tant Web site factors that contribute to the success of B2B IIM (for a visual representation of our framework for the effective implementation of B2B IIM, see Figure 1).

The purpose of this research is not to identify conceptually the linkages among the different dimensions of the critical success factors or to examine how these factors affect the success of B2B IIM. Instead, this section discusses some potential linkages between the constructs that might be used as a base for further research.

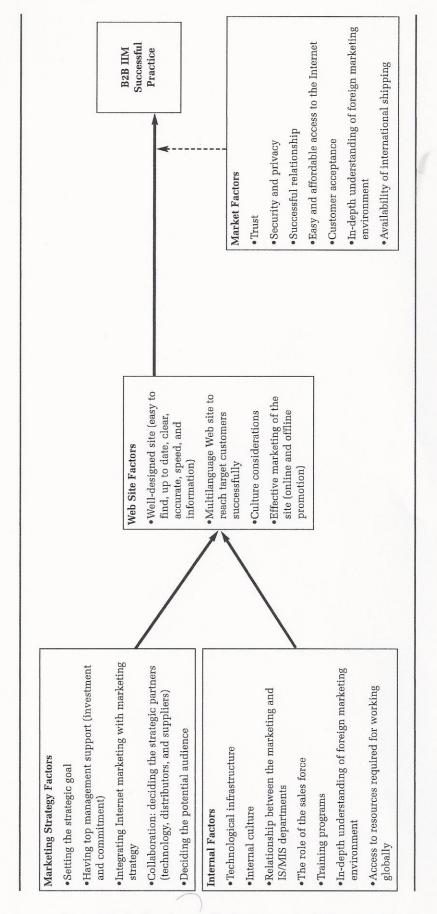
The research framework (see Figure 1) reflects two ways of how critical success factors could affect B2B IIM success. The first way focuses on the direct linkages among the different components of the proposed framework. On the basis of these types of relationships, we could suggest that marketing strategy factors and internal factors influence Web site factors. Prior research supports this view. For example, Prasad, Ramamurthy, and Naidu (2001) and Sheth and Sharma (2005) find that e-marketing strategy affects and will continue to change IIM practice. For example, culture, an element of the internal factors, has been shown to have a significant impact on how Internet users browse and shop and even to influence their expectations from a particular Web site (Krishnamurthy and Singh 2005). Extensive empirical investigation is needed to understand how the critical success factors could affect one another and, in turn, the success of B2B IIM.

Combining information integration with active marketing on the Web is especially important for B2B IIM. According to the proposed research framework, Web site factors affect the success of B2B IIM. Previous research has shown that culturally adapted Web content leads to better usability, more favorable attitude toward the site, and higher purchase intentions (Singh, Furrer, and Ostinelli 2004). According to Herbig and Hale (1997), if a Web site is the first critical step in forging a personal international business relationship, the ability to "connect" will not be established unless the Web site ensures that the first connection is sensitive to the cross-cultural aspects of interface design, navigation currency, time and state conventions, localization, and internationalization.

The second type of relationship identifies factors that moderate the success of B2B IIM. In our study, market factors may moderate the impact of Web site factors on B2B IIM success. Therefore, if both a positive market environment in terms of security and trust and a positive, encouraging culture facilitate the use of the Internet as a medium for buying and selling, we expect successful B2B IIM, and vice versa. Having a Web site is not enough to generate international sales, even

Proposed Research Framework

Figure 1.
A Proposed Framework for B2B IIM Critical Success Factors



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though the Internet makes it technologically feasible for global customers to access a company's site. Therefore, companies should consider the market factors and adopt emarketing strategies to the desires and needs of international customers. A holistic, quantitative analysis is needed to investigate the direct and indirect effects of the critical success factors on B2B IIM success.

This article describes qualitative research into companies' B2B IIM efforts through a series of in-depth interviews. The evidence from multiple cases is compelling, and therefore the overall study is more robust. Multiple case designs follow a "replication" logic (as opposed to a "sampling" logic). Therefore, contrary to a common misconception that case studies provide little basis for scientific generalization, multiple case studies are generalizable (though not necessarily to multiple populations or contexts). Our goal was to expand and generalize theories (analytic generalization), not to enumerate frequencies (statistical generalization). Given our objectives, a case study with a multiple case design was the appropriate methodology. Having multiple sources of evidence also helps overcome the commonly cited limitations of interviews (i.e., bias, poor recall, and poor or inaccurate articulation). In addition, we used paraphrasing and summarizing intermittently during each interview to ensure that the interviewees' answers were interpreted accurately.

The criteria for selecting the organizations to participate were as follows: First, a marketing manager/sales manager (or the person who was in charge of IIM activities) needed to be available to participate in the interview. Second, companies needed to have already used or to be in the process of using the Internet for B2B IIM. Finally, companies should come from different sectors. Several organizations were contacted, and three prominent ones expressed interest and met the criteria. We decided to use all three. We have given each company a false name to preserve anonymity. At the time of the study, two of these companies, Petrolco and Electricco, had completed a B2B IIM project and were in the realization stage. The third company, Textileco, was midway through the implementation stage.

We conducted three interviews with the Internet manager, the e-business strategy manager, and the e-business manager at Petrolco; we conducted only one interview with the e-commerce marketing manager responsible for the Internet marketing project at Electricco; and we conducted only one interview with the managing director responsible for the Internet marketing project at Textileco. The number of interviews that could be conducted was limited because of the lack of time and resources. However, follow-up telephone

## **METHODOLOGY**

## Participants in the Case Study

calls were made to cover some aspects that were not fully covered in the interviews.

## **Data Collection Process**

The technique we chose for data collection was face-to-face interviews. We deemed this to be the most suitable approach mainly because of the "exploratory" nature of the study, which meant that a comprehensive discussion was required regarding several issues (i.e., marketing strategy, internal factors, market factors, and Web site factors). This would provide the opportunity for interaction rather than answering specific questions.

To give structure to the interview, we prepared and documented some guidelines. These were based on the study outcomes and were aimed at achieving the study objective. Interviewees were encouraged to talk about any issues that they believed were important to ensure that the various elements of B2B IIM were addressed. All critical factors were covered with all interviewees, and there was flexibility to rephrase or reframe questions according to the context of a particular interview.

We recorded the interviews using a tape recorder and subsequently transcribed them. We computerized these transcripts into a database. We then consolidated all data taken from interviews, observations, and documents and linked them together to create a full picture of each company's entire process of implementation. The diversity of issues represented in all three case studies has the advantage of enriching the data collected. This richness of data facilitates comparative analysis among the cases and therefore leads to theory improvement.

## OVERVIEW OF THE CASE STUDIES

In this section, we focus on the description and analysis of the qualitative data. We consider each critical factor and examine the broader picture of similarities and differences among the experiences of Internet use in each of the three companies.

First, Petrolco is one of the largest industrial companies in the world. The head office of this company is in the United Kingdom and is a base for global Petrolco firms, such as Oil Products, Chemicals, Renewables, Gas and Power, Aviation, Marine Products, and Petrolco Services International (all pseudonyms for Petrolco's subsidiary companies). The company provides a wide range of services from management consultancy to information systems support. The trading and shipping arm of the Oil Products company, Petrolco International Trading and Shipping Company, is based in London. It trades approximately four million barrels of crude oil a day. We conducted interviews with the Internet manager, the e-business strategy manager, and the marketing manager, all of