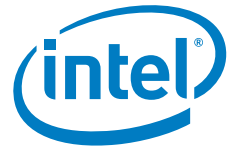


CASE STUDY



Intel® Xeon® Processor E5 Family
Big Data Analytics
Communications/Media

Speaking to more than a million customers individually

True Corporation builds a big data platform to better serve their customers' needs



“By choosing a big data platform built on Cloudera’s solution and powered by Intel® Xeon® processors E5 family, our data scientists have a suite of analytics software and applications to generate insights from our customer data to realize better marketing returns.”

Dr. Rujikorn Pavasuthipaisit,
Director of Data Analytics and
Research at True Corporation

True Corporation is Thailand's leading communications conglomerate. The organization delivers a range of services to more than one million customers across five business units. These include TrueOnline*, TrueMove H*, TrueVisions*, TrueMoney* and TrueLife*. Plans to deploy a DPI (deep packet inspection) software to discover usage patterns among TrueMove H mobile users triggered a review of the existing data warehouse. As a result, True Corporation implemented a big data platform, delivering 200 TBs (terabytes) of capacity, to provide a 360-degree view of customers across the entire conglomerate.

CHALLENGES

- **Enable big data capabilities for DPI software.** True Corporation needed to store up to 5 TBs (terabytes) of data a day from its DPI solution.
- **Develop a 360-degree view of individual customer behaviors.** The goal was to integrate multiple data sources into one repository to build a comprehensive understanding of True Corporation customers across all business units.
- **Better target customer offers and campaigns.** The company wanted to improve the ROI (return on investment) from CRM (customer relationship management) activity.

SOLUTIONS

- **Build a big data platform based on market-leading solutions.** Using Intel® Xeon® processors E5 family to power a CDH, a distribution of Apache* Hadoop* from Cloudera, True Corporation created an easy-to-manage and scalable infrastructure for deep customer insight.

BUSINESS VALUE

- **A 360-degree view of one million customers.** Enabling valuable insight into customer behaviors so that True Corporation can deliver greater value through more relevant offers and services.
- **Driving innovation company wide.** Thanks to the solution's ease of use, data scientists work more efficiently, finding it simpler to integrate multiple data streams and discover new trends and patterns to support business development.
- **Up to 40 percent faster query times.** The speed of the platform enables True Corporation to improve the efficiency of its decision making, capitalizing on opportunities as they arise.
- **Big data capacity at 10 percent of the cost.** True Corporation has gained an enterprise-class big data environment at a fraction of the cost of scaling its existing data warehouse.

Big data solutions are proving invaluable. They offer companies greater business insight and new ways to drive revenues. CPSs (communication service providers) such as True Corporation in Thailand want to capitalize on the huge amounts of data they gather to understand customer behaviors in more detail, thereby targeting campaigns and promotions better.

"Big data is an opportunity that you need to take," Dr. Rujikorn Pavasuthipaisit, Director of Data Analytics and Research at True Corporation. "Our goal was a big data solution for our DPI (deep packet inspection) software. We planned to roll out a DPI solution on our TrueMove H mobile network to see data usage more clearly."

Adding value to relationships with personalized usage patterns

In essence, the DPI would highlight usage patterns, data locations and content preferences at a personalized level across the mobile network. This wealth of information could then be used to deliver more compelling, individual customer experiences, in turn reducing churn and generating new revenue streams. "Think of it in these terms," explains Dr Pavasuthipaisit. "A customer may be consuming data off-peak while paying for a data plan that isn't time based. Knowing their usage pattern, we can offer them a better deal, adding value to our relationship."

In addition, Dr Pavasuthipaisit had much broader aims for the eventual big data solution. "Once the DPI data was successfully integrated, we wanted to bring in multiple data sources from right across True Corporation to generate a 360-degree of our customers and gain yet more valuable insight into behaviors and patterns."

Requiring the right tools for big data

The challenge for Dr Pavasuthipaisit was the existing enterprise data warehouse. "We had been investing in our data warehouse for 10 years, and the maximum amount of data we could store was 50 TBs (terabytes). Yet the amount of DPI data we expected to generate was 5 TBs a day. It meant we could store data for only 10 days, and we needed at least a month's worth to do any valuable analysis." The picture worsened when Dr Pavasuthipaisit thought about integrating additional data sources into the warehouse.

"We needed a proper data management and analytics platform for our CRM plans to work out," he says.

True Corporation investigated Apache Hadoop big data solutions, approaching multiple vendors. It soon focused attention on CDH, a distribution of Hadoop, from Cloudera, running on a hardware platform powered by Intel Xeon processors E5 family. "Our first thoughts were that Cloudera and Intel are leading the market. And when we tested Cloudera and Intel, we found it outperformed the rest of the solutions based on our KPIs (key performance indicators)," says Dr Pavasuthipaisit.

Working with a local Cloudera partner in Thailand, True Corporation successfully deployed its big data solution. A team of in-house data scientists began integrating data from the DPI software with the Cloudera and Intel platform, and completed their work on schedule. "We had some challenges with the data coming in to the solution, but once that was ironed out, I was impressed with the performance and reliability of the platform. To-date, downtime has been zero," comments Dr Pavasuthipaisit.

Deeper analysis with up to 40 percent faster query times

True Corporation has created a unified and governed enterprise data platform to deliver a 360-degree, omni-channel view of customer behaviors. Right now, the platform—which currently supports up 200 TBs of data—is being used to store and analyze around 5 TBs a day from the DPI solution. Says Dr Pavasuthipaisit, "More than the capacity, we have found query times are now up to 40 percent faster with our Cloudera and Intel platform compared with our existing data warehouse. It allows us to gain a better understanding of our data."

Enables big data capacity at 10 percent of the cost

Besides the greater performance, the Cloudera and Intel solution is substantially more cost effective. "We have been able to deliver 200 TBs of data storage with the Hadoop platform at one tenth of the cost of expanding our data warehouse," comments Dr Pavasuthipaisit.

Creates a 360-degree customer view

These are exciting times for True Corporation because stakeholders, such as Dr Pavasuthipaisit, can see what's on the horizon.

LESSONS LEARNED

- Big data solutions enable CPSs (communication service providers) to gain valuable insights into customer behaviors and use the information to tailor offers and services.
- Intel® Xeon® processor E5 family and CDH*, a distribution of Apache* Hadoop* from Cloudera, provide an efficient and cost-effective platform for big data solutions.
- Open-source big data solutions deliver huge capacity at a fraction of the cost of enterprise data warehouses.
- The ease-of-use of Cloudera and Intel big data solutions helps data scientists simplify management and rapidly integrate multiple data streams.

"By choosing a big data platform built on Cloudera and powered by Intel Xeon processors E5 family, our data scientists have a suite of analytics software and applications to generate insights from our customer data to realize better marketing returns," comments Dr Pavasuthipaisit. Data is still being accumulated from the DPI software and a detailed picture of data usage patterns is forming. From these insights, True Corporation will be able target its CRM campaigns more effectively. "Our expectation is to gain a better ROI (return on investment) of anything up to 19 percent from greater personalization of our campaigns," believes Dr Pavasuthipaisit.

Driving big data innovation with simplified management

The value of the Cloudera and Intel solution will increase over time. Feedback from the company's data scientists has been great and they are looking forward to integrating other data sources. Indeed, the platform's simplicity has enabled True Corporation to reallocate some IT personnel to other tasks. "The value of the Cloudera and Intel platform goes beyond our data to the efficiency of our entire IT services," says Dr Pavasuthipaisit. "Staff are being moved to other revenue-generating areas to deliver further benefits to the organization."



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About Cloudera

Cloudera is revolutionizing enterprise data management by offering the first unified platform for big data, an enterprise data hub built on Apache Hadoop*. Cloudera offers enterprises one place to store, process, and analyze all their data, empowering them to extend the value of existing investments while enabling fundamentally new ways to derive value from their data. Only Cloudera offers everything needed on a journey to an enterprise data hub, including software for business-critical data challenges such as storage, access, management, analysis, security, and search. As the leading educator of Hadoop* professionals, Cloudera has trained over 22,000 individuals worldwide. Over 1,000 partners and a seasoned professional services team help deliver greater time to value. Finally, only Cloudera provides proactive and predictive support to run an enterprise data hub with confidence. Leading organizations in every industry, plus top public sector organizations globally, run Cloudera in production. www.cloudera.com

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