WHITE PAPER

Corporate and Investment Banking

The Hidden Business Opportunities Waiting to be Discovered Within Your Customer Data

STIBO SYSTEMS
MASTER DATA MANAGEMENT

How master data management (MDM) makes entity analytics more insightful and immediately actionable

Banks wishing to identify growth opportunities by industry, by segment and by product find that relationship managers (RMs) often lack the actionable, insightful information required to assist them. Sometimes a single piece of unique information can give RMs the edge they need to decide how to move an opportunity forward.

The lack of actionable, insightful information often finds its root cause in the lack of technical ability to reconcile information coherently and accurately from across the entire business. Customers, products and their associated transactions are managed in business and technical silos. As a result, corporate customers wishing to use multiple products over various locations may find themselves frustrated at the lack of clarity offered by the bank brought about by the different supporting procedures, processes, organizations and people that take place in the background of an operation.

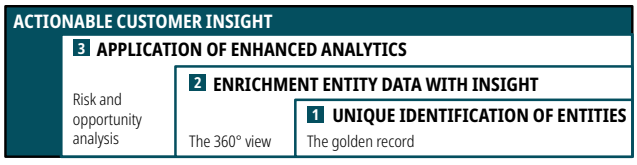
Additionally, the techniques required to provide the analytics across decentralized information sources have not evolved proportionally to the quantity, complexity and variety of data at hand.

Fortunately, remedies exist that don't require reengineering the entire organization's IT infrastructure.

Firstly, fundamental to the success of reconciliation is the ability to uniquely identify entities and the roles they play with respect to the organization and each other.

Secondly, the reconciliation repository, typically a data warehouse or data lake, should include this trusted entity data and reconcile (enrich) it with additional, existing, operational and analytical data.

This approach allows the analytics to produce more reliable and insightful results.

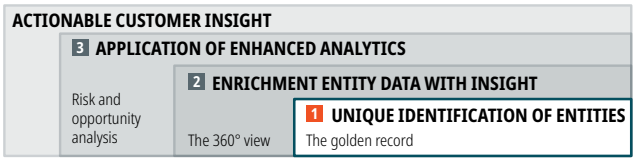


Use master data management to find truth and insight in a sea of data and assumptions

A master data management strategy is often the first step on the journey to obtaining customer insight.

Understanding, for example, how entity data connects and relates across the entire organization and beyond, can yield hidden value that will help relationship managers to unlock new potential. Once a unified, trusted and governed view of customer information can be found, you can enhance its value through the addition of other trusted information sources, some of which might even emanate from outside of the organization.

Unique identification of entities to establish golden records



Legacy applications — Disconnected business processes — Data silos

All three are key issues familiar with anyone involved in programs that aim to improve customer sales and service, address constantly evolving compliance requirements or reduce cost of operations.

Embarking on a course of remediation can seem daunting and expensive. Resolution often needs a coordinated, enterprise-wide approach, but ownership of this resolution does not always naturally fall into one business unit. Re-engineering existing infrastructure needs multiple business units to agree on investment and organization priorities. Again, this is something that can be challenging to obtain.

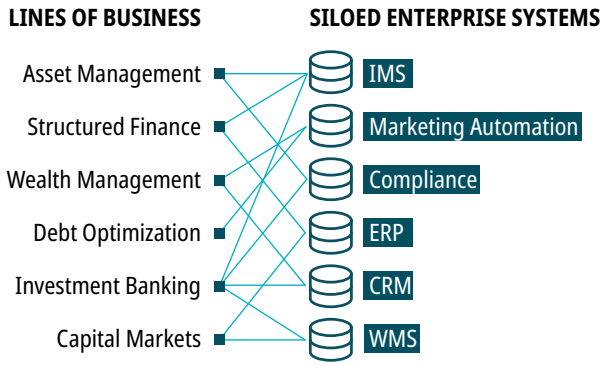
Good data for one is not necessarily good data for all

So why not just use someone else's data instead? Essentially because there is inherent risk in using data for purposes for which it was not originally intended. Applications are designed to support business processes, not data governance processes. So, data curation is inherently linked to the design of each application.

Applications have grown up under the supervision of their line-of-business owners rather than data owners. While on the surface the application owner may be saying that their data is good, it cannot be guaranteed to behave so well in a different context. Indeed, should needs change over time, asking a business owner of another application to change their data could make for a challenging conversation.

Data lake projects need a data governance policy that supports informed decision making

Why not just put everything in a warehouse or data lake? This approach also tends to be problematic unless there is a unified corporate data strategy and dictionary, often initiated by the CDO, on how you intend to interpret and use data. Analytical tools are not designed to effectively resolve differences in entity data; neither their metadata descriptions nor contents. They expect the data being analyzed to be as accurate and coherent as possible.



While there may be unique owners for each line of business, there is often no owner of the entity data that is being used from corporate-wide perspective

You can only correlate information sources from disparate systems if they are abiding by the same data governance policy rules and if they are using a compatible data dictionary. This is especially true of master data such as product, contract and entity data. Entity data, in particular, is often found to have numerous and disparate points of control. This makes its immediate consolidation both arduous and error prone.

The teaming of the CDO and IT department is key to drive the business case

It is often left to the CDO and to IT to find a way forward that can satisfy both initial and future needs with a minimum of disruption yet yield significant benefits in order to add momentum to the ambition. Their challenge is to take undisciplined entity data and train it to become an ordered enterprise asset. This action should make the case for top line results – tangible business growth opportunities – rather than uniquely a stance for compliance, efficiency or risk mitigation. Arguably, revenue objectives owned by many business leaders tend to be more visible.

A business sponsor that is directly and positively impacted by the results of the ambition is indispensable for both its initial success and future expansion. **(Get the white paper "The 26 Questions to Ask Before Building Your Business Case for Customer Data Transparency")**

Fortunately, technology and good data governance practices can help. To help break down data silos, data management technology is available that will work effectively alongside existing systems so that their data repositories do not need modification or replacement.

Data governance business processes ensure an organized and measurable approach to improving data performance.

Entity reconciliation starts with defining some rules

In order to best drive the technology to deliver expected goals, you need to establish some basic governance starting points. For those organizations which do not yet have an active data governance council, it might be prudent to establish such an organization for the initial phases of the project.

Examples of typical governance questions that precede solution implementation include:

Organization	Data
What is a customer?	What data uniquely identifies an entity?
What data stewardship roles and responsibilities need to be established relative to the owners of the data sources?	What constitutes an automatic vs. manual intervention during data reconciliation?
What KPIs do you need to establish project business impact and organization performance?	What KPIs are needed to measure data performance improvements?
Do you need to establish a data governance council?	Can data sources provide a minimum level of information quality in order to be relevant in the reconciliation process?
What corporate standards on data handling need to be respected?	Are there constraints on providing access to and manipulating personal information (PI), consent (e.g., GDPR) or other sensitive information?

Assigning unique identifiers to entities is the place to start

In the beginning of the solution phase, it's recommendable to uniquely identify entities with a small number of high quality sources. This strategy is likely to yield better learning on stewardship practices and provide business benefits more quickly. This also provides a point of good anchorage from which other, less reliable sources may be integrated. This way, you can simplify the data management decision making for the data stewards.

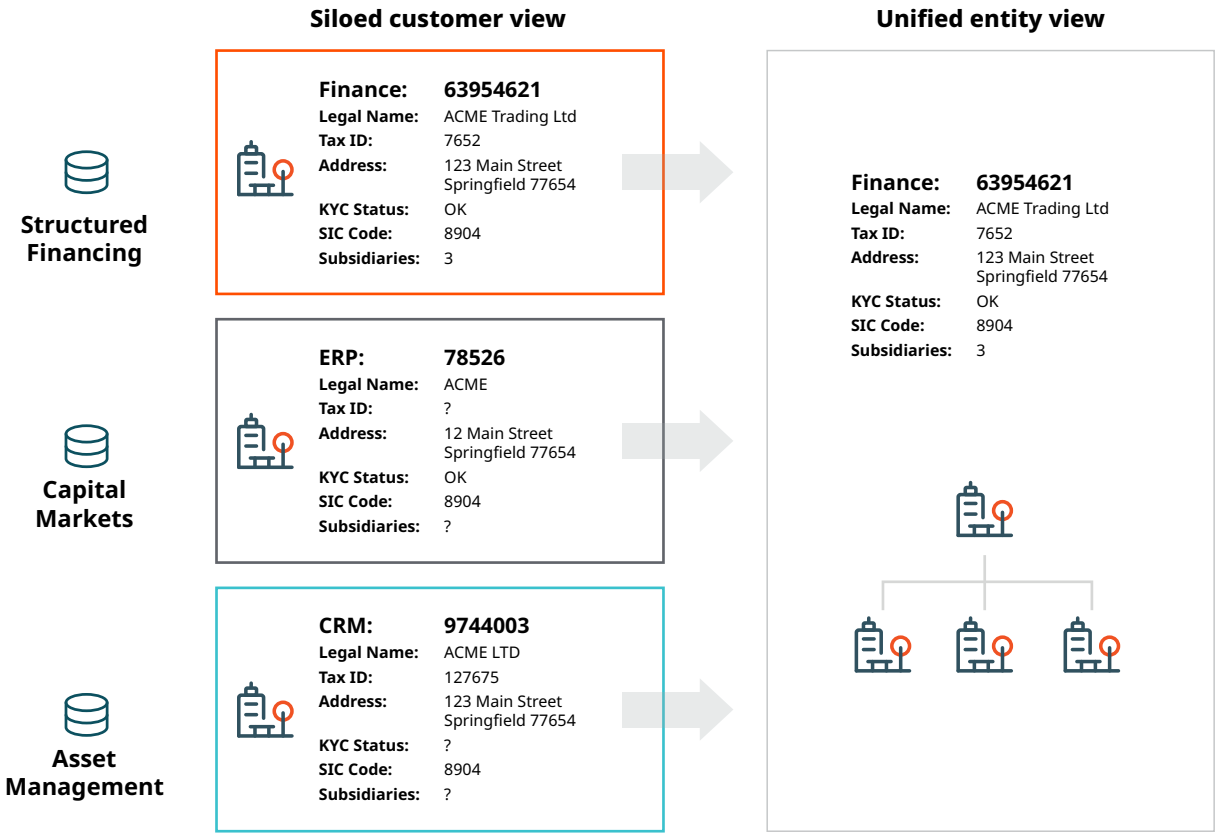
Key capabilities of a master data management solution to accomplish this include:

- Integration capabilities to a variety of data sources and automated data reconciliation to develop insightful information
- Analytics to guide stewardship decision making and performance
- Collaborative capabilities for the resolution of complex data issues
- Automated data quality improvement to reduce time and effort spent in data analysis
- Flexible and adaptable data modeling to help facilitate change management

Unique identification of entities – the key data attributes to get right

Chart 1 in the appendix shows example types of party data that can be collated to establish: 1) Unique identification and 2) A second level of refined identification – useful when data quality might be poor and external sources (e.g., D&B information) may be used to help qualify.

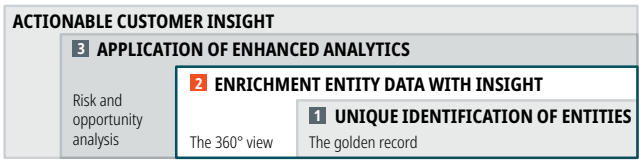
See Chart 1



Unified and aggregated entity views allow the establishment of a unique entity identifier for the entire organization.

Enrichment of entity insight information to establish a 360° view

Entity enrichment under the guidance of governance yields the anticipated business result



While entity information may be interpreted as reliable in its own business silo, you now need to give it new meaning and value at a corporate level. To do so, it must be reconciled (aggregated) into a 360° view reflecting its true structures (incl. legal, marketing, credit), relationships (incl. to contracts, to other counterparties, to assets) and other related information (incl. KYC information and evidence, consent indicators).

Once you can establish a unified, trusted and governed view of entity identification, you can enhance its value through the addition of other trusted information sources, some of which might even emanate from outside of the organization. For example, adding D&B information might help support the creation of legal, risk, credit and marketing hierarchies to multiple levels that might then be shared uniformly across the organization. Also, adding information concerning party relationships to contracts, assets and other counterparties is now possible due to the reliability of the unique identification of entities.

This 360° view of party data is essential to develop a customer-centric perspective of the business relationship. Service desks and sales operations can gain actionable insight from this information. Indeed, improvements in the quality and availability of business critical information can also help reduce administrative expenses to drive efficiency and deal with ever increasing demands from the regulators for know your customer (KYC) and customer due diligence (CDD) procedures.

Chart 2 in the appendix shows example types of data attributes for rich entity insight.

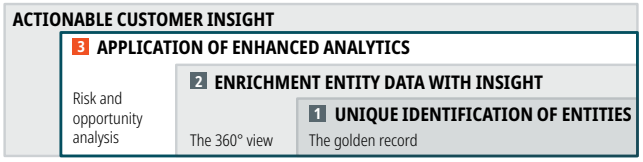
See Chart 2

A survey found that 46% of corporate customers are less than satisfied with their banker's ability to support new customer on-boarding with more than 60% of issues linked to accuracy, documentation and duration; areas in which timely access to complete, accurate and insightful information is key.

— EY Global Commercial Banking Survey, 2014

Enhanced analytics to get insight into risks and opportunities

MDM makes analytics more insightful and immediately actionable



The analytical goals of big data projects have largely been localized, exploratory and pattern seeking in nature. Big data sources have in general been confined to limited numbers of data sources within departmental business application silos. Such projects are limited in their ability to support insightful, data-driven decision making.

Data sources have not been curated using the same data policy management techniques. This introduces an element of risk that is only amplified as more data sources are added, when the ambition becomes enterprise-level data-driven decision making.

This is exactly where MDM can help.

Adding MDM data into the mix with operational and analytical data provides a compass with which to improve accuracy of data navigation. Analytical models can exploit the master data references in order to support data-driven decision making. With traceability and transparency in mind, MDM also helps to identify the data lineage associated with data-driven decisions. MDM enables advanced analytics to work on more joined-up information in a way that it can be trusted and shared across enterprise organizational boundaries.

As business models evolve towards needing faster data integration, even real-time data, the reliable points of anchorage provided by master data within the big data repository will become indispensable. One major advantage of using MDM is to be able to help maintain information accuracy against growing data volumes. This will help to enable AI and ML ambitions. Machine learning will be able to operate in a way that reduces human bias AI will help to find actionable, insightful, information relationships.

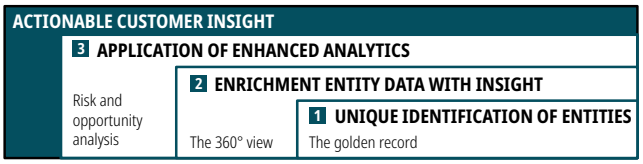
Excellence in data management capabilities is at the heart of transforming from a product-centric to a customer-centric organization

Improving the ability to collect, govern, complement and share key business information is crucial for the transformation from a product-centric to a customer-centric organization, one that is able to actively market to and retain profitable, high-value customers.

While merging and integrating applications might be a longer-term perspective option, joining together the information into sources for analytics can help a product focused organization take a significant step towards becoming a customer-centric organization, simply by understanding the scope and variety of touchpoints that entities have across the organization.

Using master data management as part of a data lake or warehouse strategy gives you the ability to confidently identify non-obvious relationships:

Actionable Customer Insight



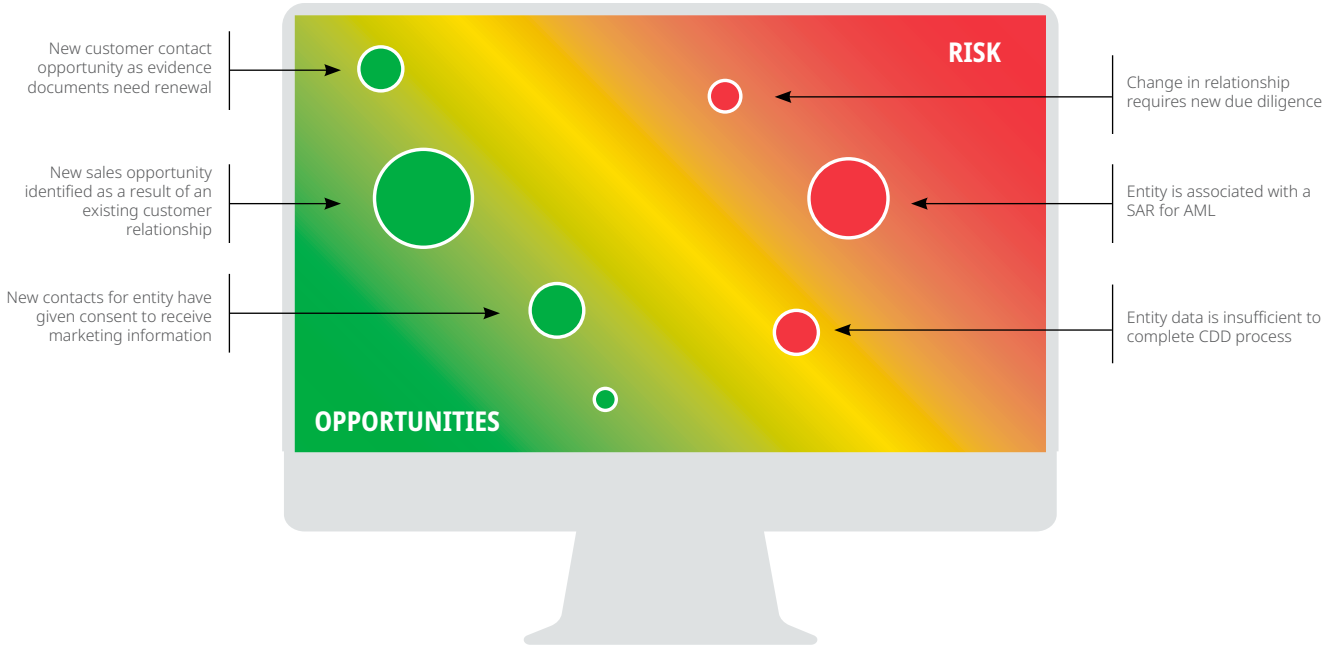
The pairing of data reconciliation and analytics, when guided by data governance:

- Assists in the identification of events and facts that support proactive actions to investigate new sales opportunities and improve customer service
- Detects information events that, when investigated by relationship managers, may yield new opportunities
- Supports a transition from product centricity to customer centricity

Master data management (MDM) is a key enabler for providing a single, trusted view of business-critical information for analytics purposes. A key advantage of MDM is that existing data sources and silos can remain in place while the MDM solution does the hard work of transforming this data into high-quality, ready-to-use information.

MDM turns entity analytics, into actionable insight.

After the aggregated data has been reconciled, validated and transformed into useful information, relationship managers can have it presented on a heat map where they can easily identify information events as opportunities or risks to investigate and act upon.



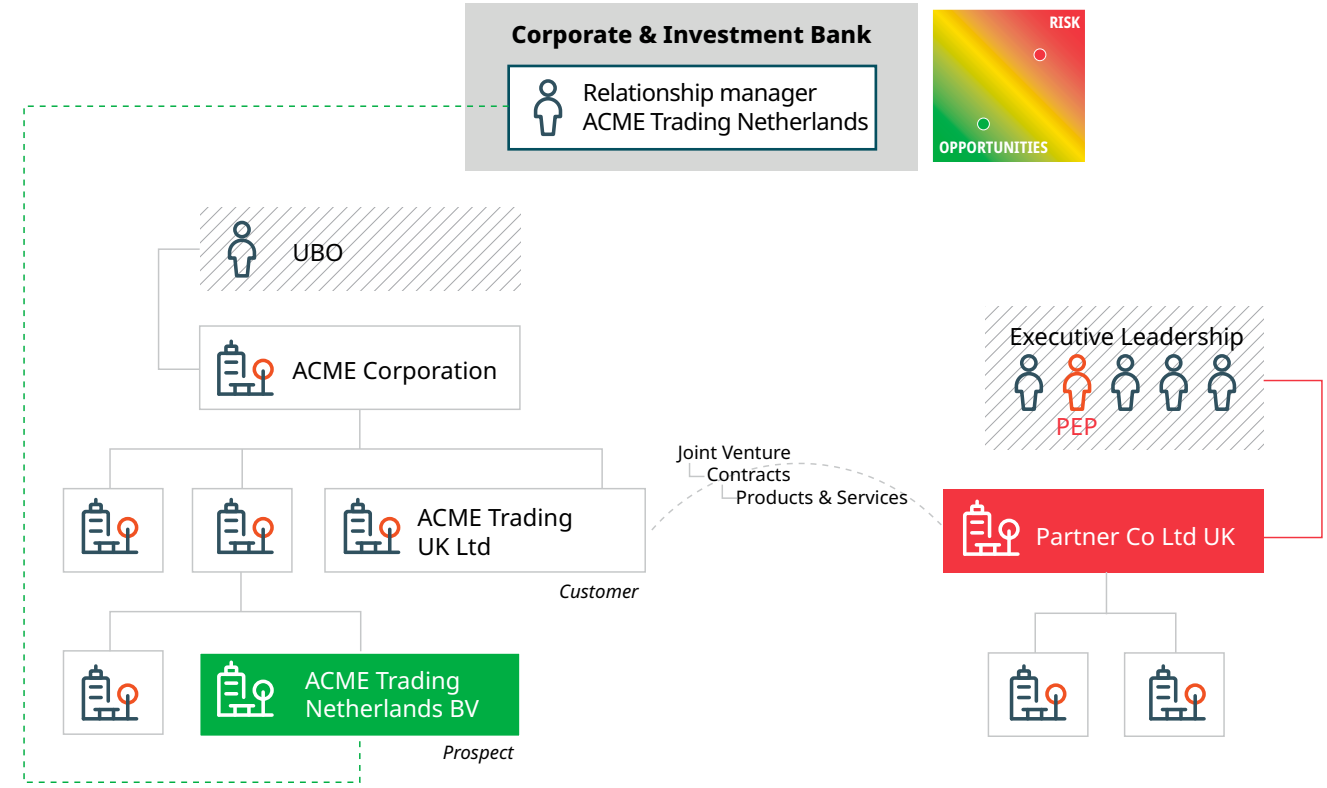
Business case

A relationship manager (RM) of a corporate and investment bank has a customer, ACME Trading Netherlands. ACME is an American company. ACME Trading Netherlands is inquiring about using the bank's structured finance services.

Before reconciling their master data, the RM could only have visibility on the bank's Dutch operations. But now, having a unified entity management system, the RM can see and leverage the bank's complete, global relationship with ACME.

In this example, the RM can see that ACME's subsidiary in the UK, ACME Trading UK Ltd., is already a customer and using the bank's structured finance services.

This insight helps the RM in the sales process with the Dutch prospect. However, the RM will also have to take into account in the due diligence process that there is a joint venture in place in the UK with a politically exposed person (PEP) relationship.



Your prospect is related to a customer in the UK

A PEP might influence your customer due diligence (CDD)

Data that represents extended relationships gives insight into the possibility of identifying opportunities (a Dutch subsidiary of an existing customer) and risks (a politically exposed person (PEP)) associated with a joint venture with a UK subsidiary.

Chart 1

Attribute	Data
Essential data for unique entity identification	
Legal name	Operating legal name.
Company name	Operating trading name ("trading as").
Legal form	Sole proprietorship, partnership, corporation etc.
Jurisdiction	Location of incorporation.
Business address	Legal address and any other addresses relevant for assistance in identification.
Client type	Corporate clients, banks, non-banking financial institutions, representatives. Examples: ▪ Supervised financial institutions ▪ Listed corporate ▪ Non-listed corporate ▪ Unincorporated business partnership ▪ National governmental authorities ▪ Local governmental authority ▪ Non-supervised agents/Intermediaries ▪ Trusts ▪ SPV ▪ Fund/collective investment scheme (is a non-supervised financial institution) ▪ Private individual (e.g., shareholders, controlling parties, UBOs and directors)
Unique entity/customer ID	Assignment of a corporate-wide, internal, unique identification mechanism. Different lines of business (e.g., investment and wealth management) often have their customers identified differently. In addition, more centralized functions such as compliance and risk management may have their own mechanisms.
Local customer ID	Party identification applicable within a country/region used for identification, for example a local chamber of commerce number or tax identifiers.
Global ID	Any existing global identification mechanism being used across the enterprise.
Originating ID	The ID currently being used for the entity in its system of source. Examples include systems that have identifiers for prospects where only customers get assigned unique identifiers.
Review date	Dates at which data has been reviewed/needs reviewing and the time required between reviews.

Chart 1 continued

Attribute	Data
Data to assist in complementary identification	
External ID validation	External identification service, such as D&B, Bisnode, Infogreffe etc.
Legal hierarchy	Corporate legal hierarchy. This may exist in internally developed form and/or originate from external data providers such as Dun & Bradstreet. View from the ultimate parent to the ultimate subsidiary. Entities will include parents, joint ventures, affiliates, divisions, branches, holdings, groups and non-operating entities.
Industry codes	Industry classification into core and non-core businesses, including NAICS, SIC, NACE, ISIC, NOGA etc.
Ultimate Beneficial Owner (UBO)	Identification required typically for the purposes of AML and KYC/CTF.
Line-of-business (LoB) relationship	Understand if the client has a relationship with another LoB. The data from other LoBs might be different, so CDD requirements will need to be flagged appropriately
Eligible party type	▪ Credit ▪ Insurance ▪ UCITS ▪ Government ▪ Central bank ▪ EU regulated financial institution

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Chart 2

Attribute	Data
Data to assist in the development of insight	
Financial stakeholders	Showing stakeholders and their positions (e.g., % ownership).
Entity relationships	Party to party relationships (1-2-1 or 1-2-many). Examples include both people and organizations such as advocates, PEPs shareholders, administrators and subsidiaries.
Contractual relationship	Type of contract and role played against the contract.
Director and management parties	Persons having an official organizational management and administration role.
Representatives	Persons or companies having representative roles for management and administration functions, for example power of attorney.
PEPs	Politically exposed persons and other sensitive party associations.
CDD status	Where multiple line-of-business relationships are in existence, the CDD requirements might be different for the same customer.
Economic structure	Cooperation between two or more companies; joint venture; temporary project relation etc.
Credit risk hierarchy	Organization of party and contractual relationships that supports analysis of credit risk.
Marketing hierarchy	Representation of entities and their extended relationships in support of identification of sales and marketing opportunities.
Historical hierarchy	Acquisitions, mergers, incorporations, dissolutions etc.
Organizational structure	Administration and/or internal organizational structure.
Sanction screening	Indicate status with respect to sanction or other due diligence check lists.
Risk assessment	Risk level based on CDD/KYC or other risk assessment process.
Relationship status	Classification that would summarize the relationship with the business, such as customer, prospect, advocate etc.
Party classification type	Retail, professional, eligible
Eligible party type	Credit, insurance, UCITS, government, central bank, EU regulated financial institution
Market information	Structured and unstructured information from market information providers (e.g., LexisNexis, Six, Bloomberg).
Consent and preferences	Party's consent confirmation (e.g., GDPR) that determines what personal information may be used for contact, marketing, sharing and other business purposes.

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