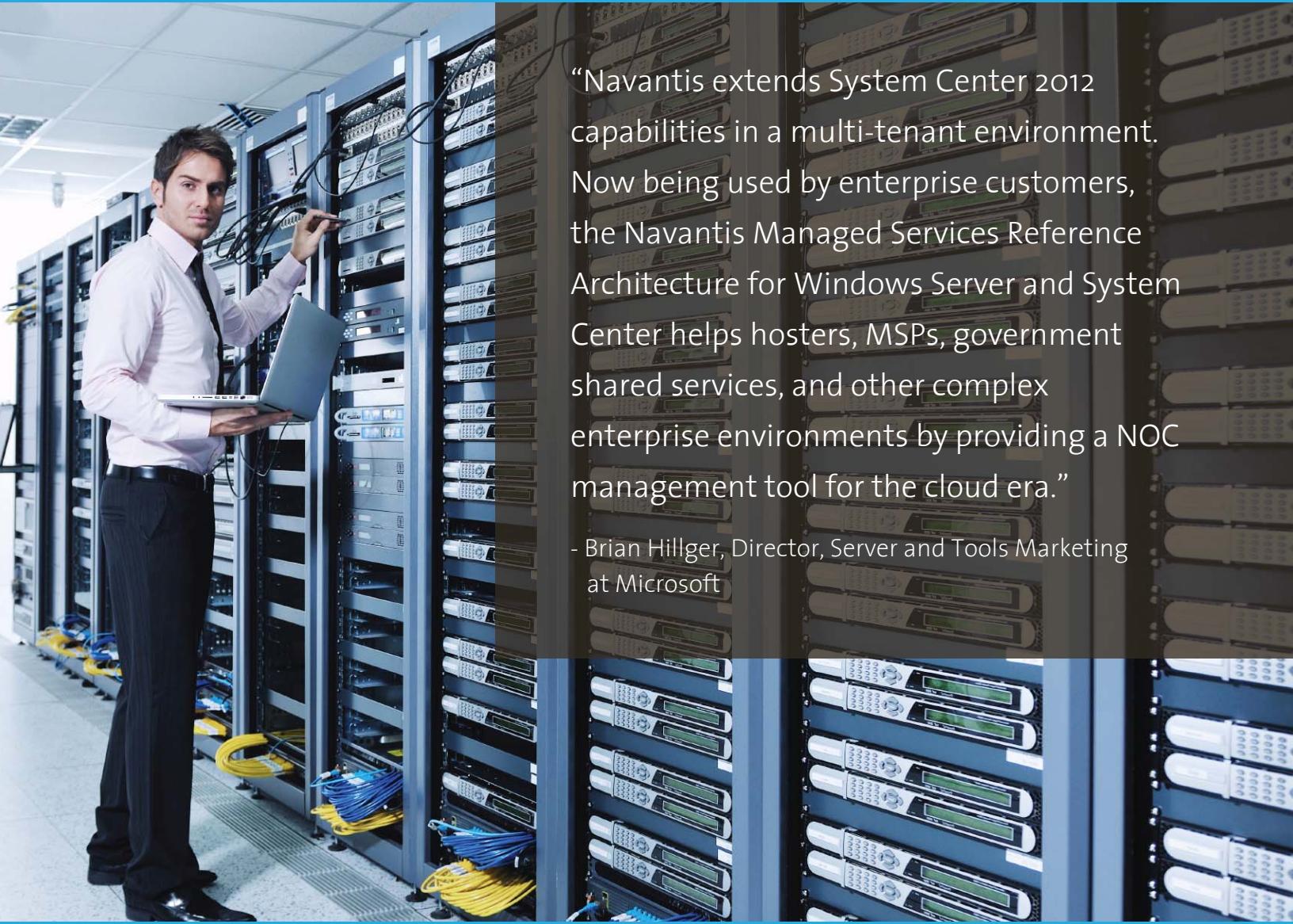




# USING MANAGED SERVICES TO DRIVE EFFICIENT IT



“Navantis extends System Center 2012 capabilities in a multi-tenant environment. Now being used by enterprise customers, the Navantis Managed Services Reference Architecture for Windows Server and System Center helps hosters, MSPs, government shared services, and other complex enterprise environments by providing a NOC management tool for the cloud era.”

- Brian Hillger, Director, Server and Tools Marketing at Microsoft

# Abstract – **USING MANAGED SERVICES TO DRIVE EFFICIENT IT**

Enterprises moving to a managed services model to achieve greater efficiencies, reduce operational costs and improve service level agreements (SLA) may be at risk of not realizing expected ROI. A poorly designed balance of people, process and technology will increase the probability of reduced business benefit or even outright failure of the initiative.

An optimum managed services environment is able to apply the right technology tools to automate key processes and activities in a predictable fashion ensuring people are more efficient and effective while providing insight into services and managing to pre-defined SLAs.

The first part of this paper will explore the challenges facing organizations seeking to operate a more efficient, optimized and SLA driven best practice IT organization. The second half will describe the unique elements that Navantis has implemented as part of its managed services offering including the Navantis Managed Services Reference Architecture which extends the full capabilities of System Center 2012 into a multi-tenant environment.



# What is **MANAGED SERVICES?**

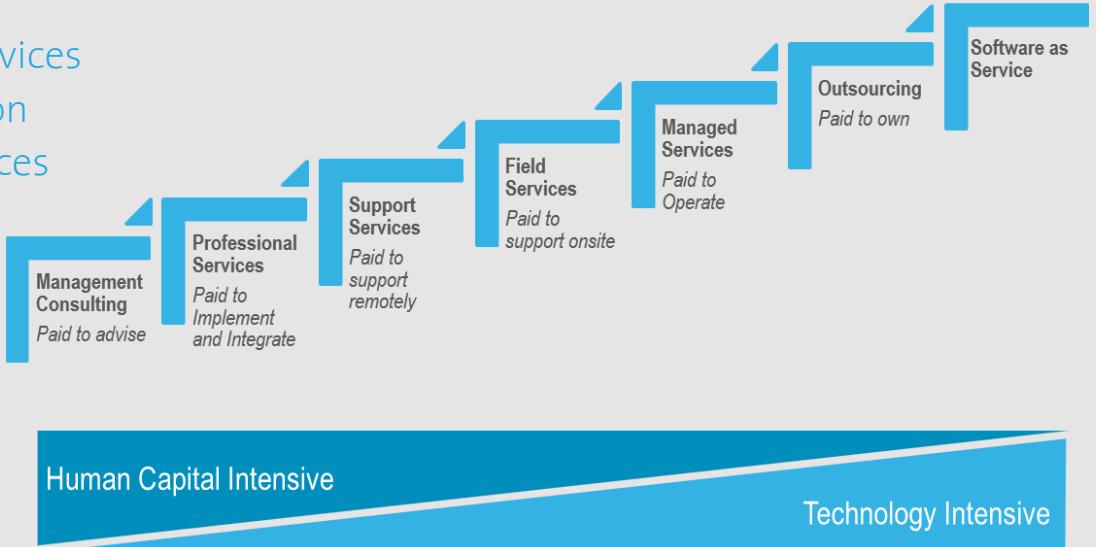
Managed services is a generic term that refers to the practice of transferring responsibilities for computers, networks and software to a third party for the purpose of driving efficiencies and improving operations. Managed services are outcome based and often feature a fixed cost for a defined set of services and deliverables, the expectation being that the same or better levels of service can be delivered to the enterprise at a lower total cost of ownership. The decision to move to managed services is usually driven by corporate strategy.

Managed services are not to be confused with mega-outsourcing contracts which transfers complete ownership and control of specific departments to a third party organization. In fact, the rise of managed services options may be seen as a challenger to mega-outsourcers due to the fact that managed services offer flexible and cost-effective methods for managing and protecting enterprise networks, systems and applications while leaving greater governance in the hands of the enterprise.

the same or better levels of service can be delivered to the enterprise at a lower total cost of ownership



Where managed services sit on the information technology (IT) services continuum:





## Efficient IT – **THREE KEY PILLARS**

Three key pillars support any IT services delivery. These are people, process and technology. The goal of most IT organizations is to deliver infrastructure, applications and service levels to enable the organization to function at peak efficiency so that the business can react to competitive pressures, remain profitable, grow revenues and thrive in a global marketplace.

Achieving this goal requires a delicate balance of people, process and technology. An optimum environment is able to apply the right technology tools to automate key processes and activities in a predictable fashion ensuring people are more efficient and effective while providing insight into services and managing to pre-defined service level agreements (SLA's).



the right technology tools to automate key processes and activities in a predictable fashion ensuring people are more efficient

# PEOPLE

In recent years, many IT departments have sought to increase their agility, overcome short-term capability deficiencies, and/or accommodate the impact of hiring restrictions by utilizing staff augmentation arrangements with IT service providers or by contracting directly with independent contractors. As a temporary strategy, this approach has a number of advantages compared to the alternative of directly hiring staff.

However, the staff augmentation model can become problematic if it adapts into a permanent operating ideal. As a long-term solution, it has none of the benefits of alternative external sourcing models and, in fact, can create a number of serious risks, potentially erasing value, increasing costs and exposing corporate vulnerabilities.

By its nature, staff augmentation represents higher labor costs. Contracting organizations must add overhead and margin to their labor expenses and, while some of this can be avoided by contracting directly with individuals, this too entails higher administrative costs internally. When used as a long-term solution, the natural offset that staff augmentation provides through the avoidance of hiring/de-hiring is lost to higher labor expense.

More significantly perhaps is that reliance on staff augmentation as a permanent model tends to foster a management style that does not plan for resource consumption. Resources are too easily accessed. The consequence is gradual “staff creep” and an unrecognized “head count” that slips under the organization’s human resource governance radar.

Contractors are added continually or become entrenched in the organization as high cost permanent staffing. Because staff augmentation has no associated service level commitments other than hours available to work, the linkage to value derived is unclear and seldom measured.



The response to any service issue is generally (and conveniently) attributed to insufficient staffing, adding to the staff creep problem.

**Perhaps most significant is the loss of knowledge control. As contractors become embedded in the organization, they accumulate information and capabilities upon which the organization is functionally dependent.**

With no contracted service commitment or requirement to document knowledge in a transferable manner, contractors can and do often hold organizations hostage, perpetuating the permanency of their engagement.

While traditional staff augmentation models can provide the people, the burden on providing process and technology then falls on the client who is frequently operating in “react” mode and unable to implement the governance and tools necessary to maintain control.

# PROCESS

Many IT organizations looking to adopt best practice processes turn to the ITIL framework as their guide. According to the ITIL governing body, ITIL is “the most widely accepted approach to IT service management in the world. ITIL provides a cohesive set of best practice, drawn from the public and private sectors internationally”.<sup>i</sup>

Unfortunately, according to a study published in The Journal of Information and Knowledge Management, the “ITIL framework does not offer clear-cut implementation techniques. The implementation mechanism is left for the implementer to decide upon.”<sup>ii</sup> This means that each organization is left to determine how to apply best practice principles within their own unique environment and according to interpretation by the (often limited) capabilities of their people.

What this means is that many organizations who set out with intent to implement best practice processes across their IT service delivery model,

struggle when it comes to putting the theories intended to act as a guide into practice in a real-world scenario.

Gartner’s IT Maturity Model provides a rationale that explains why many organizations experience limited success when attempting to implement best practice processes. Their findings suggest that IT organizational readiness is a critical element with respect to capability when introducing the right internal processes. Study findings published in 2008 report that 45% of IT organizations only have ad-hoc processes for IT Infrastructure and operations; 30% of IT organizations have defined processes for IT service support, while the ones which had repeatable and individually automated processes only counted for 15% of all IT organizations.<sup>iii</sup>

Implementing “best practice” processes becomes a project itself; one that will likely need expert guidance to “get it right”.

IT organizational readiness is a critical element with respect to capability when introducing the right internal processes

Gartner study findings report that **45%** of IT organizations only have ad-hoc processes for IT Infrastructure and operations.

	Survival	Awareness	Committed	Proactive	Service-Aligned	Business Partnership
People	No organizational focus on IT infrastructure and operations	Defined, technology-centric organization for IT infrastructure and operations	Technology-centric organization; investment in IT service desk function and staff	Process-centric organization, defined governance structure	Customer- and business-focused, IT service and delivery centric organization, formal governance	Business optimization and entrepreneurial focused culture
Process	No formal IT processes for IT infrastructure and operations	Ad hoc, but aware that processes are necessary; dependent on tools to implement de facto processes	Defined processes for IT service support and project management	Repeatable and individually automated; focus on IT service delivery-related IT processes	Integrated, automated and extended beyond ISO; focus on all service and business management processes	Dynamic optimization of IT services; implement processes fostering business innovation
Technology	No formal strategy or execution on technology investments	Basic management tools; no formal infrastructure hardware or software standards	IT support and project-related management tools; desktop hardware/ software standards defined; begin infrastructure standardization/ rationalization	Formal infrastructure standards and policies; process and domain-centric management tools; virtualization foundation in place	Formal IT management process/tools architecture; shared services; aggregated capacity management	Proactively promoting new technologies and impact to business; real-time infrastructure
Business Management	No formal IT business management functions	Very little outside of budgeting	Project management office	Financial management, formal key performance indicators	IT service cost metrics; competitiveness	Business contribution metrics

Source:[http://www.gartner.com/resources/147900/147962/introducing\\_the\\_gartner\\_it\\_i\\_147962.pdf](http://www.gartner.com/resources/147900/147962/introducing_the_gartner_it_i_147962.pdf)

# TECHNOLOGY

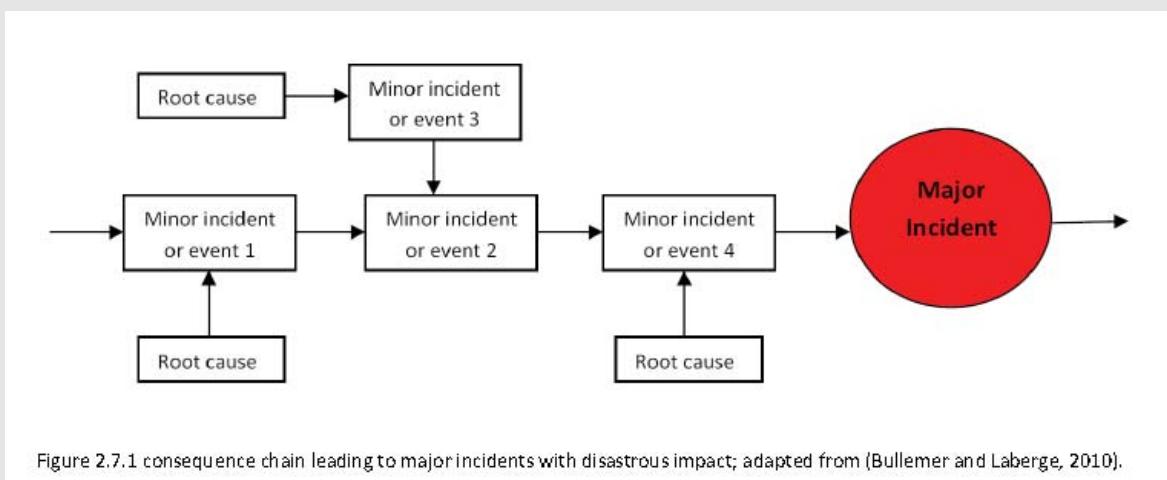
To properly support people and process, there is a requirement for an underlying framework of tools that enable automation, provide insight and extend the capability of IT to implement and manage SLA commitments. Integrating a suite of management technologies that enable monitoring, workflow, insight, self-service and collaboration across subject matter experts with varying skill-sets is a critical success factor.

Technology tools, no matter how advanced, do not by themselves ensure that organizations will realize the benefits. In fact “new tools can actually inhibit performance, increase costs and cause innovation to flounder. In a nutshell, tools are only as effective as the people and organizations using them.”<sup>iv</sup>

Examples of how organizations fail when not harnessing the power of technology tools to provide insight were identified in studies by Bullemer and Laberge who cited examples where organizations missed the “big picture” when not capturing and understanding the potential impact of a single incident. Their research identified that a systematic approach to incident view provides the opportunity to uncover common underlying issues leading to major or catastrophic failures.

Another benefit of using tools to monitor and flag incidents and systems is the insight gained from a better understanding of what is happening across the environment being managed. This insight provides the opportunity to foster a continuous improvement culture which is another objective of an efficient and optimized IT organization.

“New tools can actually inhibit performance, increase costs and cause innovation to flounder.. tools are only as effective as the people and organizations using them.”



# The MANAGED SERVICES MODEL

The managed services model provides an accelerated framework to support organizational IT in their goal to reach an efficient and optimized department.

The essential difference is that under a managed services model, the provider is committed to delivering an “outcome” at a defined price versus an “input” (as under the staff augmentation model). An input is simply the performance of an activity with no commitment that the activity will result in the desired outcome.

Pricing is tied to the outcome. Should the service requirement diminish or disappear, the associated costs react in kind. This provides the “scalability to demand” often sought in a staff augmentation model, but scalability that is tied to service.

Linked to managed services is a service commitment. Under the staff augmentation model, the only service commitment is hours of work. Under the managed services model, the provider assumes all of the risk of meeting the service commitment.

The value creation is huge. As the provider assumes the delivery risk at a fixed cost, the provider is highly incentivized to establish productivity measures required to meet the service commitment. This manifests itself in the implementation of tools and processes, as well as extensive documentation, as the provider cannot afford to risk not meeting the service commitment by relying on individuals.



Documentation and process rigor also allow the service provider to move work through a global delivery structure with ease. Through the application of documentation, tools and processes, the service provider is able to deliver services reliably with fewer, more productive resources. The managed services model therefore is structured to deliver a commercially viable, low cost service offering to the organization.

From the standpoint of what an organization really wants from IT, the managed services (outsourcing) model delivers the following advantages:

- a predictable low price/cost service/outcome;
- scalability based on business demand;
- fewer delivery risks; and
- operational performance metrics tied to process excellence, documentation and outcomes.

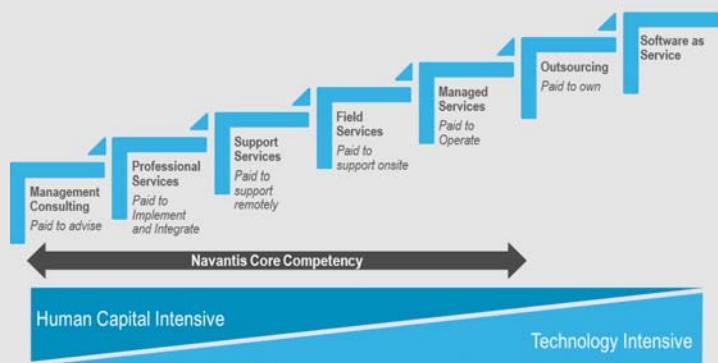
Managed services organizations are generally large and serve multiple clients from multiple locations. As opposed to smaller staff augmentation organizations (or individual contractors), managed services organizations have the ability to deliver a wealth of skills and capabilities. Client organizations have access to a broad base of skills, solutions and knowledge to meet evolving requirements.

A managed services model delivers all of the skills access and flexibility of a staff augmentation model; however, because the model relies heavily on management and process rigor, clients generally experience elevated capability themselves. Clients can pick an engagement model that best suits their business need but each model is fully supported by the tools and processes that have developed over the years.

# Navantis MANAGED SERVICES MODEL

To address the need for flexible, scalable managed services that can meet the unique business needs of a wide variety of clients, Navantis has created several models that enable us to apply the right combination of people, process and technology to our clients' environments.

The diagram depicted here expands on the managed services continuum introduced at the beginning of this paper and illustrates where Navantis provides capabilities.



## Build Operate Transfer

"Build Operate Transfer" or "BOT" arrangements help clients retain the option of transferring ownership of the operations after a mutually agreed upon time frame. Navantis helps the client set up the back office operations from start to finish. This covers establishment of the operation, acquisition of facilities and staff and extends to actually running the centre for a defined period. Once the centre and services are well established, management and ownership can be transferred to the client.

## Traditional Managed Services

In traditional Managed Services, responsibility for an entire IT operation or a segment of IT services are moved to Navantis to take advantage of the expertise and cost benefits offered. This model works well for routine IT services that can be handed over to the service provider completely. Navantis takes complete responsibility for operating the service on behalf of the client and commits to SLAs that cover quality and performance metrics.

## Co-Managed Outsourcing

Co-managed outsourcing is similar to the traditional managed services model but with closer involvement from the client. Typically, a client manager and Navantis on site team are located within the client location. This approach increases client comfort levels while providing all the benefits of a hybrid, onshore/offshore based IT operation.



# Navantis MANAGED SERVICES KEY FEATURES

Key features of the Navantis Managed Services engagement models are:

- Takes a complete, end-to-end responsibility of a set of deliverables for a segment of the IT services and operates on behalf of the client.
- Budgets are calculated on the basis of either named dedicated personnel working on the assignment or based on a shared team model on a task basis. They are set for a certain period of time, typically ranging between 6 months to 5 years.
- Budgets can also be defined for the full set of services, thereby making it a fixed price managed services engagement. Clients adopt this model when the work can be clearly scoped with a distinct set of deliverables and services.
- The role of the client becomes that of a reviewer with the additional responsibility of contracts management and budget tracking.
- Each agreement includes clearly defined SLAs for each deliverable and penalties applicable for non-delivery.
- Delivery of service can be performed onshore at client location, offshore or a combination of both. We work with all our clients to determine the best model based on individual circumstances.
- Navantis managed services models are guided by ITIL principles so that defined processes are leveraging “best practice” from multiple industries.

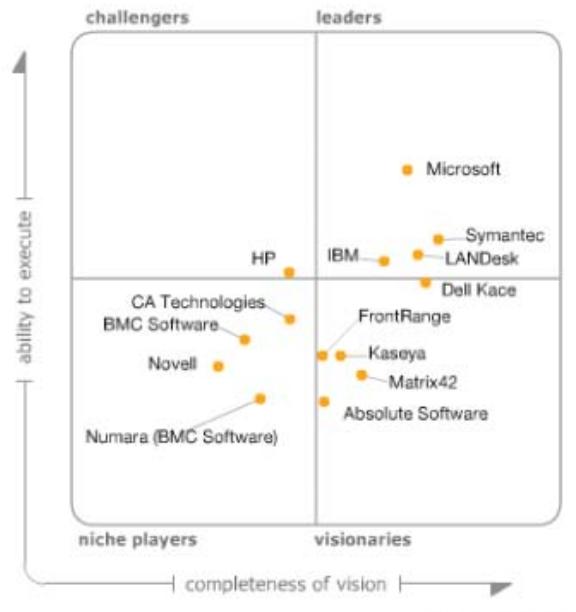
A Navantis managed services model is often adopted by organizations as a continuation of an existing staff augmentation engagement. Adopting a Navantis managed services model ensures the accountability for deliverables and managing towards the agreed outcome rests with Navantis. Clients also are able to realize the benefits of the Navantis OnCloud Managed Services platform otherwise not available with a pure staffing model.

# Navantis ONCLOUD MANAGED SERVICES PLATFORM

Navantis OnCloud Managed Services platform is an end-to-end cloud services offering based on Microsoft Windows Server 2012 and System Center 2012. The Navantis OnCloud Managed Services Platform enables features like Self-Serve Portal, Remote Operations Manager Monitoring, and Remote Configuration Management for servers, workstations, networking and devices. Service Provider Cloud Hosting delivers the Microsoft Cloud OS and Navantis OnCloud Managed Services Platform Infrastructure for multi-tenant web and virtual machine cloud services, and Navantis Managed Services Service Desk.

Built exclusively on Microsoft System Center 2012 and Microsoft Windows Server 2012, this offering uses our own Navantis Managed Services Reference Architecture and is unique because it extends System Center from a product that is designed from a single hybrid environment into a true multi-tenancy management suite.

**Figure 1. Magic Quadrant for Client Management Tools**



Source: Gartner (January 2012)

## Why Is This Important?

Ranked by Gartner as the “absolute leader” in the Magic Quadrant for management tools, the Navantis Managed Services Reference Architecture for System Center 2012 means that the full capabilities of this powerful management tool can be extended to all Navantis managed services clients. We believe that Navantis is the only provider in Canada (and possibly globally) offering the power of the System Center 2012 toolset to managed services clients.

This comprehensive solution leverages the Windows Server 2012 and System Center 2012 suite of products and provides the ultimate Cloud OS experience for the end-user and the organizations that use it. The Navantis OnCloud Managed Service Platform is exclusively developed, designed and managed by Navantis and demonstrates the depth of knowledge and investment Navantis has with Microsoft System Center 2012 and Windows Server 2012.

Navantis OnCloud Managed Services Platform is also an ideal solution for hosting providers or MSP's, enterprises with multiple lines of business, governments looking to operate a shared services infrastructure as well as organizations looking to outsource a portion of their IT.

# SELF-SERVE PORTAL

Navantis OnCloud Managed Services Platform extends System Center Self-Service capabilities to the user through an easy to use self-serve portal. Navantis OnCloud Managed Services Platform offers user role based access to managers and end-users alike to submit incidents, service requests, and change requests. The self-serve portal enables the user to track their requests and communicate with Navantis Managed Services analysts. Furthermore, Navantis OnCloud Managed Services Platform self-serve capabilities includes the management of virtual machines and web sites hosted on the Navantis OnCloud Managed Services Platform, co-locates and public clouds.

A woman in a business suit is smiling and interacting with a computer screen displaying a self-service portal interface. The interface has a header "ADVANTAGE SERVICES" and sections for "ADMINISTRATIVE TASKS" and "MANAGED SERVICES".

**ADVANTAGE SERVICES**

**Home**

Help Articles

My Requests

My Activities

**ADMINISTRATIVE TASKS**

Access Management  
Use this service to manage access to Navantis Managed Services

Account Management  
Use this Service Offering to create new customer accounts and other customer...

**MANAGED SERVICES**

Application Support  
Incident Support Services

Infrastructure Support  
Incident Support Services

Service Request  
New Proactive Services and Enhancements to Existing Services

# REMOTE OPERATIONS MANAGER MONITORING

Navantis OnCloud Managed Services Platform provides rich monitoring and management for physical hardware and virtual fabric, Windows Server and Windows Workstations covering critical business applications from end-to-end. This means we support everything - from hardware to applications and every element in between. Our team will also assume vendor management responsibilities and engage hardware providers as needed based on the defined SLA.

Each client we onboard has a clearly understood RACI matrix and financially backed SLAs for predictable experience.

In addition, the Navantis OnCloud Managed Services Platform is also available for network monitoring, UNIX/Linux and synthetic transactions that can be monitored from the Navantis OnCloud Managed Services Platform, co-locate or public cloud which provides real end-to-end visibility of business applications and IT Services.

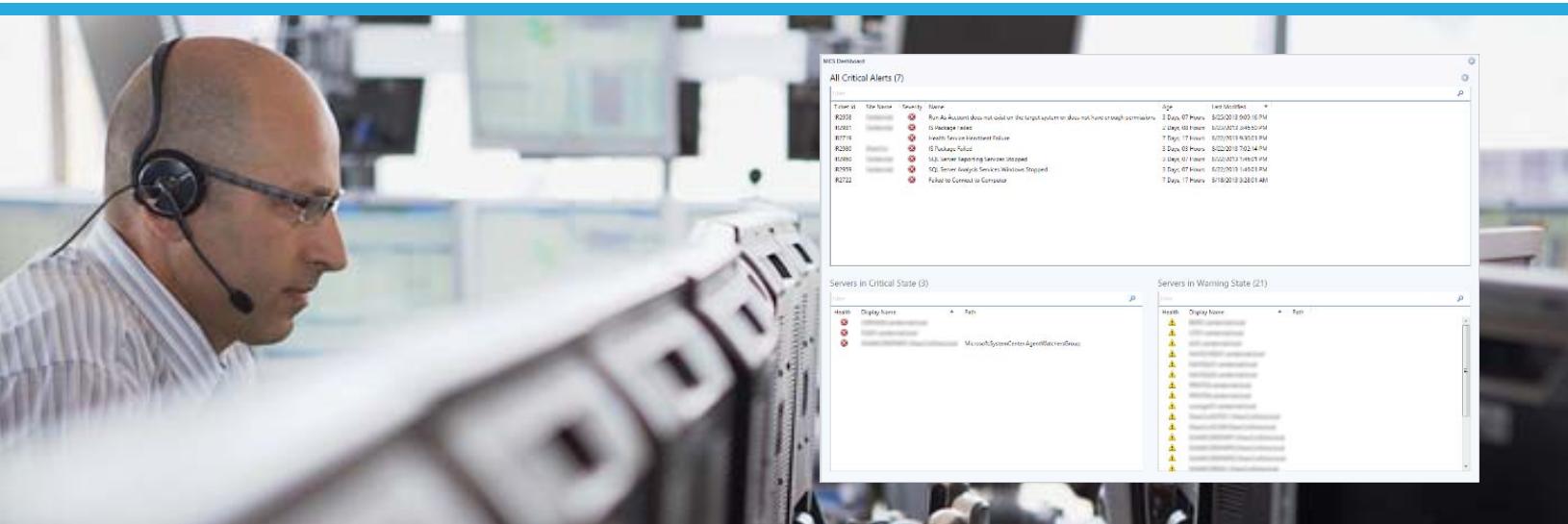
Leveraging the System Center platform the Navantis OnCloud Managed Services Platform provides a flexible platform to monitor custom business applications and enables a variety of features which can be extended beyond the out of the box standardized elements. Navantis Managed Services continuously learns your infrastructure to ensure all the required aspects of your environment are monitored.

Following industry best practices Navantis Managed Services infrastructure collects state data, event data and performance data. Our team of 24/7 analysts monitors this data and is able to respond promptly and proactively with minimal impact on the customer infrastructure or operations.

Implementation of Navantis Managed Services Remote Operations Manager Monitoring is easy and quick, with no infrastructure investments and no customer staff requirements, implementation of new monitored instances is as simple as creating a request in the self-serve portal. Monitoring will begin within minutes.

All the information is collected in a centralized repository where Navantis Managed Services can produce state reports, performance reports and even usage and consumption reports, enabling customer's full visibility into their current state.

The Navantis team will assume responsibility to manage and monitor your hardware and applications. In addition, Navantis will assume responsibility to work with the application and hardware vendors as needed based on the defined SLA.



# REMOTE CONFIGURATION MANAGEMENT

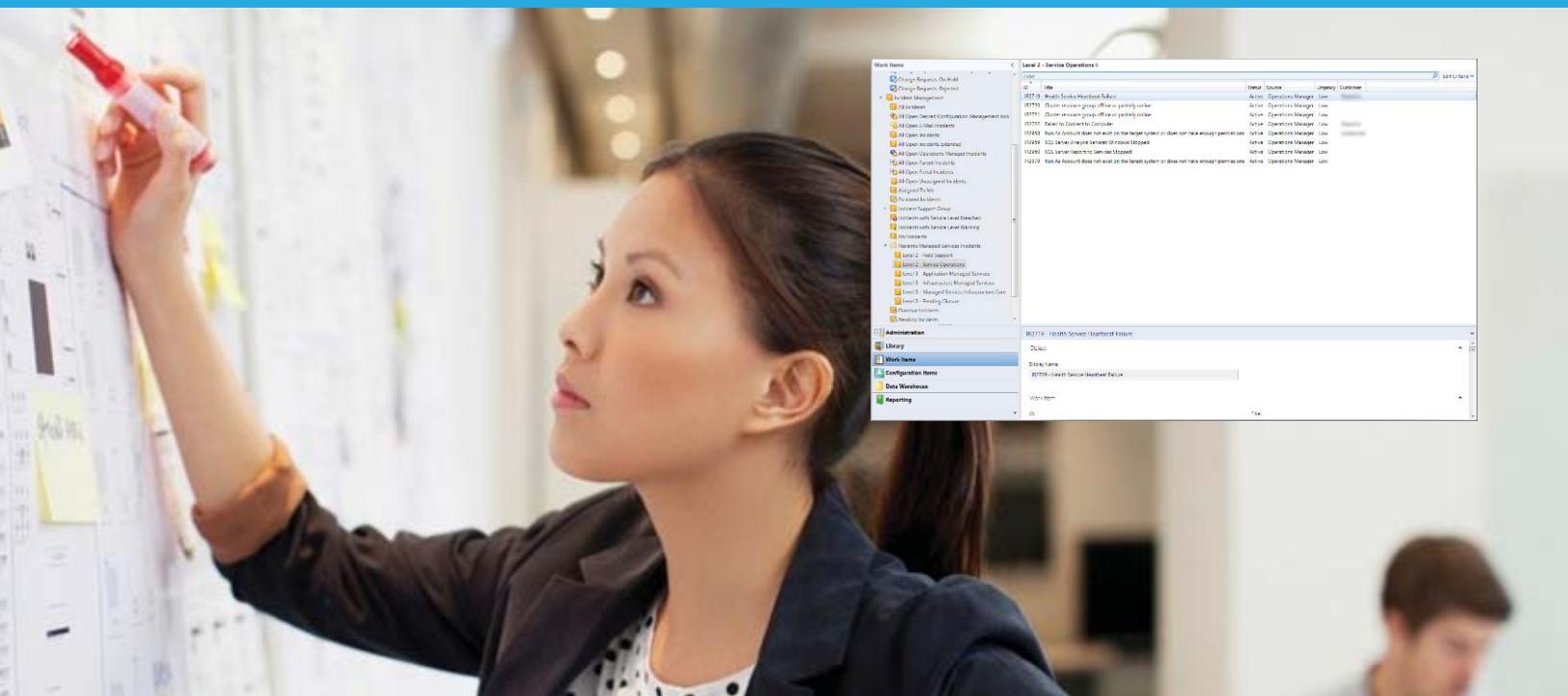
Navantis OnCloud Managed Services Platform offers a solution to manage your workstation and mobile devices through the extended capabilities of System Center Configuration Manager. Enabling managed organizations to fully support a wide range of operating systems such as Windows, MacOS X, Unix OS and others. The Navantis OnCloud Managed Services Platform offers critical features such as scanning and inventory of devices, software inventory, software distribution, patch management, antivirus and malware detection and prevention.

The Navantis OnCloud Managed Services Platform Remote Configuration Management takes away the complexity usually required to implement such capabilities with our out-of-the-box ready-to-go solution, eliminating the need for a complex infrastructure to manage servers, workstations and mobile devices.

The Navantis OnCloud Managed Services Platform is pro actively monitoring your managed instances and delivers current Windows update reports and other related configuration manager information. Using this information Navantis and the customer can pro actively address issues before they become problems.

Navantis OnCloud Managed Services Platform is also available for mobile devices such as Windows Phones, Android, iOS and Windows RT, truly embracing the consumerization of IT with a centralized management platform without compromising the organizations data.

available for mobile devices such as Windows Phones, Android, iOS and Windows RT



The screenshot shows the Service Management Portal interface. On the left, there's a sidebar with icons for All Items, Web Site Cloud, VM Clouds (selected), Service Bus Cloud, SQL Servers, MySQL Servers, Automation, Plans, and User Accounts. The main area is titled 'vm clouds' and shows a list of items in the 'CLOUDS' tab. The list includes:

NAME	VERSION	PUBLISHER	STATUS	PUBLISH DATE
WS2012 with IIS Role	1.0.0.0	Microsoft	✓ Published	5/15/2013 6:31:08 PM
WS2012 with IIS Role	1.0.0.0	Microsoft	✓ Unpublished	
WS2012 with IIS Role	1.1.0.0	Microsoft	✓ Unpublished	

At the bottom of the main area, there are buttons for NEW, IMPORT, UNPUBLISH, and DELETES.



## REMOTE SERVICE DESK

Navantis OnCloud Managed Services Platform Service Desk capabilities are based on Microsoft System Center Service Manager 2012. With Navantis Managed Services implementation of Service Manager, organizations can rest assured that industry best practices for IT Service Management (ITSM) are followed through automation and standardization, reducing the overhead on IT departments to manage and operate their own solution.

Navantis OnCloud Managed Services Platform Remote Service Desk is available to customers through email, phone, and Self-serve portal. Customers can use any of those options to submit Incidents, Service Requests, and Change Requests.

Navantis OnCloud Managed Services Platform Remote Service Desk solution has deep integration with all the System Center components which enables greater visibility of the customer's Configuration Management state, and Operations Management state.

available to  
customers  
through email,  
phone, and self-  
serve portal

# NAVANTIS ONCLOUD HOSTING

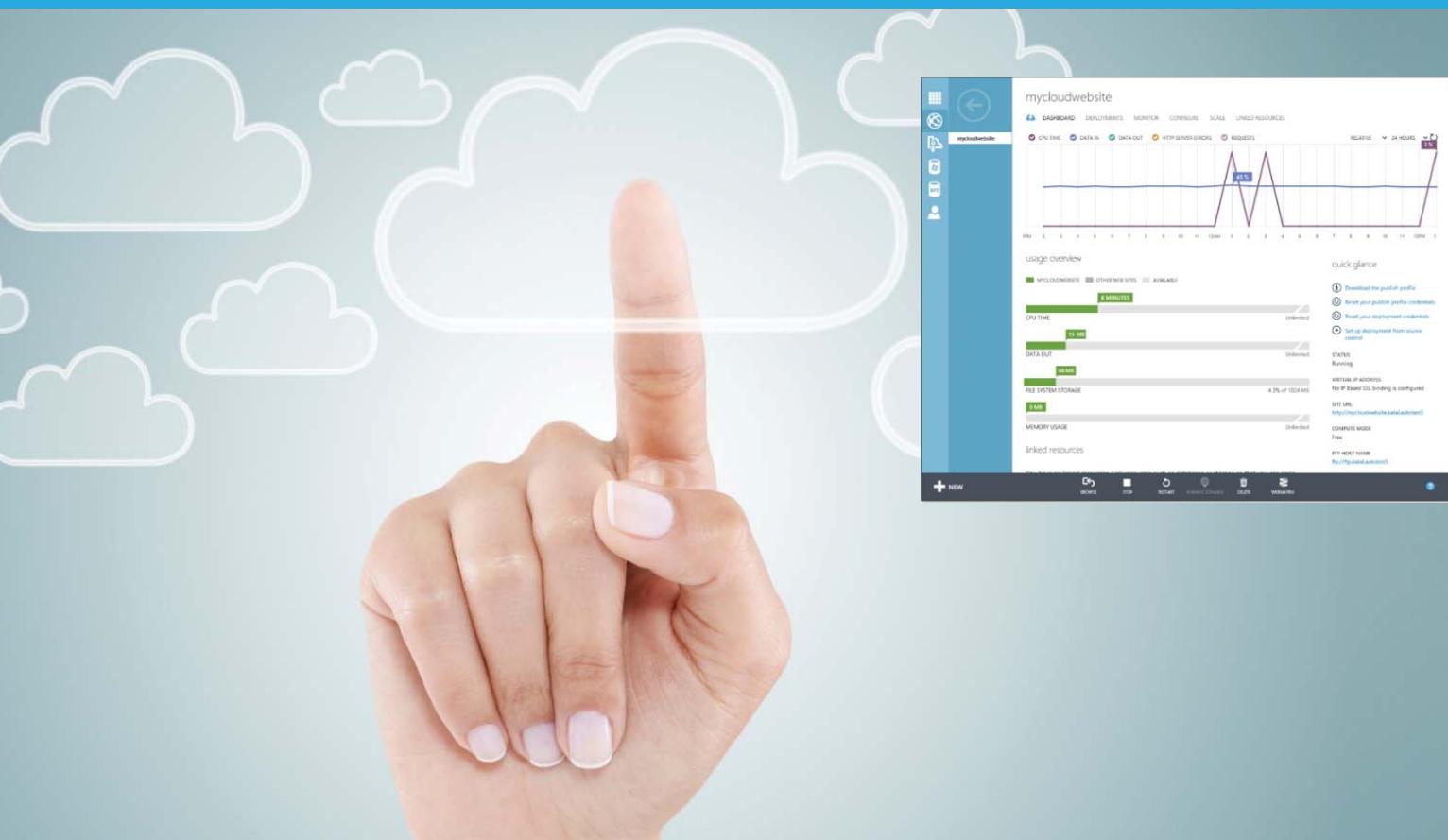
Navantis OnCloud Infrastructure is the core infrastructure for the Navantis OnCloud Managed Services Platform and customer hosting. As a leader in integration and solutions Navantis worked closely with Microsoft to design and implement Windows Azure Services technology for Windows Server 2012. Navantis participated in the Microsoft Technology Adoption Program (TAP) to implement the new Windows Azure Pack and Windows Server 2012 R2 and System Center 2012!

Windows Azure Pack provides Windows Azure technology that enterprises and service providers can run on their Windows Server infrastructure for multi-tenant web and virtual machine cloud services.

Benefits include the management portal for tenants. This portal delivers a consistent, customizable self-service portal experience for provisioning, monitoring and management of services such as web sites, virtual machines and services bus. Also the management portal for administrators provides the ability to configure and manage resource clouds and user accounts.

The Windows Azure Pack also includes capabilities for automation and integrating additional custom services on the services framework including a runbook editor and execution environment, enabling deep integration with the Navantis Managed Services Infrastructure to deliver end-to-end solutions.

consistent,  
customizable  
self-service  
portal  
experience



# ITIL PROCESSES

ITIL represents a repeatable manner through which any organization can plan, construct, deliver and manage their IT services. The most widely accepted approach to IT Service Management in the world, ITIL represents a cohesive set of best practices, drawn from international public and private sectors. It encompasses five major areas of consideration surrounding IT Service delivery: Service Strategy, Service Design, Service Transition, Service Operations and Continuous Service Improvement. These five areas, with their identified processes and sub-processes allow for any IT group, department or organization to be successful in the delivery of their services to its customers in support of the company's business goals.

At Navantis, we are guided by the ITIL framework to leverage tools, technologies, skilled people and processes ensuring that our services delivered are aimed at enabling an efficient and effective service delivery. Navantis OnCloud Managed Services Platform allows us to deliver a predictable set of processes and procedures to be leveraged internally as well as by our customers. This empowers our Managed Services Delivery Team(s) to excel in the quality, consistency and completeness of their deliverable commitments to our customers.



# AUTOMATION

Navantis OnCloud Managed Services Platform is a fully automated management system, enabling Navantis to quickly and effectively respond to customer requests. Using automation built into the Navantis Managed Services Reference Architecture we are able to achieve seamless integration between the System Center components, Windows Server and hardware to deliver best-in-class services to support the customer's business needs.

We also deliver automation to the end user. By leveraging simple, business focused service request forms in the Self-Serve portal, we enable back-end automation of common IT operations tasks. We are able to improve operational efficiency by implementing standardized, repeatable and consistent processes that align to industry accepted best practices.

Navantis OnCloud Managed Services Platform Automation can be extended to the customer's infrastructure delivering end-to-end orchestration. This enables the management of cross-domain processes. Navantis OnCloud Managed Services Platform provides the tools for orchestration to combine software, hardware, and manual processes into a seamless system.

Navantis Managed Services provides our clients with a market leading toolset, automation and ITIL influenced orchestration to reduce the human capital requirements to operate an IT service, while providing management insight and reporting capabilities that off-the-shelf MSP toolsets cannot match.

# Appendix A

## NAVANTIS MANAGED SERVICES REFERENCE ARCHITECTURE

We are able to deliver unique management and automation capabilities because of our Navantis Managed Services Reference Architecture which has been designed to extend the full capabilities of System Center into a multi-tenant environment.

Navantis OnCloud Managed Services Platform delivers technology and services focused on creating predictable IT service delivery for our clients. The Navantis OnCloud Platform includes the Navantis Infrastructure-as-a-Service (IaaS) offering which is based on Windows Server 2012 R2 and System Center 2012 R2 and leverages components such as Windows Azure Pack, System Center Virtual Machine Manager 2012, System Center Operations Manager 2012, and Microsoft Service Provider Foundations. In addition the Navantis OnCloud Managed Services platform is offered as a Platform-as-a-Service (PaaS) or Software-as-a-Service (SaaS) solution. The Navantis Managed Services uses the enterprise grade technologies such as Windows Server 2012, System Center 2012 Operations Manager, System Center 2012 Service Manager, System Center 2012 Configuration Manager, System Center 2012 Orchestrator and System Center 2012 Data Protection Manager.

Windows Server 2012 and Windows Server 2012 R2 is the foundation for the Navantis OnCloud Managed Services Platform. Windows Server 2012 and Windows Server 2012 R2 were designed with hosting service providers and delivering robust foundation for cloud computing.

The ability to scale Virtual Machines from shared to the largest levels in the industry with the new version of Hyper-V, while virtualizing networking and storage to reduce complexity and cost associated with traditional technologies such as VLANs and SANs

System Center 2012 R2 provides a complete management stack. System Center 2012 R2 delivers the ability to easily create and deploy cloud capacity on top of virtualized resources, enabling monitoring and configuration management across multiple platforms and various vendors. Designed to deliver integrated service management and automation capabilities that go beyond software to include hardware and process. And now with Service Pack 1 and R2, hosting service providers can leverage this platform to deliver an extensible solution on top of an API layer called the Service Provider Foundation (SPF).

Windows Azure Pack delivers the consistent Navantis OnCloud Managed Service experience. Windows Azure Pack delivers self-service experiences for virtual machines and high-density website hosting. Create high scale, multi-tenant website hosting services that are simple to deploy and administer. Create extensible Infrastructure-as-a-Service offerings for customers to provision and manage VMs. Extended Portal experiences using the REST-based Service Management API to include branding, billing, custom service integration as well as integration into existing portals.

"Navantis extends System Center 2012 capabilities in a multi-tenant environment. Now being used by enterprise customers, the Navantis Managed Services Reference Architecture for Windows Server and System Center helps hosters, MSPs, government shared services, and other complex enterprise environments by providing a NOC management tool for the cloud era."

Brian Hillger, Director, Server and Tools Marketing at Microsoft

# About **NAVANTIS**

Founded in 1998, Navantis is an award-winning, end-to-end systems integrator and solution provider. Navantis plans, builds, delivers, and supports premium enterprise IT solutions. We have over a decade's worth of experience building solutions ranging from small to extremely large enterprise and province-wide systems.

Navantis provides a collaborative approach to delivering exceptional integrated solutions and we apply our expertise to help our customers enhance productivity, increase business performance, build customer communications, and reduce costs while maintaining a competitive edge.

With more solution awards from Microsoft than any other firm headquartered in Canada, Navantis was designated one of the first Microsoft Gold Certified Partners worldwide and has been recognized by CDN, the Branham Group, and IDC as one of the Top 100 professional services firms in the country.

For more information regarding Navantis, please visit

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

To learn more about Navantis Managed Services, the Navantis Managed Services Reference Architecture or to schedule a demonstration, please contact:

[info@navantis.com](mailto:info@navantis.com)

1-888-882-9588

i | <http://www.itil-officialsite.com/home/home.aspx>

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iv | <http://sloanreview.mit.edu/article/capturing-the-real-value-of-innovation-tools/>