

Make every interaction count

Overview

The need

Need for stronger computing power to accommodate real-time analysis on massive data volumes of online and offline data

The solution

IBM Netezza 1000 data warehouse appliance

The benefit

- 20% growth in digital sales – the clients see more revenue from more customers
- Ability to gauge online and offline marketing impact
- More robust view of the consumer
- Break down of data silos

[x+1]

Helping clients reach their marketing goals with analytics powered by IBM Netezza

Digital marketers are good at collecting data, but often find it challenging to derive actionable insights from the massive volumes of information they gather online. When buying ads, for example, many marketers base their decisions on the last click from a previous campaign. This leaves them unable to identify potent indicators revealed earlier in the purchase funnel, such as in-market readiness.

This strategy is far from perfect. Some consumers are barraged with ad messages, others are under-exposed, and as a result they do not fully understand the product or offer message. The bottom line is that advertising dollars aren't being spent optimally and the business opportunity is not maximized.

How does a company manage its messaging and media channels to effectively propel consumers through the purchase funnel? The answer lies in the application of complex but essential advertising analysis on massive volumes of data in real-time. This is a capability offered by [x+1] and enabled by IBM® Netezza®.

[x+1] and IBM Netezza

Founded in 1999, [x+1] helps marketers and agencies to maximize prospect and customer interactions across multiple digital channels through [x+1] ORIGIN, its digital marketing hub and a suite of advanced analytics. The process begins with finding consumers and by “flagging key data elements that tell you if they're in your target audience,” says Leon Zemel, [x+1]'s chief analytics officer. Then, by delivering messages based on the segment and the consumer's place in the purchase-decision funnel – along with the right exposure range (called Optimal Frequency Range, or OFR) – all calculated in real time, success is achieved.



“Historically, we talked about lift in the response rate or the conversion rate. Now we’re talking about lift in total digital sales. And we’re seeing a big year-over-year impact – 20 percent growth. Net-net, the client is seeing more revenue from more customers.”

– Leon Zemel
Chief Analytics Officer, [x+1] Inc.

[x+1] ORIGIN enables the management of audience interactions through the following products and services:

- **Media+1** – An audience targeting and bidding Demand Side Platform (DSP) for pre-purchased and exchange-based digital media.
- **Site+1** – A website personalization management tool that assembles data about prospects and customers, which chooses the statistically optimal mix of offers or content to show each site visitor.
- **Landing Page+1** – A service for delivering tailored landing pages based on visitor profiles and traffic sources. When paired with Media+1, it becomes a highly effective media-aware landing page.
- Analytics tools and services, including the 2011 release of **Reach/Frequency Manager**, which provides packaged and custom reporting and insights to track and improve digital marketing across the customer purchase decision funnel.
- **Open Data Bridge DMP (Digital Management Platform)** to collect, store and manage all first and third party data for in-bound and out-bound marketing.

POE™, [x+1]’s proprietary Predictive Optimization Engine which is at the heart of [x+1] ORIGIN, is engineered to leverage sophisticated mathematical models to test, optimize and scale marketing return on investment.

The strategic and tactical marketing, and media outputs made possible by [x+1]’s technology and tools, are driven by data that spans the massive Internet population. Though it’s not about volume alone; effective use depends on the analysis of the right elements.

As Zemel sees it, too many firms rely on small-data approaches – such as attribution analysis based on the last click – which fail to track the impact of offline media. [x+1] tracks attributions across both digital and offline channels and delivers effective, predictive analysis.

It takes granular data to complete this task and the data points have to be “organized so they can be analyzed and leveraged for marketing value,” according to Zemel. As many firms have learned the hard way, massive data capture cannot be effectively leveraged with traditional database marketing technology.

Big computing power

Enter IBM Netezza. [x+1] had decided to replace its legacy MySQL database with a data warehouse appliance that would provide the needed horsepower, scalability and ease of use.

Solution Components

Hardware

- IBM® Netezza® 1000

Previously [x+1] used Oracle, SAS, and in-house developed ETL processes, which put flat files directly into solutions like SAS. Data volumes were growing and the analytics team had to perform increasingly complex ad-hoc analysis to serve clients and help them grow their businesses. That meant moving from a traditional relational database management systems (RDBMS) to proprietary analytical tools.

“We used to look at every impression individually as opposed to taking a comprehensive view of that user,” Zemel says. “We had to take a more longitudinal look. But we couldn’t support that level of complexity.”

What [x+1] needed was processing power, the kind that facilitates data-intensive analysis in a real-time environment. Having heard from partners and other firms in the space, [x+1] turned to IBM Netezza. While other solutions were also considered, “We compared IBM Netezza to our Oracle environment more than anything,” Zemel says.

Based on this review, [x+1] chose the IBM Netezza data warehouse appliance and deployed it with minimal effort. One deciding factor was speed – IBM Netezza facilitates real-time analytics. Additionally [x+1] was impressed with IBM Netezza’s scalability and price/performance ratio.

The IBM Netezza data warehouse appliance architecturally integrates database, server and storage into a single, easy to manage system which requires minimal set-up and ongoing administration. It delivers high performance, out-of-the-box, with no indexing or tuning required, and it simplifies business analytics dramatically by consolidating all analytic activity in the appliance, right where the data resides.

Data is now run through TIBCO® Spotfire and placed in visualization outputs for the convenience of the end users – namely media planners and analytics professionals at digital marketing firms and their agencies. IBM Netezza helps marketers cut through the digital exhaust and respond more quickly to consumer needs. In short, it helps them synchronize large data volumes into meaningful marketing.

By installing the IBM Netezza data warehouse appliance, [x+1] was able to provide its analytics team with a simple SQL interface that could handle massive volumes of data. The analysts can focus on gleaning insights, and the engineering team can focus on the company’s core products.

“For this single client, we collect five billion cross-channel marketing impressions per month from all its marketing activities. This is where we really use the power of IBM Netezza.”

— Leon Zemel

At the same time, clients can now move quickly up the maturity curve – they can leverage increasingly sophisticated types of data analysis to create business value. Firms that climb the maturity curve the fastest are the ones most likely to win.

A client's story

With the IBM Netezza engine empowering [x+1]’s solutions, [x+1] is helping marketers solve seemingly insoluble problems. For example, one client had a “mass of uncultivated user interactions – log files, web site analytic data, customer data,” says Zemel. “But it had trouble fully monetizing this sprawling virtual metropolis of digital customers.”

They had the typical problem of bombarding some consumers with the same ad over and over just because they visited a web site. Meanwhile, other consumers who needed multiple touches, simply didn’t get them. “Last-view attribution analysis leads us to believe that this might actually be working,” Zemel says. “But consumers are not going to switch brands just because they saw one display ad.”

The result for this client: “The audience composition was way below where it needed to be,” Zemel says. Even worse, the firm didn’t know the full impact of its marketing. “There was a disconnect between the digital investment and digital P&L.”

Multi-dimensional data

To solve this problem, [x+1] applied two core customer-centric, data-driven marketing precepts:

- Define the consumer and their needs.
- Determine the messages and investment that will move the consumer along the purchase funnel.

This required a multi-dimensional data approach: The company had to update the consumer’s record with every interaction – in real-time. They also needed to access demographic and lifestyle data from third-party sources. This was needed to determine who the consumer is and their personal profile segment, as well as behavioral data based on all the touches that are being supplied to that consumer. These included banner-clicks, search activity, site visits, product signups and comparison shopping.

How do these different data elements work together?

Prospect segmentation does not tell the business owner enough information regarding the person who is preparing to make a purchase. An audience prospect segment for a car dealer (e.g. urban dweller, head of household, student) won't reveal that he or she is in the market to buy a car, but it will when combined with his or her behavior. "If he or she has searched or visited a car shopping site, we have a strong indication of how likely he or she is to buy a car," says Zemel.

He warned, though, that it takes at least a half-dozen data sources to create a robust consumer profile, and that the marketer must judge the accuracy of each source to decide which ones to use for modeling and targeting.

At this point, having applied predictive segmentation to the data, the client was able to decide the message and the Optimal Frequency Range (OFR). "The OFR is a critical lever for creating marketing success," says Zemel. "The family guy with two cars may require more message exposure to get him to consider to switch brands than a person buying their first car."

OFR analysis looks at the entire marketing picture by segment and user. It is based not on the last impression, but on all interactions from the start of the relationship – thus, it is a broader and far more effective gauge of consumer intent than last-view attribution. "We bid higher for people that were below the OFR and got impressions in front of them," Zemel says. "And we reduced our bids for people who were beyond that range or not in the target audience. We shifted the entire media plan into that sweet spot."

That done, [x+1] built "look-a-like segments to expand the coverage and the size of our target audience," Zemel says. Then, during the calibration period, [x+1] analyzed all media sources and their audience impact, applying mathematical models to determine the spend and frequency cap on each one. The client could move dollars where they needed to go – within the OFR.

The client was now able to track – and more effectively use – traditional or negotiated media and, "at the same time, complementary to that, we were able to fill in the gaps in the real-time inventory exchanges," says Zemel.

You might wonder: Is it difficult to connect online and offline activity when the sale is offline? The answer, no. Take the case of the auto purchase. "If someone requests a quote or a dealer visit online, there are ways through lead management to optimize that," Zemel says. "Sometimes there isn't a direct connection, so it's a little bit more correlative at first."

The benefit: digital sales growth

Armed with the power of IBM Netezza, [x+1] produced several benefits for its client. First, there was an attitudinal change. “We shifted the client’s whole view of how they were managing media in market,” Zemel says. “They went from a last-view, CPA performance-based optimization plan to a more meaningful and comprehensive approach.”

Based on this, the client determined how consumers were moving through the funnel – and the financial impact. “We had to prove that there was a causal effect – that we put dollars in and got total digital sales out,” Zemel says.

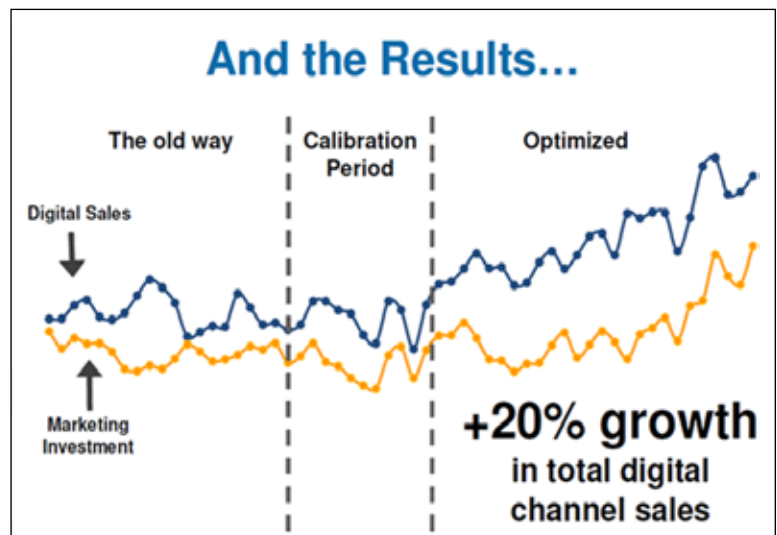
The firm also knocked down barriers separating brand and performance marketing. “Breaking down the silos didn’t take a hammer or a re-org,” Zemel says. All it took was “a marketing framework focusing on the audience.” People at the firm and its agency could see where they fit in, and work toward the same business goal.

Another benefit was control: The client is in full command of frequency and audience engagement. At the same time, the client has moved away from relying on near-term performance for analysis and can now see the total effect on its business. This has led to a better audience composition.

The result is that the company is now able to work with massive data volumes. “For this single client, we collect five billion cross-channel marketing impressions per month from all its marketing activities,” Zemel says. “This is where we really use the power of IBM Netezza.”

And what about the most important barometer: revenue?

“Historically, we talked about lift in the response rate or the conversion rate,” Zemel says. “Now we’re talking about lift in total digital sales. And we’re seeing a big year-over-year impact – 20 percent growth. Net-net, the client is seeing more revenue from more customers.”



About [x+1]

[x+1], the online targeting platform leader, maximizes the return on marketing investment (ROI) of websites and digital media using its patented targeting technology. Providing the first end-to-end digital marketing platform for advertisers and agencies, it optimizes engagement rates and lift conversion in both media and on websites. Its predictive marketing solutions enable automated, real-time decision making and personalization so the right advertisement and content is delivered to the right person at the right time. Top companies in financial services, telecommunications, online services and travel have significantly increased the performance of their digital marketing using the services of [x+1]. The company is headquartered in New York City. For more information, please visit www.xplusone.com; follow us on twitter @xplusone.

About IBM Netezza

IBM Netezza pioneered the data warehouse appliance space by integrating database, server and storage into a single, easy to manage appliance that requires minimal set-up and ongoing administration while producing faster and more consistent analytic performance. The IBM Netezza family of data warehouse appliances simplifies business analytics dramatically by consolidating all analytic activity in the appliance, right where the data resides, for blisteringly fast performance. Visit netezza.com to see how our family of data warehouse appliances eliminate complexity at every step and lets you drive true business value for your organization. For the latest data warehouse and advanced analytics blogs, videos and more, please visit: thinking.netezza.com.

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