Data Management Solutions (MDS). However, this tool is no longer available, now Microsoft partners with Profisee for Master Data Management.

Profisee provides all the traditional MDM solution functionalities as data modeling, data quality, and data integration. In addition, it has the following features:

- Fast integrations, most implementations under 90 days according to Gartner
- Partnership with Microsoft, very easy to migrate from Microsoft MDS
- Available from the Azure Marketplace
- Data Fabrics

As the two other MDM tools presented, Profisee is available on-premises and on the cloud, it is a cloud-native platform. However, Profisee compared to the two others specializes only in Master Data Management.

Profisee: <https://profisee.com/>

Master Data Management Tools Comparison

- 4) Provide a comparison of the 3 tools which clearly shows which of the requirements from our list (from question 2) does each of the tool's address? Where does a given tool have a gap? What are the main 3 pros and 3 cons of each option? Of the 3 listed, which one would you recommend? Why?

Comparing a few of the Master Data Management tools listed in question 3, those are Informatica MDM 360 Applications, Pimcore, and Profisee.

Informatica MDM 360 Application:

Informatica MDM is recommended for organizations that require a comprehensive and flexible data management solution, have the necessary IT resources, and are willing to invest in implementation and maintenance.

Addressing the requirements:

Informatica MDM addresses all the listed requirements, including customer information, location data (country, state, city, and postal code), delivery address, contact info of key contacts, and credit card information. However, the 360 Application does not include credit card information management features.

Gaps:

One potential gap of Informatica MDM is its complexity, which can require significant IT resources to implement and maintain. Additionally, some users have reported issues with the user interface and user experience. Also, the gap in 360 Applications is the lack of credit card information management features, which may be a disadvantage for organizations that require this functionality.

Pros:

- Comprehensive data management capabilities, including data governance and data quality features and a centralized view of customer data.
- Strong integration capabilities with other systems and data sources.

- Scalable and flexible to accommodate changing business needs.

Cons:

- High implementation and maintenance costs.
- The steep learning curve for non-technical users.
- User interface and user experience can be challenging for some users. May require additional integrations with other systems and is complex to set up and configure.

Pimcore:

Pimcore is recommended for organizations that require a comprehensive and customizable data management solution, have the necessary technical resources, and are willing to invest in implementation and maintenance.

Addressing the requirements:

Pimcore addresses all the listed requirements, including customer information, location data (country, state, city, and postal code), delivery address, contact info of key contacts, and credit card information.

Gaps:

One potential gap of Pimcore is its open-source nature, which can require more technical knowledge to implement and maintain compared to some other solutions.

Pros:

- Offers a flexible and customizable data model.
- Open-source platform with a strong developer community and extensive customization options.
- Strong integration capabilities with other systems and data sources.

Cons:

- Can require more technical knowledge to implement and maintain.
- May be less user-friendly than some other solutions.
- May require additional customization to meet specific business needs.

Profisee:

Profisee is recommended for organizations that require comprehensive and easy-to-implement data management solutions.

Addressing the requirements:

Profisee addresses all the listed requirements, including customer information, location data (country, state, city, and postal code), delivery address, contact info of key contacts, and credit card information.

Gaps:

One potential gap of Profisee is its pricing, which may be higher than other solutions.

Pros:

- Provides data management and governance features.
- Easy to use and deploy, with a user-friendly interface.
- Easy integration capabilities with other systems and data sources.

Cons:

- Higher pricing compared to some other solutions.

- May require additional customization to meet specific business needs.
- Limited support for non-Microsoft environments.

Recommendation

Each of the three tools can satisfy Vert's demands according to the requirements given. However, I would suggest either Informatica MDM 360 Applications or Profisee given the requirement to keep credit card data. Both programs come with integrated storage for credit card data as well as robust data administration and governance features. While having a steeper learning curve and possibly being more expensive, Informatica MDM 360 Applications also offers a broader variety of integration capabilities. Profisee, on the other hand, is easier to use and deploy as well as rapidly configure. Ultimately, the choice will depend on Vert's specific needs and budget.

Sources:

[Learning Consultant says... \(simplilearn.com\)](#)

<https://profisee.com/>

<https://pimcore.com/en/master-data-management>

<https://www.informatica.com/products/master-data-management.html>

<https://www.gartner.com/en/information-technology/glossary/master-data-management-mdm>

<https://sourceforge.net/software/compare/Informatica-MDM-vs-Profisee-vs-pimcore/>