

CASE STUDY

# SONIC DRIVE-IN

Sonic wanted a single-source Big Data solution that could provide faster and easier access to insights that inform strategy. **The answer: 1010data.**



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## SONIC DRIVE-IN

Unwilling to accept limitations imposed by conventional database technology, Sonic wanted a Big Data analytics solution that would drastically accelerate time to insight while giving the company's analysts the improvisational freedom they needed to make raw data actionable. In the 1010data analytics platform Sonic found the breakthrough technology that met all its needs. The Cloud-based 1010data analytics engine bootstrapped Sonic's analytics almost instantly—providing deep insights that Sonic immediately put to work informing strategy. With 1010data powering its analytics, Sonic is poised to extend its market leadership while serving as a model for the new, data-driven enterprise.



## EMBRACING BIG DATA

With more than 3,544 drive-ins in 43 states, Sonic (NASDAQ: SONIC) is the nation's largest chain of drive-in restaurants. The company's nostalgic drive-in concept, carhop delivery service, and distinct menu combine to create a classic American diner experience that's a powerful differentiator in the crowded Quick Service Restaurant (QSR) segment.

But not even market leaders can rest on their laurels in unpredictable economic times. A decline in discretionary spending, skyrocketing prices for key inputs, and intense competition is forcing drive-in restaurant chains to find new ways to absorb rising costs without passing them onto customers—and risk losing market share.

Not surprisingly, Big Data analysis is shaping up as a major competitive advantage in the drive-in restaurant business, where the decisions a company makes today can affect its profitability for years to come.

Liberating insight from massive datasets makes it possible for QSR companies to predict consumer behavior, analyze purchasing patterns, and drive customer action.

While Sonic has carved itself a niche by leveraging nostalgia, there's nothing vintage about the company when it comes to information technology. Early on, Sonic recognized Big Data analysis as a way to retain its competitive advantage—especially at a time when the company is expanding to Northern tier states and adapting its menu to a wider range of consumer preferences.



### INDUSTRY

Quick Service Restaurant

### CUSTOMER

Sonic, Inc.

### CHALLENGE

Sonic wanted a single-source Big Data solution that could provide faster and easier access to insights that inform strategy.

### SOLUTION

The Cloud-based 1010data analytics platform running powerful database software on commodity servers.

### BENEFITS

Instant access to all of the company's data. User-friendly interface allows "ad hoc" queries and fosters creative analytics. Powerful analytical and statistical tools. Encourages database mashups that can reveal hidden synergies. Lower cost of ownership and easier monetization of data assets.

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## CONFRONTING THE BARRIER

While Sonic could see the potential its vast data stores offered, it was frustrated by the performance limitations of analytical solutions based upon dated database technology.

Most enterprises rely on data warehouses built on relational database technology that matured in the 1990s. While the model was more than adequate for managing data 20 years ago, it doesn't scale well to the enormous amounts of data generated by today's information-rich companies. Managing, sharing, and replicating of giant datasets across database servers is difficult and slow, creating a Big Data barrier that many vendors address with workarounds and third-party applications that increase complexity and add cost.

One approach is to chop a large dataset into "bite-size" samples or aggregates that won't choke the relational database engine. In addition to adding complexity, database sampling can fail to reveal critical patterns or relationships if the extracted data doesn't accurately represent the entire dataset. And if a query doesn't produce the desired results, the analyst must start from scratch, collecting new samples and submitting a rewritten query that may take days to return results.

Sonic's leadership wasn't satisfied with this type of piecemeal solution. They were convinced that maintaining the company's competitive edge demanded quicker access to high-value insights and a less rigid approach to data queries. As a company that values financial responsibility, Sonic was also reluctant to invest in a complex and expensive solution requiring multiple vendors and long development cycles.



## LOOKING FOR AN EDGE

The Big Data barrier was most apparent when it came to optimizing performance at over 3500 Sonic drive-ins. To compete in the quick-service restaurant segment, companies must accurately predict the effectiveness of new programs and menu revisions. The logistics of rolling out programs and replacing menus forces drive-in restaurant chains to live with their decisions for months. A failure to identify critical trends can result in strategic blunders — ineffective programs and underperforming menus that can kill margins at hundreds of drive-ins.

To maximize performance of its customer programs and the daily menu, Sonic validates strategy with data modeling that measures expected performance against statistical values. Unfortunately, analytical tools based on relational database systems are simply too slow for effective modeling.



### SONIC AT A GLANCE

SONIC Corp. is an Oklahoma City-based, publicly held company that owns, operates and franchises SONIC Drive-Ins (NASDAQ: SONC).

A prototype of the first SONIC Drive-In opened in 1953. 60 years later, SONIC operates 3500 restaurants in 43 US States and serves 3 million customers daily.

### CORE VALUES

Relationships as a way of life. Celebration of entrepreneurial spirit. Respect for individuals. Surprise and delight. Ethical treatment of animals.

With the 1010data analytics platform, Sonic would be able to perform queries on all of its data.

By the time Sonic got useful answers, the information was already out of date. A Big Data analytical solution was valuable only if it could deliver the information Sonic needed while it was still actionable. Like fast food, the value of Big Data depends on how quickly you can get it.



## NARROWING THE FIELD

Sonic took a close look at some highly touted Big Data solutions, including ones based on Hadoop. While Hadoop showed promise, Sonic recognized it as a platform that required extensive preparation and provided only the foundation for a larger solution that required multiple components.

Sonic didn't want a Big Data analytics version of a combo meal. The company was willing to invest time tracking down a single, unified solution rather than a mixture of different products and technologies requiring long lead times and expensive infrastructure.

Additionally, the ideal solution would give Sonic analysts the improvisational freedom to formulate queries on-the-fly, allowing them to follow hunches, effortlessly shift focus, and experiment with the data. This level of flexibility wasn't possible with conventional tools that forced analysts to work with incomplete datasets that limited their creativity.



## WANTED: A SINGLE SOURCE OF TRUTH

Rejecting "mix-and-match" solutions that would not address its strategic requirements, Sonic targeted a single-vendor solution aligned with the company's forward vision— real-time analysis of all of its transactional processing data.

Any time lag between formulating a query and getting results was simply unacceptable. Certain that only an fast and flexible Big Data solution could take the company to the next level, Sonic immediately rejected offerings that demanded advanced technical expertise, specialized development, or ponderous control mechanisms.



## ENGAGEMENT

Upon first encountering the 1010data analytics platform at a national restaurant show, Sonic executives were instantly impressed by a revolutionary new vision for the data warehouse; a Cloud-based platform that unified data and analytics.

Running ultra-fast database analytics software on commodity servers, the 1010data analytics engine was capable of processing billions of rows of data almost instantly, for only a fraction of the cost of less advanced



"1010data allows our analysts to interact instantly with all our data. By giving them the freedom to explore and improvise, the platform encourages discovery—and makes data analytics a factor in every single business decision."

**CRAIG MILLER**  
*Senior Vice - President  
& Chief Information  
Officer*



solutions. Gaining momentum in the marketplace, 1010data had built a solid reputation creating successful Big Data analysis solutions for high-profile clients such as the New York Stock Exchange.

Because the 1010data analytics engine wasn't built on the aging relational database model, it didn't require workarounds to compensate for the limitations of legacy architecture.

With the 1010data analytics platform, Sonic would be able to perform queries on all of its data, not just subsets that had to be prepared beforehand. Sonic also appreciated the intuitive, spreadsheet-style view of the data that simplified queries and made the data accessible to nontechnical users.

And as a Cloud-based platform, the 1010data offering appealed to Sonic's good business sense. Instead of having to make an enormous — and risky — capital-expenditure investment, Sonic would pay only for the capacity it needed.



## SEAMLESS SECURITY

Security is a critical aspect of the way Sonic does business. As a relatively newcomer to the SaaS (Software as a Service) space, Sonic wanted assurance that any data it uploaded to the Cloud would be totally secure. As part of its "vetting" process, Sonic asked potential vendors to fill out a detailed questionnaire that measured each candidate's ability to meet its exacting security standards, including strict compliance with ISO standards and safeguards against physical damage.

1010data quickly put to rest any doubts Sonic might have about the security of its data on the Cloud. While many potential vendors could answer some of the security questions, 1010data alone answered every single question with a detailed response that more than satisfied Sonic.

Confident that its data stored on the Cloud would be secure, Sonic had no reservations about choosing 1010data as the technology partner best equipped to help the enterprise achieve its lofty goals.



## FAST START, INSTANT RESULTS

Once Sonic green-lighted the partnership, implementation was quick and easy. With a minimum of preparation, Sonic loaded its dataset into the 1010data private Cloud and began performing deep analysis in just a few days.

"1010data was the only vendor able to answer all our data security questions and address every one of our concerns, including the threat of physical damage. We were very impressed, to say the least."

**LESLIE WEAVER**  
*Director of Data Services*

Confident that its data stored on the Cloud would be secure, Sonic had no reservations about choosing 1010data as their technology partner.

Even before the pilot phase was complete, the new analytics platform started paying big dividends, revealing unexpected data relationships and trends that Sonic was quickly able to leverage. 1010data analytics radically compressed time-to-insight, giving Sonic a powerful analytics solution that met all of its rigorous requirements.

Support for “ad hoc,” on-the-fly queries allowed Sonic analysts to quickly model programs and menus that struck a near perfect balance between ROI and customer value. The platform’s package of statistical drivers and reporting features revealed critical performance factors driving sales — invaluable information that Sonic is relying on to formulate its expansion plans.



## POTENT MASHUPS

It’s baseline requirements satisfied, Sonic quickly started taking advantage of other opportunities the 1010data platform offered, including analytics of “mashups” that combined Sonic data and public data tables.

A technique that’s beyond the reach of conventional database analytics, mashups can reveal hidden synergies and marketplace trends. By running ad-hoc queries on mashups of its transactional data and public data, Sonic rapidly validated new variables and ran numerous scenarios. In a matter of days, company analysts were effectively modelling consumer behavior in different regions and giving leadership critical insights they put to work shaping new strategy.

Previously, Sonic paid for public data tables, but co-location of the company’s data assets on the Cloud provided easy (and free) access to public databases containing a wealth of information.



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Sonic is considering extending 1010data analytics to the franchise community. Co-location of Sonic’s data on the Cloud simplifies the sharing of data with affiliates while allowing the company to maintain control over its sensitive information.



## DRIVING THE FUTURE

By extending the boundary of what's possible, the 1010data platform has inspired Sonic to use its powerful analytical instrument to liberate insight in other business sectors.

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Also on the drawing board are plans for an executive dashboard that would allow senior managers to navigate and query Sonic's extensive data assets without technical expertise. Additionally, Sonic is weighing the use of the 1010data platform for workforce analytics.



## TO BE CONTINUED

1010data not only delivered the fast and flexible Big Data solution Sonic needed—it gave the company a powerful, leading-edge business intelligence tool that offers a tantalizing glimpse of possible futures in an emerging economic order that favors agile, data-driven companies that aren't afraid to break with the past.



# ABOUT 1010DATA

Gaining actionable insight requires the best analytical tools and access to all relevant data. 1010data is a complete solution that provides both. We provide the only out-of-the-box, self-service, cross-enterprise insights platform. More than 750 of the world's largest companies trust 1010data to manage, share and analyze over 27 trillion rows of data because of our proven ability to deliver results more quickly, easily and accurately than any other solution. Please visit [www.1010data.com](http://www.1010data.com) for more information.

**TO GET STARTED, CONTACT 1010DATA TODAY.**

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**MORE POWER TO YOU**

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