Chapter XXII

End-User Computing at BRECI: The Ordeals of a One-Person IS Department

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EXECUTIVE SUMMARY

Small business is frequently touted as the fastest growing part of our economy. In the 1990s, a small business can easily use technology to its advantage. This has been made possible by the rapid and significant drop in the cost of hardware and networking, the availability of a wide-range of cost-effective software packages, and the escalating computer and information literacy seen in executives and the general workforce. In spite of this, and contrary to what is reported in the general and computer press, the application and understanding of technology is lacking in many small businesses that could benefit greatly from its use. In contrast to the success stories seen in the press, the intention of the case study presented here is to show a less than successful attempt at the introduction and use of information technology in a small business. The business was a multi-state consulting firm with a highly educated workforce, geographically-dispersed projects, and demanding customers. Information technology offered the promise of significantly reduced administrative and communication costs; improved document production, distribution and management; and improved internal communication. The benefits stalled just as they were beginning to be realized, because executive management lacked the necessary understanding and failed to provide the...
support that was needed to fully realize the benefits. In addition, end users failed to understand their role in supporting the introduction and implementation of information technology, and thus sealed the fate of the overall implementation. IS staff hiring and transition planning, training, software selection and piracy, ergonomics, managerial support, and end-user involvement are examined in this case. While the details have been disguised to conceal the identity of the company and individuals involved, the case is an accurate depiction of end-user computing at “BRECI” and many other small businesses.

BACKGROUND

Basin & Range Environmental Consultants, Inc. (BRECI) provides a limited number of highly specialized environmental consulting, planning and impact mitigation services to clients throughout the western United States. Most work done by the firm is the result of the requirement to conduct environmental impact studies for, and mitigate adverse impacts from, projects funded or licensed by public agencies. The entire industry tends to move through feast and famine cycles with numerous projects authorized within short periods of time and then nothing for extended periods. While an occasional large-scale project is approved, it appears that the days of numerous simultaneous large-scale projects is over. In the western U.S. in the last 10 years, there have been only four large projects which needed the type of consulting services provided by BRECI. BRECI had successfully bid two of these.

BRECI has offices spread throughout the Rocky Mountain and Great Basin states of Idaho, Utah, Colorado and New Mexico. The corporate office was moved from Boulder, Colorado to Colorado Springs, Colorado in the late 1980s. This was done because a major career opportunity became available for the spouse of BRECI’s president. The physical location of the corporate office is of little concern as long as it near a major airport and has easy access to the interstate highway system. The administrative activity remained in Boulder after the move because employees preferred Boulder and did not want to move to Colorado Springs. The Boulder office also became a field projects office and had a small staff of environmental specialists. An executive secretary, graphic artist and eventually an administrative assistant were hired for the Colorado Springs office. An environmental specialist with an interest in business administration became the Colorado Springs business manager and took over some corporate administrative functions. The corporate office also became home to four high level environmental specialists who were charged with overseeing various parts of a large project that was under way.

A major field project office was maintained in Salt Lake City, Utah. The purpose of field offices was to service major projects and clients. While these offices were originally intended to be temporary, they took on a life of their own due to the multi-year projects they serviced and the number of highly skilled staff who were, over a period of years, converted from temporary to permanent status. The philosophy of BRECI was that field offices would remain if they could bring in enough work to be self supporting. The attitude in the field offices was that they were too important to be disbanded. In addition, field office staff failed to recognize that the large projects would eventually wind down and did little to market themselves and thus ensure their survival. Luckily, a large project near Las Vegas, New Mexico was gearing up at about the same time the Utah project was...