Mini Case Managing Technology at Genex Fuels[4]

[4] Smith, H. A., and J. D. McKeen. "Managing Technology at Genex Fuels." #9-L05-1-004, Queen's School of Business, February 2005. Reproduced by permission of Queen's University, School of Business, Kingston, Ontario.

"You have got yourselves into a terrible predicament," said V. R. "Sandy" Sandhuramen, his soft Indian accent belying the gravity of his words. "You are incredibly lucky you have managed to do business as well as you have, but this situation cannot be allowed to carry on." Sandy, a high-priced technology consultant, had been hired by Genex Fuel's new CIO, Nick Devlin, to review the company's technology portfolio and help him and his newly appointed IT architect, Chuck Yee, get a handle on the firm's technology needs.

Genex, a major producer of crude oil and natural gas, is the largest marketer of petroleum and petroleum products in the region. It is structured into three distinct business divisions, each comprising a number of functional segments. Until recently, IT had been decentralized into the three divisions, each with its own director of IT who reported to the divisional executive vice presidents (EVPs). Devlin, formerly the director of the corporate division, had been appointed CIO and given the specific mandate to bring in SAP as the primary technology platform for all the divisions.

"We have to start behaving like we're one business," said the CEO when he appointed Devlin. "I want a much more agile and responsive IT organization than we've had in the past. It seems to me that every time I ask IT to look into something I've heard or read about, they always come up with a thousand and one reasons why it *won't* work. We need to be able to use technology competitively, and that won't happen unless you can get ahead of the curve."

Devlin's excitement about his new mandate had lasted just about a week, until the true scope of the challenge became clear. He had asked each divisional IT director for an inventory of hardware and software currently in place and to briefly outline the work that was in their plans for the coming year. "We must have one of every piece of hardware and software ever produced," Devlin marveled as he scanned their reports. On the one hand, there was a new customer management system called COMC, which had been implemented to improve real-time information exchange between the company's 135 bulk fuel sites and Genex headquarters. On the other hand, IT was still running an archaic DOS-based marketing system called MAAS to provide customer service and reports. "And they want to bring in SAP!" he groaned. "We need a plan, and we need it soon."

That was when Devlin had engaged Sandy to work with Yee. "First, I want a no-holds-barred assessment of our current situation," he had said, and now they were in his office, outlining the "terrible predicament."

"The biggest problem you face at present," said Sandy, "is the fact that you have absolutely no standards and no integration, as you discovered for yourself, Nick." There was a lot of technology out there—both old and new—and it was a political hot potato.

Almost every system had its group of advocates, some very senior in the company. All the EVPs had invested their individual technology budgets in the hardware and software that they felt could best support their work. The problem was that maintaining this mishmash was now costing an arm and a leg. And it was highly doubtful that the company was getting true value for its technology investment.

“We should be able to leverage our existing investments so we can invest in new technology,” said Yee. “Instead, almost all our budget is taken up with holding these systems together with toothpicks and tape.”

“One of the most challenging situations,” Sandy went on, “is Price One.”

Obsolete but absolutely essential, Price One is the fuel-pricing system that stores the pricing algorithms for all fuels marketing functions, including aviation, marine, retail, branded associates, and industrial and wholesale. Although pricing is an integral part of marketing, Price One cannot communicate with COMC and is not easily adaptable to changes in the business environment. Price One perfectly reflected the business and technology that existed ten years ago, but this has now become a real drawback. To get around these limitations while continuing to use Price One, staff manually feed information from pricing requests in COMC to Price One to get approval because both systems use different terminology in coding products for different pricing methods.

Price One also lacks the ability to link information from different systems to ensure data integrity. As a result, Price One has accumulated some irrelevant data groups under pricing for products, and such corrupted data can be detected only by an experienced individual who has been dealing with that product group for decades and who would know at a glance the validity of the data. One of Price One’s critical flaws is its inability to link with other systems, such as COMC, and to pick up competitive market information in order to approve price. Previous plans to rewrite this system have been resisted strenuously by management because of the expense. Now the system is on its last legs.

“And like most oil and gas companies,” Sandy observed, “you have automated very few of your information assets as other types of organizations have done.” Typically for the industry, Genex had grown by acquiring other, smaller firms and had inherited an enormous amount of physical data. It now has more than two million items of paper and microfilm. It has one hundred twenty thousand tapes of data. Some items date back to the 1940s and came from numerous sources. The company’s seismic assets, on which it bases many of its decisions and which has a replacement cost estimated at more than two billion dollars, are stored on a wide variety of media from analog tapes, magnetic reels, and cartridges to optical discs to paper, film, and microfilm. They are spread out across five conventional physical warehouses.

This system of data management is problematic for two main reasons. First, with land sales occurring every two weeks, it is extremely difficult to make timely decisions based

on all known information about a property. Clearly, the more seismic information a company can bring to bear on its decisions, the better it can decide where it wants to do further work. Second, the company's data assets, on which its future depends, are extremely vulnerable. There is no backup. When needed, the only copy of the information requested is physically transported to Genex's offices. The tapes on which the data reside deteriorate further with each reading. Furthermore, much information resides on obsolete forms of media and is getting increasingly difficult to access.

"Finally, IT is getting a lot of pressure from the executive office," reported Sandy. "These guys have seen what's going on in other companies, and they want to see Genex move into the twenty-first century. Staff at Genex cover vast territory and must work from home, from local facilities, or on the road. Not only does Genex need to provide a virtual working environment for these workers, but it also needs to consider how they can work together as a team without having physical colocation for communication."

"Well, I guess we have it all," said Devlin. "Integration problems, outdated hardware and software, inconsistent data, expensive workarounds, pressure to modernize, and substantial budget limitations." Turning to Yee and Sandy, he smiled. "Now what are we going to do about it? Where do we start?"

Discussion Questions

1. What evidence is the CEO using to suggest that Genex is not using technology competitively?
2. Did Devlin need to hire Sandy, a "high-priced technology consultant," to tell him that technology at Genex was a mess?
3. Devise a strategy to successfully implement enterprisewide systems (such as SAP) at Genex.