

# MASTER DATA DEFINED

Why Bother &  
How To Get Started



 **QMetrix**

 **Profisee®**

## TABLE OF CONTENTS

What is Master Data? .....	2
Why Bother With Managing Master Data? .....	5
Deciding What Master Data to Manage .....	9
How Do You Create a Master List? .....	19
How Do You Maintain a Master List? .....	23
A Few Thoughts On Versioning and Auditing .....	25
A Few Thoughts On Hierarchy Management .....	26

# WHAT IS MASTER DATA?

Most software systems have lists of data that are shared and used by several of the applications that make up the system.

*e.g. { A typical ERP system will have at the very least Customer Master, Item Master and Account Master data lists. This master data is often one of the key assets of a company. In fact, it's not unusual for a company to be acquired primarily for access to its Customer Master data.*

## Rudimentary Master Data Definition

One of the most important steps in understanding master data is getting to know the terminology. To start, there are some very well understood and easily identified master data items, such as “customer” and “product.” Truth be told, many define master data simply by reciting a commonly agreed upon master data item list, such as: Customer, Product, Location, Employee and Asset.

But how you identify elements of data that should be managed by a MDM software is much more complex and defies such rudimentary definitions. And that has created a lot of confusion around what master data is and how it is qualified.

To give a more comprehensive answer to the question of “what is master data?”, we can look at the 6 types of data typically found in corporations:

1. **Unstructured Data:** Data found in email, white papers, magazine articles, corporate intranet portals, product specifications, marketing collateral and PDF files.
2. **Transactional Data:** Data about business events (often related to system transactions, such as sales, deliveries, invoices, trouble tickets, claims and other monetary and non-monetary interactions) that have historical significance or are needed for analysis by other systems. Transactional data are unit level transactions that use master data entities. Unlike master data, transactions are inherently temporal and instantaneous by nature.
3. **Metadata:** Data about other data. It may reside in a formal repository or in various other forms, such as XML documents, report definitions, column descriptions in a database, log files, connections and configuration files.
4. **Hierarchical Data:** Data that stores the relationships between other data. It may be stored as part of an accounting system or separately as descriptions of real world relationships, such as company organizational structures or product lines. Hierarchical data is sometimes considered a super MDM domain because it is critical to understanding and sometimes discovering the relationships between master data.
5. **Reference Data:** A special type of master data used to categorize other data or used to relate data to information beyond the boundaries of the enterprise. Reference data can be shared across master or transactional data objects (e.g. countries, currencies, time zones, payment terms, etc.)
6. **Master Data:** The core data within the enterprise that describes objects around which business is conducted. It typically changes infrequently and can include reference data that is necessary to operate the business. Master data is not transactional in nature, but it does describe transactions. The critical nouns of a business that master data covers generally fall into four domains and further categorizations within those domains are called subject areas, sub-domains or entity types.



The four general master data domains are:



### Customers

Within the customer's domain, there are customer, employee and salesperson sub-domains.



### Products

Within products domain, there are product, part, store and asset sub-domains.



### Locations

Within the locations domain, there are office location and geographic division sub-domains.



### Other

Within the other domain, there are things like contract, warranty and license sub-domains.

Some of these sub-domains may be further divided. For instance, customer may be further segmented based on incentives and history, since your company may have normal customers as well as premiere and executive customers. Meanwhile, product may be further segmented by sector and industry.

This level of granularity is helpful because requirements, lifecycle and CRUD cycle for a product in the Consumer Packaged Goods (CPG) sector is likely very different from those for products in the clothing industry. The granularity of domains is essentially determined by the magnitude of differences between the attributes of the entities within them.





## WHY BOTHER WITH MANAGING MASTER DATA?

Because master data is used by multiple applications, an error in the data in one place can cause errors in all the applications that use it.

*e.g.*

*An incorrect address in the customer master might mean orders, bills and marketing literature are all sent to the wrong address. Similarly, an incorrect price on an item master can be a marketing disaster and an incorrect account number in an account master can lead to huge fines or even jail time for the CEO—a career-limiting move for the person who made the mistake.*





### **In summary:**

Merging master lists together can be very difficult since the same customer may have different names, customer numbers, addresses and phone numbers in different databases. For example, William Smith might appear as Bill Smith, Wm. Smith and William Smithe. Normal database joins and searches will not be able to resolve these differences.

A very sophisticated tool that understands nicknames, alternate spellings and typing errors will be required. The tool will probably also have to recognize that different name variations can be resolved if they all live at the same address or have the same phone number.

## The Benefits of Creating a Common Master Data List

While creating a clean master list can be a daunting challenge, there are many positive benefits to the bottom line that come from having a common master list, including:

- A single, consolidated bill, which saves money and improves customer satisfaction
- No concerns about sending the same marketing literature to a customer from multiple customer lists, which wastes money and irritates the customer
- A cohesive view of customers across the organization, that way users know before they turn a customer account over to a collection agency whether or not that customer owes money to other parts of the organization or, more importantly, if that customer is another division's biggest source of business
- A consolidated view of items to eliminate wasted money and shelf space as well as the risk of artificial shortages that come from stocking the same item under different part numbers

**Finally, the movement toward SOA and SaaS make MDM a critical issue.**

*If you create a single customer service that communicates through well-defined XML messages, you may think you have defined a single view of your customers. But if the same customer is stored in five databases with three different addresses and four different phone numbers, what will your customer service return?*

*e.g. Similarly, if you decide to subscribe to a CRM service provided through SaaS, the service provider will need a list of customers for its database. Which list will you send?*

*For all of these reasons, maintaining a high quality, consistent set of master data for your organization is rapidly becoming a necessity. The systems and processes required to maintain this data are known as **Master Data Management**.*





This is a preview.

Get the full version of *Master Data Defined: Why Bother & How to Get Started* at **[www.qmetrix.com.au/resources](http://www.qmetrix.com.au/resources)**

**Download full version**



QMetrix is a Master Value-Added Reseller and implementation partner of Profisee in Australia and South East Asia. We provide professional advisory services including Master Data Management strategy, business case development, design and architecture, technical implementation, integration and support.

Talk to us about your data management challenges, the possibilities for your organisation or to see a personalised demo. Learn more at **[www.qmetrix.com.au](http://www.qmetrix.com.au)** or contact us to start a conversation at **1300 785 336 / [info@qmetrix.com.au](mailto:info@qmetrix.com.au)**