Creating and Marketing a Dental Supply Online Store

David Gadish
California State University, USA

INTRODUCTION

The dental supply company is family owned and operated. It was founded in the 1940s and currently serves approximately 1,000 dental offices and offers over 16,000 different products from over 200 manufacturers. Management did not consider the importance of information technology solutions that other firms have implemented to increase efficiency and cut costs. A decision to modernize came in 2003 as revenues started falling and existing clients started ordering dental supplies from competitors. This analysis covers the first 2 years of marketing from November 2004 to November 2006. The process was preceded with a 2-month campaign planning phase.

Understanding the Dental Supply Industry

The North American market size in 2005 was estimated to be $5.6 billion (Patterson, 2006). Two main players in the market are Patterson with 32% and Sullivan-Schein with 30% market share. Market growth is estimated to be 7% to 9% annually.

The Patterson Dental Company provides a range of consumable dental products, clinical and laboratory equipment, and value-added services to dentists, dental laboratories, institutions, and other health care providers. Patterson Dental has the largest direct sales force in the industry, totaling nearly 1,300 sales representatives and equipment/software specialists. Projected revenues for the fiscal year 2005 were 1.8 billion dollars (32% of the North American market share) (Patterson, 2006). Sullivan-Schein Dental has an extensive line of dental, medical, and pharmaceutical products (Sullivan-Schein, 2006), the company holds about 30% of the North American market in fiscal year 2005 (Patterson, 2006). Benco Dental serves 20,000 customers in 18 states and employs about 950 associates (Benco, 2006).

Pearson Dental Supplies offers dental supplies and dentist office equipment. The company was founded in 1945 and its supply catalog carries over 65,000 products, making it one of the big players in the dental supply industry (Pearson, 2006).

The other players in the Dental Supply Industry include but are not limited to AccuBite Dental Supply, Atlanta Dental, Applied Dental, Burkhart Dental, Conger Dental Supply Company, Darby Dental Supply, Discus Dental, and Eastern Dental Supply.

The North American dental market consists of about 156,000 U.S. dentists and around 18,000 Canadian dentists (Pearson, 2006). 65%-70% are sole practitioners. There are over 135,000 dental practices. The average revenue per dentist stands at $550,000 per annum. Dentists spend $0.05 – $0.07 revenue per dollar on consumables supplies, which means $25,000 to $35,000 of revenues per annum.

The international market has enormous possibilities for U.S. exports. The European Union will continue to be one the largest export markets for the U.S., but countries in Central and South America and India are becoming larger buyers of high quality dental supply.

The U.S. has historically accounted for roughly 50% of the global market for dental equipment and supplies. In 1998, the total export of dental products totaled $633 million. In 1998, exports to Europe rose to $277 million, which represented 44% of total exports of dental supplies. As Japan and China become world powers, their need for dental hygiene products increases. As of 1998, U.S. sales reached $28 million, which represented a 40% increase since 1996. This is attributed to economic growth, higher income levels, increased access to dental clinics, and great awareness of dental hygiene (Palmer, 2002).

The Internet, the World Wide Web, and other developments of the information revolution will redefine patient care, referral relationships, practice management, quality, professional organizations, and competition (Bauer & Brown, 2001).

THE DENTAL SUPPLY E-COMMERCE SOLUTION

The Web offers the advantages of both centralization of information and coordination (Marks, 2004). To survive, the company needed to increase revenues and reduce operating costs. They chose to accomplish this by automating business processes through the implementation of their online solution. The Web site provides customers with information online. It allows dentists to place orders online. It also allows prospective dentists to reach them. The company will become more accessible to their clients and prospects (Goff, 2002). It will also be able to further build on its brand.

The company uses their Web site to further inform its customers of new dental supplies and sell dental supplies to its customers. The company's Web site integrates three areas of commerce:

- The Products system includes product search and an online catalog system
- The Customers system includes a customer accounts systems, authentication system and links to the order and product systems
- The Orders system includes customer orders and delivery systems

Databases, Web servers, Web applications, and other computer technology were used to get the Web site up and running. Data about dental products was loaded from the company's existing ERP system. Product images were requested from a few hundred dental product manufacturers who's products the company resells, and were then incorporated into the e-commerce solution. The process is detailed in the following sections.

Planning of Dental Supply E-Commerce Infrastructure

In creating the e-commerce solution for ENG Dental Supply, the Systems Development Life Cycle process was utilized. It consists of seven phases. The planning phase covered project scope and budget. The analysis phase included research of the competition, analysis of employees and client requirements, research of ISPs, and research of e-commerce packages. The design phase included designing processes to add/remove/modify products and planning marketing strategies. The system build phase includes the purchasing and configuring test computer, purchasing the e-commerce package, and development and testing of an e-commerce Web site. The data build phase involved many activities including: extraction of product data from the DMS system, identification of products to list online, cleanup of product data, classification of products, data load, collection of product images, population of images into the e-commerce Web site, and finally testing the data in the e-commerce Web site. The deployment phase consisted of: creation of training materials, training employees, moving the site from test to production environment, and training clients online. The final phase is operations, which included activities; updating prices, adding/removing/modifying products, and marketing and supporting the e-commerce Web site. Once these activities were identified, a preliminary project budget was established (see Figure 1).

Determine Project Scope

ENG needed to catch up with their competitors almost immediately if they wanted to remain a viable dental supply company. In order to do so, ENG needed to provide its customers with an online product catalog that would have electronic commerce capabilities so the customers could compare products and place orders.

Determine Budget

The client allocated $45,000 for the initial implementation, and so the question facing the team was how to implement the maximum possible for the tight budget.

Figure 1. Dental supply e-commerce planning phase

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