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SaiCom turns Big Data into business intelligence

Powerful laptops speed accurate business reporting

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CORE™ i7

"Using Intel technology allows us, as a small company, to be very competitive and with powerful technology at our fingertips, we can demonstrate the power of the information businesses already have without worrying about time lags or delays during a sales presentation. That is the promise of Big Data … the ability to tap into key information instantly to make informed decisions."

– Ajay K. Gupta, CTO
SaiCom Consulting Inc.

For many years, businesses across Canada have been dutifully entering data into their software systems hoping to tap into the promises of the Big Data trend, but many were struggling to extract meaningful information that could be used to improve competitiveness, deliver one-to-one marketing or make real-time business decisions based on accurate information.

"People have been entering data into their databases for 15 to 20 years but still don't know how to use that information," says SaiCom Consulting Inc. CTO Ajay K. Gupta, adding that any information they were getting was coming in too slowly to be actionable. "I'm constantly asked 'how to find my top customers?', 'how do I know what they're buying?', 'what key demographics apply to our customers?' and 'how do I turn that information into intelligent marketing or loyalty programs?' All that information is available but they just can't get it in a timely way."

In the past, Gupta says Canadian SMBs were more laid back in their approach to business expansion but today he says they're looking to go toe to toe with global powerhouses and need to leverage their stores of disconnected data to compete. "The small guys, (such as) real estate companies or small manufacturing companies, want to be on the same playing field as the large guys. They are learning that real-time business intelligence isn't just for the big guys, it can help little guys become more efficient in their day to day operations."

"By listening to what a company needs, we help them optimize their databases and develop customized reporting that gives them the information they need quickly so they can make the best possible business decisions based on the data they are already collecting," he says, explaining that they aim to deliver these tools to customers in weeks not years.

As a smaller, nimble consulting team, Gupta says his team of four depends on Intel® for ultra-fast notebooks including an HP ZBook powered by the 4th Generation Intel® Core™ i7 processor family, which allow consultants to mimic a server environment for sales presentations. Back at the office, they're supported by a network server infrastructure featuring the Intel® Xeon® processor E5-2609 to support their development work and implementation of customized reporting. In addition, the server acts as a demonstration site to showcase mobile or remote installations.

"Using Intel technology allows us, as a small company, to be very competitive and with powerful technology at our fingertips, we can demonstrate the power of the information businesses already have without worrying about time lags or delays during a sales presentation," he says.

Turning data into intelligence

Most companies predict future performance based on what they did in the previous period. In the old days, Gupta says it could take weeks to get data from IT on the last period and that

meant businesses are making decisions on stale data.

"Week old meaningful data is out of date and companies can't make decisions based on that," says Gupta "If a month-end or year-end closed yesterday, they need to know the critical information about the past month or year end within 12 hours. That is the promise of Big Data ... the ability to tap into key information instantly to make informed decisions. If I can't get an answer until a week or two later, that's not good enough because I can't proactively adjust in time to recover or improve."

Gupta says simply installing an ERP or business intelligence system isn't enough to leverage the potential decision making power of Big Data initiatives. That's where implementation consultants like SaiCom come in. He explains that successful implementations often come down to the consultants who deploy the systems.

"Sometimes people buy SAP because it's a big name and they think this will give them the technology they need but you have to find the right consulting team to help you make that product sing," he says, explaining they are often called in after previous implementation attempts and customers aren't getting the information they want. "We show them what can be done and it's like a light comes on."

Gupta says one of the most time-consuming parts of their job is reviewing and cleaning up the data companies have on hand to provide meaningful results. "You can't do reporting on transactional data or what we call Dirty Data. You have to clean it up and format it so it is more report centric and optimized for reporting," he explains.

By creating a separate optimized Data Warehouse/Mart for the purpose of reporting that pulls the transactional data, companies can extract fast, accurate reports that they can use for more confident decision-making, without slowing down data entry.

"If you slow down the data entry

process, you are taking a step backwards instead of a step forward and hurting your productivity," says Gupta. "We optimize the process so you are getting fast, accurate data without impacting productivity."

Monster mobile power

Gupta never knows what they're walking into when they go to a client site and depends on their laptops to be responsive and nimble.

"We've walked into a customer site that wants us to start work on their reporting issues immediately, but doesn't have the network infrastructure in place. In these situations, we can use our notebooks to hit their transactional database, create a reporting database and start working on the reporting tools right away. Once the customer's business intelligence infrastructure is in place, we simply transfer over everything we've developed locally with no time lost."

"We are not limited by needing to have access to our customer site. (Working remotely) we can move forward and meet those deadlines," says Gupta, noting that using a laptop as a server wouldn't be possible without the power of the Intel® Core™ i7 processor series and the speed of Intel® Solid-State Drives.

"We need something we can carry with us but act as a remote server for full end-to-end demo on client sites," says Gupta. "The HP ZBook is really, really fast and we needed the fastest capability available at the time and lots of memory because the applications we use are very CPU centric. We need the fastest processor that we can get with hyper-threading and quad cores."

With experience using many different generations of Intel® Core™ processors, Gupta says the Intel® Core™ i7-4800MQ processor gives them even more speed and scalability to effectively handle the increasing number of software solutions that leverage full 64-bit processing capabilities.

Rock solid drives

To mimic the server environments on

Challenge

With small and mid-sized businesses looking to compete with larger enterprises locally and internationally, accessing reliable customer sales information or other key business data can help level the playing field. With years of transactional data at their fingertips, companies struggle to tap into the potential they could realize through Big Data initiatives to make meaningful decisions.

Solution

Big Data = Intelligent Decision-Making. Using their expertise in business intelligence and data warehousing, SaiCom Consulting Inc. turns a company's data into actionable information, delivering on the hopes businesses place in Big Data to let them compete (and win) against larger corporations around the globe. Leveraging the power of Intel® in laptops, solid-state drives and servers, SaiCom develops and implements the reporting and analysis tools their customers need to compete and win.

Impact

- Big Data becomes a powerful decision-making tool with custom reporting and analysis tools from SaiCom that turn old, stale data into real-time analytics built on a range of Intel® technologies that allow consultants to deliver tools faster, cutting delivery of implementations by as much as half.

- Laptops with an Intel® SSD Data Center S3500 Series and 4th Generation Intel® Core™ i7-4800MQ processor allow SaiCom to mimic server environments for customer demonstrations, cutting up to two hours of load time down to 10 minutes.

the fly, Gupta's team uses Symantec Ghost* software. Loading a server image could take up to two hours on laptops featuring 1st Generation Intel® Core™ i7 processors, but with a 4th Generation Intel® Core™ i7 processor and Intel® SSD DC S3500 series in their laptop, load time has been cut to as little as 10 minutes.

"With the old type of cylindrical drives, performance is slow," says Gupta, adding they previously had to walk gingerly into meetings while the software is still loading and hope they didn't jar the drives. "If I was to do an imaging back-up, it could take me an hour and a half to almost 2 hours and starting the full suite of software required could take as long as 40 minutes."

"Before, we had to arrive 60 to 90 minutes earlier and would boot up our laptops in the parking lot. Now, I don't need to get there too early. We can be up and running by the time the projector and prep work is ready."

"With these (Intel) solid-state drives I can be ready in as little as 10 minutes," says Gupta. "It greatly reduces our time of recovery and has incredible performance. The response time on these Intel SSDs is incredible."

When Gupta's team started looking at solid state drives for their servers, they tried other competitors before purchasing their first Intel SSD. "We just couldn't get the others to work for the enterprise and Windows server* operating systems. When we tried the Intel drives, our guys said this is crazy-fast. This is exactly what we were looking for and what we wanted so we bought another, and another."

Prepared for the future

When it came time to upgrade their internal server network to support clients' corporate Big Data programs and the development of their customized reporting tools that extract meaningful information from raw data, Gupta once again selected Intel® Xeon® processors, opting for the Intel® Xeon® processor E5 family.

"If I buy the best processor available to me at the time, I can make this server last much longer," he says, noting that this costs him less on upgrades in the future. "We always look at capabilities right now and if the server can be expanded in the future, I can do much more with the hardware down the road. We want to be able to maximize the lifecycle of our server."

In addition to supporting internal reporting and development, SaiCom's server acts as a demo site for how companies could leverage a secure internet version of their solution to allow for remote access or internal cloud solutions.

"I need to know when I am running the demo that it will be quick and responsive," explains Gupta. "We have to show the best possible performance, because if it is slow, it is not going to help sell the solution. That's why we invest a little more and have more power on board because it can help us sell the solution better."

He makes the same recommendations for his customers, noting that a bargain server could end up costing more in the long run when it quickly reaches capacity and needs upgrading. "If you are going to have 50 people hit that server, invest in the best hardware, the best CPU, memory and hard drive configuration so your employees know they can trust the system and get the information out quickly," he explains.

For more information on Intel® products, visit **www.intel.com/itcenter**

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