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Abstract Title:
Best Practices in the Economic Justification of
B2B Supply Chain Management Projects

Richard G. Mathieu
Department of CIS & MS
College of Business
James Madison University
Harrisonburg, VA 22901
mathierg@jmu.edu
540-568-3064

Raktim Pal
Department of CIS & MS
College of Business
James Madison University
Harrisonburg, VA 22901
palrx@jmu.edu
540-568-7094

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Abstract

A business-to-business (B2B) supply chain management (SCM) project is a special class of business project that is characterized by high levels of unpredictability, risk and technical complexity. Due to the fact SCM technologies typically must span vertical architectural levels and must integrate horizontal business processes and enterprise applications, SCM project management has become one of the most demanding business professions. As with any other significant capital investment, supply chain management expenditures must show significant benefits to warrant their continuation and expansion throughout the enterprise. Surprisingly, little academic research has focused on best practices for the economic justification of B2B supply chain projects. This research utilizes a case study approach to examine the economic justification of B2B supply chain management projects within three publicly held multi-national companies. Results from our research show that B2B supply chain projects contain several unique characteristics which suggest the deployment of new economic justification practices.

I. Introduction

Project evaluation methodologies have been abundantly available to business decision makers for years. However, successfully applying these methods to business-to-business (B2B) supply chain projects is difficult. According to Vaskelis (2001) B2B projects often make traditional valuation techniques infeasible because these projects typically span multiple business functions, often require implementation of new information technologies, involve coordination of multiple implementation phases, and

typically enable previously unrecognized revenue opportunities. Yet the desire for organizations to fairly evaluate capital investments in B2B supply chain management projects remains high. A rash of articles in the popular business press on the need to evaluate SCM and enterprise-wide IT projects points to importance of the issue in the business community (Hartman, 2002; Hoffman, 2002; Knill, 2000; Rodin, 2001; Smith, 2000; Solomon, 2002; and Vaskelis, 2001).

a. Approaches to Project Evaluation

Gallagher (2003) argued that many projects fail as not all decision makers are on the same page with the product and/or vendor selection process. Since success means different things to different decision makers it is important to identify varying viewpoints early and agree upon importance of each factor defining success. Keen (2003) mentioned that IT project selection is often complex and controversial. The article lists a number of problems associated with IT project selection including lack of self-criticism, IT team's deficiency in initiatives to explain the justifications of a project to the business people, inability to induct changes in project selection methods despite self-analysis, lack of open communication, use of ambiguous selection criteria, and reliance on impressions and preference rather than objective ranking and scoring of projects. In order to help businesses to analyze the costs and returns on information systems and eventually select the right IT project, few companies sell services to estimate value generated by a project. Value is measured using a number of metrics such as revenue gains, cost savings, time to market, on-time delivery, market share gains, etc. (Foley, 2002). Some of the well known marketed metrics are Gartner's Total Value of Opportunity (TVO), Giga's Total Economic Impact (TEI), and Microsoft's Rapid Economic Justification (REJ). For

justifying a project economically, basic concepts like net present value, hurdle rate, internal rate of return, and cash flow are used by these metrics (Foley, 2002). In 2002 Alinean launched a software package named Value IT, which analyzes risk of investment and makes comparisons of peer projects to help CIOs justify new expenses for IT projects (Bank Technology News, 2002). Rogow (2004) interviewed a number of executives involved with IT project decisions. His findings suggest that companies should look beyond return on investment and total cost of ownership. Some organizations have formalized the process measurement and process improvement as part of project justification (Segars et al., 2001). Other considerations such as multi-year financial commitment analysis and budget provisioning should also be made before taking the final project selection decision. Lefley (2004) also argued that financial approach for appraising strategic benefits of projects is inappropriate. The research looked into procedure for developing strategic indices (SI) that can be used to identify and evaluate projects' strategic benefits. Stanleigh (2006) mentioned that projects should be aligned with the organization's core strategies. Organization should have well structured process of prioritizing projects.

The academic literature is filled with sophisticated techniques to evaluate SCM, IT and R&D projects. However, evidence would suggest that these sophisticated evaluation techniques have not found wide acceptance in industry. According to the Mainstay Partners study originated in 1999, only 21% of the companies have processes for prioritizing and managing their technology investments. Most choose their IT investments on ad hoc basis, favoring pet projects of powerful managers (Hartman, 2002). Many companies use ROI metrics that are inconsistent from one project to another making it

nearly impossible to correctly choose which projects should be funded and which one's should be killed (Lewis and Koller, 2001).

b. R&D Projects

In the area of R&D management, many R&D portfolio managers use hybrid approach that combines different traditional approaches; they rely far less on financial methods for portfolio management and put stress on management buy-in and support (Cooper et al., 1998). R&D project selection models historically fall into three categories: financial, risk, and scoring (Lawson et al., 2006). While financial methods have been found to be the most widely used amongst large organizations, companies that use hybrid approaches incorporating risk analysis and scoring scheme with the financial analysis generally do a better job in selecting projects (Cooper et al., 2001). Hybrid project selection approaches are more comprehensive and often use group-decision making techniques. This may be normal group technique (NGT) where first round of anonymous ballots are cast followed by group discussions, finally second round of ballots are averaged to establish final score. Alternatively, Delphi techniques are used. Despite the potential advantages of structured hybrid approaches, they may be cost prohibitive. Ringuest el al. (2000) used a methodology for adding or removing a project from an existing R&D portfolio using the criterion of conditional stochastic dominance which analyzes the effect of a given project on the risk and return of the existing portfolio. Based on a field study, Lawson et al. (2006) concluded that small and medium sized enterprises may find it justified to adopt such an approach due to management's view that the benefits are eclipsed by the cost and time involved in implementing the model. Also, sometimes management

thinks that high quality decisions can be made by experienced executives without a structured approach.

c. General IT Projects

Irani et al. (1997) classified various techniques used for evaluation and selection of IT projects into four major categories: economic, strategic, analytical, and integrated approaches. Economic approaches are structured in nature. They generally use financial measurements such as return on investment (ROI), internal rate of return (IRR), net present value (NPV), and payback approaches and largely ignore intangible factors. Strategic approaches are less structured and deal with projects' strategic alliances with corporate goals by considering both tangible and intangible factors. Analytical approaches such as scoring models (Nelson, 1986), risk analysis (Remenyi and Heafield, 1995), and analytic hierarchy process (Saaty, 1990) are highly structured but subjective with the use of tangible and intangible factors. Integrated approaches such as balanced scorecard (Kaplan and Norton, 1996) and multi-attribute utility theory (Sloggy, 1984) combine subjectivity with formal structure, and incorporate both financial and non-financial dimensions of decision making. It is argued that traditional economic appraisal techniques are not appropriate for justifying investment in IT projects because of intangible benefits, and direct and indirect costs associated with these projects. On the other hand, while analytical and integrated approaches are capable of considering intangible factors they are complicated to use (Irani et al., 1997).

Badri et al. (2001) proposed goal programming approach for selecting information system (IS) projects in health service sector. The model accounts for multiple factors such as various costs, benefits, risks, time for completion, availability of resources, and decision-

makers' preferences that are important in project selection. Stewart and Mohamed (2002) developed a project evaluation framework based on multi-criteria utility theory. Milis and Mercken (2004) argued while traditional appraisal techniques such as payback period and net present value methods are not quite suitable for IT project selection the newer appraisal methods are difficult to interpret and use. They suggested that reliance on a single technique may yield sub-optimal results and proposed multi-layer evaluation process based on balanced scorecard. Kulak et al. (2005) suggested that axiomatic design (AD) may be suitable for multi-attribute evaluation of IT projects. Five basic criteria were considered: technical and organizational risk, return on investment, user satisfaction, operational agility, and strategic competitiveness. Crisp and fuzzy AD approaches were developed for complete and incomplete information respectively.

d. B2B Supply Chain Projects

A B2B supply chain management (SCM) project is a special class of business project that is characterized by high levels of unpredictability, risk and technical complexity. Due to the fact SCM technologies typically must span vertical architectural levels (business, application and technology architectures) and must integrate horizontal inter-organizational processes and enterprise applications, SCM project management has become one of the most demanding jobs for business professionals. The need for effective project management techniques continues to grow as SCM managers face challenges created by the geographical distribution of systems, the outsourcing of development and maintenance activities, and the increased reliance on information technology components. SCM technologies are often closely linked to enterprise resource planning systems (ERP) that have emerged as the backbone of the modern

information technology infrastructure (Laudon and Laudon, 2007). ERP systems provide a set of technologies that can be used to coordinate activities, processes and decisions that may be distributed across the entire firm. Many organizations have adopted enterprise resources planning (ERP) systems with the goal of integrating key business processes so that information can flow freely between parts of the firm. CIO Insight conducted a survey of ROI methods and applications in March 2002. This survey indicated that supply chain management and ERP projects were among the most difficult areas to determine ROI.

The inter-organizational nature of B2B supply chain makes system evaluation more complex (Clemons and Kleindorfer, 1992; Levinson, 1994). Overall acceptance by supply chain partners associated with such projects is critical for being successful. Sarkis and Talluri (2004) mentioned about lack of methodologies in the literature on justification of inter-organizational systems. They developed a framework integrating analytic hierarchy approach (AHP) and goal programming to incorporate a number of factors involved in decision-making in a supply chain context. For evaluation of internal systems and software requirements they identified ten factors: cost, internal adaptability, external adaptability, platform neutrality, scalability, security, reliability, ease of use, customer support, and perceived value. For evaluation of inter-enterprise supply chain communication systems requirements eight factors were identified: communication speed, standard, security, reliability, transaction filtering, value added services, information access, and various costs. Each organization in the supply chain who is participating in the decision making process evaluates alternatives with respect to various factors mentioned earlier. The managerial preferences of these factors are captured in

terms of relative weights as determined by AHP. The goal programming formulation minimizes the sum of weighted deviations from the best targets set by the decision makers. The framework is data intensive and requires significant amount of managerial inputs. Although the model strives to minimize deviation from the best target value, the authors mentioned about potential conflict caused by non-acceptance of an alternative by an organization in reality. Also, dominant partner in a supply chain may try to move decisions in their favor. Since, SCM projects influence relationships with upstream/downstream suppliers/customers, supply chain wide performance measures are needed to measure effectiveness (Chin et al, 2004). However, many companies lack this and they tend to stick to organization based measures only.

e. Best Practices in Project Management

A best practice is a concept that has long been associated with project management. Since 1969, the Project Management Institute has "provided project management insight, best practices and enterprise support for the project management profession" (Project Management Institute, 2006). Loo (2003) described best practices as the "optimum ways of performing work to achieve high performance" and states that much of the literature on best practices relates to benchmarking against external organizations. Loo (2002) included integrated project management systems, effective scope management, planning, scheduling and controlling of project, high-caliber project teams, stake-holder participation, effective communication within teams and externally, and customer satisfaction among critical success factors of project management.

One approach to best practices in the supply chain community has been the Supply-Chain Operations Reference-model (SCOR). SCOR is a process reference model that has

been developed and endorsed by the Supply-Chain Council as the cross-industry standard diagnostic tool for supply-chain management. SCOR enables users "to address, improve, and communicate supply-chain management practices within and between all interested parties". SCM groups often use SCOR to establish SCM performance metrics and compare supply chain performance to industry counterparts. This model has been used successfully in a number of SCM projects despite the model's limitations as reported in the literature (Power, 2005). One main limitation is that the SCOR does not explicitly assist in the project evaluation process.

A few research studies have noted distinctive aspects evaluating SCM projects. Flaig (2005) mentioned that people involved in Six Sigma projects with shorter duration do not consider time value of money in project selection. This is erroneous because the useful project life can be longer although the implementation time is short. It was further argued that classical net present value (NPV) approach for evaluating projects falls short of capturing some of the project's major effects in process improvement including quality and yield rate. Also, probability of completion is not considered in classical NPV. Flaig (2005) modified the NPV analysis to reflect expected cash flow based on probability of accruing benefits and incurring cost which in turn depends on probability of completion. Koksal (2004) mentioned that often quality improvement (QI) projects are not evaluated comprehensively and many theory of constraint (TOC) based approaches do not capture quality and its long-term effect on sales. He proposed an improvement of TOC-based method by incorporating quality loss, which can be used as a measure of customer dissatisfaction affecting sales. Knill (2000) noted that when evaluating a SCM project that it is imperative to consider the impact on adjacent processes and processes downstream.

These studies as well as other research works mentioned earlier studied some distinctive aspects of SCM project selection. However, to the best of authors' knowledge no academic research has looked explicitly at best practices related to comprehensive evaluation of real life B2B SCM projects till date.

II. Research Objectives

The primary objective of this research is to identify a set of best practices for the economic justification of B2B supply chain management projects. We purposely seek to go beyond simply looking at different analytical techniques, but to examine the processes and methodologies that organizations employ to economically evaluate B2B SCM projects. For the purposes of this paper, project management best practices are defined as 'recommendations based on prior outstanding results that can be adapted for use in the management of a project'. A cohesive set of best practices were determined after a series of interviews with executives involved in the project selection process at three different Fortune 1000 companies. The process of supply chain management project selection is described at three different organizations along with the identification of best practices. These best practices are then summarized and compared to similar findings and theoretical formulations reported in the supply chain literature.

Case-based research allows investigators to understand the nature and complexity of the processes taking place and serves as a basis for theory building. A multiple-case study approach was chosen as a mechanism for determining the best practices for SCM economic justification because multiple case studies are ideally suited. It should be noted that this methodology corresponds to an exploratory, multiple-case research strategy as

elaborated in Yin (1994). Important steps in the use of this methodology are background research, protocol development, participant selection, data collection, and data analysis.

1. Background Research

An important starting point in our research was a review of the literature on the economic justification of SCM projects. The scope of this review included research papers and 'popular' press articles that discussed supply chain projects and the economic justification of related projects (ERP, material handling, manufacturing, and information technology). A summary of this literature review is contained in the 'Introduction' to this paper. It is important to note that no research was found that identified best practices in the economic justification of supply chain projects. Thus the research we undertook is largely exploratory in nature, and a case study methodology is an appropriate research approach. Project goals and objectives were established at this point.

2. Protocol Development

The structured client interviews were the prime source of data in this research. In following with the principles of case study research, a protocol was developed that included not only the interview questions but also the procedures to be used by the interviewers (Yin, 1994). Each interview script began with the client's description of the B2B supply chain project. This description was followed by questions in five areas of inquiry: formal methods, cost assessment, benefits assessment, risk assessment, and ROI in the project management process. Each client interview session started with a statement about the purpose of the research and an assurance the respondent would receive a transcript of the interview with a chance to change and/or edit any statements in the transcript. This was followed by questions designed to solicit experiences related to the

economic valuation of B2B SCM projects. These questions were iteratively developed and tested over the course of three months prior to the actual client interviews.

3. Participant Selection

Participating organizations were selected based on their long-term involvement and expertise in the B2B supply chain projects. Each organization was a global, public traded company that had at least one organizational group devoted to the management and execution of SCM projects. Each organization had existing formal processes in place for the evaluation and selection of new projects within the organization. An important goal of the participant selection process was to solicit a diversity of well-informed viewpoints.

4. Data Collection

Data was collected through face-to-face interview sessions that were between sixty and ninety minutes in length. The interviewers used a scripted interview approach. These questions were developed based on a review of the literature and background discussions with knowledgeable project managers. At the end of the interviews each participant received a draft manuscript of the interview and was asked to review it for accuracy and to add comments where appropriate. Minor modifications were made to the final draft of the manuscript based on feedback from study participants.

5. Data Analysis

The goal of our analysis was to treat the evidence fairly and to produce analytic conclusions consistent with an exploratory research project. As a result we used the following analytical techniques suggested by Miles & Huberman (1984) whereby a matrix of categories was created and evidence was placed within such categories.

Ultimately the results were organized in order to present a comprehensive examination of the issues surrounding B2B SCM projects.

III. Description of B2B Supply Chain Management Projects

This research study utilized a case study approach to examine the economic justification of B2B supply chain management projects within three publicly held multi-national organizations.

SCM Project A

This project involved the development of a vendor managed beverage inventory for an overseas retailer. In order to reduce lost sales due to out of date product, to reduce the number of 'mark down' sales due to bloated inventory levels, and to grow the volume of product sold, the sponsoring organization worked with an overseas retailer to implement a vendor managed inventory (VMI) solution. While the existing order fulfillment process was reliable, an improved fulfillment system was needed to meet the needs of an overseas retailer with demands that were often highly variable. The proposed solution involved modifications to the existing information system (new data and process requirements) and changes to the organizational structure (third party merchandising with the incorporation of human intelligence to facilitate demand forecasting and aid in pricing decisions).

Formal methods used to evaluate *Project A* included cost benefit analysis and payback period. Adjustments had to be made for foreign investments, interdependent projects and the cost of project delays. Because this was considered a large project with a

payback period of greater than twelve months, formal ROI calculations were required and a corporate hurdle rate had to be met. The cost drivers for the project included a significant IT investment in a SAP to legacy system 'bolt on' and a third party VMI solution to develop forecasts. Approximate costs for the project were estimated at $300,000.

When evaluating the project, historical data was used to estimate the reduction in lost sales due to out of date stock, to estimate the reduction in price markdowns due to overage, to estimate the cost of product spoilage, and to estimate the increase in volume due to increased sales. Risk assessment was used to determine the company's exposure if the updated system did not generate reliable and accurate data to aid in demand forecasts. In addition, project leaders had to access the risk associated with potential significant change in business environment resulting in changes in demand and corporate responsiveness.

The overall leader on this project was a senior level executive in the supply chain group. This project leader played an important role in interfacing with sales& marketing, the overseas vendor, third party merchandisers, and with the IT group. Periodic reviews called 'test points' were used throughout the project. Costs and benefits were reviewed. Managers carefully watched the performance metrics. A gradual implementation process was used whereby the prior manual mode gradually gave way to an automated mode. Much attention was given throughout the project to the end-users for the new VMI solution.

SCM Project B

This project was an ERP integration project between an automotive manufacturer and its supplier. The primary goal of the project involved reducing the number of permutations of the product sold and consolidating product sizes. A MAP (management approval process) template was used to analyze the SCM project. This project had a sponsor from Customer Service and an owner from the Sales Division. A Management Approval Process Board met once a month to accept/reject proposals. The board had members from many different business units. Variable costs were identified in terms of the number of man-weeks required to complete the tasks. No capital expenditures were involved in this project.

MAP document called for scope and process description. Process and technology enablers were identified, along with the identification of the transaction functionality required. Before and after benefits were listed for both the customer and manufacturer. Metrics used were market share, manufacturing efficiency, and inventory savings. Benchmarking was not used in this project. Risk assessment was used to assess technical, financial and execution risk. In this case the greatest risk was associated with the technology – XML/BizTalk. Up to this point sponsoring organization had no experience with BizTalk production experience with XML-based transactions.

The volatility of expected benefits was a big issue in ROI analysis. For example, the benefits accrued by Project B were not factored into the project evaluation of the original SAP analysis. Yet Project B would not be possible without an ERP platform. Today many of the SCM projects are looking to leverage the SAP investment without major outlays of capital. In the eyes of the senior SCM manager, B2B justification of

projects is an important area. Not only must you convince persons in your own organization about the benefits of the project, you must typically sell the project to your external customer. Often time this means important and difficult changes in cross company business processes.

SCM Project C

This project was part of an efficient consumer response initiative in the retail grocery industry. A producer of pet products sought to reduce lead times at several distribution centers and retail centers through upgrades to a SCM component of an integrated information system. A profitability model was designed to show how the initiative would result in cost savings for the customer. Ultimately the model was expanded to show how both supplier and the customer won or lost on the project. Savings were shown as annual cost savings. Savings were then broken down to savings as a percentage of sales and savings on per case of product basis. Two separate, but linked, worksheets were constructed to house driver data and rates data. These variables were typically adjusted during a sensitivity analysis.

Operational costs were tracked throughout the project but there was not an emphasis on making sure that the costs were in line with the planned budget. Cost estimates were determined to be more difficult to do if there were changes in the ranks of senior management, getting skilled staffing particularly in the IT area. All major processes were documented. This was a major cross-functional activity that emphasized who did what in sequence. A 'from-to-by-copy' matrix was used for each process step. Metrics used included fill rates, order cycle times, and transit times. Benchmarking was

used in a project where a logistics piece was being taken away from a distributor and the process had to be benchmarked to determine 'fair compensation'. Contingency plans were developed for a worst-case scenario.

For large capital projects such as this there was an expected 18 to 24 month payback period. The project had a sponsor and a lead project manager. The project went before a Project Review Board for approval. Organizational redesigns prior to the project eliminated possible cross-functional conflicts. Positive relationships with the IT group were critical to the ultimate success of the project.

IV. Determination of Best Practices

A follow-up review of each B2B supply chain project revealed the following eight best practices:

1. Project should be aligned with Organizational Strategy

The execution of a SCM project can be ruined if it turns out that the project runs counter to organizational strategy. Project managers must ensure sponsor and organizational commitment so the project does not get canceled nor have resources reassigned. In addition, metrics should be developed that are critical to senior executives. This can help raise the visibility and the value of the SCM project. All three B2B supply chain projects in this study had steps to ensure that the project was aligned with corporate strategy.

2. Use Historical Project Data for Benefit and Cost Assessment

SCM project teams can use historical project data to improve project performance by reusing effective techniques, developing estimates based on past experience, and

learning from past mistakes. The following quantities measures can be valuable in project planning: costs, schedule, work hours, scope and quality. Project B used a bottom-up approach to estimating costs, while both Project B and Project C used volatility in benefits estimation. One critical aspect of developing a business justification for collaborative SCM project is a thorough evaluation of the trade-off between total cost of ownership throughout the life of the system versus the long-range, enterprise-wide, long range benefits of the project. Organizations have a tendency to focus narrowly on upfront expenditures and only benefits limited to departmental time and cost savings.

3. Make Risk Assessment Part of Project Evaluation

Most project managers are aware of the need to manage the risks of a project. It is important that risk management be directly integrated into the project evaluation process. Risks should be quantified and prioritized. Steps should be taken to mitigate risk exposure. Project A and Project B assessed technical, financial and execution risks. Project C used a worst case scenario approach to develop a contingency plan. A manager for Project A stated that the risk of not doing the SCM project should be weighed.

4. Document Process and Scope before Evaluation

Formal documentation of each business process is important in all B2B SCM projects. In addition, a scope document is helpful for understanding precisely what is expected during the course of a project. More specifically, the project scope should include project deliverables, project functionality, project data, and the technical structure of the solution. All three projects in this study considered documenting business

processes and clearly defining the project scope prior to the economic evaluation of the project to be very important.

5. Separate IT lead and Project Manager lead

Nearly all B2B supply chain projects involve information technology and the involvement of the IT department. "The problem is that many IT leaders insist on taking leads on projects, even though they are not the ones who will be using the system and helping it realize its full potential" (Solomon, 2002). Two of the SCM projects (Project A and Project B) separated the duties of the project manager and the IT lead. In both cases the organization required that someone outside of the IT group be the lead on all large projects.

6. Organizational Redesigns, if necessary, to Eliminate Conflict with IT

Historically, conflicts between IT and organizational units have resulted in problems in the execution of large projects. "Breaking organizational barriers and enabling collaboration across the supply chain requires a cultural change in how your organization measures and rewards individuals and organizational units. The traditional model is based on cost and revenue models: the new model is based on metrics that align to cross-organizational business processes" (Smith, M., 2000). In projects A and C, organizational redesigns had eliminated conflicts between IT and the functional units within the organization.

7. Evaluation Part of Comprehensive Project Management Process

Calculating the return on investment for the B2B supply chain project should be viewed as part of the ongoing project management process. Effectively measuring ROI typically means devising a system of governance in which key metrics are continually

revisited during the life of the project in order to keep the project on track. Methods for using a formal review board for large capital projects were found in all three SCM projects.

8. Consider the ROI Evaluation of the Supply Chain Partner(s)

The economic return of the project to the supply chain partner can be important to the success of the project. Walker et al. (2002) mentioned about the assumption: "that all parties can achieve a win-win situation provided they work together to help each other gain not only a realistic reward for their input but to gain a competitive edge in the market as a result of their experience on this milestone approach." Also, they discussed on project partnering and project alliancing (Walker et al., 2002). Among the three projects we studied, Projects A and C considered the economic impact of the SCM project on the partnering organizations. However, not always such win-win situation may persist. It will be interesting to analyze the project evaluation process when conflicts may arise between an organization and its partner(s) because of a B2B SCM project.

Table 1: Summary of B2B Supply Chain Management Project Best Practices

Best Practice	Case Study Support	Literature Support
1. Project Should be Aligned with Strategy	Project A, Project B, and Project C	Gallagher (2003), Stanleigh (2006)
2. Use Historical Project Data for Benefit and Cost Assessment	Project B and Project C	
3. Make Risk Assessment Part of Evaluation	Project A and Project B	Badri et al. (2001), Kulak et al. (2005), Lawson et al. (2006), Ringuest el al. (2000)
4. Document Process and Scope before Evaluation	Project B and Project C	Cooper et al. (1998), Loo (2002)
5. Separate IT lead and Project Manager lead	Project A, Project B, and Project C	Solomon (2002)
6. Organizational redesigns, if necessary, to eliminate conflict with IT	Project A and Project C	Chin et al. (2004), Smith (2000)

7. Evaluation Part of Comprehensive Project Management Process	Project A, Project B, and Project C	Segars et al. (2001), Solomon (2002), Stanleigh (2006)
8. Consider ROI Evaluation of Your SCM Partner(s)	Project A and Project C	Chin et al. (2004), Walker et al. (2002)

V. Conclusions

We set out to examine the means by which organizations evaluate B2B SCM projects. A case study analysis of three B2B supply chain management projects investigated the methods by which the projects were evaluated. Best practices were identified and then compared with the previous literature. Results from our research show that B2B supply chain projects contain several unique characteristics that suggest the deployment of new economic justification practices. It is hoped that this research will lead to more empirical research on the economic justification of supply chain management beyond the exploratory stage and towards theory-based models of SCM project selection.

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