



Harmonizing data across the enterprise to enable powerful analytics

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Consumer goods companies are spending millions of dollars to access data from multiple sources. These data sets must be harmonized for their true power to be realized.

Misaligned data sets lead to incorrect analysis, which could then lead to misdirected business strategies. It also means a poor return on your investment, making it hard to justify additional spending on data. Common problems resulting from an un-harmonized data environment include:



Inconsistent values for the same metric from different sources, such as internal shipment data versus syndicated market data.



Teams using different data sources to address the same problem, leading to conflicting insights and an inability to compare notes.



Misaligned reporting periods between data sources, like that of your marketing department versus retailer transactions, which makes it impossible to measure the effectiveness of activities like promotions.



Paying data providers to clean data sets to make them useable on top of the license fee — and even then, they aren't living up to their potential because they're not aligned with other data sources, making it difficult to justify the spend.



No central process for data governance, which means that rebrands, retailer consolidations or changes to reporting processes render all analysis useless until a comprehensive remapping across all data sets has been undertaken.

Having different data sets pointing in different directions can be worse than not having data at all. At best, incompatible data sets represent a waste of money; at worst, using them for business-critical analytics could lead to ill-guided strategies and material loss to the company.

Good data can transform a business, however. So your focus should be on turning these disparate sources into a coherent whole that lets you access the relevant data at the right levels. Data harmonization does exactly that, and typically at a fraction of the cost of purchasing the data sets in the first place.

What is data harmonization?

Harmonization is a continuous process that aligns all available data sources — market data, shipment data or customer data — across all key metrics.

By synchronizing data points across products, channels, time periods and geographies, otherwise disparate data sets can easily converse with each other. And that brings the full range of business data to bear, making the entire organization “analytics-ready.” This will:

Harmonization helps develop focused marketing strategies.

A major Fortune 500 was able to estimate the market size and develop focused marketing strategies for each subcategory, which were originally masked under one big category of oral care in the data provider’s database.



Increase the accuracy of reporting, which makes building comprehensive models for engaging your customers a certainty.



Allow more accurate assessment of total addressable markets, market share and market forecasts.



Make exception reporting possible by having relevant data points address key questions.



Streamline the sales and operations planning processes by having a “single source of truth.”

Harmonization vs. transformation

Combining data sources in a single warehouse is not the same as harmonization. There are many tools in the market that claim to transform and integrate different sources, but few are capable of truly harmonizing disparate data sets to the level required to build powerful analytics.

Sometimes, integration is really all that you need. If the objective is to check the data for completeness, validate for accuracy or simply add to your existing data warehouse, then you may not need a complete harmonization. Setting up a simple “extract, transform, load” (ETL) process or commissioning a data service provider to clean your data may suffice.

Harmonization cuts down ‘data-to-decisions’ time.

A CPG manufacturer was able to cut down the data-to-decisions time by 45 days through automated harmonization.

However, if your objective is to make the organization “analytics-ready,” then you should embark on the harmonization journey. This should include:



Comprehensive validation steps to ensure complete, consistent and accurate data points to enable metric-to-metric comparison across sources.



Creation of attributes – additional fields or derived metrics – using mapping files or business rules to enhance the analytics-readiness.



A scalable process that can handle additional metrics and domain nuances.

Harmonization also simplifies data governance – a process overlooked at most companies. Updates to one data set will automatically be reflected in all others. This can prevent companies from making multi-million dollar errors. Imagine if a retailer consolidation was reported in your internal systems, but not in the syndicated market data; the insights derived and, therefore, the recommendations for your customers could be disastrous.

Harmonization will help go beyond linear hierarchies to help with business strategies.

A global beverages company was able to create attributes to classify retail outlets based on monthly sales volume and hence support its distributors with promotion strategies for specific retail outlets.

The trouble with data sets

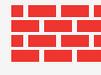
While you should expect data providers to share data sets that are ready to use, that unfortunately is not always the case. Even data from top global providers can have problems such as:



Different structures for different markets or categories.



Additional costs for cleaning data or providing a streamlined feed.



An inability to access data from other providers due to competitive practices.



A lack of true harmonization capability or the patience needed to meet specific client demands.

This means that, even after spending millions of dollars to access data from multiple sources and even more on having it all streamlined, your organization could still be left with data sets that can't talk to each other.

Taking the plunge

Choosing the right partner to guide you through harmonization is vital. But before you can choose that partner, setting a clear objective is integral to ensuring that the process does not end up becoming a simple data integration.

A strong vision, and identified use cases, will help you choose the relevant fields and optimize your effort and resources toward enabling the analytics solutions you need. This requires a commitment from any organization embarking on the harmonization journey to deliver the right infrastructure, set up robust governance processes, and ensure that key personnel are engaged in the project.

For consumer goods companies, the rewards are considerable. You will finally be able to unlock the enormous value in datasets currently sitting idle or – even worse – generating misleading insights. By turning the flood of data that’s available into a coherent, cohesive whole, data harmonization gives businesses a full-spectrum view of their organization and the markets in which they operate.

Fractal has experience harmonizing more than 1100 country categories.

Fractal has experience harmonizing more than 20 different data sources (from syndicated to media to shipment to consumer survey).

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Fractal Analytics has more than 1000 people across 12 global locations including the United States, UK and India and has been named a "Cool Vendor in Analytics" and a "Vendor to watch" by Gartner.

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