Grupo Maseca leverages HP's Adaptive Enterprise strategy to maintain worldwide leadership in the production of tortillas



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Edgar SosaInformation Technology CoordinatorGrupo Maseca



Solutions for the Adaptive Enterprise.



Grupo Maseca, one of the top 100 Mexican companies, selected an HP Adaptive Enterprise infrastructure to enable it to remain the number one producer of corn flour and tortillas in the world.

Founded over 50 years ago in Mexico, Grupo Maseca (Gruma) has built its enormous global business on the strength of the most traditional Mexican food item: the tortilla. While the worldwide food market is tough, and growth has not been easy, Gruma has become one of the most influential enterprises in Mexico. It has achieved annual sales of US\$1.8 billion, and has successful operations in the United States, England, Central and South America.

Gruma has a production capacity of over 3 million tons of corn and wheat based products. Edgar Sosa, Information Technology Coordinator at Gruma, described, "In many countries Gruma is the principal producer of corn flour and its derivatives, with revenues coming from the sale of corn and wheat flour, and pre-packaged tortillas. The Company has 29 corn flour plants, seven wheat plants, 20 tortilla factories, and over 80 distribution centers."

Constantly seeking excellence

The Company's success is due in part to its constant pursuit of excellence. All its plants have received the ISO 9002 quality certification and the ISO 14001 environmental certification.

From an IT perspective, Gruma has a goal of maintaining technological advantage via leading-edge solutions – convinced that this is the best way to remain competitive in a global market. "Three years ago we installed our enterprise resource planning (ERP) system, SAP R/3, and it has become the foundation for our business practices around finance, production, and sales," explained Sosa.

He continued, "The more we use the ERP system, the more data we need to manage, and the more valuable this information becomes to sustaining our competitive edge. It is mission-critical for us to maintain the high availability of this data, but it is complicated by having operations in Europe and across Latin America, which demand continuous network access to the information from 150 locations of varying sizes."

Evaluating new technology

Given the criticality of the ERP information and to satisfy its growing business needs, Gruma decided to reassess its choice of EMC Symmetrix data storage and the server platform hosting the SAP application. It embarked on an evaluation of other leading-edge infrastructures that would deliver high-performance, be highly availability, and have great scalability.

Sosa recalled, "In order to evaluate new technologies, we created a very detailed request for proposal (RFP) which contained of all the necessary information – including operating cost expectations – to allow the invited vendors to prepare and present their comprehensive responses."

In addition to EMC, which had partnered with Unisys, Gruma received proposals from IBM and from HP. The Company evaluated each proposed solution's characteristics, functionality, connectivity, and vendor support.

Sosa reflected, "We gave special attention to the datamigration process that would need to be undertaken if the solution were implemented, because we wanted to minimize the risk associated with the transfer. We also wanted to ensure that we selected a solution that would integrate well with our architectural needs and deliver the overall strategic value-add we wanted for the company. In short, we were looking for an infrastructure that would support our non-stop operations, keep up with our growth rate, and allow us to reduce operational costs."

HP delivers the ideal infrastructure

The results of the evaluation showed Gruma that HP would provide the best solution. Sosa elaborated, "HP put forward the most robust, well balanced, and fully integrated solution. It included a very high-quality centralized HP storage system, which would interconnect well with the new servers and our remaining legacy servers. The other vendors proposed application platforms and storage solutions that were not as flexible. HP was able to capitalize on having comprehensive offerings for HP-UX®

and Microsoft Windows® 2000, and we were in favor of a migration to Windows."

The HP proposal not only satisfied Gruma's HP-UX and Windows 2000 integration needs, but also included a set of strong consulting and support services. "It was the combination of these factors that gave HP the competitive advantage," noted Sosa.

"The most important goals for this project were to improve infrastructure availability and enduser response times, while lowering operational costs – HP has delivered all of this and more."

– Edgar Sosa, Information Technology Coordinator, Grupo Maseca

Mitigating risk and relieving fears

"This was a very complex project not only from an operational and risk management perspective, but also from a delivery perspective. The new infrastructure components needed to arrive on a very specific timetable, and in an exact sequence, in order to meet our budget constraints," explained Sosa.

He elaborated, "Owing to its criticality to the business, we opted to install the new storage subsystem first, even though technically and tactically it was riskier to do so before the server migration. We made this decision because we knew the HP disk arrays would give us immediate demonstrable results such as better response times, higher availability and shorter backup cycles."

Deploying the storage environment also involved implementing the storage area network, making the first phase multifaceted. Gruma installed two fully configured HP StorageWorks Disk Array XP512 subsystems – connected via Fiber Channel into a storage area network (SAN) – to house the 10 terabytes of business-critical data that was to be accessed by both UNIX and Windows servers through a 16 port Fiber Channel Switch. It was architected to provide zero down-time backups, and enable continuation of full operation in a disaster recovery scenario.

With regard to the configuration of the disk arrays Sosa noted, "We decided to use the Raid 5 level of data protection versus Raid 1, because it offers increased storage capacity. We were unsure of the affect this might have on the performance, but not only did we achieve greater storage capacity, but our data retrieval response times are far superior compared to the legacy EMC Symmetrix systems."

To this day Sosa cannot forget the fears he experienced prior to the transition, he said, "At the beginning my fears were very high, but they were very quickly calmed by the consultants from HP Services. The consultants' attention to detail and experience enabled the installation to go very quickly and smoothly."

The next, and final, phase dealt with the transition from the UNIX server to Windows 2000.

'Buena, Bonita y Barata'

The benefits from the new infrastructure have been huge for Gruma. Sosa observed, "For businesses like ours, that simply cannot stop, being able to use technology to reduce risks and maintain operations 24x7 is vital. The most important goals for this project were to improve infrastructure availability and end-user response times, while lowering operational costs – HP has delivered all of this and more."

The new high-performance HP storage environment has cut response times by 50 percent. In addition, the time taken to backup the data also has been cut in half, reducing the operational effort and expense associated with this task. The Raid 5 configuration has significantly reduced Gruma's per-megabyte storage cost, which in turn has had an enormous positive impact on the payback period.



Sosa reflected, "For us it was very valuable to see how successfully HP was able to balance our special needs – making sure that all tasks were accomplished in the correct sequence – with completing the implementation in a timely manner. We are delighted with our partnership with HP – it is without doubt that HP's Adaptive Enterprise strategy has helped Gruma maintain its competitive lead."

He concluded, "The vast majority of our worldwide businesses have benefited from the HP solution. This cost-efficient, centralized global infrastructure enables us to efficiently service the business needs in America, England and Central America from here in Mexico. As we colloquially say in Mexico this solution has been 'Buena, Bonita y Barata' - meaning good, pretty and inexpensive."

At a glance

- Company: Grupo Maseca (Gruma)
- Location: San Pedro Garza García, N.L. México
- Founded: 1949
- URL: www.gruma.com
- Primary business: The production, marketing, distribution, and sale of corn flour, packaged tortillas, and wheat flour.

Challenges

- Select and deploy leading-edge technologies to gain competitive advantage.
- Choose a solution that would deliver high performance, have great stability and be highly available.
- Minimize risks associated with any required data transfers.
- Partner with a vendor that could deliver on time and in the correct sequence.

Solution

- HP industry-standard servers running Microsoft Windows.
- Two fully configured HP StorageWorks Disk Array XP512 subsystems.
- 16 port Fiber Channel Switch.
- Implementation and data migration consulting from HP Services.

Results

- Project delivered on time, without adverse impact on business operations.
- New infrastructure provides increased availability.
- End-user response times have been cut by 50 percent.
- Operational costs have been reduced and overall efficiencies improved.

For more information on how working with HP can benefit you, contact your local HP sales representative, or visit us through the Internet at our world wide web address: http://www.hp.com

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