



ADVANTAGES OF WEBSPHERE CUSTOMER CENTER IN FINANCIAL SERVICES

Abstract

IBM's WebSphere Customer Center (WCC) is one of the most powerful Master Data Management solutions, giving single source of truth (golden copy) of customer data. It provides a real-time, service-oriented application that manages customer-centric business processes and transactions, while persisting new enterprise customer knowledge and processes, such as complex relationships and roles, interaction history, event notifications, privacy and data entitlement rules.

Introduction

Many businesses today, especially global financial enterprises, have hundreds of separate applications and systems where data that crosses organizational departments or divisions can easily become fragmented, duplicated and most commonly out of date. Getting answers to basic questions such as “who are our most profitable customers?”, “what product(s)

have the best margins?” or in some cases, “how many employees do we have”? become tough to answer. To meet these challenges, businesses turn to master data management (MDM). WCC streamlines data sharing between different business entities so that data among these entities remain consistent; this is called golden copy of the

customer data. In addition, effective use of WCC makes business intelligence (BI) and analytics reports more trustworthy; these reports can be used for better understanding of customer behavior. This paper focuses on the common challenges the Financial Services industry faces and how WCC can address them.

Common Data Processing challenges addressed by WCC

Data Redundancy

Same data is duplicated in different applications for serving different purposes like public dept department, deposit account department or securities department in different applications with different names. As a result, a lot of redundant or

inaccurate data is stored because data updated in one application may not be reflected in other applications. Even if an organization tries to replicate the information across different departments, it would increase the overall cost for them.

WCC maintains single source of truth, also called golden copy; one data point that captures all the necessary information we need to know about a member, a resource, or an item in our catalogue – assumed to be 100% accurate

Data Inconsistencies

While trying to address the above problem, organizations may land up with erroneous data. If organizations try to consolidate

data from different applications for Business Intelligence (BI), it would create issues due to data inconsistency.

WCC reduces data inconsistencies by eliminating data silos and connecting data from customers, products, suppliers, and assets

Business Inefficiency

If organizations can't support BI, their performance is greatly impacted. Quantifying these inefficiencies is not always easy,

but Gartner estimates the cost can be as high as 20% of the operational budget¹ for an average organization.

WCC reduces business inefficiency by onboarding, consolidating and cleansing disconnected data

Supporting Business Change

Data driven by disruptive sources and/ or reasons like below makes the problem worse:

1. Introduction of new products or services or deprecation of old products or services

2. Advent of new technologies
3. Organizational restructure
4. Mergers/acquisitions

WCC improves collaboration and flexibility between internal and external users, thus improves business processes and operational efficiency

Benefits WCC brings to Financial Services firms

Governing Agreement: Most financial organizations are bound by compliance regulations like FATCA, BASEL, etc. Non-compliant data incurs huge fines. Banks are mandated by laws like EU Data Protection Act and PCI DSS (Payment Card Industry Data Security Standard) to defend and safeguard customer data. These rules vary based on geographies. WCC maintains data digitally in a single repository making it fast to keep up with these regulations.

Clients Centricity: Improvements in technology and communication supports getting a whole picture of customers' activities, purchases, etc. with the bank, hence improving customer relationships which client officials can nourish better. WCC merges and de-duplicates client and product data to have a single source of

authenticity, therefore allowing reliable and high quality data.

Early Fraud Detection: The domain of digital, despite all its pros, does come with the immense hurdle for banks to handle frauds and scams. MDM helps banks understand client spending patterns, client irregularities, etc., to be able to identify fraud at an early stage, by cross-verifying changes. Banks can get better clarity in understanding client behavior through WCC, thus preventing fraud and developing regulatory compliance.

Compliance Risks Abolished: MDM enables companies to learn and decrease compliance risks by helping organizations maintain data quality centrally. WCC comes with features, which allow organizations

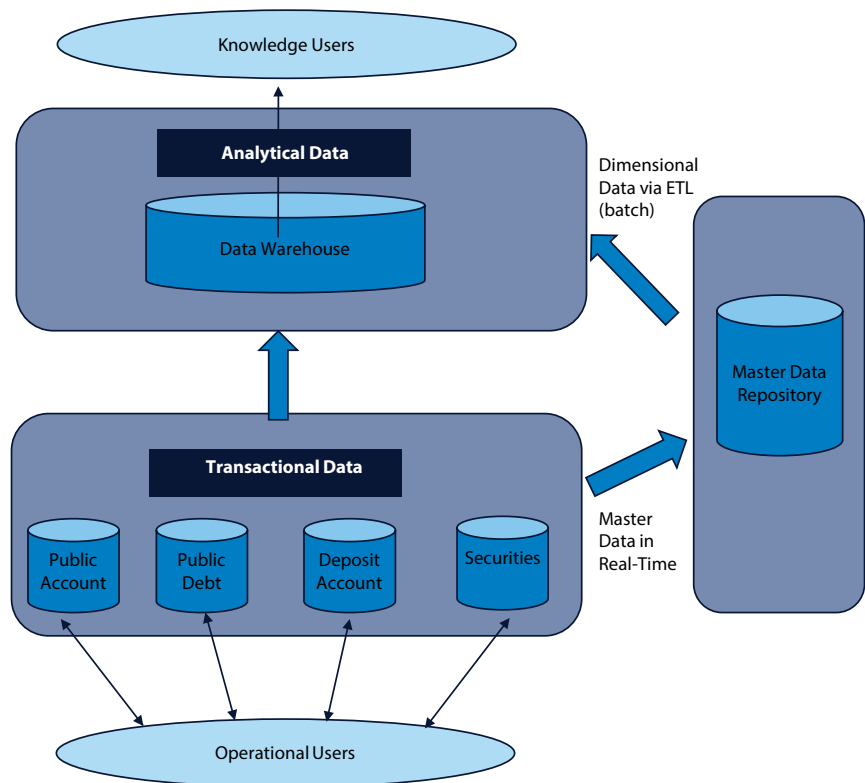
to recognize and remove any data quality issues. This efficiently ensures clean and precise data is consistently sent to inspection teams to reduce regulatory fines.

Increase Business Profitability: Being a central repository of all data, an MDM solution addresses the goal of improving revenue and margin. MDM helps in recognizing the specific needs of clients to provide better solutions to those clients, and customized services to make new customer requests. WCC allows marketing teams to optimize cross-sell, up-sell, and product bundling offers, hence helping banks improve customer acquisition, raise the revenue of customer, decrease costs to acquire and hold, reduce customer attrition, and improve product sales.

Architecture of WCC

There are three main types of data that are being captured and maintained within organizations.

1. **Transactional Data** - Data that is being generated by applications in supporting business processes of the organization
2. **Analytical Data** - Data that is calculated and/or derived from transactional information to support the decision making of the organization
3. **Master Data** - represents business objects upon which transactions are done and the dimensions on which analysis is conducted



Suspect Duplicate Processing:

The goal of WCC is to provide a single view of a customer account and their financial transactions. Suspect Duplicate Processing (SDP) is the feature provided by WCC to achieve this goal. The SDP provides a mechanism to keep a golden copy of a given account. There are three options for running SDP. SDP can be configured to run in real-time, to run offline or to use a combination of both.

- **Real-time** - It can be run in real-time and can check for suspected duplicates if critical data is added or changed when adding a new party or updating particular elements of an existing party
- **Evergreening/Offline** - It is a combination of both real-time and offline. The Evergreen application uses Event Manager, and SDP must be configured off to use this option, as it is only the online transactions that check this configuration to determine whether or not it should be run. Simpler searching and matching that requires less time and CPU use can be performed in real-time, while more complex searching and matching can be performed offline, using Evergreening. The externalized rules that implement searching, matching and so on are shared across the real-time and offline environments and observes which mode SDP is running in.



Steps for SDP:

Customize the JRule file for customer (party) match

Critical data is used for finding suspect duplicate parties and then weighing how closely each suspect match or doesn't match. Examples of critical data includes name, address, and tax identifier.

Match Category or Suspect Type

Match category is derived based on the combination of match and non-match relevancies. The following are the match categories defined within the product:

1. A1: 100% confident the two parties are the same
2. A2: Reasonably sure the two parties are the same
3. B: Not sure if the two parties are the same, most likely due to insufficient data for matching
4. C: Confident two parties are not the same

Match Relevancy

Critical data between two entities are matched by using match relevancy.

Non-Match Relevancy

If critical data doesn't match between two entities, it is called non-match relevancy, also called the "suspect reason".

Match Persons Rule

This rule matches critical elements between two persons. The results of

matching are shown as match relevancy and non-match relevancy scores.

The individual elements are assigned match/non-match scores that reflect their weighting factor in determining a match. The final scores are the sum of the individual scores. The ADDACTIONTYPE database table relates action codes to the relevancy scores. The final scores are the sum of the individual scores.

The default critical elements and scores are:

Default Critical Element Match Non-Match	Match	Non-Match
First Name	1	1
Last Name	2	2
Birth Date	4	8
Address - the minimum elements are: address line one; city; province/state; postal/zip code	8	4
SSN/SIN	16	16
Gender	32	32



Survivorship

It creates a new customer (party) based on externalized rules of survivorship and inactive source party plus all suspected parties provided. And further, transaction addresses the situation of multiple distinct parties that all represent the same single person or organization. This situation could result from insufficient or incorrect information on the parties such that WCC could not identify the parties as the same person or organization, or as a result of suspect processing (a configurable option) being turned off when the parties were initially added.

WCC Performance Tracking Configuration

Using WCC, performance statistics for transactions within components of the architecture can be captured. The levels of performance tracking can also be configured. One can turn on or off the statistics based on user need. One should use Logging component or ARM 4.0 (Application Response Measurement) implementation identified through configuration.

WCC tracks performance from several specific points in the instrumentation. At each point of instrumentation within WCC, the following information is provided: request ID, request name (end-to-end transaction name), transaction name, parent correlator ID, correlator ID and a context specific note. The duration of the transaction is calculated by the mechanism that captures the performance information.



Conclusion

About 70% of officials from the finance division maintain the importance of client-centricity¹ but do banks know their clients? Do clients trust bankers? Are banks giving a multi-channel experience? Are financial products related to clients? WCC helps banks build a primary central repository of customer data by combining data across different source systems. WCC helps banks understand client spending patterns, client irregularities, etc., to be able to identify fraud at an early stage, by cross-verifying changes. It enables companies to learn and decrease compliance risks by helping organizations maintain data quality centrally.

Glossary of terms

Acronym	Expansion
MDM	Master Data Management
WCC	Websphere Customer Center
FS	Financial Services
SDP	Suspect Duplicate Processing
FATCA	Foreign Account Tax Compliance Act
EU Data Protection Act	European Union Data Protection Act
PCI DSS	Payment Card Industry Data Security Standard
BI	Business Intelligence
AI	Artificial Intelligence

About the Author



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