Chapter VIII

Measuring ROI in E-Commerce Applications: Analysis to Action

Manuel Mogollon
Nortel Networks, USA

Mahesh S. Raisinghani
University of Dallas, USA

ABSTRACT

Measuring the Return on Investment (ROI) of a project is a key element of the IT Governance process. The research in this paper aims to provide an overview of how to calculate the ROI for e-commerce applications so that this information, and the attached ROI Calculator Tool Template, can be used by organizations to reduce the time in preparing the ROI for a project. Although there is much written about ROI, there is not that much said about how to prepare one, specifically for an e-commerce project. By reading this research paper and by using the ROI Calculator Tool, any IT group or organization that is going to deploy e-commerce applications will have a starting point for calculating ROIs.

SECTION I: INTRODUCTION

In an interview, Harvard Business School’s Michael E. Porter had this to say about e-commerce: “The Internet as a family of technologies will have a very powerful effect on operational effectiveness. We’ll see deeper integration among service, sales, logis-
tics, manufacturing and suppliers. The first level of that will improve efficiencies, reduce transaction costs and reduce inventory” (Byrne, 2001, p. 114). Businesses are looking for those e-commerce applications, such as relationship-marketing software, integration software, customer management, E-Procurement, and collaborative software that can achieve the business integration discussed by Michael Porter to boost productivity and/or create new sources of revenue.

In the late ’90s, companies discovered the seemingly endless possibilities of the Internet, and they began to purchase e-commerce applications with little or no financial controls. There was a sense of urgency that precluded taking the time to measure the real economic value of these investments — companies were moving at Internet speed. Then the US economy slowed dramatically, Information Technology (IT) budgets dropped considerably, and projects were competing for the few available dollars (Sammer, 2001). In this new economy, IT managers must convince management of the value of a project, compare projects to determine which offers the best return, and justify the implementation of an e-commerce application.

A survey carried out by the Meta Group in November 2001 led to the following conclusion: “ROI has become one of the most important evaluation criteria for IT groups” (Ferengul, 2001, p. 1). The renewed focus on ROI as an evaluation tool came after years of IT departments using some internal measurements, such as the number of visitors to a web site and network uptime, that didn’t have any meaning for business executives who were trying to link a project to the overall performance of a company. Today, Return-on-Investment is becoming an important tool for IT departments and corporate management to measure and quantify the return of e-commerce applications in relation to other investments.

In April and May of 2000, International Data Corporation (IDC) conducted an Internet Executive e-Panel survey about ROI (Rosenthal, 2000, pp. 3-8). These were some of IDC’s findings:

- On the question of whether ROIs are calculated for e-business projects: 33% of the respondents said yes, 16% said they didn’t know, and 50% said no.
- Reasons given as to why ROIs should not be calculated:
  - The time and energy aren’t worth it because ROI is an imperfect calculation. Not enough firm data to base calculations on.
  - The ROI is usually positive in e-commerce applications so there is no need to calculate it.
  - Similar companies may already be doing it. Even though ROIs are not comparable from company to company, if another company has similar programs, tools, and features, then it may not be necessary to spend the time and resources to calculate the ROI for each new element in e-commerce.
- Reasons given for why ROIs should be calculated:
  - The ROI process will help determine the metrics that matter.
  - Once the ROI is calculated, it is easier to do it for similar projects.
  - The ROI process will provide a sense of which e-commerce applications produce the best and fastest results.
Related Content

Business/IT Alignment through IT Governance Patterns in Portuguese Healthcare
www.irma-international.org/article/businessit-alignment-through-it-governance-patterns-in-portuguese-healthcare/110920/

Virtual Organization: Duality of Human Identities in Consciousness and Entity
www.irma-international.org/chapter/virtual-organization-duality-human-identities/25910/

Trust Management and Delegation for the Administration of Web Services
Michele Tomaiuolo (2014). Organizational, Legal, and Technological Dimensions of Information System Administration (pp. 18-37).
www.irma-international.org/chapter/trust-management-and-delegation-for-the-administration-of-web-services/80707/

CIO Perspectives on Organizational Learning within the Context of IT Governance
www.irma-international.org/article/cio-perspectives-on-organizational-learning-within-the-context-of-it-governance/180693/

Explorative Study on the Influence of National Cultures on Business/IT Alignment Maturity
www.irma-international.org/article/explorative-study-influence-national-cultures/43743/