Microsoft Azure
Customer Solution Case Study

Ecartstudio
Location-Based Application Development

Microsoft's Open Cloud Platform Empowers Thai Software Vendor to Scale Globally

Customer: Ecartstudio
Website: www.ecartstudio.com
Customer Size: 86 Employees
Country or Region: Thailand
Industry: Software Development

Customer Profile
Based in Bangkok, Ecartstudio is an independent software vendor that specializes in providing web-based and location-based information systems to enterprises, banks, and governmental organizations in Thailand and overseas.

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Bangkok-based software vendor, Ecartstudio has gained national recognition through its award-winning Location-Based Information System (LBIS) solution. With its future aim set for expanding regionally and extending its product portfolio, the company decided to adopt Microsoft Azure as its public cloud platform. With Azure, Ecartstudio can easily scale its SaaS solutions while ensuring enterprise-level reliability, without a big upfront investment. Most importantly, the openness of Microsoft Azure platform allows Ecartstudio to focus on business solutions rather than worrying about the choice of development technologies.

Business Needs

Established in 2004, Ecartstudio is a Thai software vendor who provides location-based information solutions to local enterprises, banks, and governmental organizations, including Viriyah Insurance and Thailand's Treasury Department. In recent years, the company has expanded its services to customers overseas including China and Singapore.

"By combining our technology with geo-tagged data from both customers' and Ecartstudio's database, our goal is to provide solutions that enable enterprises to make strategic business decisions" proclaims Wutthikorn Manomaiwiboon, Managing Director, Ecartstudio.

In line with this vision, Ecartstudio has rolled out solutions that include Ecartmap, an advanced mapping tool, and LBIS, a location-based information system. These products cater to the needs of customers who want to create private maps or have unique requirements which prohibit them from utilizing public mapping solutions. For example, a sugar and cane manufacturer in China cannot employ Google Map due to

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**Wutthikorn Manomaiwiboon,
Managing Director, Ecartstudio**

censorship policies, and, therefore, needed to implement its own mapping solution.

Given Ecartstudio strong focus on business solutions and customers' satisfaction, the company has pragmatic approach in its technology adoption. The company has chosen to go with cloud-based SaaS model from the beginning since it allows for rapid delivery. To accommodate its customers' varying integration requirements, the company has built its technical team with expertise across diverse technologies, including Microsoft for back-end platform, open source for front-end development, and both structured and unstructured database management systems.

Reliability and scalability are two main priorities for Ecartstudio, since its clients are mostly large enterprises and government agencies. "Enterprise solutions demand reliable services with very little or zero downtime. Take the case of our client from the insurance industry. During the rainy season, the number of users in the system usually spike as a result of increasing road accidents. Our solution would need to be able sustain these types of unpredictable bursts in demand," says Wutthikorn. "Of course, ideally, we would also want our infrastructure investment to be as cost-effective as possible…"

More importantly, the company wanted a technology service that could support a growth plan to expand its products

portfolio while extending its services to other countries and regions – including Asia and North America.

Solution

It was clear from the beginning to Ecartstudio's management that adopting a public cloud would be a far more logical choice compared to building its own datacenter.
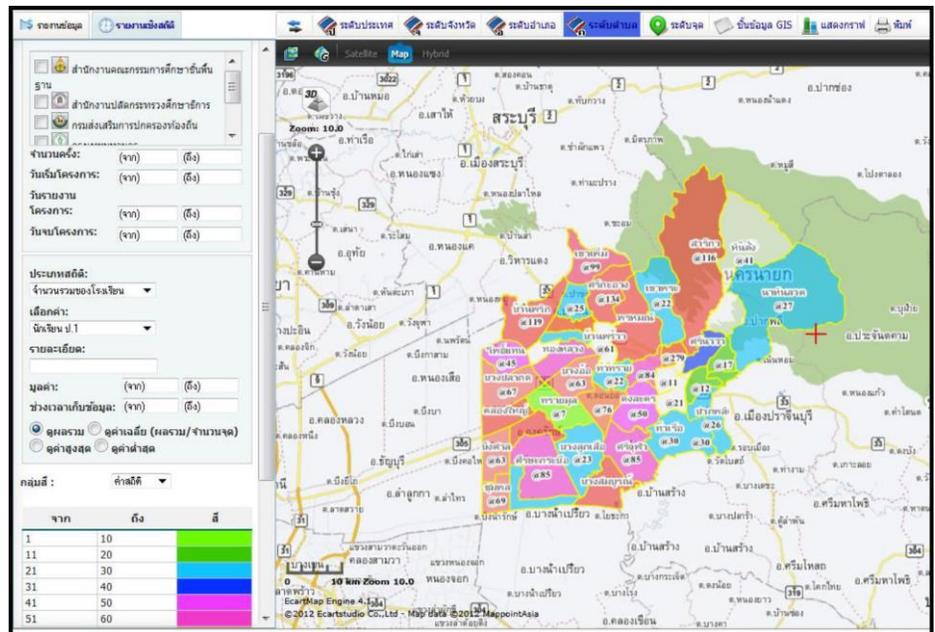
Ecartstudio considered several cloud-based options including Microsoft Azure, Amazon Web Services (AWS) and other local public cloud solution providers. "What made me particularly interested in Azure was its openness and interoperability with open source technologies as well as the service reliability it can offer for our enterprise clients." Wutthikorn offers his opinion. By adopting both IaaS and PaaS services, the company hosts its maps and develop its system on Azure virtual machines, while deploying its web applications through Azure cloud services.

Ecartstudio's adoption of the Microsoft cloud went smoothly thanks to Azure's

compatibility with open source software. "Our back-end platform is built with Microsoft technology, but the front-end of our solutions is developed using PHP. We also need to be able to talk to our clients' database systems and have implemented support for varying technologies including Microsoft SQL Server, PostgreSQL and MySQL depending on their requirements. We deploy our custom solutions to multiple clients on Azure, and it can integrate seamlessly with our customers' environments," says Wutthikorn.

Microsoft Azure not only offers interoperability with open source technologies but also provides large system capacity for running big data solutions. "We are now developing new big data solutions for retailers by using MongoDB and Hadoop file system to achieve fast queries on large data sets. Azure allows us to run MongoDB on its VMs and cloud services without any difficulty.

"Partnering with a Japanese vendor that provides the camera technology for data and image gathering, our solution will allow retailers to gain insight into shopper behaviours through an analytics dashboard

LBIS (Location-Based Information System) provides real-time data analysis and summaries in geographical formats with several topographical layers of information, including population density, flood zone, and dry areas.

Microsoft Azure

that features our innovative foot-traffic mapping features," explains Wutthikorn.

Furthermore, Azure empowers enterprise users with the 99.95% monthly SLA, ensuring highly available services. "With the Enterprise Agreement, we can give assurance of service reliability for our customers," adds Wutthikorn.

Benefits

With Microsoft Azure, Ecartstudio can now achieve scalability and deliver rapid deployment while obtaining technology needed for global expansion. The openness of the platform also allows flexibility in developer allocation, hence accelerating application development.

Scalability. Unlike other cloud providers, Microsoft Azure facilitates easy system scalability through Azure on-demand cloud infrastructure. "With the local cloud providers, to scale the systems, we have to rely on them to do it. But with Azure, we can easily configure that ourselves," explains Wutthikorn.

Rapid and Flexible Deployment at Client Sites. Azure provides an open and flexible platform for running Ecartstudio's solutions and enables seamless integration with client environments, hence accelerating the client-site deployment.

Additionally, Microsoft Azure offers a hybrid capability which allows the combination of on-premises servers and cloud-based applications. This is essential for Ecartstudio as it allows the company to design its solution to fit the clients' infrastructure needs and budgets rather than be constrained by its technology choices

Expanding Globally. Through Microsoft Azure, Ecartstudio can easily expand its offering beyond Thailand. "In our next product, we are piloting with a major retailer in Canada. The availability of Microsoft Azure's datacenter around the world allows us to provision our solution easily and quickly even when the customers are thousand miles away from our office," says Wutthikorn.

Ramping up Developer Resources. The openness of the Microsoft Azure platform empowers Ecartstudio to adapt its developer resources depending on both customers' needs and market availability. In the development of its earlier solutions, the company decided to build a team of PHP developers to accelerate development. "Our front-end is mainly built with PHP, because, in Thailand, PHP developers are easier to find than .NET, as 80% of local developers use PHP, "explains Wutthikorn.

"We are currently developing our next product that capitalizes on big data

technology. The flexibility of Microsoft Azure empowers us to ramp up the technical team quickly as the team is free to adopt technologies they are familiar with, such as Node.js and MongoDB. This flexibility enables us to productize the idea smoothly and on-time," explains Wutthikorn.

"By providing an open development platform alongside its enterprise-level reliability, Microsoft Azure gives us confidence that we can deliver a great analytics solution that will add value to our customers.

"Azure is constantly evolving and always incorporating new innovations, thereby enabling small companies like us to get innovative quickly, with less R&D spendings. Through its numerous tools, Azure also helps improve development productivity and enables us to develop products with faster time-to-market," concludes Wutthikorn.

FBIS (Fire Block Intelligence System) accelerates fire insurance approval process and performs risk management on overall fire insurance efficiently using risk information on the online map.

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