WHITE PAPER:

# Remote Infrastructure Management: The New Outsourcing Frontier

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## **Executive Summary**

Businesses today face significant challenges in managing complexities, while optimizing key functional areas, reducing costs and maintaining their competitiveness. Add the increasing demands for better, faster and more cost-effective solutions and services, and you've pushed IT to the brink. Businesses, especially those with large networks of satellite locations, are pressed to optimize their IT infrastructures to meet these demands.

We also know that in a typical IT organization today greater than 50% of the support personnel and more than 74% of the IT spend are focused around the infrastructure. But the bottom line is quickly becoming the "better, cheaper, faster" model without adding cost or headcount. This dilemma has led to the acceleration of offshore outsourcing.

The new outsourcing frontier of today is in Remote Infrastructure Management (RIM) Services. As recently as two years ago, the idea of hiring someone to manage your data center and network operations remotely would have been viewed as a risky idea. Not so today with the advent of robust enterprise tools, ubiquitous broadband coverage and highly skilled technicians focused on one thing—keeping your networks operating at peak performance while keeping costs low—and doing it in a proactive state, not reactive as in the past.

This white paper focuses on the trend toward remote managed services and how organizations can leverage these services to drive down costs while ensuring the highest level of service quality and end-user satisfaction.



## TABLE OF CONTENTS

Executive Summary	1
ntroduction	3
Current State	4
What is Remote Infrastructure Management	4
nfrastructure Maturity	5
RIM Service Offerings	6
Key Issues	7
Business Drivers	8
Before You Take the Plunge	8
mproving the Infrastructure Remotely	10
Tools and Process	10
Call to Action: Next Steps in RIM Outsourcing	11
How We Can Help	12
Summary	13
About the Author	14
About CompuCom	15

## Introduction

Today's IT infrastructure environment is an amalgamation of technologies and devices to serve specific purposes. As business requirements have changed, devices and technologies have been developed to support enhancements in applications and the ever-changing infrastructure. CIOs and other IT leaders are faced with delivering more for less while support issues continue to mount. The classic disconnect between IT and the business has never been so paramount. This requires new strategies, new thinking and quick responses to meet these challenges.

One of the most effective weapons IT leaders possess is the ability to leverage outsourcing and in this case, RIM outsourcing. The key to this success may be out-tasking, or offshoring, but with whom and where are the key questions of the day. And what are the risks and rewards of moving data center and device monitoring and management to others while you focus on your core competencies? The answers to these key questions will help IT leaders as they look for viable solutions.

#### **Current State**

With the advancement in tools, processes and technologies, RIM offshoring is quickly becoming an effective solution and strategy for CIOs looking to take advantage of labor arbitrage without compromising service quality or network performance.

It was initially argued that infrastructure outsourcing was so closely tied to physical assets in IT and the data center to render it unfeasible for offshore delivery. However, upon further investigation, it was learned that much of the IT support work done by major corporations was being done remotely in their facilities or regional data centers.

Leading research shows that greater than 70% of IT services surrounding the data center can be executed remotely. This is due in part to the advancements in remote monitoring and diagnostic capabilities of services and tool providers, together with the introduction and adoption of Information Technology Infrastructure Library® (ITIL) as the de facto standard for IT Service Management (ITSM). These factors have been critical to the rise of RIM as a viable delivery model for ITSM services.

Today, progressive service providers are investing heavily in the tools, processes and infrastructure talent required to successfully meet client requirements and delivering outstanding service quality. These efforts have given corporate IT groups the peace of mind they need to move more of their infrastructure support to capable providers.

## What is Remote Infrastructure Management?

Remote Infrastructure Management (RIM) is defined by analysts as the remote support and management of various IT services that are related to infrastructure support from global delivery sites. The service offering encompasses remote monitoring and management, which includes support, administration, maintenance, troubleshooting and performance enhancement. These services include the remote system monitoring of the following: data center, networks (WAN and/or LAN including switches, routers, hubs), database administration, desktops, servers and related peripherals and e-mail systems.

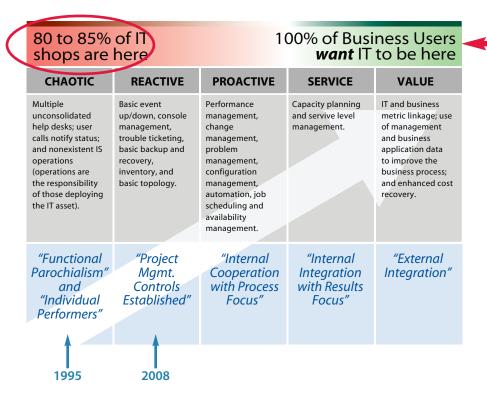
Service providers who deliver RIM services must make substantial investments in highly skilled professionals with vertical competencies in selected technology segments and subsystems. In addition, they need to provide robust enterprise tools together with voice and data-grade bandwidth for managing these enterprise environments from afar.

RIM services are poised for strong sector growth as companies look to leverage a global delivery model to support their businesses. Savings can be as high as 50% because service providers can leverage automation, state-of-the-art facilities and highly trained personnel to deliver these services 24/7/365.

## **Infrastructure Maturity**

In 1995, Gartner introduced their Infrastructure Maturity Model (See Figure 1). The model was developed from survey results at their U.S. Data Center Conference. They polled more than 450 participants concerning the maturity of their organization's infrastructure and operations. The key findings showed that for more than 85% of the respondents, IT infrastructure maturity was very low, measuring 1.3 on a 5-point scale. Only 12% rated their infrastructure maturity at levels 2 or 3, and less than 5%, above level 3. Fast forward to today, armed with the polling results from more than 600 participants at the November 2007 Data Center Conference, Gartner commented that while there has been some upward movement in terms of process maturity and reducing the number of infrastructure silos, sadly 77% of the respondents still rated themselves in the lower three maturity levels.

(Figure 1) **Gartner Infrastructure** Maturity Model



Gartner's recommendations to the audience were as follows:

- Assess your IT maturity with respect to people, processes, technology and business management using strong assessment tools.
- Make the improvement of IT Infrastructure maturity a top priority—at a minimum, achieving Level 3 (Proactive).
- Develop a systematic, prioritized roadmap for continual IT Infrastructure improvement.



## **RIM Service Offerings**

Typical internal IT services include the data center, network, PC, application operation and LAN/WAN support. These services are the more mature outsourcing offerings in this market, and they continue to grow at a predictable rate of 5-8% per year. Today, however, many of these services are further subdivided based on the client's business requirements to outsource only specific functions.

Today, one of the fastest growth areas in IT outsourcing is the use of the global delivery model for services. Organizations are looking to find low-cost, highquality alternatives to dedicated on-site support. Service providers have answered this demand with onshore, nearshore and offshore offerings in application development and management. Success with this strategy is encouraging organizations to look at IT infrastructure services that can be delivered remotely.

By 2012, leading analysts predict less than 50% of the labor hours for global service delivery would shift from on-site to remote delivery.

## Infrastructure services that can be delivered remotely:

- Application monitoring and management
- Data center outsourcing
- Network management services
- Security services
- · LAN/WAN outsourcing
- Database
- End-user services

- Service/Help desk
- Storage services
- Telecom

(Figure 2) CompuCom Remote Infrastructure **Management Services** 

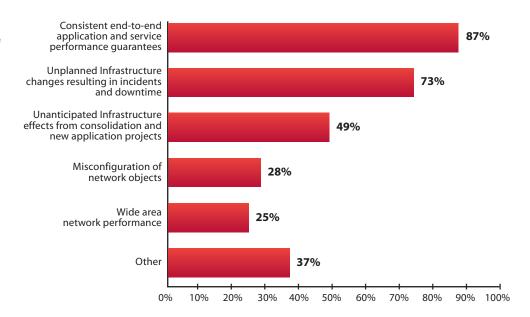
## CompuCom Remote Infrastructure Management Services A highly integrated, process-driven approach of managing IT infrastructure components through the efficient and effective use of people, processes, and products (tools and technology) to deliver innovative services with exceptional quality. **Remote Network Services** itoring and management responsibility for a client's network environm ork (WAN) and other networking infrastructure, such as voice to an outsi The transfer of part or full sys DBA responsibilities for Oracle, SQL, DB2 and Sybase databases. Support includes monitoring, security, a asset reliability, disk planning, consolidation, outages, patches, configurations, scripts, jobs schedules, back up, recovery, and migrati **Remote End-User Services** nd maintaining end user for identity administration, directory services, authentication stering of single sign-on, federated identity and user provisioning. **Remote Security Services** note monitoring and management of IT security information, assets an ery of those services is via remote security operations center, not through



## **Key Issues**

In a recent survey conducted by industry analyst firm Forrester Research, the vast majority of IT infrastructure managers at \$1 billion-plus companies noted that the issues cited below have become more severe in the past year. Out of the mix of responses, Forrester selected the top five as seen in Figure 2 below.

(Figure 3) 5 Challenges for Enterprise Infrastructure Managers Source: Forrester Research



Executives are demanding consistent service-level guarantees for key applications or services across the whole enterprise. It is no longer enough to guarantee server uptime. What really matters today is the end-user experience and productivity. The primary challenges are how to describe the key services in meaningful terms to the buyer, how to map these services to the underlying infrastructure and how to monitor the end-to-end performance of these services. For most of IT, budget constraints and a tight economy marginalize an IT organization's ability to deliver on these demands.

Forward-looking companies are already addressing the most important challenges by selectively outsourcing to organizations that can bring process maturity using ITIL or Six Sigma process implementations for service delivery, as well as robust tools like service catalogs, network configuration and bandwidth management, autonomics and auto-discovery technologies. Organizations should conduct an assessment, look at their specific situation, and use these examples as best practice guidelines as they build a roadmap for continuous improvement.

#### **Business Drivers**

The following is a short list of some of the key business drivers for outsourcing RIM services:

- Cost reduction through labor arbitrage and utilization
- Access to state-of-the-art tools and technologies
- Proven process and continuous improvement capabilities
- Highly skilled technical resources available 24/7/365
- · Proactive response
- Security

Cost reduction is clearly the number one key business driver for remote services as CIOs facing continued challenges in meeting end-user demand, together with ever-shrinking budget, look for creative solutions that do not bring added risks. The good news—clients who have shifted these functions offshore report savings of greater than 50% when outsourcing infrastructure services to these providers. A recent analyst report predicts that while currently no more than 5% of organizational spending can be attributed to externally sourced IT-shared solutions, by 2010, that proportion will have grown to almost 25%. Because infrastructure management today accounts for more than 70% of the IT budget of an organization, RIM provides a significant opportunity to lower this percentage and allows the organization to invest in new technologies or simply to maintain their market competitiveness.

In addition to cost savings, the ability to leverage next generation tools, standards and processes are also a priority. IT organizations today are looking for continuous improvement in all areas of business, and leveraging a service provider's knowledge and skills in processes such as ITIL and Six Sigma are added benefits for organizations. Add to that the ability to have a centralized view of their infrastructure, using a Web portal, and you achieve an effective way to see into the enterprise using someone else's looking glass.

## **Before You Take the Plunge**

As you begin to explore the potential for leveraging RIM services, several factors should be taken into consideration in your due diligence process.

#### **Standards**

From a standards viewpoint, remote management is the one area within IT where standards have preceded widespread adoption of services. The best practices framework, ITIL, established by the British government nearly 25 years ago, has become the de facto standard for IT processes, but in reality it is not a standard. The real standard is ISO 20000. With its roots in the ITIL framework, ISO 20000 is the latest and perhaps the most important standard in the industry today. It is the one and only true measure of a service provider's ability to deliver outstanding services and quality.

#### Security

In the dot-com era, security issues doomed many companies. Today, security is still cause for concern, but what is more important is how the service provider handles security from both a physical and technological aspect. You are looking to safeguard your data in every situation to ensure that a hacker cannot breach your security threshold and navigate into your system using the service provider's network. In addition, you want to make certain that the provider's tools are robust enough to prevent others from accessing your data as you share a common gateway.

#### **Problem Management and Event Escalation**

Establishing a responsibility matrix prior to the contract is an important step. Here are some questions to consider:

- What are the communication and escalation protocols?
- How long should a service provider try to fix the problem before escalating to level two or level three within your organization?

Creating this matrix and decision tree allows for effective communications to flow on both sides and can eliminate a number of pain points in delivering effective services.

#### **Service Level Agreements**

Service Level Agreements (SLAs) are the fundamental methods for measuring the performance of any group responsible for delivering services—whether local or remote. Developing the right SLA is important. And, having the right baseline measures in place before negotiating the handoff is critically important. You cannot expect the service provider to deliver on something your organization was incapable of delivering unless they have the same degree of opportunity. As with problem management and event escalation noted previously, the concepts of escalation, security, governance and collaboration must be discussed and determined in advance of the handoff.

## Collaboration

Team collaboration via the service provider's Web portal is essential, not only in gaining a big picture view of the network, but also in sharing metrics and business intelligence information. Setting realistic and attainable goals and objectives at the outset are also very important. But there is another element that is essential—the face-to-face communications and interactions of this newly formed strategic partnership. Building trust early is vital to both the short- and long-term success of the relationship.

Delivering professional services today is really all about people. Reviewing goals and objectives, and issues and concerns on a quarterly basis is extremely important, especially in the beginning of the new relationship. More important is the need to get to know one another—that is when trust is formed. You cannot build and sustain relationships when you do not have the opportunity to meet frequently.

Again, these are the important factors you should consider in the selection process of a service provider and in the scope and range of services you are comfortable in outsourcing.

## Improving the Infrastructure Remotely

Historically, outsourcing and data center monitoring and management were all about asset acquisition and transfer to the service provider. Perhaps it was a great solution for the enterprise at that time, but IT organizations were severely hampered due to loss of control. However, today's RIM service offerings are packaged in a way that enable you to retain control of your IT assets, while eliminating the challenges associated with day-to-day IT operations. You reap all of the benefits without the staffing or support issues, and you leverage great skills and technologies as well.

The support for all of your IT infrastructure needs can be delivered both cost effectively and remotely by leveraging a service provider's extensive global delivery network, best-in-class processes, security practices, technologies and personnel. All of this begins with an infrastructure assessment to determine the current state of your IT environment. The assessment will give you and the service provider a realistic view of the environment and allow for the creation of a solid transition plan. This allows the service provider to transition services efficiently and without problems and will keep end-user satisfaction and performance high while driving down costs.

Beyond pure cost savings, your organization will experience improved service delivery and security by leveraging the wealth of knowledge and resources.

#### **Tools and Process**

The rapid evolution and maturity of remote management tools, technologies and processes have given progressive service providers the ability to efficiently and effectively manage the data center infrastructure ensuring enterprise reliability at the highest possible level while utilizing remote connectivity to monitor, manage and deliver outstanding service quality. Central to this improvement strategy are remote management tools that provide network administrators with the key elements needed to monitor the effectiveness and availability of their infrastructure. By leveraging an external service provider, downtime is minimized while maximizing profits typically lost as operating expenditures. These tools provide a flexible alternative for network administrators. They can seamlessly integrate remote management solutions into an existing infrastructure to create a complete Infrastructure-as-a-Service (laaS) solution, to accommodate organizations lacking a hardware infrastructure, or having the staff to support a full scale data center.

## Call to Action: Next Steps in RIM Outsourcing

Though the trend of delivering RIM services from an offshore location is being embraced by organizations at a fast pace, not all initiatives have been successful nor have they met the planned business objectives. To reduce the risks associated with this level of undertaking and to ensure success, the organization and IT leadership should have a clear vision of their end goals and an outline for an effective strategy. Here are some key action steps to consider as you move forward with RIM outsourcing:

- Have a clear strategy for outsourcing Adequate effort should be spent on developing an effective strategy. You need to analyze your portfolio to establish which functions are right for RIM outsourcing and the right business model for implementing the strategy.
- Get stakeholder support The pros and cons of the initiative must be well understood by your leadership and communicated across the organization. Managers need to have an understanding on delivery processes and the outsourcing readiness of the organization. Having a solid process foundation helps ensure outsourcing success. But some firms go down the outsourcing path because of the opposite reason—as a remedy for a lack of strong service management.
- Conduct an infrastructure maturity assessment Knowing where you are today from a process and best practices standpoint will help you when you create a continuous improvement roadmap for the future.
- Selecting the right service provider Do your due diligence and homework well. Talk to reference accounts and ask a lot of questions. It is important to go through a rigorous sourcing process to select the right partner. Customers need to perform due diligence, specifically around infrastructure capabilities. It is essential to develop a partnership with a selected provider and work jointly to develop best practices and optimized service delivery processes.
- **Develop strong sourcing competency** Organizations that use outsourcing as a pillar in their business strategy must invest in advanced competencies to manage multiple providers. For example, even with a sound sourcing strategy and best-in-class sourcing management, contracts will be hard to manage without the right people who understand outsourcing dynamics.
- Retaining your intellectual property One of the basic fears in outsourcing is that over time you lose a great deal of intellectual capital. Knowledge of networks and systems is important to every enterprise. Just because you outsource does not mean that the knowledge should go with the transaction. Make governance a deliberate process and ensure that everything is well documented. Appoint a single point of contact from your side and make sure that person is working very closely with your service provider's single point of contact.
- Develop a security and disaster recovery plan Security breaches and discontinuity in service because of inadequate disaster recovery/businesscontinuity planning can derail a RIM initiative. The service contract should clearly define this requirement and a strong governance structure should be put in place to oversee the implementation of the processes.



 Manage compliance issues - Regulatory compliances are constantly changing and becoming all-inclusive. At the end of the day, your organization is responsible for any deviations from the regulations. Stay current on the regulations such as Sarbanes-Oxley, the Patriot Act for electronic record management, the Health Insurance Portability and Accountability Act (HIPAA) for the healthcare industry and others that govern your industry.

As the IT industry has matured, risk mitigation methods have evolved to manage these risks. Careful planning, provider selection, transition and governance management are essential to effectively manage the risks and realize business benefits. Most importantly, commitment from executive leadership is critical to the success of a strategic RIM initiative.

## **How We Can Help**

Not sure about where to begin? CompuCom offers a complete range of RIM services. We offer these services in conjunction with Infrastructure Maturity, Business Service Management, and other key assessments and utilize ITSM and process improvement services to deliver sustainable results across the enterprise.

Aberdeen, an IT industry research firm, released a report in April 2008 on service quality that benchmarked CompuCom clients against 280 other global companies in 13 categories related to best practices and capabilities. CompuCom's ranking met or exceeded best-in-class levels in all 13 categories. Scores on quality and capabilities far exceeded all other companies participating in the survey.

Regardless of your entry point, CompuCom has the people, processes and technology tools that can be used throughout the entire service life cycle to help provide reliable, cost-effective, high-quality services that provide organizations significant value in the pursuit of service excellence.



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- Nearly 90% of CompuCom clients have more than 5 years tenure
- CompuCom is ISO 20000 certified

## **Summary**

Outsourcing RIM services to a viable and progressive service provider is a lowrisk, highly-effective solution. This approach drives out costs while providing high end-user satisfaction and service quality. Today the question is not if, but when, to take the plunge. Start by seeking expert advice in planning for the transition, provider selection, and an effective governance process to maintain controls and to ensure that you realize the business benefits you are seeking.

At CompuCom, we are here to help you gain greater flexibility and performance from your next outsourcing engagement. We leverage third-party user satisfaction metrics as a benchmark against the industry average and we compensate our teams based on that performance. Most importantly, we strive to be a company that is easy to do business with. Our success is based on communication, trust, and understanding and our focus on delivering the best IT value in the industry.

- McKinsey on IT, June 2006, April 2007 issues
- Infrastructure Management Outsourcing, Everest, 2006
- The Forrester Wave™; Global Delivery Remote Infrastructure Management, Q3 2007



#### **About the Author**

#### Thomas D. Vetterani

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Tom Vetterani is responsible for CompuCom's market quality and offering development programs. In addition, Mr. Vetterani is responsible for the melding of CompuCom's Integrated Infrastructure Management™ (IIM) and ClientLink™ methodologies into the organization's service delivery operations of a client services engagement.

Bringing more than 30 years of demonstrated technology and management expertise, Mr. Vetterani joined CompuCom in 1999 from former parent organization Safeguard Scientifics, where he provided business and technology consultancy and leadership to a number of Safeguard's portfolio companies. Prior to that, he was Chief Technical Officer and then President of Global Intellicom's AMCom and VirCom subsidiaries, focusing on wireless and speech recognition technologies, mergers and acquisitions. Mr. Vetterani began his career at IBM and spent several years in various executive positions at BASF and McKinsey in both the United States and Europe.

## **About CompuCom**

CompuCom Systems is a leading IT outsourcing company providing infrastructure management services, application services, systems integration and consulting services, as well as the procurement and management of hardware and software. With more than 20 years of IT experience, CompuCom employs more than 7,800 highly skilled associates who have earned a combined total of more than 44,000 industry certifications company-wide. As experts in workplace services, CompuCom's unique Integrated Infrastructure Management™ (IIM) solution reduces costs, increases productivity and helps clients gain maximum value from information.



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