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ROI CASE STUDY
MICROSOFT GREAT PLAINS
THE BELL GROUP

THE BOTTOM LINE

The Bell Group integrated Great Plains into its IT and operations cultures to eliminate chronic supply chain disruptions, increase sales, and reduce labor.

ROI: 211%

Payback: 0.48 years

THE COMPANY

The Bell Group is one of New Mexico's largest private employers, and has been a part of the business community of New Mexico since 1944. Founded by Saul Bell as a wholesaler of jewelry supplies to primarily Native American jewelry craftsmen, the company has grown to supply jewelers in every country in the world though catalog sales, dealers and their own sales forces. The company remains family owned and has had annual sales growth for more than 20 years.

The Bell Group employs more than 500 associates in a variety of business areas including manufacturing, engineering and product development, distribution, supply chain management and purchasing, and sales and marketing. Manufacturing operations are diverse, ranging from full sheet metal machining capabilities to precious metal casting, as well as fine and electronic assembly. Sales operations include inside and outside sales forces, international dealer management, telephone-based customer service and sales, and walk-in sales for local customers. The marketing functions at The Bell Group are completely in-house, and include everything from an in-house photography studio to a high tech graphic arts environment. State-of-the-art technology is now found throughout the company, and include voice-activated RFID (Radio Frequency Identification) for warehouse workers, and digital graphic controls for quality assurance and product management. Skillful use of technology gives The Bell Group an edge in their competitive markets by enabling efficiencies that result in lower costs for customers. The Bell Group's information management also reduces the risks inherent to making strategic business decisions.

THE CHALLENGE

During 1999, The Bell Group realized it had a problem. While the company had a great business model and a dedicated, hard working and talented work force, several aspects of the business were in a state of crisis. The work force was working full tilt, often incurring over-time just to get product out. Sales transactions were delayed by back orders 30 percent of the time, which was significantly higher than the industry standard of 3 percent. Limitations on both visibility and process improvements had caused throughput to decline, and labor to rise. Conversions of inventory and accounts receivable to cash had slowed.

Underlying Bell's problems was an IT system that did not match the company's business processes and was difficult to use. The employees needed a system that could better support their interaction with the customers. The Bell Group was on its second homegrown legacy system, which took three years to develop and was obsolete when it went live. The system was labor intensive, and provided limited benefits from visibility and integration. As a result, departments worked too independently. For example, manufacturing staff received no information from, nor did it exchange information with the sales or inventory staffs. Other departments were similarly isolated and operated on their own. These disconnects disrupted the supply chain, diverted capital to financing inventory, and accounts receivable

THE STRATEGY

During 1998, the Bell Group began to take steps to correct its supply chain problems by improving the quality of information available to its warehouse and other departments along the supply chain. The Bell Group sought a broad-based companywide solution that would provide better reporting to employees involved with finance, sales, fulfillment, warehousing, and marketing. During the selection process, Bell looked at PeopleSoft, Solomon, Microsoft Great Plains, and several hardware specific vendors. Microsoft Great Plains was selected for several reasons: It is readily customized and allows for integration across functionalities such as CRM, warehouse management, and BI (Business Intelligence). Additionally, Microsoft Great Plains had a cultural approach that appealed to Bell Group. Bell wanted to have technical ownership of its solution within five years. Bell sought this in order to both minimize external consulting costs, and maximize its ability to internally develop business driven solutions based on its own culture and strategic needs.

In January 1999, an internal team of 13 IT staff and six business staff began implementing the solution with Great Plains' Premier Support Group:

- The IT team upgraded the legacy dumb terminal environment to a new PC environment.
- The team went through every functional area in the company, and examined the essential steps along the value chain. These critical processes, along with many smaller ones, were analyzed to determine how they could be optimized by the transition to Microsoft Great Plains. Specifically, it was determined whether the related functionality in Microsoft Great Plains should be customized, or the human process within the company should be changed. In many instances, the business process was changed, and this analytical process helped to minimize the amount of customization during the implementation.
- Late in the deployment, the warehouse management and forecasting systems within Microsoft Great Plains had to be replaced because the OEM agreement between Microsoft Great Plains and a third party vendor terminated. Selection and integration of a suitable replacement, Radio Beacon took five months. Additionally, Blue Moon Industries, a Microsoft Certified Gold Partner replaced Microsoft Premier Support at this time.

- The Bell Group's CEO, Andrea Hill, had a hands-on role. Her objective here was to do more than deploy a solution. She wanted to give the company a central nervous system that would optimize the activities of its various parts. She also wanted to shift the focus of her IT staff away from systems development, and towards both support of an off-the-shelf system, and the development of solutions in it based on the business needs within Bell.
- Prior to going live, Bell Group completed three two-day pilots. These pilots were extremely comprehensive. All departments were involved. A large number of transactions were simulated. Virtually all business processes, including human and technological, were practiced. In total, 400 Bell employees participated.

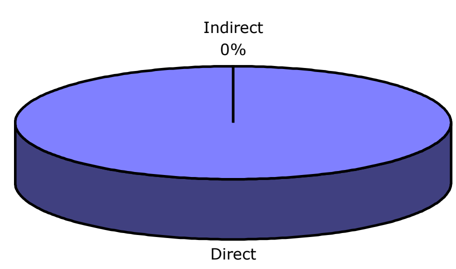
The system went live in July 2002, late by 5 months largely as a result of the time required for the replacement of the warehouse management and forecasting systems.

KEY BENEFIT AREAS

As a result of their Microsoft Great Plains deployment, The Bell Group has increased its profitability by increasing sales while increasing costs by a far lower percentage. This was because of increased productivity in all areas, particularly warehouse and supply chain operations. Key benefits from the solution include:

- Cost avoidance. While The Bell Group's revenues increased 12 percent in 2004, overall labor increased by less than 0.5 percent. The Bell Group's workforce is currently the lowest it has been since 2001. The company has had no layoffs, but has reduced its workforce through attrition. The Bell Group estimates that in the absence of the Microsoft Great Plains deployment, 280 people would have been hired to support the current level of sales.
- Increased throughput. While the amount of sales and the number of orders have both increased, reporting visibility from Microsoft Great Plains has allowed the company to increase the amount of inventory moving through the company without increasing staff in the warehouse.
- Improved direct marketing performance. During the deployment, Bell Group integrated into Microsoft Great Plains a third party CRM product. As a result, Bell is able to fine-tune its mailing lists and significantly improve the response rates from direct marketing. Bell now generates more revenue from the same amount of direct marketing expenditures.
- Increased call-center efficiency. With better customer targeting, the number of inbound calls that do not result in a sale has reduced by 35 percent. As a result, revenue per call and per call-center employee have both increased.
- Improved customer satisfaction. Reduced back orders, more rapid deliveries, and increase order accuracy have all caused improved customer satisfaction metrics to increase by 3 percent. This has increased the level of repeat sales.

BENEFITS

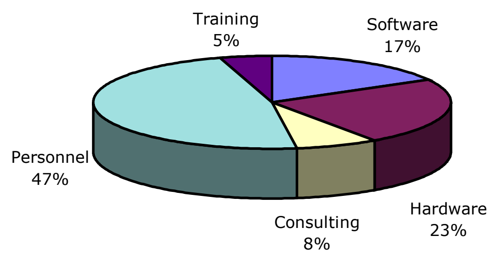


TOTAL: $34,344,000

KEY COST AREAS

Bell's largest deployment cost category was personnel, at 47 percent. This is a result of the shift in the company's IT strategy during the deployment. Rather than developing homegrown systems, this staff now works with various teams in the organization to create Microsoft Great Plains based solutions that optimize efficiencies within the various departments. As a result of the replacement of VAX dummy terminals with a PC based system, hardware was the next largest cost category at 23 percent. Software, consulting, and training comprised 17 percent, 8 percent, and 5 percent, respectively.

COSTS



TOTAL: $6,445,903

LESSONS LEARNED

Bell faced challenges as a result of the need to replace the warehouse management system. Selection of a suitable replacement, which was in beta at the time, lengthened the deployment by 5 months, and was a significant cause of the deployment going over budget by 18 percent.

CALCULATING THE ROI

Nucleus calculated the costs of personnel, hardware, software, consulting, and training costs to quantify Bell Group's total investment in Microsoft Great Plains. Benefits consisted entirely of staff avoidance. This was quantified by estimating the number and costs of hires that would have been necessary to support the current level of sales in the assumed absence of Microsoft Great Plains.

DETAILED FINANCIAL ANALYSIS
The Bell Group

SUMMARY

Project:	**Bell Group Great Plains Deployment**
Annual return on investment (ROI)	**211%**
Payback period (years)	**0.48**
Net present value (NPV)	**9,656,436**
Average yearly cost of ownership	**2,148,634**

ANNUAL BENEFITS	**Pre-start**	**Year 1**	**Year 2**	**Year 3**
Direct	0	11,448,000	11,448,000	11,448,000
Indirect	0	0	0	0
Total Benefits Per Period	0	11,448,000	11,448,000	11,448,000

DEPRECIATED ASSETS	**Pre-start**	**Year 1**	**Year 2**	**Year 3**
Software	750,000	0	0	0
Hardware	1,500,000	0	0	0
Total Per Period	2,250,000	0	0	0

DEPRECIATION SCHEDULE	**Pre-start**	**Year 1**	**Year 2**	**Year 3**
Software	0	150,000	150,000	150,000
Hardware	0	300,000	300,000	300,000
Total Per Period	0	450,000	450,000	450,000

EXPENSED COSTS	**Pre-start**	**Year 1**	**Year 2**	**Year 3**
Software	0	112,500	112,500	112,500
Hardware	0	0	0	0
Consulting	250,000	250,000	0	0
Personnel	0	1,018,056	1,018,056	1,018,056
Training	304,237	0	0	0
Other	0	0	0	0
Total Per Period	554,237	1,380,556	1,130,556	1,130,556

FINANCIAL ANALYSIS	**Year 1**	**Year 2**	**Year 3**
Net cash flow before taxes	10,067,444	10,317,444	10,317,444
Net cash flow after taxes	5,258,722	5,383,722	5,383,722
Annual ROI - direct and indirect benefits			**211%**
Net cash flow after taxes (direct only)	5,258,722	5,383,722	5,383,722
Annual ROI - direct benefits only			211%
Payback (years)			**0.48**
Average annual cost of ownership			2,148,634
3-year cumulative ROI			382%
3-year IRR			202%

FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%