Is it Really so ‘Strategic’?
Motivational Factors for Investing in Enterprise Systems: A Survey

Przemysław Lech, University of Gdańsk, Poland

ABSTRACT

This paper presents empirical research on motivational factors for investing in Enterprise Systems (ES), based on the survey conducted among project leaders. The results show that enterprises make investments in ES mostly to increase operational efficiency, provide managers with more accurate information and, which is interesting, to be able to continue the operations on the current level. Almost one third of examined enterprises indicated the replacement of an inefficient IT infrastructure with a new one enabling smooth operation of current business processes as the most important motivational factor for investments. The results of the research presented in this paper may help to understand the productivity paradox as they prove that many enterprises treat IT as a commodity rather than a strategic asset that generates significant business gains.

Keywords: Enterprise Systems, Investment Decisions, IT Investment Motivational Factors, Reasons for Investing in IT, Survey

INTRODUCTION

A lot has been said about the strategic role of information technology and its ability to create competitive advantage (see, e.g., Byrd et al., 2006; Clemons & Webber, 1990; Kaplan & Norton, 2004; Powell & Dent-Micaleff, 1997). According to many authors, IT investments are supposed to be justified mostly if they enable the achievement of strategic goals (Benson et al., 2004; Kaplan & Norton, 2004; Powell & Dent-Micaleff, 1997) or deep organizational changes (Ashurst & Doherty, 2003; Davenport, 1993; Ward & Elvin, 1999). Only then, say the mentioned authors, will IT investment lead to substantial value creation. This way of thinking about IT investment is well grounded in MIS theory and supported by case studies from practice (Dhillon, 2005; Lech, 2007).

On the other hand authors studying the ‘productivity paradox’ phenomenon (Dedrick et al., 2003) found no positive correlation between IT spending and firms’ profitability. Although such positive relationship was discovered between IT investments and labour productivity as well as consumer welfare (lower prices, better service) (Hitt & Brynjolfsson, 1996), the enterprises should rather be interested in increasing profitability or shareholder value.
The question arises, why all enterprises around the world still perform massive investments in IT if this does not yield to any of the above.

Porter (1980) pointed out, that under assumption that markets are effective, without substantial barriers of entry, no enterprise can gain the long-lasting competitive advantage as its temporary success would be soon copied by the competition. Following that conclusion Carr (2003) pointed out that as IT is a freely accessible good, and a way it is used by one enterprise can be copied by the others, competitive advantage gained with the use of IT will be temporary. Although Carr was criticized for lack of evidence for his conclusions, several other authors support the temporary nature of IT related competitive advantage (D’Souza & Mukherjee, 2004; Stattopoulos & Dehning, 2000).

If the relation between the IT spending and firm’s productivity is ambiguous and the gain of competitive advantage through IT is rare, the questions arise, what makes the enterprises invest in IT and what are their expectations with regard to these investments.

To answer the above questions 28 Enterprise System implementation projects are examined in this paper to find out what motivational factors made the decision makers to undertake them.

Reasons for IT Investments: Literature Review and Discussion

Many authors take a stance that an investment in IT is justified only if it supports the achievement of a competitive advantage (Clemons, 1987; McFarlan, 1984; Porter & Millar, 1985) or at least is a mean of performing substantial organizational changes. The second is regarded to be the basic condition for IT profitability (Ashurst & Doherty, 2003; Benson et al., 2004; Devaraj & Kohli, 2002; Marchand, 2000; Willcocks & Greaser, 2001). On the other hand research on productivity paradox shows mixed evidence regarding correlation between IT spending and performance, not to mention profitability (De drick et al., 2003; Hitt & Brynjolfsson, 1996).

If the enterprises continue massive IT investments for more than two decades, not facing the radical improvement of their financial indicators in the same time, one should allow a hypothesis that there are some other motivational factors for doing so. In other words it seems probable that IT is needed in the enterprises even though it neither yields to competitive advantage, nor supports organizational changes which increase the firm’s profitability.

Bacon (1992), examining decision criteria in selecting information systems investments has grouped them in 3 categories:

- Financial
- Management
- Development

Each of them with assigned 3 to 6 subcategories.

The decision criterion used for the evaluation of a planned IT investment is a derivative of a motivational factor that drives the decision to invest. For example: if a decision maker uses the NPV method, it is clear that he/she expects the investment to be profitable. Thus the increase in the firm’s profitability would be his/her motivational factor to invest.

Having that in mind, one should be able to map the above decision criteria with the motivational factors for investment which these criteria represent. Using financial criteria, such as discounted cash flow or payback methods means that the decision makers would like to obtain positive profitability out of the IT investment. A look at the management criteria presented by Bacon results in a conclusion that they can be divided into two types:

- ‘Support business objectives’, ‘support management decision making’ and ‘probability of achieving benefits’ reflect the proactive motivation for IT investment.
- ‘Response to competitive systems’ and ‘legal requirements’ reflect reactive motivation.
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