THE GOLDEN RECORD: ORGANISING THE DATA CLUTTER IN MASTER DATA MANAGEMENT

Abstract

Managing incredible volumes of data from various sources in an enterprise is hard enough. What further becomes a daunting challenge is to make sense of unstructured data and create a 'golden record' that becomes the single point of reference for quality data. Enterprises rely on vast volumes of unstructured data that generally flows in from disparate sources. Since different teams and individuals are usually in charge of data entry in various systems, duplication, reliability, and accuracy are common problems enterprises face in effectively managing and accessing this data.

Here's looking at the concept of golden record in master data management (MDM) and why it is referred to as the 'single version of the truth' concerning any piece of information stored in the company database — and why it can be elusive.[1]

Infosys®

Navigate your next

Understanding the golden record in MDM [1] [2]

The ultimate prize in the world of data is — no surprises here — a single, well-defined data point that can successfully capture essential and 100% accurate information about any entity in your domain. This may include a resource, a product, an inventory item, a customer, a vendor, pricing details, or even employee information. In fact, the concept of MDM revolves around compiling data from different systems, eliminating any duplicate records, and filtering and funnelling this information to create what we call a 'golden record.'

The golden record, in simple words, provides you with instant access to the purest and most validated picture of the records in your domain. It is the only version of all the data entities in an organisational ecosystem that users can turn to when they need specific and reliable information.

Why is creating the golden record so important? [1] [2]

Data is the new soil and it can be the gateway to smarter and more informed decision-making for enterprises across all industry sectors and domains. However, simply having mountains of data at your fingertips is not enough. Unstructured data, duplicate entries, and inaccurate records can cause confusion and chaos. Therefore, it is essential that your data is not only structured in a way that makes sense from a business point of view but also consolidated into a golden record so that every process that can use this information becomes substantially more productive. You can then leverage this single version of accurate data to make better business decisions.*

Given all the facts stated above, it is clear that data accessibility, quality, accuracy, reliability, consolidation, and control are some of the biggest challenges that plague today's enterprises. And, while implementing an MDM solution is the answer to most of these issues, ensuring the 'golden record' is not easy. However, it isn't impossible either. Read on as we uncover the key considerations for creating a golden record and how you can achieve perfection in the process.

Critical considerations for the golden record in MDM [1] [3]

Perhaps the most pressing challenge in terms of tapping into and implementing an MDM solution is that the workflow is quite complex and you need to lay down certain rules in order to make it work for you.

If you are setting out to create the golden record, there are a few key factors that one needs to consider:

- Accounting for all the diverse data sources that contribute variable data to the pool
- Assessing which sources are reliable versus ones that are dicey or untrustworthy
- Deciding what pieces of information need to reflect in your golden record
- Establishing the key criteria for quality data population
- Matching and merging records for similar entries in different databases
- Determining the approval process (selecting either automated or manual intervention)

While automating most parts of this workflow is what modern enterprises seek, it is equally critical that some degree of manual intervention is required at certain stages (in the last step mentioned above, for example) to preserve the integrity of the golden record.

The solution [2] [4]

Here is a simple example. Suppose you want to zero in on the most accurate and truthful record from the following table, which includes information about the same person gathered by different teams and entered into your organisation's database through various sources.

Source System	Name	Age	Gender	Phone number	Address
1	Chandler B	33	M	+967-1-622-3222	15, Yemen Road
2	Chandler Bing	33	-	622-3222	Yemen Road, Yemen
3	C Bing	33	M	+967-1-622-3222	15, Yemen Road, Yemen

When you have similar records with different values from various systems or sources (as seen in the table above), the aforementioned rules need to be decided in order to determine the most truthful one. The 'golden record' can be determined to be:

• One record from one of the sources

• Or a combination of attributes from the disparate records

That is where a complete MDM solution can help. It can not only consolidate scattered records but also create a unified hub that helps you better manage your product, supplier, distributor, and customer data, thus giving your organisation an on-demand 360-degree view of all this information. The golden record rectifies inconsistencies, corrects duplications, provides values when a value may not exist, and improves the data quality within a record.

When applied to the table presented above, this how a golden record would look.

The golden record	Name	Age	Gender	Phone number	Address
Combination of attributes from all three source systems	Chandler Bing	33	M	+967-1-622-3222	15, Yemen Road, Yemen

While this is a crude example, it appropriately illustrates a golden record. When you manage to compile the most reliable information about one particular subject into a single entry, your process of collecting, finding, accessing, and leveraging this data becomes infinitely more efficient.

Data quality is by far the trickiest aspect of this entire process. Despite putting the most efficient technologies and systems in place and establishing precise rules and criteria for data population, there could still arise a situation where the reliability of a record is in question. In case of any such discrepancies or inconsistencies, an expert data steward is often appointed to manually review these records. An MDM solution that blends machine intelligence with human intelligence is one that is most likely to succeed in the longer run.

Sources:

1. https://www.informatica.com/blogs/golden-record.html
2. https://www.dqglobal.com/blog/golden-record/
3. https://www.dataclarity.uk.com/2020/06/22/what-is-golden-record-management-and-why-it-is-important/
4. https://bi-insider.com/posts/master-data-management-the-golden-record/

For more information, contact infosysbpm@infosys.com

Infosysbpm.com

Stay Connected