IDENTIFYING THE PROCESSES MOST NECESSARY FOR ACHIEVING STRATEGIC GOALS

Craig Huxley  
Queensland University of Technology

Glenn Stewart  
Queensland University of Technology

Chris Taylor  
Queensland University of Technology

Michael Rosemann  
Queensland University of Technology

Follow this and additional works at: http://aisel.aisnet.org/amcis2002

Recommended Citation
Huxley, Craig; Stewart, Glenn; Taylor, Chris; and Rosemann, Michael, "IDENTIFYING THE PROCESSES MOST NECESSARY FOR ACHIEVING STRATEGIC GOALS" (2002). AMCIS 2002 Proceedings. 137.  
http://aisel.aisnet.org/amcis2002/137

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2002 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.
IDENTIFYING THE PROCESSES MOST NECESSARY FOR ACHIEVING STRATEGIC GOALS

Craig Huxley, Glenn Stewart, Chris Taylor, and Michael Rosemann
Information Systems Management Research Group
Centre for Information Technology and Innovation
Faculty of Information Technology
Queensland University of Technology
c.huxley@qut.edu.au  g.stewart@qut.edu.au  ci.taylor@qut.edu.au  m.rosemann@qut.edu.au

Abstract

Globally, companies are attempting to develop leaner profiles and change faster in order to remain competitive. The pressure on the CEO and other executives to produce continued growth has lead to a continuous search for greater alignment of activities coupled with rapid change. This research in progress paper outlines a methodology; that is, using the balanced scorecard to identify 'critical' processes in ERP service organisations. This approach will provide, as one of a number of benefits, for a more efficient use of resources improving those processes which impact most heavily on achieving strategic goals. It exposes the problem area within organisations and uses ERP services as its focal research domain. The paper outlines the approach that is being taken by the research to deliver an industry focused solution.

Keywords: Balanced scorecard, value added process engineering, critical processes

Introduction

Investment in information technology today is increasing to become the largest single element of capital expenditure (Thorp 1998). Mounting pressure by the ‘market’ to produce continued growth has lead to the search for greater alignment of activities coupled with rapid change in the way companies conduct their business. Bender, Cedeno, Cirone, Klaus, Leahey and Menyhert (2000) and Lin and Pervan (2001) state that failure to achieve business objectives and the neglect of end-users are contributors to the high failure rate of process engineering projects.

The proliferation of ERP systems which fail to provide benefits through low utilisation of the software and a poor understanding of the processes has increased the need for a solution that reduces the hit and miss approach to process improvement seen in many companies (O'Neill and Sohal 1997; Bender, Cedeno et al. 2000; Rosemann 2000; Sedera, Rosemann et al. 2001). One proposed approach to performance improvement is to use reference models. A reference model is considered to be ‘best’ practice or ‘common’ practice and these reference models are available in books by authors such as Becker, Uhr and Vering (2001) and Scheer (1994) in modelling programs such as the ARIS Toolset (2000) and in Enterprise systems such as SAP R/3. However as Chan and Rosemann (2001) note even the use of reference models does not necessarily enable the achievement of business objectives. This occurs because a reference model is a generic ‘best’ practice representation and is not linked to specific business objectives. Thus a reference model cannot cater for the unique aspects of an organisation (Chan and Rosemann 2001). What is needed is some means of coupling the generic model to the specific business objectives. The balanced scorecard (BSC) is seen as one way of aligning processes with business objectives (Kaplan and Norton 1996; Kaplan and Norton 2001).
Business process re-engineering (BPR) approaches suggest that critical processes be identified for re-engineering but fail to inform the organisation on how this identification takes place. The principle drivers of early BPR projects in reaction to competitive pressure and cost cutting (Davenport 1993; O’Neill and Sohal 1997). The balanced scorecard approach suggests the existence of non-financial aspects of the business in which critical processes exist. Companies should align process objectives with organisational goals in order to improve competitiveness and reduce undirected resource expenditure (Hammer and Champy 1993; Chang and Gable 2001). These goals should take account of the entire environment of the organisation and as such the perspectives of the BSC, Learning & Knowledge, Internal Process, Customer and Financial. What is needed, then, is a methodology that links BSC, BPR and process engineering approaches in order to clearly identify the critical processes and link these critical processes with the business strategies and objectives. This is the focus of the research project.

The balanced scorecard (BSC) is considered to be an efficient and useful method of applying strategy within an organisation. This coupled with the benefits of process engineering might be one approach to identifying ‘critical’ processes and defining their objectives.

This approach to process improvement would reduces the complexity of decision making and develop the necessary links between process and objective. Additionally, any methodology should consider the major influences of their environment and the impact upon their strategies and goals.

The next section discusses the literature review in order to appreciate the proposed research project. Following this we discuss the research aims and design, concluding that the BSC approach coupled with process engineering will enable identification of critical processes. There is little in the literature that directs organisations towards this knowledge gap or region of complexity in process improvement.

**Literature Review**

**Process Engineering**

Davenport (1993) and Hammer and Champy (1993) developed a number of approaches to improving process engineering projects. For example identifying processes within an organisation, developing business and process objectives and focussing on those processes which conflict most with the business vision or are in the most trouble. Of these processes they suggest projects choose those which have the biggest chance of success and the greatest positive impact on the objectives.

The literature reveals that critical success factors for Business Process Reengineering (BPR) and Process engineering tend to deal with processes after they have been selected (Braganza and Myers, 1997, Sedera et al., 2001). Davenport (1993) and Hammer and Champy (1993) have provided substantial depth of research into choosing processes for improvement or radical redesign. Their publications fail to deal with the detail of a company’s need to align processes with the organisation's goals and strategies.

**The Balanced Scorecard**

One methodology used to provide organisations with an approach to developing greater links between processes and strategies is the Balanced Scorecard (BSC). Some research cites figures of 40% and 60% of US fortune 1000 companies are using, planning to use or evaluating the BSC (Ittner and Larker, 1998, Lipe and Salterio, 2000). This was developed by Norton and Kaplan in response to an organisational need to take a balanced longer term view of strategy (Kaplan and Norton, 1992). Companies such as Siemens, IBM, British Telecom, Mobil, Volvo, AT&T, and Bayer use the BSC to develop, implement and measure their realisation of strategies. It had initially been intended to provide a set of measures, which would supply management with information concerning long-term goals (Kaplan and Norton, 1992). Kaplan and Norton (1996) now believe that it is really a strategic management system. This was the result of their experience while working with companies between 1992 and 1996. Kaplan and Norton in their latest book ‘The Strategy-focused Organisation’, reaffirm this belief (Kaplan and Norton, 2001). They add that the fundamental benefit of the BSC is the effectiveness of execution of a strategy within an organisation. It is more than a support system. The BSC is a method for communicating strategy to all levels of an organisation and for assisting in the alignment of activities with strategy (Kaplan and Norton, 2001).

A comprehensive literature search was conducted on the topic of the balanced scorecard. This highlighted problems associated with areas such as the implementation, perspectives used, measures chosen for intangible objectives and the links between

Advantages and Disadvantages of the BSC

There appears to be consensus in the literature that the BSC is able to emphasise strategic intent, change the focus of organisations from short-term to include long-term and assist in organisational change. Most authors in the field agree that the BSC is able to communicate the strategy of the organisation effectively (Martinson et al., 1998, Stewart, 2001, Van der Zee, 1999). Martinson et al (1998) suggests that the BSC is able to value the intangible benefits of products, processes and projects by linking these back to financial measures and objectives.

Ittner and Larker (1998) refer to studies, which indicate that firms experience “considerable difficulty linking (non-financial) measures to future accounting or stock price performance”. They cite Brancato(1995), for example, who reported that none of her case study participants could “precisely quantify the link between key non-financial performance measures and the bottom line.” Additionally Ittner and Larker say that in their studies only “28 percent could link customer satisfaction measures to accounting returns and 27 percent to stock returns” (Ittner and Larker, 1998).

The usefulness of the BSC in identifying ‘critical’ processes is seen in the way that perspectives are used. This research project will focus on the internal process perspective as it is this perspective that organisations need to understand in order to improve process engineering projects. The internal process perspective ensures that organisations draw links between those processes which impact upon the objectives of the organisation. In this approach the user is able to then describe the value of each process in supporting the objectives of the perspective. The internal process objectives are already linked to the customer and financial objectives.

Any search for ‘critical’ processes within an organisation requires a definition of at least the meaning of critical for that organisation. In order to provide a generically useable definition a literature search for definitions is being conducted. For the purposes of this study the following working definition is being used;

“Those ‘few’ processes which have the ‘greatest’ effect on the attainment of Corporate Strategic Goals”

The goals of the research project are described in the next section.

Approach to Research

The Research Aims

The scope of this research is confined to the domain of ERP service provision. This approach has been taken to limit the data collection required and increase the likelihood of producing high quality outcomes.

This research project intends to provide

a. A generic definition for a critical process in an Enterprise Resource Planning (ERP) service provider environment.
b. A current understanding of strategies and objectives for ERP service providers which are rated in order of priority.
c. An understanding of the issues involved in implementing the methodology.(Using the BSC approach to identify critical processes)

Phase One
Completion of a literature search looking for an improved definition of a critical process.

Phase Two
The approach used in this exploratory study is to use a focus group in multiple sessions. These will be made up of managers from organisations that use Enterprise Resource Planning (ERP) systems as Application Service Providers (ASP) and Application
Hosting Centres (AHC’s), in-house system providers and ERP consultants. Data collected from the focus group session will then be used in a Delphi study. The Delphi method used will be a modification of that used by Chang and Gable (2000). For the purpose of this research ASP/AHC organisations and in-house departments are considered to be similar. If during the course of the focus group session this is refuted then the results of the research will reflect this.

The following are outcomes of the Delphi study and focus group session;

a. A generic definition of a critical process within the domain
b. Identification of the types of objectives and strategies used within the ERP service provider domain
c. This research will not develop a complete scorecard but will confine itself to those parts necessary to evolve the perspective of internal processes. This is intended to keep the project within its time constraints.

Phase Three
The results of phase two will be used to undertake the implementation of the methodology (Using the BSC approach to identify critical processes) in a single company as a pilot study. It is envisioned that this company has already implemented a BSC and thus the main benefit will be seen in refining the selection of ‘critical’ processes from a fully populated scorecard.

Phase Four
The results of phase two and three will be used to undertake the implementation of the methodology in three companies within this domain. This is intended to be used to identify the issues concerning the methodologies implementation.

Conclusions
This research in progress paper has shown that the BSC is a suitable method to use in this methodology. The literature search has highlighted some of the problem areas and shown that there is consensus that the scorecard is useful for linking processes to strategy. Key problem areas are the generic definition of critical processes and objectives and strategies within the ERP service provision domain. These will be improved upon by the use of the focus group session and Delphi study. Implementation issues will be highlighted by the pilot study and following case studies. These case studies will refine the methodology (Using the BSC approach to identify critical processes) ensuring that it becomes a valuable approach to processes improvement within the domain.

This study will enable the research team to present the results of the data collection and the issues that are noted when using the methodology. ERP service providers will then be able to draw upon these experiences to improve upon the work of Hammer & Champy and Davenport. This methodology enables users to identify those processes which are critical in achieving organisational goals. By removing the complexity of aligning processes with strategies and objectives we can focus on De Bono’s call for change which adds value not just incremental improvement (De Bono, 1999). Further work in this area might include an analysis of the generic nature of the approach to other industries.

At the conference the authors will be able to present the results of phase one, two and three. Namely;

a. A comprehensive analysis of a critical processes within the ERP service provision domain
b. A comprehensive and insightful understanding of the objectives and strategies used by organisations in the domain
c. Insights into the issues arising from the pilot study.

References
Strategic Information Systems in the Digital Economy


Van der Zee, D. I. Alignment is not enough: Integrating Business and IT Management with the Balanced Scorecard. Symposium on IT Balanced Scorecard, Antwerp, Belgium, Technologish Instituut VZW.(1999)