Amidst increasing pressure from boards of directors, stockholders, and the general public, along with regulatory requirements such as those in the U.S. Sarbanes-Oxley Act of 2002, enterprise risk management has moved to the forefront of corporate concerns. Simultaneously internal auditors have been saddled with the responsibility to ensure adequate internal controls are in place across the enterprise. One reality rapidly confronting many corporate executives is the realization that enterprise risk is not enterprise centric, but emanates from an extended enterprise and includes relationships with vendors, customers, and outsourcing providers. Indeed, in today’s environment we no longer simply compete in a company versus company environment, but rather survival is dictated through successful supply chain competitiveness. Inevitably, these extended-enterprise relationships are heavily dependent on information technology-based systems that are linked through increasingly tight business-to-business (B2B) e-commerce linkages.

The purpose of this study is threefold. First is to articulate the risks surrounding B2B e-commerce relationships in order to enhance the understanding of how those risks can impact enterprise risk management. The second purpose is to explore the various facets of B2B e-commerce relationships and attain a better understanding of the key risk factors that should be monitored as a component of B2B e-commerce risk management efforts. The third is to assist in understanding how to assess a relationship with a current or potential B2B partner in order to better understand the likely risk level being inherited via the trading relationship.

This document provides a detailed report on a study undertaken with the support of The Institute of Internal Auditors Research Foundation to identify the general critical risk factors surrounding B2B e-commerce relationships and to garner a better understanding of how business relationship factors tend to impact the risks from these B2B e-commerce relationships. The project focuses on the supply chain and business partnering risks that evolve specifically from B2B e-commerce relationships. Risk identification includes those evolving at the technical level, application-user level, and the business level in an effort to comprehensively capture the B2B related risks. Additionally, the research takes a look at general business relationship factors in an effort to better understand how these relationship factors might influence assessment of risk in specific B2B e-commerce relationships.

In order to meet the objectives of the research project, a two-stage research method was applied. The first stage consisted of a series of structured focus groups conducted with internal corporate risk management groups (e.g., internal IT auditors, IS security staff, and e-commerce developers) and external risk management advisors (e.g., external IT audit specialists and e-commerce advisors).
consultants). The result of these focus groups was the identification of 49 specific risk factors spanning the three levels of B2B e-commerce relationships (e.g., technical, application-user, and business).

The second stage of the research method was to integrate the 49 identified risk factors into a risk assessment instrument and engage a sample of internal auditors and consultants to evaluate one of their trading partner organizations. These participating professionals also provided information on nine other attributes of the relationship with this trading partner and assessed the desirability of assurance over the trading partners B2B e-commerce operations.

The results of the study indicate that the 49 risk factors form a manageable set of key risk indicators that can be used to provide a preliminary risk assessment of trading partners in B2B e-commerce. There was strong agreement among the various focus group participants as to the key risk indicators that should be utilized and these factors were found to be beneficial to the second group of participants applying the risk instrument.

The additional trading partner relationship characteristics for which data were also collected indicated that variances in trust, power, dependence, technical capabilities, environmental volatility of the industry, and fairness in trading practices had a significant impact on both the satisfaction with the relationship and the desirability of third-party assurance of the trading partners B2B e-commerce operations.

The findings of this research study along with the articulation of the impact resulting from changing supply chain relationships provides a solid foundation for introducing extended-enterprise risk management processes. The discussion should be useful to chief corporate officers, chief audit executives, IS security directors, and B2B e-commerce relationship management specialists in developing assessment and monitoring programs that facilitate the assessment of risk exuding from tightly coupled trading partner relationships.