

Igloo Consolidates on Oracle's SPARC Server Platform, On Track to Earn 169% ROI Over 3 Years



Customer Profile

Igloo Products Corp

Igloo Products Corp is the world's #1 cooler manufacturing company. One out of every three households in America own at least one Igloo product.

Founded: 1947

Headquarters: Katy, TX

Revenue: \$100–500 million (est.)

Employees: 850

“We’ve always been an Oracle shop so migration was relatively easy. Going Oracle to Oracle saved us time in not having to rewire apps into a different environment. And the performance improvements have been dramatic and game changing for our business.”

GAGAN BHARDWAJ,
ORACLE SYSTEMS ARCHITECT,
IGLOO PRODUCTS CORP.

EXECUTIVE SUMMARY

Igloo Products Corp is the world's #1 cooler manufacturing company. The company is credited with inventing the cooler category in 1947 and today one out of every three households in America owns at least one Igloo product. The company manufactures the majority of its products at a 1.4 million-square-foot factory in Katy, TX, and ships to more than 250 retailers worldwide.

Igloo's business systems have evolved over the past decade, shifting from IBM mainframes to Sun SPARC servers and Oracle software in an effort to optimize both system performance and total ownership costs. The company needs massive transactional capacity during its peak season and can't afford delays that could impact sales and deliveries to global retailers.

In 2008, as Igloo placed increasing demands on its aging (and sprawling) platform, performance and cost challenges began to re-emerge. Igloo responded by investing in a new virtualized platform based on Oracle Solaris Containers and consolidating operations on two energy-efficient Sun SPARC T-Series servers. Today, Igloo is running its ERP system (Oracle E-Business Suite) on two-thirds fewer machines, helping to cut monthly service provider costs by nearly 50% while significantly boosting system speed and availability. Furthermore, extra system capacity and flexibility is allowing Igloo to implement new applications and projects to help optimize the business.

According to an assessment by Mainstay Partners, Igloo is on track to earn a return on investment of approximately 169% over three years with the company breaking even in the first year.

BACKGROUND

For Igloo, product quality and innovation is essential to maintaining market share—as is prompt, accurate deliveries to major retailers. Igloo also aims to boost profitability by focusing on building lean manufacturing and accurate forecasting systems, and, with Oracle Supply Chain Management, building an agile supply chain that rapidly adjusts to market shifts.

Igloo's business is highly seasonal, with the company recording most of its cooler sales

ORACLE PRODUCTS

Software

- Oracle Database 11g
- Oracle Business Intelligence Enterprise Edition
- Oracle BPEL Process Manager
- Oracle Application Server
- Oracle iStore
- Oracle E-Business Suite 11i
- Oracle Solaris 9
- Oracle Solaris 10
- Oracle Solaris Containers

Hardware

- Sun SPARC Enterprise T5240 Server
- Sun SPARC Enterprise T5140 Server

from January to July. During this period, Igloo processes hundreds of orders per minute, operates multiple shifts at its facilities, and ships products around the clock. System performance and availability are essential during the busy season to avoid delays that could impact sales orders and deliveries.

Historically, Igloo relied on Oracle E-Business Suite applications to help manage and integrate its core supply chain processes. These Oracle solutions, which it continues to rely on today, include automated systems for order management, warehousing, inventory control, and logistics. Igloo has upgraded the applications over time, recently adding Oracle's transportation management module.

Rising System Demands

As its business expanded in recent years, Igloo put more and more demands on its enterprise systems, which in turn required it to regularly update its IT infrastructure. Eight years ago, for example, Igloo replaced their mainframe platform. But the new platform eventually hit a performance and capacity wall that left IT administrators struggling to balance server loads to keep operations running smoothly. "We had the dual challenge of some machines being underutilized and others being over-utilized," said Aby Joy, Senior Director, MIS, Igloo Products Corp.

Because of these system strains, downtime became an issue. Crashes lasting more than a day hit Igloo several times a year and sent business users scrambling to process orders and track inventory using paper-based methods. Restarting these systems and reconciling inventory after a major crash was a time-consuming and costly chore. Meanwhile, a number of projects aiming to enhance the company's strategic capabilities were put on hold for lack of IT bandwidth.

"We did not have enough firepower to work on multiple projects simultaneously," Joy said. "Frequently our internal resources had to wait on systems to be shut down and brought up again. That led to project delays as well as projects stepping on each other. We needed a more flexible architecture so we can dial up and down resources, and failover from one machine to another."

Inefficient hardware utilization also pushed up Igloo's operating expenses. Monthly fees to an offsite service provider were climbing to cover a sprawling infrastructure that encompassed six power-hungry servers and 24 CPUs. Moreover, Igloo was paying more for software licenses because of pricing models tied to the number of CPUs in operation. This factor alone limited the company's adoption of a number of new applications that could benefit the business.

Joy summed up the overall situation this way: "We needed to have a hardware refresh—and we wanted to do it the right way."

KEY BENEFITS

- 169% ROI over 3 years
- 100% system uptime
- 89% reduction in transaction time
- Reduction in third-party hosting costs
- 3x improvement in project resource scaling
- Lower software licensing costs
- One-time hardware cost avoidance
- 90% reduction in power consumption
- 89% reduction in heat generation
- 10% improvement in IT efficiency

THE BUSINESS VALUE OF UPTIME

“We sell thousands of products a day during the busy season. If a server goes down for even a day or two, it creates delays that can translate into lost business. Some of our biggest customers rate us by our shipment performance. If the system is not available and deliveries are delayed, it can mean a lower vendor performance scorecard, which in turn raise the price of doing business.”

—Aby Joy, Senior Director IT,
Igloo Products

ORACLE VIRTUALIZATION SOLUTION

Igloo considered a number of options for addressing its infrastructure challenges but settled on deploying Oracle Solaris virtualization technology—Oracle Solaris Containers—to consolidate IT operations on two new Sun SPARC Enterprise T-Series servers. “We found we could use the immense multi-threading opportunities with this chip architecture and really open the floodgates,” said Gagan Bhardwaj, Oracle Systems Architect with Igloo. “We have immense computing power available now. The Sun SPARC Enterprise T5140 and T5240 servers blow the old systems out of the water.”

As detailed below, Igloo’s move to upgraded SPARC T-series servers and Oracle Solaris led to a lean, virtualized environment yielded a host of operational and strategic benefits, including a significant reduction in service-provider fees, lower power consumption, reduced software licensing costs, faster processing performance, and the elimination of costly downtime. Extra system capacity and flexibility is also giving Igloo the bandwidth to implement critical new business applications, including Oracle E-Business Suite modules to automate and optimize warehouse management, product shipping, and document imaging—as well as roll out critical new business intelligence capabilities.

OPERATIONAL AND STRATEGIC BENEFITS

An assessment by Mainstay Partners documented the following operational and strategic benefits from Igloo’s migration to a consolidated, virtualized Oracle-Sun IT environment.

Significant Savings Over 3 Years for Hosting Services

Igloo has traditionally maintained a lean IT staff, preferring to rely on outside service providers and other partners to host and manage its infrastructure. In switching to a virtualized platform on Sun SPARC servers, Igloo maintained the hosted model but switched to a new provider, SunGard Availability Services, that could host the new consolidated hardware footprint for half the monthly fees of the previous vendor while also providing dedicated system administrators and resources. Igloo managers said the streamlined SPARC/Solaris configuration, with 66% fewer servers and 83% fewer CPUs, contributed directly to the fee reductions.

Resource Capacity to Launch 3x More IT Projects

Igloo executives said the new platform is enabling the company to launch new IT projects that support continued business growth (Igloo grew at a rate of about 15% last year). Because capacity and licensing costs are no longer an issue, Igloo can roll out new applications and initiatives with comparative ease. In the past, for example, Igloo could only handle about two new projects a year, while this year the company plans to launch six new projects.

WHY ORACLE?

Igloo originally ran its business on IBM mainframes and software but later chose to move to Oracle-Sun servers to achieve better manageability and lower ownership costs. “We were able to cut internal IT staff 50% and improve service levels tremendously,” said Aby Joy, Igloo’s Senior Director of IT. In 2008, when Igloo needed to modernize again, it took another look at IBM servers and also considered HP hardware. “To get comparative processing power with IBM, we would have ended up paying three times the cost,” Joy said. “And the only HP servers that could handle our type of transactions were on the decline phase of their product life cycle.” What’s more, he said, “based on analysis done by our partners JASS and SunGard, we found that neither vendor could handle multi-threading the way Oracle SPARC servers could.”

VALUED PARTNERSHIP

“The JASS and Oracle partnership has enabled Igloo to accelerate the project deployment and the level of Oracle solution insight provided by the JASS experts is one of the main reasons Igloo achieved financial and operational success with the consolidation on Oracle’s SPARC Server Platform.”

–Aby Joy, Senior Director IT,
Igloo Products

10% Gain in IT Staff Productivity

As noted earlier, in the legacy environment IT administrators were caught in a constant cycle of shuffling server capacity to accommodate shifting business demands. This led to project delays and inefficient staff utilization. Today, the picture is reversed: administrators rapidly “fire up” new Oracle Solaris containers and dial up or down processing capacity as needed. The flexible environment also makes it easy to implement system and application upgrades. Overall system management efficiencies are expected to increase IT staff productivity by 10%.

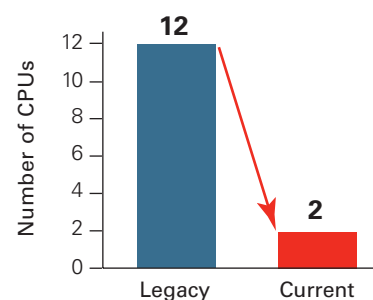
92% One-Time Reduction in Hardware Costs

In Igloo’s new virtualized environment, a single Sun SPARC T5240 server running Oracle Solaris Containers can host multiple virtual machines and dozens of applications, each occupying separate zones within the server. For administrators, this virtualized environment is easier to manage and offers more flexibility compared to Igloo’s earlier one-server-per-machine model. When Igloo needs a new server, administrators simply provision space on its existing T5240 (production) or T5140 (dev-test) server, creating a virtual machine in 2–3 hours. Over all, the move has eliminated business bottlenecks by enabling Igloo to seamlessly allocate and re-allocate processing capacity (containers) as needed through a single administrative interface.

Lower Software Licensing Costs

As noted earlier, Igloo faced steep costs for software licenses that were priced by the number of CPUs (Igloo had 12 running in its legacy platform). As shown at right, virtualization using Oracle Solaris allowed Igloo to run its business on 83% fewer CPUs and thus make a portion of its software purchases more affordable.

Figure 3: Fewer CPUs in Virtualized Environment

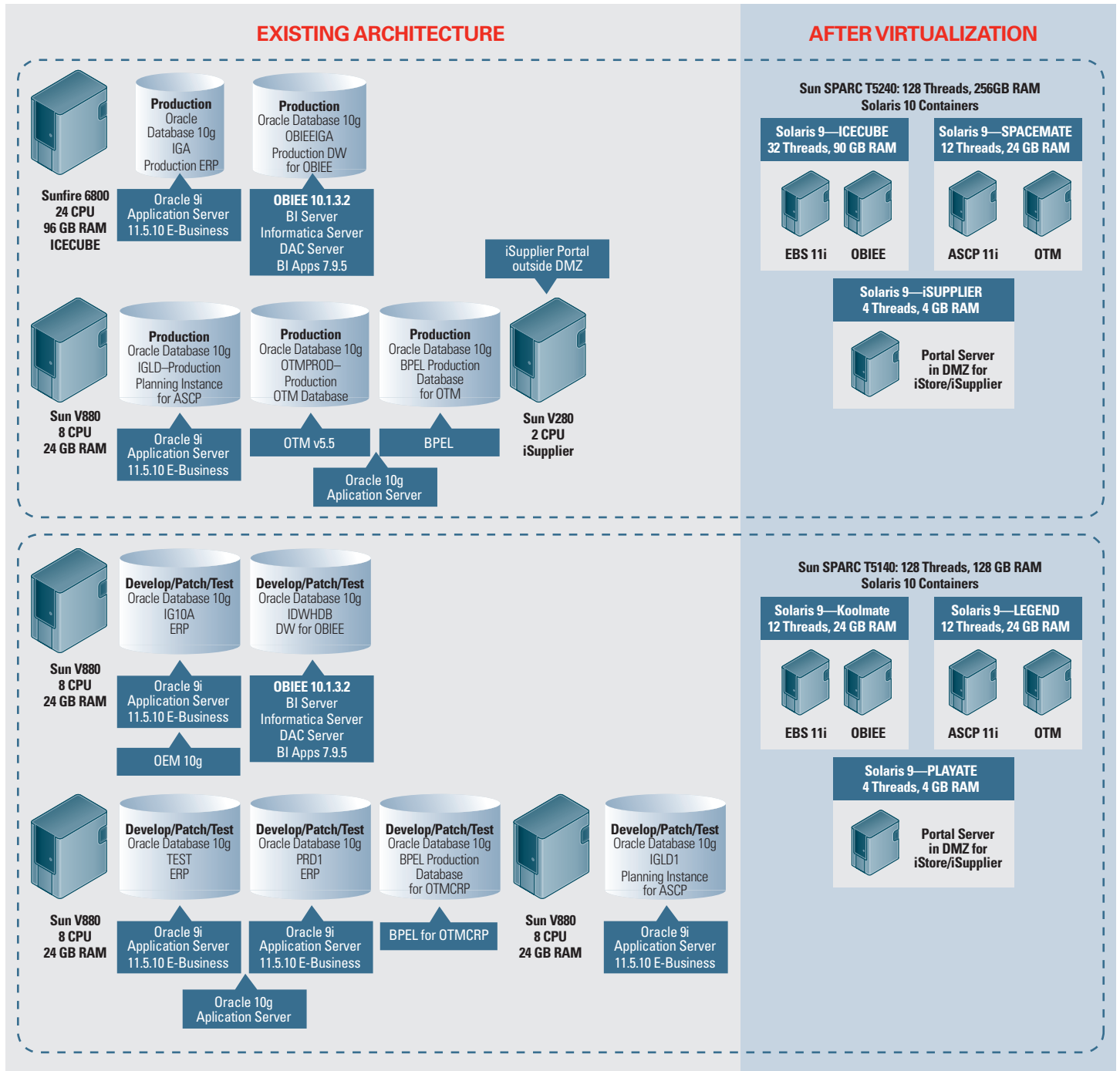


100% System Uptime

With the move to a virtualized platform, Igloo completely eliminated system outages that would hit the company as often as 2–3 times a year.¹ Today, Igloo’s service provider is achieving 100% uptime and easily meeting its service level agreement. By contrast, the previous service provider often failed to meet Igloo’s 99.5% uptime SLA because of ongoing capacity bottlenecks and other hardware issues.

¹As noted above, extended system crashes (more than a day) forced managers to switch to cumbersome paper-based order processing methods; and reconciling inventory was a painstaking process after the system came back online.

Figure 8: System Configuration and Architecture



“The Sun SPARC-Series servers blow the old systems out of the water.”

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ABOUT THIS CASE STUDY

Research and analysis for this study was conducted by Mainstay Partners, an independent consulting firm, drawing from interviews with Igloo employees, review of planning documents and searches of industry literature. ROI calculations use industry-standard assumptions regarding the time value of money.

Mainstay Partners is the leading provider of independent value assessment and IT strategy services. Our clients include Oracle, SAP, Cisco, Lexmark, Microsoft, Motorola, and HP. For more information, please visit www.mainstaypartners.net. Information contained in this case study has been obtained from sources considered reliable but is not warranted by Mainstay Partners.

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Reduced Power Consumption by 90%

Administrators reported that just one of its legacy servers consumed more power and generated more heat than the entire virtualized infrastructure currently running. As shown in Figures 4 and 5, Igloo’s virtualized environment runs 90% cooler and consumes 90% less electricity than its prior sprawling platform.

Figure 4: Heat Generation

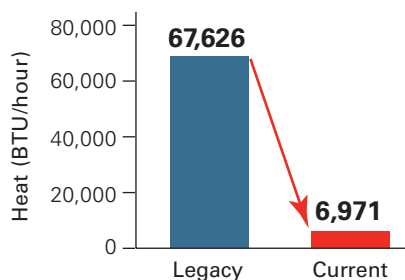
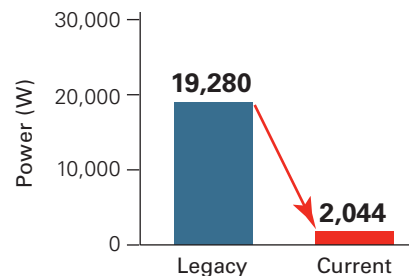


Figure 5: Power Usage



169% ROI PROJECTED

According to Mainstay’s estimates, Igloo is on track to earn significant savings over three years from its investment in a virtualized Oracle IT infrastructure. The largest share of savings will come from substantially lower service provider fees enabled by the consolidated platform, and savings from avoiding the installation of new physical servers and hardware to keep pace with business growth. Additional benefits come from lower software licensing fees and energy costs. Over three years, Igloo is expected to earn a return on investment of approximately 169% with the company breaking even in the first year.

“We have a highly seasonal business that can’t afford downtime or slow performance during our peak demand periods. So one of the best decisions we made was moving to a virtualized Sun SPARC/Solaris platform running Oracle Database. It literally opened the floodgates in terms of capacity and flexibility, and we’ve experienced 100% uptime to date, which has made a huge difference with our customers while also shrinking our operating costs. I can’t think of a better combination than SPARC and Oracle Database when you need extreme performance, reliability, and availability.”

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