

CITO Research Tell Us a Question.

AUGUST 2010

# The Million Dollar Misperception

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# Conclusion

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# Introduction

Manufacturing is being rocked by waves of change. Manufacturing companies can either ride the waves or be sunk by them.

This paper surveys the forces that are compelling manufacturers to change their approach to information technology (IT) and especially business-critical manufacturing software. Software as a Service (SaaS), which involves running software on Internet servers located off-premises (sometimes known as cloud computing) increasingly stands out as a viable and appropriate choice for midsize and fast-growing manufacturing companies. This paper shows how the SaaS model has evolved from its simple beginnings and now can provide comprehensive solutions for manufacturers. To be sure, many manufacturers remain wary of SaaS because of concerns about reliability, security, and the lack of robust manufacturing solutions. This paper explains how recent advances in software have largely overcome these obstacles, why SaaS is making major inroads into the manufacturing sector, and why NetSuite is the leading solution in this burgeoning market.

# Why Change Now? Because It's Better Than Dying

Manufacturing companies face a new world in the 21st century. Gone are the days when the small or medium manufacturer could ignore market trends such as cost efficiency, "always-on," globalism, and distributed business. Margins are under intense pressure. Globalization is now a local matter and even small manufacturers must operate as multinationals. They must manage multiple locations, time zones, diverse customer currencies, and supply chains that stretch around the globe. They must be nimble enough to scale up or down rapidly based on changing business conditions. They need real-time visibility into their operations, financials, and supply lines. Manufacturers must have the ability to rapidly install, configure, and integrate new technologies. The ability to deploy new technologies always has been a key enabler of successful manufacturing—today more than ever. Over time this technological innovation included Numerical Control (NC), Material Requirements Planning (MRP), Manufacturing Execution Systems (MES), Enterprise Resource Planning (ERP), Computer-Aided Manufacturing (CAM) and now Software as a Service (SaaS). Making a bet on the wrong technology is a multi-million dollar mistake—one that may drive your business to extinction.

In the 20th century, on-premise model for running software applications was the only option within the manufacturing sector. From the 1980's through 1990's, on-premise ERP helped manufacturers automate processes, reduce costs, improve response times, serve customers, and manage growth. On-premise ERP also provided the comfort of self-reliance because manufacturers kept their own computing resources in house. But even the best technology eventually becomes obsolete and the on-premise model has reached it financial, technological, and business value limitations today.



### **Margin Pressure**

Manufacturing margins are under intense pressure. Manufacturers face competition from both onshore companies and emerging nations such as China and other Pacific Rim nations, whose low labor costs and absence of legacy "boat anchor" infrastructure allow them to produce commodities at rock bottom prices. In addition to the competitors, manufacturers are squeezed by the costs of energy, transportation, labor, health care, raw materials and regulatory constraints.

These market forces compel manufacturers to constantly reduce unnecessary expenses, scrutinize every budget line item, and relentlessly pursue new gains in efficiency. Here's a summary:

- **Cost-cutting targets.** On-premise ERP solutions are prime candidates for scrutiny, with most too expensive and providing too little value. According to Gartner Research, some 88% of CIOs reduced their IT budgets in 2009 and many of them are making with 2006 or 2007 resource levels.
- Create value and do more with less. Businesses need to cut budgets and contribute to business success by retaining and attracting customers. But value matters more than ever. As Gartner concluded, "Value creation, particularly of the type created by IT, is actually increasing in this environment."
- Inefficient use of IT budget. According to Forrester Research, the "average manufacturing company spends 75 cents of every dollar in IT 'just keeping the lights on."<sup>2</sup> Some 75% of every IT dollar is not productive, not contributing to business nor adding value! IT staff in mid-market and fast-growing manufacturing companies add little value if they spend time writing custom code and trying to compensate for the deficiencies of older ERP systems.

### **Distributed Operations**

Today distributed operations are the name of the game for manufacturers, regardless of size. No matter whether they have 50 employees or 5,000 employees, manufacturers must manage extended supply chains. They need visibility, control, and oversight over all the elements in their distributed operations.

Outsourcing is becoming a fact of life for manufacturers. They are contracting out more and more production, components and business processes including IT, customer service, design, R&D, engineering and more. With so much activity occurring outside the walls of their own factories, modern manufacturers need better visibility and instant communications with their extended supply chains.

Quality control is paramount—and a global matter that extends far beyond the factory walls. Today customers have zero fault tolerance and infinite ways to make their grievances known to the entire world. If a component fails in your product, any teen can post a scathing review online where it will remain for perpetuity. That means manufacturers need to be keenly aware of every link in their supply chain in order to control quality and protect their brand. They need software that supports a distributed supply chain and distributed workforce.

<sup>&</sup>lt;sup>1</sup> Gartner Perspective: IT spending 2010

<sup>&</sup>lt;sup>2</sup> "US IT Budget Benchmarks — Preparing For 2010" by Andrew Bartels and Craig Symons



Customers and partners expect accurate forecasts, instant information and traceability along the full length of your supply chain. The need for traceability information also is becoming more pressing due to several additional forces such as greater regulation and government mandates.

### **Multiple Locations**

Today manufacturers operate in multiple locations all over the world. Even a mid-market company may have plants on several continents, customers all over the world, and resellers that operate in multiple languages and currencies. These manufacturers need comprehensive, global access, any-time and anywhere. They must collaborate with partners in other countries, oversee far-flung value chains, and manage multiple locations, currencies, tax codes, legal entities, and regulations.

• **The Problem:** On-premise software makes it hard to add locations. A manufacturer that uses SAP or Oracle may find that it takes 6 to 18 months to add a new location overseas.

### **Internet and Mobile Technologies**

The Internet has become the dominant global communication network. Unfortunately, most onpremise ERP systems were not designed for the Internet, not to mention newer mobile technology.

• **The Problem:** On -premise ERP has no web or mobile features. Most ERP systems were designed with a pre-Internet sensibility and integrating newer technologies is an ongoing struggle. Today managers walk around the shop floors with laptops, tablets, and iPads. They need software solutions that seamlessly integrate mobile and Internet technologies. They need to serve employees, partners and, most importantly, customers who expect access to the manufacturer's purchasing site, online invoicing and customer service resources.

### **Employee Expectations and Productivity**

It is no longer acceptable to burden employees with cumbersome software that requires extensive training or custom programming. Consumer products by Apple, Google, and Facebook have set a new standard of usability. If your manufacturing solution lacks usability, employees will reject it. If it requires extensive training, you will squander your money, employee time, and productivity.

### Flexible Architecture

On premise ERP systems are characterized by "version lock" and rigid architecture. Manufacturers require technology to be flexible, extensible, and customizable. In six months, their business processes may be entirely different from what they are today and technology better enable it, not be a bottleneck!

Manufacturing is becoming more complex. It is shifting from high-volume, low-value repetition to low-volume, high-value "to order" modes of production. As a result, manufacturers are looking for more flexible ERP adapted to a collaborative environment and integrated functionality.





### Who Wants to Be a Programmer?

IT can no longer afford to be a custom development shop. Any manufacturer that employs IT staff to spend hours or days writing one-off programs to produce basic reports is wasting valuable time and resources.

### **Business Continuity**

What happens if your business is hit by fire, earthquake, hurricane, flood, terrorism or some other disaster? Businesses that host their own on-premise hardware and software are vulnerable to outage. How do you keep your company running, products moving, inform customers and keep employees productive? Critical software should be available anytime, anywhere, "in any weather."

### Visibility

As a manufacturer, you need a 360-degree view of your business in real time. With value chains stretched across the globe, you need visibility into the entire lifecycle from initial engineering design to production line to quality control to customer service. People expect self-service and immediate answers to important questions. Who are your profitable customers? Which product lines are selling? Which suppliers are late and causing problems on the manufacturing line? What is the most expensive component in your manufacturing assembly? If this information isn't at the fingertips of the employees who need it, you're wasting time. You're also missing potential problems and squandering potential opportunities.

### **Best Business Practices**

Manufacturers need software that supports the best practices of their work environment. Any successful business must clearly define goals and objectives. But how do manufacturing business leaders measure progress towards those goals? They need the ability to capture key metrics and analytics. They need benchmarks to compare performance to last quarter and last year. They need dashboards that provide at-a-glance overviews of performance and key metrics. They need workflow to intelligently route information to the right people and business processes in the right direction.

There is no one-size-fits-all; therefore software must be tailorable and customizable to the best practices of each company and each employee. After all, a salesperson needs something very different from a production line worker. In short, manufacturing companies need solutions that are adaptable, customizable and extendable enough to support their own best practices and provide key metrics of performance.

### Adapt or Lag Behind

To be fair, these shortcomings were not caused by bad decision-making. On the contrary, manufacturers often made the right decisions at a time when there was no alternative to the on-premise ERP model. Now, however, the software landscape has changed and offers new alternatives.





Changing habits is hard. But a changing environment brings a Darwinian mandate: adapt or die. Manufacturing companies that refuse to consider new ways of doing business run the risk of losing competitive standing and being saddled with software solutions that provide diminishing returns with each passing year. If your margins shrink to zero, you won't be in business much longer.

Why should you change now? Because later may be too late.

# **Manufacturing Pain Points**

After more than three decades, ERP has become the software that manufacturers can't live without but it also causes the most frustration.

### **Rising ERP Costs**

Even as margins shrink, the costs of on-premise ERP continue to rise.

- Up-front costs. Manufacturers pay exorbitant bills for IT yet have little to show for it. The costs of running data centers and maintaining the skills to operate the software continue to rise. According to CIO magazine, the average cost for an SAP installation runs nearly \$17 million. The others aren't much better: Oracle averages \$12.6 million and Microsoft \$2.6 million. Tier II ERP providers average \$3.5 million.<sup>3</sup>
- Maintenance costs. ERP customers have grown numb to outrageous maintenance costs. Oracle and SAP charge 22% maintenance and support fees, a lucrative source of revenue for vendors who can treat their customers like a captive audience.
- On-premise heating, cooling, and maintenance. The cost of running your own data center goes well beyond the up-front purchase of hardware. The data center must be powered, cooled, ventilated and maintained. Even throwing away obsolete machines isn't cheap (e.g., disposal fees). The total cost of ownership has become a painful burden for manufacturers.

The cost of a server may be doubled or tripled by having to power and cool it. Consider one simple example cited by publication Electronics Cooling: a typical server might cost \$4,000. But the three year cost of powering and cooling that server often runs nearly as much (\$3,942) in the USA and twice as much (\$7,884) in markets with high energy prices such as Japan. As the Electronics Cooling report concluded, "the cost of the power and cooling infrastructure has crept in to be the primary cost driver."<sup>4</sup>

Hidden costs. Often, companies do not have a clear picture of spending because bills are split among many vendors, including VARs, software vendors, and installers. ERP brings shadow costs that are not obvious at the outset such as licensing, implementation, customization, maintenance, and upgrades. And the biggest expense doesn't appear on an invoice: the payroll for IT staff to manage, extend, and customize ERP as well as run the data center.

http://www.cio.com/article/501656/Why\_ERP\_Is\_Still\_So\_Hard

<sup>&</sup>lt;sup>3</sup> Why ERP Is Still So Hard, by Thomas Wailgum, CIO,

<sup>&</sup>lt;sup>4</sup> "In the data center, power and cooling costs more than the it equipment it supports," by Christian L. Belady, P.E., Electronics Cooling, Feb. 1, 2007, http://www.electronics-cooling.com/2007/02/in-the-data-center-power-and-cooling-costs-more-than-the-it-equipment-it-supports



### Big Costs, Little Benefit

Despite their hefty price tags, ERP systems do little to differentiate a business or make it more competitive. According to a 2008 survey published in CIO magazine, only 4% of IT leaders believe their ERP systems create competitive advantage.<sup>5</sup>

### Lack of Deployability

Deploying ERP is cumbersome and slow. According to CIO magazine, ERP projects have only a 7% chance of being completed on time, most overrun their cost estimates.<sup>6</sup> As mentioned previously, deploying an SAP or Oracle solution to each new location may take 6 to 18 months.

### Silos and Hairballs

Manufacturers often grapple with IT solutions that lack integration. Too often, information is trapped in filing cabinets, "Post It" notes, or disjointed application silos, hampering analysis and decision making. System integration costs, which are generally four or more times software license costs, run out of control.

Some companies are burdened with patchwork solutions or multiple systems, often as a result of mergers and acquisitions. Others deploy multiple software applications with little overall coordination and wind up with a "software hairball"—a tangled mix of applications that do not play nicely together. Sometimes companies use multiple SaaS vendors for point solutions and end up choking on "hairball 2.0." These companies simply transfer the on-premise hairball into the cloud.

### The Dreaded Upgrade

Upgrading to the newest software release has become so painful that many companies delay as long as possible. Some deploy one version at the time of purchase and stay with it long past its productive life because they dread shutting-down production for weeks to upgrade and retrain their personnel. According to research from the Aberdeen Group, some 57% of ERP customers are one to three releases behind the latest version of software. These companies risk falling behind in innovation and ending-up with an unsupported, dead-end product that even the original vendor doesn't support any longer. As the Aberdeen report added, "even those on the latest release of a product based on old and outdated technology are at risk."<sup>7</sup>

### **Expensive and Extensive Shelfware**

Many companies bought ERP systems with more features than they really needed. As a result, they wound up with "shelfware" that has huge cost, extensive functional footprints but relatively little use.

<sup>&</sup>lt;sup>5</sup> Why ERP Is Still So Hard, by Thomas Wailgum, CIO, http://www.cio.com/article/501656/Why\_ERP\_Is\_Still\_So\_Hard

<sup>&</sup>lt;sup>6</sup> Why ERP Is Still So Hard, by Thomas Wailgum, CIO, http://www.cio.com/article/501656/Why\_ERP\_Is\_Still\_So\_Hard

<sup>&</sup>lt;sup>7</sup> Quoted in Thomas Wailgum, "Midmarket ERP Customers Declining Upgrades, Finding New Risks," CIO magazine, September 11, 2009.



According to one article in CIO magazine, the chances that enterprise employees will actually use an ERP application are barely better than 50%.<sup>a</sup> Unfortunately, customers who buy on-premise tools pay the full cost for software they never touch.

### Lack of Usability

Unlike SaaS—which was inspired by consumer software and designed with end users in mind—end users do not easily configure on-premise ERP systems. In many cases, a simple task like creating a new report is a major project that requires IT experts, consultants, and weeks of development and test cycles. As a result, innovation is stifled.

### **Power Consumption**

Energy use is a growing concern for manufacturing operations. IT is a major consumer of power, especially for enterprises that operate their own server rooms. According to the global strategy consulting firm Oliver Wyman, the utility bill (power, cooling and space) can consume up to 30% of the IT budget.<sup>9</sup> Companies often spend more powering and cooling the typical computer server over its lifetime than they did on the initial purchase.

According to McKinsey & Co., the data center is the number one source of greenhouse gas emissions for most service industries.<sup>10</sup> The problem is especially acute for companies that maintain infrastructure for peak loads that far exceed their average usage.

### Security

Security is a paramount concern for manufacturers, but while in-house is thought to be more secure than outsourced, the reality is that many companies take responsibility for guarding their own data when they are unqualified to do so. According to the Ponemon Institute and security company Imperva, only a third of smaller companies have implemented the Payment Card Industry's (PCI) Data Security Standard (a standard introduced in 2005 by major credit card companies). In a survey of 560 US and multinational organizations, 79% reported a data breach involving loss or theft of credit card information, and 60% said they lacked resources to comply with the PCI standard and protect consumer information.

Most companies simply lack the resources and expertise to maintain state-of-the-art security. The assumption that your data is safer simply because it resides in house is akin to thinking your money is safer under your mattress rather than in a bank.

### **Business Continuity**

Unfortunately, in-house IT does not necessarily equal "in service" IT. Many fast growing businesses struggle to keep their hardware and software running.

<sup>&</sup>lt;sup>8</sup> Why ERP Is Still So Hard, by Thomas Wailgum, CIO, http://www.cio.com/article/501656/Why\_ERP\_Is\_Still\_So\_Hard

<sup>&</sup>lt;sup>9</sup> Making Green IT a Reality: Customer Perspectives on the Impact of Storage Vendor Decisions on Power, Cooling, & Space in Enterprise Data Centers, Oliver Wyman, Dec. 2007, http://media.netapp.com/documents/ar1054.pdf

<sup>&</sup>lt;sup>10</sup> "Data Centers: How to Cut Carbon Emissions and Costs" by William Forrest, James M. Kaplan, and Noah Kindler, McKinsey Quarterly, November 2008, http://mkqpreview2.qdweb.net/article\_print.aspx?L2=3&L3=50&ar=2255



SAP is the poster child of complex, legacy, costly, on-premise software. The firm Precise surveyed 700 IT and business professionals and found that 90% of SAP customers have a performance problem at least once a month and more than half had three or more incidents a month. According to the survey, 80% indicated that these problems impacted their business and 39% said they had ongoing, unresolved problems with SAP performance.<sup>11</sup>

### Pain Relief

To be fair, these shortcomings were not caused by bad decision-making. On the contrary, manufacturers often made the right decisions at a time when there was no alternative to the on-premise model. Now, however, manufacturing companies need a better solution. As a result, smart manufacturers are taking a second look at SaaS.

# A New Way of Doing Business

Software as a Service (SaaS) represents the most dramatic evolution of business software in a generation. In a nutshell, SaaS is software delivered via the Internet. Since its emergence in the 1990s, the SaaS model has created the biggest paradigm shift in business computing since the switchover from mainframes to PCs two decades before.

Many manufacturers still cling to misperceptions about the capabilities of SaaS. Many believe that manufacturing applications such as Material Requirements Planning (MRP) are too complex to run in a SaaS environment. Because SaaS emerged from the consumer space, many enterprises associate it with less complex applications such as sales force automation. To be fair, this was true but is no longer the case.

According to Forrester Research, "SaaS usage has grown far beyond its early roots, where it was primarily used in vanilla customer resource management (CRM) and human resource (HR) deployments. SaaS solutions are now used across a wide and growing variety of applications as they continue to break down traditional barriers around customization and integration."<sup>12</sup>

Cloud computing is information technology delivered as a service and comes in many forms: Software as a Service, Infrastructure as a Service, Platform as a Service, Process as a Service, and so on. Cloud providers like Amazon, Google, and Microsoft provided vast computing resources beyond the reach of all but the very largest companies wirth huge economies of scale and low prices – SaaS is all about using what you need, paying for what you use and making sure you get value from your investment. Even the smallest startups could afford whatever computing resources they needed and scale up as fast as their business demanded. Cloud services are booming: according to Gartner Research, cloud services revenues are expected to hit \$68 billion this year and grow to nearly \$149 billion by 2014.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> "Research Reveals Ongoing SAP Performance Issues Have Significant Business Impact," http://www.marketwire.com/press-release/ Research-Reveals-Ongoing-SAP-Performance-Issues-Have-Significant-Business-Impact-1004552.htm

<sup>&</sup>lt;sup>12</sup> "Forrester Research TechRadar For Sourcing & Vendor Management Professionals: Software-As-AService" by Liz Herbert (March 12, 2009).

<sup>&</sup>lt;sup>13</sup> Forecast: Public Cloud Services, Worldwide and Regions, Industry Sectors, 2009-2014, Gartner Research



These new SaaS and cloud models brought a sea change in the software industry (see sidebars). Customers no longer needed air-conditioned rooms filled with servers and very expensive IT consultants. All they needed was an Internet connection and computers. Companies no longer had to dread the next upgrade or pay expensive bills for maintenance or license renewals. They could shift to a pay-as-you-go model and buy only what they needed. IT departments were freed from application development and maintenance and could become application users and innovation enablers. IT staff could cut back on unproductive integration programming and focus on more strategic as-

In the SaaS and cloud models, the vendor assumes responsibility for servers, backup, software, operating systems, databases, updates, migration, power and cooling, facility space, and staffing costs. The vendor can spread the cost over the entire customer base because all use the same version of software.

SaaS also results in a more favorable relationship between customers and vendors. SaaS vendors are incented to get their clients up and running as quickly and easily as possible, to keep them running, and ensure customers' on-going success. In contrast, on-premise software vendors collect large up-front costs and are then incented to make their clients as dependent as possible. The SaaS model is based on a continuing stream of subscription revenue and vendors are motivated to keep their customers satisfied. SaaS vendors maintain a centralized operational brain trust with far more expertise than the typical in-house IT staff.

Benefit	Summary
Shared Risk of Success	The vendor assumes more responsibility for success of the implementation and ongoing use of the software
Automatic Upgrades	The vendor takes full responsibility for upgrades
Ease of Deployment	The software can be accessed from any computer with a browser
Flexible Licensing Eliminates Shelfware	Per user subscription licensing can be adjusted annually
User Empowerment to Adapt Software	SaaS is easy to configure allowing users to adapt the software to their needs
Transformed Economics	The SaaS model changes software from a capital to an operational expense and eliminates maintenance fees
Centralized Expertise	Special skills are maintained by the vendor in a centralized pool that is shared by all clients
Accelerated Innovation	Because only one production version must be maintained and all usage infor- mation is available to developers, innovation is accelerated
Greener IT	Total energy costs are reduced through efficient sharing of centralized servers and data centers

#### Table 1. SaaS Benefits

pects of the business.

These benefits have pushed SaaS firmly into the mainstream. SaaS continues to boom and is likely to become an even larger part of enterprise computing. According to the research firm IDC:

- 76% of US organizations used at least one SaaS application by the end of 2009.
- In 2010, nearly 45% of US firms plan to devote at least a quarter of their IT budgets to SaaS applications. This percentage has doubled in only two years.



The SaaS market reached \$13.1 billion in revenue in 2009 and is projected grow to \$40.5 billion by 2014—a compound annual growth rate of 25%.<sup>14</sup>

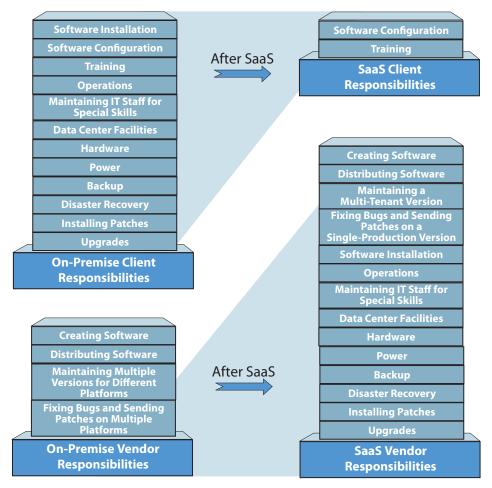


Figure 1. The Transfer of Responsibilities in the SaaS Model

Despite the growth of SaaS, some sectors have been slow to adopt this model. Many manufactures have adopted SaaS for front and back office functions such as accounting, ecommerce, human resources, or sales force automation. But until recently, they have lacked cloud solutions for fundamental manufacturing processes like Forecasting, MRP, Work Order Management, Inventory Control, warehousing, and quality control. These applications are mission critical and many manufacturers have understandably been risk-adverse when it comes to SaaS.

<sup>14</sup> "Worldwide Software as a Service 2010–2014 Forecast: Software Will Never Be the Same" by Robert P. Mahowald, June 2010.





CITO Research Tell Us a Question.

Now SaaS has matured to the point where it can provide these solutions—often at a lower cost than in-house ERP systems. As a result, smart manufacturers are reconsidering SaaS. Saugatuck Technology expects SaaS to expand significantly in the manufacturing sector over the next two or three years.<sup>15</sup>

Why? Because the leading ERP SaaS provider recently entered the manufacturing space.

# Why NetSuite?

NetSuite recently launched an end-to-end ERP solution specifically designed for manufacturing companies—with all the economic and operational advantages of the SaaS model. NetSuite Manufacturing Edition is the only cloud-based integrated business suite for manufacturing.

The manufacturing solution rests on NetSuite's decade of experience as a SaaS pioneer. Founded in 1998, NetSuite now has more than 6,500 customers—including hundreds of manufacturers—and is the number one web-based business software suite available today.

Saugatuck Technology predicts that NetSuite Manufacturing Solution "signals the beginning of a broader trend toward SaaS in manufacturing and the supply chain."

- Complete manufacturing solution. NetSuite Manufacturing Edition lets you manage your entire business from one SaaS suite. It provides control and visibility into all key manufacturing processes from the C-suite to the shop floor. It provides the full suite of manufacturing capabilities needed by mid-market and fast growing manufacturers, including production engineering, demand planning, material requirements planning, shop floor control, manufacturing inventory control, manufacturing cost control, project control, lot and serial control, and the ability to manage multiple sites and divisions. Better yet, these must-haves of manufacturing ERP are complemented by additional NetSuite capabilities and efficiencies.
- Global reach. NetSuite OneWorld allows companies to operate across multiple subsidiaries in different countries. It supports separate currencies, separate taxation laws and separate legal entities. It allows companies to convert currencies, consolidate financials, instantly produce reports and financial statements and rapidly close their books.
- Integration with legacy systems. Companies that use Oracle or SAP ERP systems can use Net-Suite to add new units and subsidiaries (new factories, new acquisitions, mergers, etc). The corporate parent might run Oracle or SAP at its headquarters and use SuiteCloud connect to run its subsidiaries in the NetSuite cloud.
- Suite of applications. NetSuite is not just ERP, but also CRM, HR, ecommerce, warehouse management, project management, and customer service—all wrapped into single application on a shared database. Manufacturing resource planning, inventory management, demand forecasting, shipping, and return management authorization (RMA) are all united in a single SaaS solution. With a few keystrokes, employees can convert an estimate into an order and produce an invoice. No one has to re-key the same data more than once.

<sup>15</sup> Saugatuck Technology Research Alert RA-744, June 9, 2010, by B. McNee and L. Geishecker <sup>16</sup> Ibid.



- Business process integration. Work flows easily from one process to the next. You can move leads to orders to manufacturing production to advanced warehouse and inventory management to order fulfillment capabilities. Workflows can be customized to suit your unique business processes.
- Scalability. New locations, business units and manufacturing sites can easily be added to your NetSuite account. You can expand anytime and anyplace; all you need is an internet connection and a browser.
- **Reports and dashboards right out of box.** NetSuite offers hundreds of prebuilt analytics and reports and can easily be personalized, customized and extended.
- Customization. Fields, forms, records and business processes can be tailored to your business by configuring options or scripting. The SuiteCloud development platform allows custom applications to be on top of NetSuite.
- Security. NetSuite meets the highest standards for ecommerce in the United States and European Union. Certifications include PCI DSS, SAS 70 Type II, and EU-Safe Harbor.
- Visibility. Real-time, 360-degree views of customers with seamless integration of CRM, financials and back-office systems.
- **Disaster recovery protection.** For companies that want additional protection, NetSuite offers flexible disaster recovery options (e.g., custom replication of data to redundant servers).
- Quick deployment. NetSuite's implementation methodology usually results in going live in 4 months.

#### • Greener IT. NetSuite helps customers reduce power use and e-waste.

#### A Robust Solution with SaaS

Xtellus is a small manufacturer with big technical and geographical challenges.

Xtellus manufactures reconfigurable optical add-drop multiplexer (ROADM) technology and dynamic optical modules for Agile Optical Networks, which are used in high-speed Internet, video, and telephone services.

Xtellus employs 75 people on three continents. It has its headquarters and one manufacturing site in Morris Plains, New Jersey, another manufacturing plant in South Korea, and a research and development center in Israel.

#### The Problem

The company lacked MRP for materials planning and was hampered by poor communications between three time zones. It used separate systems for accounting and manufacturing. The New Jersey location did accounting with Quickbooks while the Israeli and South Korean locations used a CPA firm. The company had poor visibility into cash requirements, monthly valuation of inventory, and timely documentation of production costs. Forecasts of material needs had to be done manually. The closing cycle took 30 days.

With its business growing rapidly, Xtellus could no longer afford to rely on separate systems for accounting and manufacturing. Knowing that these problems only would worsen as the company grew, Xtellus executives realized they needed a new solution.

#### **The Solution**

The company needed an integrated ERP solution that included manufacturing, planning, sales, accounting, purchasing, inventory, and shop floor control. It also needed support for a centralized engineering organization as well as better visibility and forecasting.



Xtellus sought a SaaS solution because it wanted to minimize its IT investment yet be scalable enough to allow growth and integrate operations in real time.

But it also needed a solution robust enough to handle its complex manufacturing operations. Key components and end units had to be "serial controlled" and some purchased goods "lot controlled." The company needed an MRP system that could deliver forecasts for each manufacturing plant but still rely on a common bill of materials developed and controlled by the engineering facility. It needed real-time visibility into costs broken down by components such as material, labor, labor overhead, fringe overhead, material burden, and subcontract.

The company converted to NetSuite and did a phased rollout to all locations in 2009 and 2010. The results speak for themselves:

- Books closed in less than 3 days
- Real time visibility with metrics for revenue, backlogs, inventory, cash, A/R and A/P at all locations
- Inventory levels lowered by \$1 million
- Reduction in part costs of 10 to 15% due to negotiating discounts for high volumes
- Payables and standardized vendor terms stretched across all locations for up to 60 days
- Improved margins by cost and variance feedback by 18%
- Improved cash flow with faster collections and slower payments and timed in-flow of materials

# SaaS+ERP = Relief

Now that we've taken a brief tour of the product, let's take a closer look at how NetSuite alleviates the pain of on-premise ERP for manufacturing companies.

### **Complete Manufacturing Solution**

NetSuite wraps up manufacturing, ERP, CRM, accounting, and ecommerce into one integrated package. It arms manufacturers with all the powerful capabilities of on-premise ERP, but without the pain points of cost, inflexibility, lack of integration and difficulty of deployment. The entire suite runs on a single instance of software and single database. There is no need to patch together software, reconcile databases or troubleshoot how to make facility X talk to facility Y. NetSuite gives manufacturers end-to-end control and visibility, from the remotest headwaters of your supply chain all the way downstream to your end customers. Table 2 highlights key capabilities of NetSuite that benefit manufacturers.



Tell Us a Question.

#### Table 2. Key NetSuite Manufacturing Capabilities

Manufacturing Need	Provided by NetSuite Manufacturing Edition	Result
Demand Planning	~	<ul> <li>Accurate forecasts based on sales orders and demand</li> <li>Makes manufacturers responsive to changing demands</li> <li>Ensures stock availability with just-in-time ordering</li> <li>Leaner inventory</li> </ul>
Material Requirements Planning	~	<ul> <li>Industry-proven algorithms</li> <li>Proceeds level-by-level through the BOM, reviewing demands and safety stock requirements and netting out the inventory and firmed (or greater) supplies</li> <li>More control</li> </ul>
Production Engineering	~	<ul> <li>Carries engineering downstream to deliverables, plans, and inventories</li> <li>Capabilities include item master maintenance, BOM and engineering change control</li> <li>More collaboration</li> <li>Scales to business size</li> </ul>
Shop Floor Control	~	<ul> <li>Control over work in progress and manufacturing operations</li> <li>Real-time status updates and seamless data capture</li> <li>Ability to manage work order lifecycles and routing in assembly and manufacture</li> <li>Schedule, dispatch and track</li> </ul>
Manufacturing Inventory Control	~	<ul> <li>Supports business processes for maintaining item inventories, inventory valuation and planning and item policies.</li> <li>Supports purchase requisition maintenance for direct material items and supply demand review, dynamically integrating supply and demand with projected on-hand balances</li> <li>Better timing, budgeting and less human error</li> </ul>
Manufacturing Cost Control	$\checkmark$	<ul> <li>Ability to track up to eight sub-components of cost</li> <li>Supports both standard cost or average actual cost methods</li> <li>Synchronized control with a single version of the truth</li> </ul>
Project Control	~	<ul> <li>Deep analytics and tracking controls enhance P/L variance and understanding planned vs. actuals</li> <li>Enables inventory control tracking, planning and costing of items</li> </ul>
Lot & Serial Control	✓	<ul> <li>Allows item lot or serial number to be registered through purchasing receipts, inventory, shop floor and order fulfillment</li> <li>Supports traceability</li> </ul>
Multi-Division/ Multisite Solutions	~	<ul> <li>Enables management of multiple plants, companies or divisions throughout the world</li> <li>Supports division-level MRP, allowing different planning policies and inventory</li> <li>Supports both centralized or decentralized engineering and purchasing operations</li> </ul>



# Adaptability

The software world embodies the old adage that change is the only constant. As a result, manufacturers need solutions that are specifically designed for the Internet and compatible with new technologies, even ones that we can barely imagine today. NetSuite can grow, adapt and expand as needed. NetSuite is continuously upgraded, customizable, extensible adaptable and "future proof."

### Cost

NetSuite delivers substantial savings in total cost of ownership (TCO) compared to on-premise ERP. TCO is a measure of the total cost of purchasing (or in the case of cloud computing, subscribing to) and operating a technology solution over its lifetime.

In the cloud model, the vendor takes responsibility for all infrastructure including servers, backup, software, operating systems, databases, updates, migration, power and cooling, facility and personnel. The vendor can amortize these costs over thousands of customers who all use the same software. This yields substantial economies of scale and allows the vendor to offer services more affordably than the clients could themselves. These savings are especially dramatic for companies with limited IT resources such as fast growing manufacturers, SMBs and mid-market companies.

For example, one study by Hurwitz and Associates demonstrated that NetSuite brings TCO savings of 35 to 55 percent compared to Microsoft Dynamics, a popular line of ERP and CRM solutions. Although SaaS customers typically pay higher software fees, these costs are more than offset by savings in infrastructure and personnel. NetSuite customers have zero costs for IT Infrastructure hardware, software, and maintenance.

Consider a typical scenario with a 100-user company: with the Microsoft GP (ERP) and CRM package, IT resources, training and consulting cost nearly \$934,000 over four years; with NetSuite, IT resources, training and consulting cost about one quarter as much, or \$262,311. All told, the NetSuite TCO over four years was \$697,656, about half of the Microsoft Dynamics GP/CRM TCO of \$1.4 million. Figure 2 breaks down these costs by category.

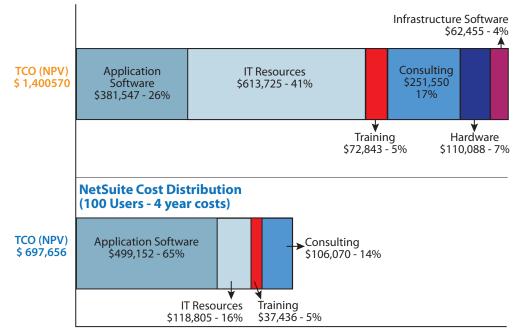
According to Hurwitz and Associates, the NetSuite TCO advantage over Microsoft Dynamics holds true for companies of many sizes:

- 55% lower for 52 users
- 50% lower for 100 users
- 35% lower for 200 user<sup>17</sup>

These numbers reflect the typical pattern of we see when we compare NetSuite to on-premise ERP vendors. For example, Asahi Kasei Spandex America spent 3% of revenue on SAP R/3 software. When the Charleston, South Carolina textile manufacturer (a subsidiary of a multinational based in Tokyo) switched to NetSuite, the IT budget dropped to one tenth of one percent of revenue. All told, the company saves about \$1 million per year in software license fees, personnel costs and other expenses.

<sup>17</sup> Saugatuck Technology Research Alert RA-744, June 9, 2010, by B. McNee and L. Geishecker





# Figure 2. Four-Year TCO Distribution—NetSuite vs. Microsoft Dynamics GP and CRM Source: Hurwitz & Associates

#### RedBuilt: Building a Better ROI

RedBuilt manufactures engineered wood products for framing commercial and light industrial structures. The company has 4 manufacturing facilities and 13 offices for sales and design.

#### The Problem

Originally a subsidiary of Weyerhaeuser, the company (then known as Trus Joint) relied on the SAP ERP system of the parent company for financials, forecasting, and inventory control. In 2008, it was acquired by a private equity firm and SAP demanded \$400,000 for the continued use of its software.

RedBuilt deemed the SAP price tag too steep for the value provided by on-premise ERP. Even with the SAP system, the company still needed to employ a bank of data entry personnel and programmers and it took too long to produce reports.

#### **The Solution**

RedBuilt already used NetSuite for CRM and decided to extend it to ERP. The deployment was completed in three months. According to a case study by Nucleus Research, RedBuilt realized more than \$2 million in savings by:

- Downsizing three data entry personnel who previously spent all their time keying information into SAP
- Reducing costs of preparing reports by 75% and cutting preparation time in half—all done by users instead of than programmers
- Avoiding the SAP fee
- Greater employee productivity because users could more easily find and analyze data



All told, the company gained an enviable return on its investment. The analysis by Nucleus Research found that RedBuilt realized the following gains:

- Average annual benefit: \$678,398
- Average annual total cost of ownership: \$207,991
- Payback: 6 months
- ROI: 158%

### Scalability

NetSuite allows manufacturers to scale up rapidly without having to add significant resources. For example, Countrypet Naturals adopted NetSuite in 2002 when its revenue was \$500,000 annually. Today revenue has grown ten times to \$5 million and the company has added just one employee.

NetSuite is scalable to large operations. Consider:

- More than 3,000 customers manage multiple locations
- More than 100 customers manage over 50,000 SKUs
- Dozens of customers manage more than 250,000 items

### **Energy Savings**

NetSuite prides itself on helping customers reduce their energy usage and carbon footprint. They also can reduce e-waste from disposal of servers, batteries, and backup media. As one article in the McKinsey Quarterly concluded, "The greenest data center is the one that you don't have to build."<sup>18</sup>

Greenspace, a supplier of green operations and maintenance products and analytical solutions, performed an analysis of NetSuite's platform and found:

- NetSuite enables customers to reduce overall server room electric consumption by more than 99%, an annual savings of more than \$10,300 per customer. This energy savings further improves the customer TCO versus on-premise IT solutions.
- NetSuite customers realize an average reduction in energy use of 99,000 kWh per year.
- NetSuite allows customers to reap more than \$100,000 in annual savings from reduced use of software, hardware, maintenance, personnel, and occupancy costs.

### Security

Security is one of NetSuite's core competencies and the company has made substantial investments to develop expertise and infrastructure that are well beyond the reach of the typical manufacturing company. These processes are governed by industry best practices and continuously tested, improved, and maintained. NetSuite has world-class data centers that meet the highest standards of reliability.

<sup>&</sup>lt;sup>18</sup> "Data centers: How to Cut Carbon Emissions and Cost" by William Forrest, James M. Kaplan, and Noah Kindler, McKinsey Quarterly, November 2008, http://mkqpreview2.qdweb.net/article\_print.aspx?L2=3&L3=50&ar=2255.



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NetSuite has earned the following certifications:

- SAS 70 Type II. NetSuite fully complies with SAS 70 Type II standards. This indicates that the American Institute of Certified Public Accountants or its designees have conducted an in-depth audit of the vendor's controls and safeguards. When NetSuite customers are audited, they provide a SAS 70 Type II Service Auditor's Report to the auditor as a substitute for auditing NetSuite's controls and procedures. Without SAS 70 Type II compliance, companies are likely to incur additional costs because they must send auditors to the vendor to analyze their controls and procedures.
- EU Safe Harbor. NetSuite fully complies with EU Safe Harbor standards. EU Safe Harbor is a key process for US companies operating in Europe. It certifies that companies comply with the EU Directive 95/46/EC on the protection of personal data. The seven Safe Harbor Principles are designed to prevent accidental information disclosure or loss of consumer data. NetSuite also adheres to the Safe Harbor Privacy Principles published by the US Department of Commerce with respect to personal data about individuals in the European Economic Area (EEA) that we receive from our subsidiaries, customers, and other business partners.
- PCI Data Security Standard. NetSuite fully complies with the PCI Data Security Standard, a set of comprehensive requirements for protecting consumer data in credit card transactions. These standards lay out requirements for security management, policies, procedures, network architecture, software design, and other protective measures. These strict standards were established by leading credit card firms such as Visa and American Express. It sets ever-evolving and stricter requirements for data protection, and companies can be removed from the list if they fail to uphold them. NetSuite provides 3D Secure Payer Authentication—also known as Verified by Visa and MasterCard SecureCode.

NetSuite's security standards are beyond the capability of most companies or on-premise providers. Auditing and certifying these levels of compliance is simply too onerous for most companies that operate in-house ERP systems.

# **Reliability and Uptime**

Many factory executives have been reluctant to adopt SaaS because they fear excessive downtime. These executives take comfort in paying for their own IT center where they can see lights blinking and ask for the IT director to bring systems down and back up when something goes wrong. Unfortunately, the proximity of the IT infrastructure does not equate with its reliability.

The firm Precise surveyed 700 IT and business professionals and found that 90% of SAP customers have a performance problem at least once a month and more than half had three or more incidents a month. According to the survey, 80% indicated that these problems impacted their business and 39% said they had ongoing, unresolved problems with SAP performance.<sup>19</sup>

NetSuite guarantees a service level of 99.5% uptime 365 days a year, 7 day a week, 24 hours a day. Does your business or IT match such reliability? If NetSuite doesn't meet this commitment, the customer doesn't pay for that month.

<sup>19</sup> "Research Reveals Ongoing SAP Performance Issues Have Significant Business Impact," http://www.marketwire.com/press-release/ Research-Reveals-Ongoing-SAP-Performance-Issues-Have-Significant-Business-Impact-1004552.htm



### **Disaster Recovery and Business Continuity**

Many executives are rightfully concerned about what happens when something goes wrong. Net-Suite has developed a comprehensive solution to these challenges:

- Infrastructure. NetSuite was architected with multiple layers of redundancy. If one or more elements fail, there is no service interruption. All data is stored in multiple locations. NetSuite performs daily hot backups to ensure quick restoration of data in case of emergency. In addition, all customer data is backed up and stored in off-site safe facilities.
- Application security. NetSuite is designed to be safe from Internet attacks. All of the servers are protected by a firewall that allows access only via specific protocols and methods. It has securely designed segregated networks, load balancers, denial of service countermeasures, and application-layer filters. All transactions are protected by 128-bit SSL, the same strong encryption used by large banks and ecommerce companies.
- Physical security. NetSuite operates a secure facility sometimes known as "fortress within a fortress." Guards, photo ID cards, identification systems, and video surveillance strictly control access.
- Advanced disaster recovery. In rare cases, customers may require exceptional safeguards outside the scope of NetSuite's data integrity models, such as dedicated redundant hardware or replication of data to a client's remote data center.
- Business continuity. The browser-based nature of NetSuite makes business continuity planning a simple matter. As long as your employees have an Internet connection, they can work from anywhere and your business continues to operate seamlessly and without any disruption.

### Automatic Upgrades

NetSuite shoulders responsibility for all upgrades. These upgrades are done with minimal disruption and are included in the basic subscription fee. All customers enjoy the latest version of the product.

### **End-to-End Integration**

NetSuite lives up to its name by offering a full suite of services that enable you to run your entire business with one integrated software package and one database.

#### CertiCell: Global Integration

CertiCell is a private company based in Brentwood, Tennessee that specializes in repairing and reselling mobile phones and PDAs. Buoyed by rising demand for refurbished phones, the company is growing rapidly. It has more than 600 employees at three facilities in Louisville, Kentucky, the Philippines, and Hong Kong.

#### The Problem

CertiCell faced the challenge of managing a complex business with three plants, 8,000 inventory records, and work orders that averaged 25 components. A single sales order might involve as many as 125 lines and more than 9,000 items.

Like many manufacturers, CertiCell relied on legacy software that lacked integration and required cumbersome manual processes. The materials planning process involved hours of data entry and spreadsheet calculations. The company lacked the ability to deliver accurate forecasts of the refurbished cell phone market, which had high demand volatility.



#### **The Solution**

The company decided it needed one system that would knit together all its global operations and integrate manufacturing, planning, sales, global accounting, multi-tiered costing, purchasing, inventory, and shop floor systems.

In 2010, CertiCell, upgraded to NetSuite OneWorld with its integrated manufacturing solution, which includes MRP, Production Engineering, Manufacturing Inventory Control, Cost Control, and Shop Floor Control modules.

Now the company is reaping the benefits of end-to-end integration. CertiCell enjoys better visibility and control over its global manufacturing operations and more robust demand-supply capabilities. It can feed real-time fore-casts into its MRP system and obtain a complete demand-supply plan for all global facilities.

#### The results:

- The centralized product engineering function for items, bills of materials, and revision control gives more accurate and complete product definitions
- The MRP engine now takes minutes to perform processes that formerly took hours
- Average costs are recalculated immediately upon completion of the manufacturing work orders
- All locations can view up-to-the-minute inventories of finished goods
- Employees can instantly look up the audit trail and transaction history
- With NetSuite, CertiCell is more effectively and efficiently managing its growing business—at a lower total cost of ownership



Figure 3 shows the breadth and depth of the functionality that NetSuite offers.

### Manufacturing

Demand Planning • Production Forecast • Flexible Forecast Periods • Forecast by Customer/Project • Forecast Consumption • Master Production Schedule • Export to Excel • Cut & Paste Import • Historical Demand • Seasonal Demand • Safety Stock Calculation • Reorder Policies • Reorder Point & Preferred Stock Level Calculations Material Requirements Planning •Division & Multi-Site Planning • Plan by Project • MRP Action Messages • MRP Planning Policies by Item • Multiple Lead Times by Item • MPS Review • Reorder Points • Supply Demand Review • Mass Firm Requisitions and Work Orders • Available To Promise • Effectivity Dates **Production Engineering** • Centralized / Decentralized / Decentralized Engineering • Engineering Change Control • Revision Control • Effectivity Dates • Approval & Release Process • Engineering Item Master • Commodity Codes • Approved Manufacturers Listing • Reference Designators • BOM Mass Add • Where Used • Costed BOM Reports • Indented BOM Reports • Component Phase In / Phase Out **Shop Floor Control** • Routing Maintenance • Work Order Release • Operation Maintenance • Work Order Pick • Work Order Labor & Qty Booking • Work Order Receipt • Backflush • Outsourced Operations • Contract Manufacturing • Consigned Materials Mgmt • WIP Tracking • Priority Dispatch List • Audit Trails • Travelers • Work Order WorkbenchManufacturing Inventory Control • Lot & Serial Control • Warehouse & Bin Mgmt • Inventory Adjustments • Cycle Counting • ABC Classification • Stock Location Reports • Invnetory Valuation • Backflush Locations • Non-nettable Locations • Unplanned Issues & Receipts • Inventory Movements • Inventory Transfers • Vendor Managed Inventory • Manufacturing Cost Control • Marefage • Cost of BOM Report • Work Order Material & Labor Costs • Purchase Order Costs • Subcontract Costs • Outsourced Manufacturing Costs • Project Budget • Project Budget • Project Budget • Project Budget • Project Work Proter • Purchase Material & Labor Costs • Purchase Order Costs • Subcontract Costs • Outsour

NetSuite

#### CRM

Sales Force Automation • Territory Tracking & Assignment • Lead Routing • Opportunity Mgmt • Quote Generation • Sales Order Entry • Upsell Manager • Advanced Forecasting • Mail Merge E-mail/Mail • Real-time Commission Reporting • Deal Expiration Notification • Flexible Commissions Schedules • Real-Time Credit Card Authorization • Forecast & Quota Mgmt • Competitor Tracking • Team Selling Marketing Automation • Bulk E-mail • Telemarketing Mgmt • Direct Mail Mgmt • Upsell Campaign Wizard • Message Personalization • Campaign Scheduling • Campaign ROI Reporting • Customizable Online Lead Forms • Referral/Promotion Code Tracking • Campaign Tracking • Lead Source Mgmt • E-mail Campaign Marketing Market

Customer Support Mgmt • Case by Product Tracking • Priority Tracking • Flexible Queue Mgmt • Case Assignment • E-mail case capture & creation • Online Self-Service • Escalation and Notification • Online Customer Center • NetAnswers Knowledge Base • Billable Time Tracking by Case

Partner Relationship Mgmt •Order Entry • Partner Activity Reporting • View Customer Cases • Joint Lead Mgmt • Real-Time Inventory Access • Promotional Discounts

Real-time Dashboards • Executive & Role-Based Dashboards • Publishable Layouts • Drag and Drop Personalization • Key Performance Indicators • Quick Search • Graph & List Report Snapshots • Scheduled & On-Demand Dashboard Alerts

Productivity Tool • Group Calendaring • Import/Export of Records • Outlook and Palm Sync • Anytime/Anywhere Web Access • NetBase Custom Records • Duplicate Detection & Merge • Customizable Reporting • File Cabinet • Reminders

Customization • Click Not Code • Configuration • Real-Time Dashboards • Custom Records/Tables • Custom Fields • Customer Saved Searches • Drop Down List • Forms • Customizable Roles • Customizable Dashboards

### ERP

Financials · General Ledger · Multi-Tier Chart of Accts · Financial Statements • Accounts Payable, Multi-currency • Accts Receivable, Payroll, Direct Deposit · Multiple Budgets · Advanced Billing • Revenue Recognition • GAAP Reporting • Allocations • Check Printing • Online Banking • Bill Payment · Updates Taxes • Generate & Edit W-2, 940,941 • Print 1099 Forms • Customizable Chart of Accounts • Reversing Journal Entries • EFT Bill Payment • Advanced Project Accting • Amortization Schedules

Inventory • Specific Costing • Item Kits • Item Images • Audit Trail • Replenishment Warnings • Multi-location • Multiple Units of Measure • Average,

LIFO, FIFO Costing • Price Levels per item • Preferred vendor records • Lot Mgmt • Barcoding • Expiration Dating • Serialized Inventory • Inventory Matrix Items • Reorder Point Tracking, Notification • Bin Mgmt • Landed Cost • Demand Based Inventory Replenishment **Purchasing** • Back Orders • Purchase History • Approval Routing • Partial Receipt Tracking • Purchase Orders • Purchase Request Tracking • Receiving • Accts Payable **Order Management** • Fulfillment • Multiple Ship To • Multiple Bill To • Discount Calculation • Sales Taxes • Bulk Order Approval • Handles Partial Shipments • Back Orders • Order Tracking for Customers • Quote/Estimate • Inventory Commitment • Pricing & Discounts • Sales Tax • Credit Card Authorization • Pick/Pack/Ship • Drop Shipments • FedEx, UPS & USPS Shipping Integration • Returns **Employee Management** • Time and Billing Entry & Reporting • Remote Time Entry • Sched and Task Mgmt • Employee Records • Payroll, Dir Dep • Exp Reporting • Time, Exp, Billing Approval Routing • Reminders

**Customer / Vendor Center** • Order History • Track Shipments • Return Orders • Update Profile

#### Figure 3: NetSuite's Broad Footprint of Functionality





# Conclusion

Manufacturers face a stark choice: maintain the status quo and face painful, slow decline or re-evaluate their technology and its ability to support their business requirements. If they continue to do business in the same old ways, they will become less competitive, lose margins, and die a slow, inexorable death.

The other choice is to go forward with a solution adapted to these dynamic times. It's time for manufacturers to take a second look at SaaS. If they like what they see, they will find that NetSuite Manufacturing Edition is the best solution on the market today.

On-premise ERP provided the right solution for many years. Increasingly, however, it's the answer to yesterday's problems. Today the questions are different: how do you protect your margins, operate across borders, manage far-flung supply lines, and exploit opportunities in the new Internetdominated world?

Do you want to be in the IT business or in the manufacturing business? If the latter, why are you expending so much time and pain on the former? NetSuite allows manufacturing companies to focus on their core strengths. By outsourcing their computing needs to the experts, they can alleviate pain points and step up their game in their core business.

Your task is to make your choice and make it smart.

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