



## SOLUTION BRIEF

# BE “IN THE KNOW” NOW: AUTOMATICALLY UNCOVER CUSTOMER TRENDS AND INSIGHTS

Customer Analytics – Marketing is no longer about the “big idea” broadcast to the masses. Instead, it’s the big insight into an individual customer’s unique need or desire that keeps a company competitive.

### THE BUSINESS PROBLEM

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Companies today must compete on knowing who their customers are...and how they find, retain, and nurture them. Whether they’re B2C or B2B, companies can no longer remain competitive simply by what they sell or where they sell it.

The companies thriving – and surviving – today outperform their competition by knowing who their buyers are and how to communicate directly to each consumer or decision-maker. As if each one was their ONLY customer or client.

## THE TECHNICAL CHALLENGE

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Learning a customer's propensity to buy or act is the essence of customer analytics. Accurate predictions of individual behavior help marketers send the right message, at the right time, using the right channel...and know when they shouldn't bother.

It takes a lot of data to do this right. More is always better; from different sources; structured, semi-structured, and not. Why? Because the more dots the analyst connects with data, the clearer the patterns become that reveal what a consumer or decision-maker might do in a given scenario.

In other words, it's a Big Data problem. And that's the heart of the challenge for the analyst charged with predicting consumer behavior – how to integrate massive amounts of diverse data from disparate sources, and find all the relationships, or linkages, within and between it – when these are not known in advance!

That's why a traditional data mart or warehouse is not the answer. These data models depend upon a schema. And a schema depends upon the analyst making accurate suppositions about the relationships in the data – BEFORE discovering what these are!

This won't do. A thorough predictive analysis requires the analyst to first discover all the relationships within and between immense sets of different data...connect all the dots that suggest a customer's propensity to buy or act. Indirect linkages between data must be inferred, and different references to the same type data reconciled. Otherwise predictive analysis is limited to what is already known about the data relationships, and throttled by the analyst's prior assumptions and experience.

First, a more flexible data model is required; one where large sets of diverse data, coming from everywhere and anywhere, are easily ingested and combined. Second, and most important, all the unknown relationships within and between all this data must be found and inferred [automatically](#), brought to the surface for the analyst to consider in real-time.

The amount of data is just too massive for the analyst to surface previously unknown relationships manually; and sampling by its very nature obstructs finding ALL the linkages deep within the data.

With all the relationships within all the data automatically brought to the surface, the analyst can begin predictive analysis with the clearest picture of the human experience, influence, sentiment, and habit that reveals the [person](#) who [is](#) the customer...

## THE URIKA SOLUTION

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YarcData has packaged the power of real-time Big Data discovery into an enterprise-ready appliance. Data relationships, or linkages, are the essence of big data discovery. Without these, the analyst cannot infer the most complete pattern of behavior or build a three-dimensional profile of a buyer. Without these, customer analytics would be stuck in the same place – an analyst making best-guess suppositions on limited amounts and types of data, with predictions of consumer behavior much less accurate or insightful.

Urika™ ingests and optimizes discovery analytics for massive amounts of data from multiple, arbitrary sources. Analysts can quickly load data into a powerful Big Data discovery engine that automatically finds and surfaces the data relationships hiding within it. No schema required.

With the unknown linkages brought to the surface, the analyst can view the results real-time or feed them to a customer analytics engine for subsequent analysis and visualization.

Urika's schema-free architecture, large shared memory, massively multi-threaded processors, and highly scalable I/O fuses diverse data sets into a high-performance, in-memory data model ready to be queried...all ad-hoc and in real-time. No need to first lay out the data or predict the relationships – or even know all the queries to make upfront.

With a memory that scales up to 512TB, an I/O capability that loads up to 350TB per hour, and a discovery engine that runs up to 8,192 Threadstorm™ processors (each capable of 128 independent streams of work at once), Urika is truly a data discovery appliance that delivers on the promise of Big Data to accelerate finding linkages between, and gaining new insights from, massive sources of disparate data.