

# Transform the datacenter Customer Solution Case Study

## INNOFACTOR®

## Nordic Hosting Provider Gains Competitive Edge, Expands Business Using Public Cloud

### Overview

**Customer:** Innofactor

**Customer Website:** [www.innofactor.com](http://www.innofactor.com)

**Customer Size:** 400 employees

**Country or Region:** Finland

**Industry:** Hosting

**Partner:** Vision Solutions

### Customer Profile

Innofactor is a Nordic IT solutions and hosting provider that serves more than 1,000 private and public sector organizations across Europe. It is based in Espoo, Finland.

### Business Situation

The company wanted to simplify and modernize its datacenter and expand its cloud application hosting business. Its existing VMware-based infrastructure was old, inconsistent, and expensive to maintain.

### Solution

Innofactor decided to switch from VMware to Hyper-V and Microsoft Azure and to create new infrastructure-as-a-service offerings using the Azure public cloud.

### Benefits

- Expand cloud business tenfold
- Increase competitiveness by keeping operating costs low
- Gain instant scalability, increased availability
- Quickly migrate to the cloud

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*Sami Ensio, President and Chief Executive Officer, Innofactor*

Innofactor, a Nordic IT solutions provider, used Vision Solutions Double-Take Move to migrate its VMware environment to Microsoft Azure and a Microsoft private cloud. By using Azure, Innofactor can offer innovative, cost-effective cloud services to expand its business by tenfold and increase scalability and availability. With the extensive automation provided by Azure, Innofactor can double its infrastructure size without increasing its staff. Innofactor averted 2,500 hours of downtime by using Double-Take Move.

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Sami Ensio, President and Chief Executive Officer, Innofactor

## Situation

In the Nordic region, the vast majority of companies, large and small, outsource their IT rather than run their own datacenters or server rooms. Sami Ensio, President and Chief Executive Officer of Innofactor, a leading IT service provider in Finland, says it's because several large, local IT service providers pioneered the idea there years ago and established a culture of trust in outsourced IT services. Also, IT salaries are high in the area, which makes hiring difficult.

Consequently, there are many solution providers in the region and much competition and price pressure. “We have to really stand out with innovative solutions and also offer low prices,” says Ensio. His company, Innofactor, is a leading solution provider in the region. As a member of the Microsoft Partner Network with multiple Gold and Silver-level competencies, Innofactor delivers business applications and maintenance services as a system integrator, develops its own software products and services, and provides hosting services.

Its customers include more than 1,000 private and public sector organizations in Finland, Denmark, Sweden, and elsewhere in Europe. The company is based in Espoo, Finland, and employs more than 400 people across Finland, Denmark, and Sweden.

To continue growing, Innofactor wanted to expand its hosting business but needed a clear way to differentiate itself from competitors. Innofactor had grown through acquisition and ended up with a mixed IT infrastructure that was virtualized with various versions of VMware software and expensive to maintain. The company sought to streamline its infrastructure and personnel, eliminate the need to keep expensive VMware specialists on staff, and chart a committed path to the cloud.

## Solution

Innofactor decided to switch from VMware to the Hyper-V technology in the Windows Server 2012 R2 operating system as its hypervisor. It also chose to expand its use of Microsoft Azure, the Microsoft cloud platform that provides compute, storage, hosting, and management services for hosting applications and services in Microsoft datacenters.

The company worked with Microsoft Services Consulting to build a Hyper-V private cloud environment in its own datacenter where it could deploy and run customer applications with greater deployment speed, flexibility, and scalability. In the Innofactor private cloud, customers run their applications on dedicated hardware. However, Innofactor also wanted to run customer workloads on shared hardware and believed that true differentiation in the infrastructure-as-a-service (IaaS) market required the use of public cloud efficiencies.

For years, Innofactor had used the Azure platform-as-a-service (PaaS) offering to develop customer solutions. But it now wanted to add Azure IaaS services to provide what it calls disruptive hosting services, which weren't available in the standard hosting market.

“We were drawn to Azure from a price, functionality, and management perspective,” Ensio says. “We want to offer hybrid cloud solutions using Microsoft System Center as our single management console. With Azure, we could also deploy virtual machines much faster than we could with local public cloud providers.” Innofactor set out to migrate as many customer workloads as it could to Azure and to use its Hyper-V private cloud to host workloads that could not run in the public cloud.

## Automated Migration

However, one big challenge remained: efficiently migrating hundreds of VMware

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virtual machines to Azure and Hyper-V. Microsoft introduced Innofactor to Vision Solutions, a member of the Microsoft Partner Network and expert in cross-platform migrations. Vision Solutions offered anything-to-anything migration capability, a completely automated process, and no significant downtime during migration.

“With Vision Solutions Double-Take Move, we could migrate our many versions of VMware to Azure without taking production servers offline,” says Toni Markkanen, Migration Team Lead for Hosting Services at Innofactor. “Double-Take Move also connects with System Center, which our staff already uses and knows.”

Specifically, Double-Take Move links to Microsoft System Center 2012 R2 Service Manager, Virtual Machine Manager, and Orchestrator to enable a fully automated migration solution. Innofactor simply chooses the virtual machines to be migrated, points to the target server in Azure, and Double-Take Move does the rest.

Innofactor was able to specify when migrations occurred and keep production servers in sync with target servers before making a final transition to the new environment. In fact, it could bring up target servers and test them thoroughly while still running production servers. As a complete safety net, if a new server did not work correctly after its migration, Innofactor could fail back to the original server and try the migration at another time.

Of the company’s original 586 VMware virtual machines, Innofactor migrated 250 to Azure, moved 150 to its Hyper-V private cloud, and decommissioned the rest. The total migration time was only about two months, with three to four months spent assessing the VMware portfolio and determining workload destination.

### New IaaS Services

Innofactor has used Azure IaaS services—including Azure Virtual Machines, Azure Virtual Network, and Azure Storage—to create a number of exciting new hosting services, with more on the way. One is Innofactor 7to7, an IaaS offering that lets customers run applications in Azure Virtual Machines from 7 A.M. to 7 P.M., then release those virtual machines at night to save money. Applications and data are stored in Azure Storage at night and returned to the Virtual Machines in the morning.

Another new service is the Innofactor Business Cloud, which customers use to combine Microsoft Dynamics NAV for enterprise resource planning, Microsoft Dynamics CRM for customer relationship management, and Microsoft business intelligence solutions into an integrated solution that runs in Azure. Customers can also add Microsoft Office 365, a Microsoft cloud-based suite of productivity, communications, and collaboration services. Package options are selected through a simple online menu, configured to the customer’s needs, and priced affordably—a very low price per user per day.

“Our customers have traditionally gotten these types of services from local providers,” Ensio says. “But we’ve made it easy for them to get the same services in the more cost-effective Azure environment while still having local service and languages and using a very simple menu system.”

Innofactor has a clear public cloud-first strategy. “We want to run everything possible in Azure, but if it’s not possible, we will run a workload in our Hyper-V private cloud,” says Heikki Jekunen, Vice President of Products and Services at Innofactor. “Nearly all our customers will run workloads in both public and private cloud, because few are willing or able to put everything in the public cloud. About 50

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percent of our environment is in Azure now, but our Azure environment is growing rapidly. We hope to have 80 percent of our workloads in Azure within a year.”

#### Applications Developed in the Cloud

Innofactor has long used Azure PaaS to build solutions in its application development business. One such solution is a cloud publishing service that lets customers publish web pages to Azure from a Microsoft SharePoint Server portal server. Another is a crisis communication solution that Innofactor developed in Azure one winter when Finland experienced heavy windstorms that knocked out electrical service.

The crisis communication service enables electrical utilities, police, fire, and other public safety authorities to quickly scale an Azure Website that is dedicated to handling customer inquiries during a crisis. Often, in emergencies, website traffic surges and sites fail when they're most needed. With the crisis communication service, these organizations can have a dedicated public communications website in Azure that can scale automatically. When traffic dies down, the customer pays only for content hosting.

#### Benefits

By entrusting more of its business to Microsoft Azure, Innofactor expects to increase its cloud business tenfold in the next three to five years and greatly expand its infrastructure without adding staff. With Azure, Innofactor gains instant scalability and increased availability. By using Double-Take Move, Innofactor avoided at least 2,500 hours of customer downtime.

#### Expand Cloud Business Tenfold in Five Years

The company's expansion of its infrastructure and its business in Azure gives Innofactor the opportunity to offer new services. Plus, it can refocus its staff from building infrastructure to delivering those new services. “With Azure, we can

offer disruptive services that competitors can't provide in a cost-competitive manner,” Ensio says. “For example, with our 7to7 IaaS service, customers can reduce their costs by 50 percent.”

Innofactor expects these IaaS services to generate significant new revenue. “Our current cloud hosting business is about [US]\$2 million, and in three to five years we estimate that it will be \$20 million,” Ensio says. “Hosting is where our long-term growth lies, and using Azure will help us not only come up with new products but also expand our market beyond the Nordic countries.”

#### Increase Competitiveness by Keeping Operating Costs Low

Innofactor operates more efficiently by standardizing on Microsoft and taking advantage of the extensive automation capabilities in Azure and System Center 2012 R2. “Because IT talent is so expensive in our region, it's important for us to not have multiple staff members doing the same things to multiple platforms,” says Jekunen. “By standardizing on Microsoft, we have to employ far fewer specialized staff members. We have increased our server count by 30 percent but are managing them with the same staff. We expect to double our infrastructure size with no staff increases. Keeping operating costs low helps our price competitiveness, which is critical in our business.”

Also thanks to the company's automated infrastructure deployment, staff members are freed up to be more involved with customer deliveries. “We can spend more time ensuring that customers are using technology in the best possible way and adding greater business value,” says Jekunen.

#### Gain Instant Scalability, Increased Availability

The instant scalability of Azure is important for some Innofactor customers, notably those doing big data analysis. Also,

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customers of the crisis communication solution can instantly turn on this Azure Website and scale up their site to handle surges in web traffic. “It’s far more difficult and expensive to scale quickly using an on-premises infrastructure,” Markkanen says.

While Innofactor has always delivered high levels of availability, the use of Azure adds another dimension of availability assurance. “We now have two Azure datacenters, in Dublin and Amsterdam, backing up one another and ensuring that our customers are better protected against regional disasters,” Ensio says.

#### **Quickly Migrate to the Cloud with No Significant Downtime**

Innofactor was able to keep its staff focused on revenue-generating business while performing a large migration from VMware to Azure and Hyper-V. “It would have taken one to two hours per server to migrate those servers manually or with another solution, and we migrated 300 servers—that’s a lot of time,” says Markkanen. “Instead, we concentrated on enhancing our customer offerings.”

The company estimates that with other solutions, it would have incurred several hours or days of downtime per server, depending on the size and complexity of the server. “With Double-Take Move, we reduced downtime to 15 minutes per server,” says Ensio. “For more than 300 servers, that’s a downtime avoidance of about 2,500 hours. In the service provider market, downtime is a business killer.”

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

[www.microsoft.com](http://www.microsoft.com)

For more information about Vision Solutions products and services, visit the website at:

[www.visionsolutions.com](http://www.visionsolutions.com)

For more information about Innofactor products and services, visit the website at:

[www.innofactor.com](http://www.innofactor.com)

## Transform the datacenter

With Windows Server, Microsoft System Center, and Microsoft Azure, customers can take advantage of an enterprise-grade platform across the on-premises datacenter and the cloud. Consistency between the datacenter and the cloud makes it easier to integrate new capabilities. With datacenter innovation and new hybrid options, you can reduce costs, simplify management, and access cloud resources on demand.

For more information about transforming the datacenter, go to:

[www.microsoft.com/en-us/server-cloud/cloud-os/modern-data-center.aspx](http://www.microsoft.com/en-us/server-cloud/cloud-os/modern-data-center.aspx)

### Software and Services

- Microsoft Azure
  - Microsoft Azure Storage
  - Microsoft Azure Virtual Machines
  - Microsoft Azure Virtual Networks
  - Microsoft Azure Websites
- Microsoft Server Product Portfolio
  - Windows Server 2012 R2 Datacenter
  - Microsoft System Center 2012 R2

- Technologies
  - Hyper-V

### Partners

- Vision Solutions