

Technology Business Strategy for an International Manufacturer

Diversified manufacturer with three divisions operating in three continents engages Edgewater Technology to develop its technology business strategy.

Edgewater's Team of Consultants:

- Conducted a thorough review of the strategic goals of each division to determine technology business drivers;
- Managed an interactive technology education workshop for the leaders of the divisions;
- Identified potential projects and prioritized them based on business impact;
- Evaluated software packages for a match with business needs and technology infrastructure; and
- Laid out a roadmap and mobilization plan to realize the opportunities identified.

The Client: A Diversified Manufacturer

This \$500 million organization has three divisions which:

- Manufacture instrumentation equipment for the automotive industry;
- Provide surface analysis systems and services for the silicon chip manufacturing industry; and
- Manufacture high voltage power drives for heavy manufacturing and processing companies.

The organization has manufacturing facilities in the Americas and Europe, and provides services in the United States, Europe and Asia.

The Challenge

Each of the divisions operated with a high degree of independence and each pursued individual technology initiatives in a piecemeal fashion. Some divisions had made fairly substantial investments in technology projects, but there was no evaluation of the cost-benefits of projects, and no Return on Investment (ROI) analysis to support funding decisions. In addition, there was significant overlap in the needs of the divisions, but there was no mechanism for sharing best practices or technology transfer between the divisions.

Management realized they needed an integrated strategy for the organization which would:

- Support the strategic objectives of each division;
- Drive business value;
- Generate rigorous ROI analysis as a tool for making funding decisions;
- Leverage investments and expertise between divisions; and
- Provide a mobilization plan which would lead to success.

The Business Solution

First Steps

There were two main challenges at the outset of the project: the leaders of each division had never been required to work together before (and in fact, many of them had not even met one another), and the division leaders' backgrounds were in manufacturing rather than information technology. As a first step, Edgewater delivered a two-day educational executive workshop for the division leaders, which had the dual purpose of teambuilding and educating them about the opportunities and challenges of technology and business as it relates to their strategic plans.

The Edgewater team reviewed the strategic plans of each division, and extracted the technology business drivers – those strategic objectives which new technology solutions could impact. Edgewater used these technology business drivers to develop a list of potential projects which would support the objectives of the divisions.

Prioritizing the Opportunities

The next step was to prioritize those potential projects to identify which would have the greatest positive impact on the organization. For each potential initiative, Edgewater evaluated the likely business benefit, developed high-level cost estimates and identified the technology and organizational challenges involved. Using this framework as the starting point, we worked with the leaders of each business to reach consensus on the priority of each potential project – for the divisions individually, and then the organization as a whole. Supply chain management rapidly emerged as the most important area for each division, with similar needs and the opportunity to use common tools for the entire organization. Online customer service and design collaboration tools were also identified as projects with high potential impact.

Package Evaluation and Selection

Edgewater evaluated seven supply chain automation packages and services, and developed a detailed ROI analysis of the projected impact of each package on each division. The most important aspect of the ROI analysis was it provided a link between the functionality provided by each vendor and the specific needs and business metrics of each division. This allowed Edgewater to develop cost savings estimates which were based on the realities of each division and enabled the buy-in of each division's leaders. In parallel, Edgewater performed a technology integration analysis of each vendor's products to determine the fit with the existing systems, processes and technologies of each division. This analysis narrowed the field to two vendors: One provided the highest projected ROI, but had the highest price tag, and the other had a lower projected ROI, but a much lower price tag. Presented with our findings, the client selected the supply chain package vendor with the lower total ROI and lower initial investment. Edgewater recommended a phased implementation plan, which is currently underway. Interestingly, Edgewater recommended an off-the-shelf package which will not require any customization by Edgewater.

Given the limited financial and human resources of the client, Edgewater recommended deferring the online customer service and design collaboration projects until they had started to demonstrate success with the supply chain management initiative.

The Technical Approach

There were a number of technical challenges confronting the analysis and recommendation. Each division had different systems in place and varying levels of technical capabilities. While some divisions had homegrown systems and informal server-room environments, others had standard commercial packages running in well-organized data centers. To achieve greatest financial and operational benefit, the divisions needed to share a common application. Hence, Edgewater's recommendations needed to accomplish both heterogeneous system integration and consolidated data management. A key part of the long-term success of a package rollout is how well the operational staff can support the package. To this end, Edgewater also considered various hosting and support options for our client.

After interviewing key staff at each of the divisions, Edgewater created an evaluation matrix that reflected the business and technical criteria the package needed to satisfy. Edgewater evaluated a number of candidate packages against the matrix. After the evaluation, which consisted of vendor presentations, demonstrations, and technical research, Edgewater Technology presented the results to our client. Edgewater Technology recommended a package that closely matched the client's business and technical needs while offering a reasonable entry cost and high ROI. In addition, based on the limited technical support capabilities of our client, we recommended an ASP-based rollout to best ensure the success of the package.

