Identity Resolution Enables Informed Decision Making

What you know about a business can create a competitive edge

In today’s fast-paced global economy, companies face increasing pressure to make faster and more intelligent decisions. Learn how Identity Resolution can improve decision-making, increase profits, and spur growth.
In a data-driven world, the opportunity trumps the challenge

Companies today are challenged to exploit the mountains of data they collect about customers, partners, suppliers, and the markets they serve. Companies that can bring together and analyze their business data across disparate processes have a decisive advantage over competitors who do not; and first movers have an advantage over those that follow. In particular, a company’s ability to identify and know its customers and partners is critical to success. Significant business value can be gained through deeper insight into:

- **Customers/Prospects**—How many unique customers does your company really have? Is your company’s prospect list in line with your target market? Which prospects can be targeted for up-selling or cross-selling because they are related to existing customers? Is your customer a member of a larger corporate family with whom you already do business?

- **Risk**—Are any of your customers or suppliers at risk of financial distress that could lead to credit risk or supply chain disruption? Similarly, are any customers or suppliers on the government debarment list?

- **Dependency**—Who are your company’s largest customers or suppliers, and what is their percentage of business relative to total sales? Does this dependency pose a financial risk or an opportunity for increased leverage or balance of trade?

- **Diversity**—How diverse is your company’s supplier base? Can it meet corporate or government diversity objectives?

Companies recognize the business opportunities in these and other areas, and so attempt to gather and use information from many different sources. But integrating information for each unique current and prospective customer or business partner is a complex undertaking. Business data is commonly stored inconsistently across source systems with varying degrees of completeness, accuracy, and timeliness.

Particularly challenging are the multiple ways in which an entity can be represented and described in different data sources, such as databases and websites. For example, in a contract system the “entity” may be a contracting party, while a billing system for related transactions reflects the entity as a financing company acting on behalf of the actual purchaser. The entity may also carry a current address in one system and a former address in another, creating further confusion and uncertainty about its identity.

The sheer volume of data and rapid pace of business change—for example, every 30 minutes a company name changes—also make it difficult to understand the most current business entity information, and to resolve data issues quickly in order to maintain reliable, high-quality data. This challenge has been further complicated by the increasing globalization of business transactions utilizing data in foreign languages and writing systems that often cannot be easily read, analyzed, or shared by traditional business systems or by users of those systems.

As a result, companies often struggle to create and maintain a clear, authoritative view of customers, suppliers, partners, prospects, and other entities.
Resolving Business Identity Uncertainty with Identity Resolution

Many companies today are achieving the required visibility into their data through Identity Resolution, a rigorous methodology that enables them to understand all aspects of a single business entity, including the ability to access and resolve data across numerous data sources. These sources can include data that is maintained internally, data that is accessed using web-enabled capabilities such as mining and discovery, and data that is accessed from 3rd-party sources.

Identity Resolution creates a standardized definition of an “entity” within those data sources, and then utilizes data, tools, techniques, processes, and analysis to identify entities with a high degree of confidence.

In essence, Identity Resolution enables informed decisions by helping companies find the right information about the right business to get to the right answer to meet business objectives. Identity Resolution is more than matching in that it not only provides identify information about a business, but also considers information such as past financial and operational performance as insight into the viability of that entity.

Identity Resolution is not a new concept or tool, but its importance and potential value have increased significantly as companies amass more and more business data in the more virtual business environment.

Companies are now implementing advanced data analytics that can derive powerful insights from their data, but these insights are only as accurate as the quality of business information available, including the ability to identify the business entity of interest. Flawed data can lead to poor decision-making and misguided strategy. Identity Resolution enables companies to dig deeper into their business systems with greater confidence that they have identified the relevant entities and related data to address their business challenges and goals.

A highly-efficient Identity Resolution function requires these features and capabilities:

- A referential, global database that is current, complete, and accurate. A large, worldwide database of verified business entities and related information, such as executive names, addresses, phone numbers, etc., is the cornerstone for effective Identity Resolution.

ACTT+C – The standard for data quality

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<th>A</th>
<th>Accuracy – the right information on the right entity</th>
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<td>C</td>
<td>Completeness – information reflects all relevant attributes of the entity</td>
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<td>T</td>
<td>Timeliness – the most up-to-date current information available</td>
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<td>T</td>
<td>Thickness – measurement of the amount and type of data that improves the ability to predict future business behaviors</td>
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<td>+</td>
<td>Cross-border consistency – no conflicting information across a global organization</td>
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This includes the assignment and utilization of a unique entity-specific identifier to maintain the referential integrity of each entity across the company’s database, so it can identify and track a business globally, and keep up with dynamic changes in the business community, such as triggers from postal processes, public records, news events, etc.

- **Rigorous cleansing, matching, analysis, and optimizing capabilities.** A company should cleanse and standardize its data to establish the most reliable, accurate, current, and complete data for each business in the company’s referential database. This can be enabled using automated processes, which include algorithms, heuristics, and business rules, to build composite records by analyzing information from many different sources. In addition, these processes can enrich the business data by completing records, adding new information beyond basic identity data, correcting fields that are incorrect or outdated, and revealing relationships among entities. Besides enabling a robust master data management capability, this also forms the basis to provide the data required to execute business functions.

- **Proficiency across multiple languages and writing systems.** The globalization of business relationships is overwhelming many business systems with multilingual data that create complex challenges when identifying a business. Many languages and related writing systems have unique alphabets, symbols, rules of grammar, and ways to organize and identify the business identity data elements, such as name and address. Adding to the complexity are country-specific nuances and standards related to business identity information, including business names, legal identifiers, addressing, postal codes, and phone numbers.

These must all be considered through the matching lifecycle when comparing inquiries to database data and determining the quality of each match experience, which is the first step in Identity Resolution.

### Different Approaches Required to Resolve Different Challenges

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<th>Language Specific</th>
<th>uses sound, meaning and geographic position</th>
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<tr>
<td>Language Agnostic</td>
<td>uses techniques based on spelling and text patterns</td>
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<tr>
<td>Semantic/Ideogrammatic</td>
<td>Must handle multiple Asian scripts and writing systems (65,000+ symbols)</td>
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An effective and robust global matching solution requires more than a character-by-character approach; in addition, the use of translation or transliteration introduces subjectivity and bias into the match experience, which can negatively impact the result. In that context, a truly global matching process must handle native language inquiries against a robust native-language reference database, using logic that recognizes language, writing-system, and country specific attributes and characteristics. It must look behind the text into the semantic, phonetic, and morphological aspects of the data to assign the correct relative impact of each data component on the overall match experience. The result is a global solution that provides a more accurate identification of companies in response to each inquiry.
This requires skilled, experienced people and reliable processes for making phone calls, investigating public records, building files, and performing the necessary investigative research to resolve unknown or ambiguous entities within a company’s database. The result is a robust, end-to-end process that evaluates the viability of the various pieces of information, allowing companies to move from matching to resolution, and then to advanced and predictive analytics for determining business actions.

Each of these interrelated capabilities instills a high-degree of confidence in the identification of a business entity, and together they support a clear, accurate, and up-to-date view of customers, suppliers, partners, and prospects. As a result, companies can confidently use their business data to identify new customers and markets, expand business with existing customers, improve supplier management, strengthen compliance, mitigate credit and fraud risk, and gain insights that improve operations and, ultimately, bolster the bottom line.

**Business Cases: Driving Value with Identity Resolution**

Identity Resolution enables companies to tackle a variety of business challenges, improve operations, and increase sales and profits in numerous ways.

*Identity Resolution is art as well as science, and it is most effective when implemented as part of a data stewardship strategy that enables advanced analytics to drive a business forward.*

As companies become more global, they collect data across multiple languages and writing systems. Identity Resolution allows companies to incorporate and use global data for a specific business entity, enabling the creation of robust database of high-quality information.
about customers, suppliers, partners, and other business entities. Ultimately, Identity Resolution helps companies make sense of their business data and use it to gain critical market insights.

**Optimize and Scale Data Stewardship Activities**
Every company struggles to turn poor quality data into high-quality data that can be easily accessed and re-used, analyzed, and shared. Most do not have the scale or internal capabilities to perform the complex tasks required to maintain business databases. Identity Resolution can enable a data stewardship strategy that cleanses and standardizes data, improves processes for acquiring and adding business intelligence to company systems, and improves data sharing among systems to enable the enterprise to take full advantage of its business data.

**Enhance Insights from Advanced Analytics**
Identity Resolution provides a foundation for companies to perform deeper analysis of the data. It provides significant value by accurately identifying business entities and linking them to valuable current and historical information, trade and other related information about the entity. More specifically, it helps companies with:

- **Risk Management.** Identity Resolution provides accurate intelligence about customers and partners, streamlines credit approval processes, and monitors compliance. Companies can use this information to conduct advanced data analytics for predicting future business performance, risk, and other variables.

- **Sales and Marketing.** Identity Resolution helps companies identify new customer leads, improve preparation for sales calls, and use new avenues (such as social media) for acquiring customers. Companies can also uncover corporate family linkages to up-sell or cross-sell to existing customers.

- **Supply Management.** Identity Resolution provides pre- and post-award insight into the operational and financial stability of suppliers, as well as supports monitoring of management, ethics, and performance.

- **Compliance.** Identity Resolution can help companies protect their brand reputation by managing the third-party risk associated with business relationships.

**Conclusion**
In today’s fast-paced global economy, companies face increasing pressure to make faster and more intelligent decisions. They have an unprecedented amount of information to guide decision-making, but they often lack the capabilities to effectively use that data. As a result, they may be a step behind in decision-making or, even worse, they are making decisions based on a partial or incorrect understanding of their data. A company that has inaccurate or incomplete information may extend credit to a high-risk client, use a supplier that is not in compliance with required regulations, chase unproductive leads, or devote valuable time searching business systems for information that ought to be accessible by a simple keystroke. The vast storehouses of data collected by companies provide little benefit—and might even cause harm—if the data is untrustworthy or too difficult to find.

Identity Resolution strengthens decision-making by providing access to the right information on the right business to make the right decision at the right time. It applies rigorous analytical processes that get companies the answers they need to take advantage of market opportunities, improve operational efficiency, and reduce risks. Identity Resolution also strengthens data stewardship and the value of information to the corporation. Ultimately, Identity Resolution supports analytical insights that can improve decision-making, increase profits, and spur growth.