A Case Study on a Security Maturity Assessment of a Business-to-Business Electronic Commerce Organization

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EXECUTIVE SUMMARY

GlobalUBid.com is a B2B (business-to-business) e-commerce company offering excess and obsolete inventory to online customers. GlobalUBid is rapidly expanding into the global online marketplace; but recently, its Web site crashed due to a denial-of-service (DOS) attack. A lack of security awareness at an organizational level has left GlobalUBid's online system vulnerable to internal and external attacks. Though informal security policies are in place, many employees are not aware of them nor are they enforced on a regular basis. Unsecured aspects of the physical workplace make the organization vulnerable to disgruntled employees, hackers, and unscrupulous competition. GlobalUBid has hired UR Secure consultants to conduct a security assessment in uncovering internal and external vulnerabilities. UR Secure has made recommendations for improved security, though the organization must develop most of the implementation details. GlobalUBid management recognizes the need for improved security, though there is a concern about the financial implications of implementing a security plan.

Keywords: business-to-business; denial-of-service; e-commerce

ORGANIZATIONAL BACKGROUND

GlobalUBid.com became a startup company in March of 1998 in order to provide online auction capabilities to U.S. companies getting rid of excess inventory. GlobalUBid is one of the first online auction sites in the business-to-business (B2B) e-commerce industry. Inspired by the skyrocketing stock values of 1997 IPOs (initial public offerings), local venture capitalists backed the company with an initial investment of $1.5 million for building the online B2B auction site. The strategic plan was to build the system as quickly as possible with an expenditure of $1,000,000 during the first year.
In May 1998, 10 Web developers, two database administrators (DBAs), and a system administrator (SA) were hired to apply both Oracle and Microsoft software technologies in building the system. The technology staff worked an average of 98 hours per week (14-hour days, seven days a week) with the promise of stock options significantly increasing in value when the company went public. The company had announced plans for an IPO offering in the spring of 1999. Approximately half of the Web developers left within the first three months because of the burnout associated with the mandatory overtime to complete the online system. These employees were replaced immediately but at a higher cost for salaries and increased stock options.

Management and the technical staff knew that when the venture capital ran out, the company would have to declare bankruptcy without an opportunity of going public. They were aware of the dot com IPO offerings that made employees with stock options instant millionaires. They were also aware of the increasing number of failed dot coms littering the Internet, many of which had insufficient venture capital to sustain development efforts.

By April 1999, the company had developed the Web technology to support online auction capabilities. The online site became available for public use in July with limited domestic support. Though the online auction site was deemed successful by GlobalUBid’s management team, more customers were needed to increase inventory sales. Inventory turnover was less than 10% per month with customer growth rate increasing 2% each month. Many of the sellers were expressing their dissatisfaction with the inventory turnover rate. It was decided that the IPO would be moved back by at least one year in order to increase the customer base and the inventory turnover rate.

GlobalUBid expanded its customer base by entering the global B2B marketplace primarily through acquisitions. GlobalUBid acquired GCB.com (Global Customer Base) in December 1999 in order to double its site traffic and add more than 5,000 new sellers in the European market. In February 2000, GlobalUBid acquired an online transaction system called StaticPrice from a company in Frankfurt, Germany. This B2B software component provided a powerful search engine and expanded GlobalUBid’s business model to include fixed quote pricing in addition to the auctioning component. Customers could now purchase inventory that was offered at a fixed price in order to expedite the purchasing process. This acquisition provided an opportunity to expand GlobalUBid’s global presence in the Asia Pacific area and Northern Africa. By the end of the 2000 fiscal year, the number of global customers exceeded 1,600 and the rate of inventory turnover doubled.

By the spring of 2000, a marketing manager was hired to manage a newly created marketing department composed of 100 employees. The objective was to have an online support system in place by early September in order to grow international sales and handle customer service enquiries. The marketing manager would take advantage of customer and seller data in order to predict inventory sales and identify potential customer growth areas. The confidential information stored in the system’s databases would be used to personalize the company’s relationships with both sellers and buyers to increase sales and inventory offerings. This confidential data, though password protected, was readily accessible by management, technology personnel, and the sales staff.
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