Ingersoll Rand Increases Business Agility with Microsoft Online Services

“Microsoft lowered our cost of ownership by deploying standardized desktop infrastructure for 19,000 people, and provided us with a cost-effective and efficient productivity system.”

John Kalka, Vice President – Deployment, Office of the CIO

Ingersoll-Rand Company Limited is a $13 billion global diversified industrial corporation. The company conducts manufacturing and assembly operations in 29 plants in the United States; 31 plants in Europe; 14 plants in Asia; 6 plants in Latin America and 1 plant in Canada. The Ingersoll Rand portfolio represents a family of industrial and commercial brands through business segments which include Climate Control Technologies, Industrial Technologies, Security Technologies, and Air Conditioning Systems and Services. The business model is enhanced by acquisitions and divestitures, thus the company needs technologies to ensure collaboration between acquired entities, efficiency across business units, and agility to integrate new businesses quickly. Ingersoll Rand turned to Microsoft to optimize its infrastructure and address technology challenges to improve its business.

Overview
Country or Region: Global
Industry: Manufacturing

Customer Profile
Ingersoll Rand is a global diversified industrial firm providing products and services to enhance comfort, transport perishables, secure properties, and increase industrial productivity and efficiency.

Business Situation
The infrastructure at Ingersoll Rand was not addressing the company’s needs. In acquiring companies, it needed consistent, adaptable workflows that could quickly move products to market.

Solution
Ingersoll Rand contracted with Microsoft to standardize desktops, improve infrastructure, and optimize the IT platform resulting in lower IT costs, better agility and increased service levels.

Benefits
- Lower Operating Costs
- Unified Desktop Management
- Automated Software Updates
- Strategic IT Focus
- Global Messaging & Collaboration Platform
Situation
Ingersoll-Rand Company Limited (NYSE:IR) is a $13 billion global diversified industrial corporation which provides products, services and solutions to enhance the quality and comfort in homes and buildings, transport and protect food and perishables, secure homes and commercial properties, and effectively improve industrial productivity and efficiency. The company represents a family of industrial and commercial brands through several business segments including Climate Control Technologies, Industrial Technologies, Security Technologies, and Air Conditioning Systems and Services. The Ingersoll Rand market brands include Trane, Thermo King, Hussman, Schlage, Club Car, and Ingersoll Rand. The company’s approximately 60,000 employees are proud to offer products and solutions people use every day.

In recent years, Ingersoll Rand has transformed itself into a multi-brand commercial products manufacturer serving customers in various global markets in part by divesting its capital-intensive, heavy machinery businesses of its past. In 2008, Ingersoll Rand acquired global air conditioning giant Trane to complement its portfolio of industrial and commercial products. Trane’s residential and commercial businesses enable Ingersoll Rand to maintain its focus on growth and innovation with a balanced portfolio.

The Business Challenge
Because of the Ingersoll Rand transformation, the corporate structure and business workflows had become highly diverse and inconsistent across divisions. For Ingersoll Rand, a strong business imperative exists to achieve the following:

- Ensure easy and effective collaboration among its businesses
- Drive increased productivity and efficiencies across business units
- Successfully integrate businesses quickly without creating overhead
- Establish an agile acquisition and divestiture strategy

The Ingersoll Rand leadership began to recognize that its current information technology infrastructure was not addressing the company’s need for consistent, adaptable workflows that could empower employees and rapidly move business and products to market.

The IT Challenge
With the Ingersoll Rand history of acquisitions, the company had accumulated a breadth of products and IT systems encompassing diverse cultures, various tools, and unique user styles. For messaging, the corporation standardized on Lotus Notes ten years ago; however, each major business unit brought its own set of collaboration tools, including varied conferencing solutions, separate IT services desks, and diverse PC images, all of which required a wide range of support. Ingersoll Rand needed an IT infrastructure that could efficiently handle acquisitions and divestitures.

One Platform Vendor Consolidation: The goal of the Ingersoll Rand IT Team, led by John Kalka, Vice President - Deployment, Office of the CIO, Ingersoll Rand, was to transition the company to one consolidated platform. In 2008, the impending licensing renewals for many different applications, such as Lotus Notes and Symantec, created an opportunity for Ingersoll Rand to consider a solution that was in sync with its strategy. These circumstances prompted Kalka to consider a sweeping change to a comprehensive Microsoft platform. Kalka said, “We were very cautious of the idea of how many people would embrace a new tool, essentially a new paradigm. What we found was that 80 percent of our users wanted to be on a...”

John Kalka, Vice President - Deployment, Office of the CIO, Ingersoll Rand

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Peter Thrall, Manager Global Technology Supplier Management Services, Ingersoll Rand

Microsoft-type platform and were using one at home. So we were ready to change.

Central Desktop Management and Support: The existence of multiple PC images across the different organizations created challenges for the team and drove up support costs. IT responsiveness had significant end user impact on productivity. The different helpdesk teams found it very challenging to support each other’s users across dissimilar client versions. With a unified IT desktop management solution, the team would be able to provide centralized IT support, proactively manage upgrades, keep licenses current, and create a better user experience. The Ingersoll Rand IT team wanted to employ a standard image that would be implemented whenever new employees joined the company, new acquisitions were made, or upon the PC refresh cycle.

Reliability: Users at Ingersoll Rand were experiencing e-mail disruptions every three days. For several years, the company’s leadership considered migrating from Lotus Notes to Microsoft® Exchange to address e-mail reliability challenges and gain the added benefits of the familiar interface of the Microsoft Office Outlook® client. The goal at Ingersoll Rand was to establish a reliable and stable messaging infrastructure. The IT team considered an outsourced model but needed guarantees that the transition to a new platform would be smooth.

Strategic Focus and Cost of IT: In its analysis, Ingersoll Rand wrestled with the return on investment (ROI) which was not compelling enough for an on-premise implementation of Exchange. At Ingersoll Rand, an on-premise solution would require implementing servers and training technicians to maintain those servers. Also important to Ingersoll Rand was keeping platforms and tools current without considerable internal effort or expense. The IT Team needed to spend fewer cycles on maintenance and instead focus on strategic initiatives and become a catalyst for the business.

Solution
Ingersoll Rand signed an Enterprise Agreement Subscription which streamlined purchasing and reduced costs of its Microsoft client and server software. The company contracted with Microsoft Online Services to host Microsoft Exchange Online and Microsoft Office Communications Online for 19,000 seats and added Microsoft Forefront™ Client Security and Microsoft Desktop Optimization Pack (MDOP) with integrated Premier Support and IT Architecture and Planning. Peter Thrall stated, “I lead Ingersoll Rand’s Global Technology Supplier Management Services team, and our team has assumed a key role in the standardization and rationalization of our technology supplier base. Microsoft has been selected as a key strategic partner of Ingersoll-Rand, and we have transitioned from a half dozen suppliers of products for e-mail, instant messaging, Web-conferencing, and virus protection to Microsoft, resulting in considerable cost savings, successful product integration, and desktop management simplification throughout the enterprise.”

Return on Investment (ROI) with Software-plus-Services: Software-plus-Services was a new concept when Ingersoll Rand and Microsoft started talking about the company’s growing needs. Microsoft helped Ingersoll Rand understand how software and attached services could benefit its organization. Ingersoll Rand clearly saw the value of a standardized desktop connecting to the communication and collaboration services hosted in Microsoft Online datacenters. Microsoft worked with Kalka and team to understand Ingersoll Rand’s internal cost models around operating messaging and collaboration. The Microsoft Online team provided an analysis showing an
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18-month return on investment to migrate off Lotus Notes to a new strategic platform. This transition would result in lower operating costs and make it possible for Ingersoll Rand to fully leverage the benefits of its Enterprise Agreement. Kalka said, “2008 was the year that we needed to transition to a single strategic infrastructure platform. Our employees asked for a Microsoft Exchange environment and preferred Outlook over Lotus Notes, but the TCO business case for an on-premise implementation was challenged. Microsoft Online effectively addressed the TCO challenge because no infrastructure investment was required by Ingersoll Rand. Microsoft Online enabled us to actually have a return on our investment within 18 months.”

Unified IT Desktop Management: Microsoft worked with Ingersoll Rand to take advantage of the Microsoft Infrastructure Optimization Initiative. The Infrastructure Optimization models provide organizations with a systematic methodology to assess and improve infrastructure and platform optimization, resulting in lower IT costs, enhanced IT service levels, and increased agility. Microsoft is currently helping Ingersoll Rand create a standard desktop image, as well as set up a desktop management infrastructure through the use Microsoft System Center Configuration Manager (SCCM), a tool which has already been deployed. The consistent desktop image will be used across business units in efforts to streamlined helpdesk support. SCCM provides an infrastructure to deploy software and allows different business groups to install the applications needed to run their business on the standard image.

The Migration: Migrations for Ingersoll Rand’s worldwide offices were implemented across regions, time zones, countries, and geographically dispersed teams. The migration team included the Ingersoll Rand project team, Microsoft Online architects, M3 deployment consultants, and Binary Tree migration specialists. The team migrated as many as 650 users from Lotus Notes to Microsoft Exchange in each 21-hour shift. In the months since, Microsoft and its partners have significantly exceeded these numbers with other customers. Microsoft leveraged migration farms in Dallas, TX; Dublin, Ireland; Davidson, NC; and Shanghai, China to manage the ongoing migrations through various time zones.

The migration team worked closely with the Microsoft Online datacenter team ensuring the right expectations were communicated and executed with Ingersoll Rand. M3, a Microsoft partner, was also a critical part of the deployment and migration team which created the user migration schedule, helped automate deployment tools, and provided post migration support for Ingersoll Rand’s IT organization. The team leveraged Binary Tree Consulting Services to move users’ e-mail and calendaring information to the new environment. Binary Tree is one of the Microsoft premier partners that provided messaging co-existence and migration services for Ingersoll Rand.

As the team drove the migration, challenges arose due to bandwidth issues at Ingersoll Rand which Microsoft addressed by installing a dedicated VPN between Ingersoll Rand and the Microsoft Online datacenter. This action resolved the problem and increased the number of users it was able to migrate each night. Since the migration at Ingersoll Rand, Microsoft has modified its process and developed a capacity calculator tool to analyze circuit capacity during the assessment phase. This analysis ensures Microsoft identifies bandwidth and performance limitations prior to the migration phase. In the end, Microsoft surpassed forecasted conversion rates and finished deployment one month ahead of schedule.
“We were taking the opportunity to standardize on a Microsoft technology platform and establish one process for all new users joining Ingersoll Rand. This standardization will enable us not only to reduce support costs...but also to deliver an overall higher quality of IT service.”

Marcel Berkhout, Global Director, Infrastructure Operations, Ingersoll Rand

The total timeline from contract to deployment completion for the migration of 19,000 users was eleven months.

**User Communication and Training:** A thoroughly executed training and communication plan supported the successful deployment to Microsoft Exchange Online and Microsoft Office Communications Online. Ingersoll Rand developed and implemented a 3-week communications plan which included announcements through posters and multiple e-mails to prepare users and provide them advance notice. Ingersoll Rand also hired a third-party company to provide training to its employees to enable them to become familiar and productive using Office Outlook 2007. The training and communication plan ensured successful end user adoption.

**Benefits**

By deploying a complete Microsoft Online solution including the enterprise standardized desktop, Microsoft Exchange Online for e-mail, Microsoft Office Communications Online for instant messaging, and Microsoft Office LiveMeeting for conferencing capabilities, Ingersoll Rand was able deliver enterprise reliability and consistency to its IT environment. End users and IT groups are now more agile and collectively focused on joint business success rather than day-to-day management, support, and communication hurdles. Company productivity has increased, and users are happy with their stable and productive collaborative environment.

**IT Strategy Aligned with Business Strategy:**

Given the Ingersoll Rand business strategy to acquire and divest holdings, understanding the costs for communication, collaboration, and conferencing on clear P&L basis by business unit is highly valued. The Microsoft Online per-user fee structure makes it easy for Ingersoll Rand to analyze and distribute IT costs across its multiple business units. In addition, the fee structure allows for simple calculation of distributed IT costs when users within business units transfer among departments. Built into the TCO for Microsoft Online, migration services are priced on a per-user basis and support seamless migration from Microsoft Exchange, Lotus Notes, and Novell Groupwise. For example, Ingersoll Rand recently acquired Trane, the global leader in indoor climate control services and solutions. Trane had been using Microsoft Exchange in an on-premise implementation. Microsoft is currently moving the Trane users onto the corporate Microsoft Online Services platform. The Ingersoll Rand IT department will soon be able to roll out the standard Windows Vista® Enterprise operating system and Office 2007 desktop image to the new users. As the needs at Ingersoll Rand continue to change, it now has the flexibility to vary its costs on an annual basis.

**Standard PC Image:** Moving from a mixed-desktop operating system environment to a standardized desktop was prescribed by the Microsoft Desktop Infrastructure Optimization Initiative. A suite of MDOP tools and SCCM meant uniformity of PC images across the company and significantly lower TCO. When the project is complete, Ingersoll Rand will realize more than $20M in savings through its move from “basic” to “dynamic” Infrastructure Optimization state. Marcel Berkhout, Global Director, Infrastructure Operations said, “We are taking the opportunity to standardize on a Microsoft technology platform and establish one process for all new users joining Ingersoll Rand. This standardization will enable us not only to reduce support costs of everything from service desks to PC technicians, but also to deliver an overall higher quality of IT service.”

**Automated Software Updates:** Ingersoll Rand was able to transition to a strategic platform
"With the Microsoft Online per user, per month flat fee, it’s easy to understand the total cost of ownership of the services....This variable pricing model creates the best way to manage our costs."

Peter Thrall, Manager, Global Technology Supplier Management Services, Ingersoll Rand

with limited investments in hardware, storage, and consulting services. All communication, collaboration, and conferencing capabilities are provided by Microsoft with regular software upgrades to the latest versions, as part of the subscription model. Upgrades require minimal effort on the part of IT which further reduces costs. Ingersoll Rand deploys any new client software it desires via its desktop deployment infrastructure based on the System Center Configuration Manager.

**Cost Management:** Microsoft Online Services coupled with an Enterprise Agreement Subscription allows Ingersoll Rand to establish a variable cost model for products and services which are historically part of a large fixed cost model. This model takes hardware and onsite infrastructure management by IT personnel and moves it offsite to a managed service scenario. This services-based cost model saves money and provides Ingersoll Rand with greater flexibility to provide the best technology at the lowest cost without the burden of hardware and infrastructure investments. “With Microsoft Online’s per user, per month flat fee, it’s easy to understand the total cost of ownership of the services. We have the capability to provide the full services suite, including Exchange, Office Communications Online, Live Meeting, and SharePoint Online, for users who require and use these services, and we can limit the services for those deskless workers in our manufacturing plants who may not need all of the functionality. This variable pricing model creates the best way to manage our costs.” said Peter Thrall, Manager, Global Technology Supplier Management Services.

**Effective Collaboration Tools:** At Ingersoll Rand, Office Communications Online enabled real time communication across the company as well as with its customers and partners. Using Live Meeting as the company’s single conferencing solution means that business units now more easily and effectively collaborate over distances and time zones, particularly in light of the company’s efforts to reduce travel expenses. Berkhout said, “It used to be challenging to stay connected when I traveled to various Ingersoll Rand and partner locations. Now I have access to my e-mail and collaboration tools on my Windows Mobile® Smartphone and my laptop. These tools enable me to increase my overall productivity, especially during business travel.”

**Reliability:** Messaging and infrastructure dependability have increased with Microsoft Online. Since the Microsoft solution was implemented, Ingersoll Rand has only experienced one minor outage. The Microsoft Service Level Agreement ensures that Ingersoll Rand will experience at least 99.9 percent uptime for its messaging and collaboration services.

**Home Use Employee Benefits:** Ingersoll Rand leveraged its Enterprise Agreement Home Use benefits to provide Microsoft Office 2007 to its employees at home. This program provided significant benefits to the employees who could use Office 2007 and Outlook 2007 at home, because it enabled the employees to be more prepared to use Office and Outlook at work, prior to the deployment. Ingersoll Rand has agreed to participate in the Microsoft Home-Use pilot program through which employees will have the ability to download the products at home rather than ordering the physical product media.

Ingersoll Rand was able to move away from a Lotus Notes, Sametime, Symantec Antivirus, and a myriad of conference solutions to a Microsoft software-plus-services solution. This standardization and consolidation allowed Ingersoll Rand to significantly reduce infrastructure IT support software costs and
lower TCO. The solution provided choice and flexibility for Ingersoll Rand to deploy components in phases as well as to seamlessly attach Microsoft Online Services to its on-premises infrastructure. The result was a streamlined deployment with high user satisfaction. Kalka said, “What Microsoft delivered to us is more than an e-mail system. Microsoft Online provided a cost-effective, efficient collaboration, communication, and productivity system. Microsoft is also helping us to lower our cost of ownership by assisting us in the development of a standardized desktop support infrastructure for 19,000 people.” Ingersoll Rand is in the process of expanding this success to the recently acquired Trane businesses. An additional 20,000 users are in the process of being onboarded to Microsoft Hosted Exchange, Office Communications Online, SharePoint Online and LiveMeeting through Microsoft Online Services.

Microsoft Online Services
Microsoft Online Services is a business-class communications and collaboration software offering delivered as a subscription service, hosted by Microsoft, and sold with partners. These services help make it easier for customers to rapidly and cost-effectively access the most up-to-date technologies, and are designed for rapid deployment to provide customers with streamlined communications, simplified management, and business-class reliability and security.

For IT staff, Microsoft Online Services helps reduce the burden of performing routine IT management tasks such as installation, provisioning, ongoing maintenance, patches, updates, and upgrades, making it possible for them to spend more time on initiatives that move the business forward. These services are backed by strong SLAs and are designed to meet the regulatory compliance and reliability needs of enterprise customers. On a technical level, the services boast the sophistication and reliability that customers expect from Microsoft, which continues to invest heavily in building data centers to support these services.

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