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Identifying Core Processes and Critical Processes for the IT Decision Process

Craig Huxley
Queensland University of Technology

Glenn Stewart
Queensland University of Technology

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ABSTRACT

Little work has been done to date in identifying critical processes. The relationship between critical processes and core processes has yet to be made. Research is required to clearly identify core processes as a subset of core competencies and their relationship to application systems and infrastructure requirements in order to make effective IT decisions. This research project extends the prior work of the authors to the issues of identifying core processes and their relationship to achieving corporate goals. The outcomes of this research will provide a visualisation of these relationships, inform the IT decision process and increase business-IT alignment.

Keywords

Process Targeting Method, Core Processes, Critical Processes,

INTRODUCTION

A search through relevant journals and business magazines reveals that there are vast amounts of literature concerning the focus on, sustaining of, building and concentrating on core competencies in deciding what to outsource (McGrath 1998; Smith, Mitra et al. 1998; Ligos 2000; Pirie 2000; Lewis 2001; Lundquist 2003; Taylor 2004). This is currently one of the more important decisions that an IT manager is faced with. Is ICT a core competency or not? Should ICT be outsourced or not, and if not all of ICT, which portions should the organisation keep as they are core competencies. This research is not so directed at answering the issue of outsourcing ICT, but within this domain, gaining a greater understanding of the concepts of core processes which enable/support core competencies and their relationship to the issue of critical processes and thus business-IT alignment.

This paper first explores the definitions of core competencies, and then proposes a research program that will first identify ‘core’ processes that enable core competencies and use this identification to support increased business-IT alignment. That is, by aligning your IT strategy to support or enable improvements in ‘core’ processes you might result in greater business/IT alignment.

THE NOTION OF CORE COMPETENCY

Much of the literature though fails to provide an operational or useful approach to identifying core competencies and identifying the life span of these core competencies. There appears to also be a lack of understanding as to definition of core competencies. Core competencies as described by Prahalad and Hamel (1990) are high level processes that are linked to strategies and goals. Regardless of the industry, it appears that many researchers and practitioners are in agreement that knowledge of your core competencies is vital to business survival and competitive advantage.
A further search for definitions of ‘core competency’ leads to a view that core competency is generally considered to be those activities that you perform the best in comparison to your competitors. Prahalad and Hamel (1990) state that core competency is defined as “that which a firm does distinctively well in relation to competitors”. Another view used within the US armed Forces states that core competency are “those portions of our mission that we must have the ability and knowledge to do right every time” (Yon 1995). This definition appears to be concerned with not what we do well now (previous definitions) but what we should do well; this definition is really about building competencies.

Mintzberg and Westley (2001) suggest many companies “may have laid out a tidy strategy on the basis of assessing its weaknesses and strengths (or, if after 1990, its ‘core competencies’), which it almost certainly got wrong.” They believe that companies not only find it difficult to utilise core competencies successfully, they also find it difficult (and usually fail) to identify what these core competencies really are (Mintzberg and Westley 2001). This is not surprising when considering the “unstable, unpredictable, and ambiguous terrain of the new economic playing field” (Eisenhardt 2002). The approach to strategic planning has changed. Eisenhardt (2002) states that “complicated, intertwined activity systems or elaborately planned leveraging of core competencies make sense in slower and more-linear situations.” Companies active in changing markets need to involve more than the top layers of the organisations, with managers who believe that strategy is concerned with organisational control, in order keep pace with competition. Effective managers pursue dual strategies both destructive to core competencies and aligned with core competencies (Eisenhardt 2002).

The focus on core competencies is primarily where problems can start to occur in these organisations as “An apparently smooth running and highly productive core competence may mutate rapidly into a core rigidity” (Leonard-Barton 1992; O’Driscoll, Carson et al. 2001). What is needed is an approach that allows the impact of changing strategies to be effectively communicated to those that understand the operational needs of the business. In this way core competencies and thus ‘core’ processes can be developed to meet new and changing needs as well as existing needs. This goal defines the current research project, described in the next section.

**RESEARCH OBJECTIVES**

The project intends to provide an approach to identifying ‘core’ processes, a subset (enablers/supporters) of core competencies, in order to perform an analysis of the two sets (critical processes and ‘core’ processes). We propose that the results will be one of four scenarios as described in Figure 1.

![Figure 1- Four possible research output scenarios](Image)

The output will be a generalisable method for identifying the inter-relationships between strategy, goals and objectives and the underlying core business processes contributing to the attainment of business strategy. The method provides a map which will be used to guide the planning of IT decisions, configuration and customisation decisions inherent in implementation and IT/business management and, will also inform the change management program associated with such systems and improve business-IT alignment. This method utilises a Balanced Scorecard style (perspective views) which is adaptable to most strategic planning styles. The method allows for identification of critical processes for improvement (as part of Continuous Business Improvement) and ‘core’ processes for management focus. The output of this research will be a visual process for identifying critical and ‘core’ processes, linked through the objectives, strategies and goals clearly identifying cause and effect.

**Objectives of the Research**

This research project aims to test and if necessary to further develop this new method to increase Business-IT alignment and inform the IT decision process, by:
Ensuring that goals/vision are defined in the strategic mapping as they are linked by cause and effect to strategies, objectives and processes.

- Identifying critical processes and ‘core’ processes to the business.
- Linking IT plans to business plans through the use of visual cause and effect mapping.
- Informing the IT decision process by clearly identifying the ‘core’ and critical processes for the business.
- Enabling the efforts of IT to be prioritised by assessing the impact of systems and functionality on business goals.
- Test the efficacy of this visualisation in identifying ‘core’ processes.

Other outcomes of the methodology will be:

- Involving IT in strategy development through the use of cause and effect mapping.
- Developing the understanding of IT for business by visually communicating the needs of business.
- Enable IT/business communication due to the need to work together to successfully achieve the points above.

This research project will further develop the targeting method to generate improved Business/IT alignment; track the achievement of business benefits from the resultant decisions and assess the value of these business benefits.

**Research Questions**

The research questions guiding this project are:

- Can this method improve the IT decision process by clearly identifying the core and critical processes and their relationship to the application architecture?
- Does the method improve the effectiveness and efficiency of communication within this area, thus achieving valued IT/business alignment?
- Can this improvement be assessed over time?

**DESCRIPTION OF THE RESEARCH PLAN & METHODOLOGIES**

This research project uses a method (the Targeting Methodology Huxley 2003, Huxley, Stewart & Jewels 2004) for guiding strategy formulation, irrespective of organisational structure or strategic planning process. This method is sufficiently rich to support the alignment objective as this method clearly identifies the linkages between strategy, objective and process. The identification of ‘core’ processes for outsourcing is one part of the Business/IT alignment question and as such fits neatly within this solution. Indeed, we propose that the three stages of alignment: setting the context, transitioning the change and exploiting the changes, are all supported through the proposed method. In addition it provides an approach to valuable double loop learning which is suggested by Henderson and Venkatraman (1994) p213 as critical to IS management.

The objective of that research was to develop an operational method by which organisations are able to identify the relationships between individual processes and organisational goals, by determining and assessing, the cause and effect pathway of each process (published reference by authors to be cited in final paper). The method is called business process targeting or the targeting method. The planned research will apply and refine this targeting method to identify ‘core’ processes. It will test the efficacy of identification using case studies and apply Action Research and or Action Learning methods to record, analysis and refine the evolution of an effective operational methodology. Cross case analysis will also be used to validate the developed approach.

We will utilise two separate but informing streams within the action research phases: the research stream and the business stream. This clear separation of research and business problems allows the team to deliver business benefits early and then withdraw to complete the academic analysis and write up.

**Phase 1 2004**

Compilation of an a-priori model of the possible impacts of targeting method on the organisation so that there is an informed data collection process. The output of the a priori model construction will inform the case study protocol.
Data collection; working with up to three industry partners to apply the methodology, identify the critical processes, identify the ‘core’ processes (and the link between critical and core) and facilitate/improve the outsourcing decision.

**Phase 2 2005**

Action Research to track the efficacy of the decision, the increase in alignment of business and IT/IS activities. This period continues to clarify the identification of critical and ‘core’ processes, to engage with business partners to ensure attainment of the business objectives and to record the efficacy of the visualisation method in improving business and IT/IS understanding. This is undertaken by:

- Undertake the pilot study as the first cycle of action research/learning using case study- Review and revise the method, protocol, a priori model
- Undertake the first cycle within participant organisation as the second cycle of action research/learning using case study- Review and revise the method, protocol, a priori model
- Develop report for first organisation on the results
- Undertake the second cycle within the second participant organisation as the third cycle of action research/learning using case study- Review and revise the method, protocol, a priori model
- Construct report for Second organisation and produce publication on the results
- Undertake the third cycle within the third participant organisation as the fourth cycle of action research/learning using case study- Review and revise the method, protocol, a priori model
- Construct report for Third organisation and produce publication on the results
- Undertake a cross case analysis of the three business unit cycles- Review and revise the method, protocol, a priori model

If the action research outcomes suggest that further changes will be needed to the targeting method, then we will undertake further cycles of action research. If the action research outcomes suggest that further changes will be limited then we will stop the action research cycles and develop user documentation as part of our knowledge transfer to the participant organisations.

**Phase 3 2006**

Complete write up of the research outputs and any further publications.

**SIGNIFICANCE OF THE RESEARCH**

Organisations are keen to outsource non-core functions, but have no means of visualising the coupling between critical processes, ‘core’ processes and organisational outcomes. This research will provide a means of developing visual cause and effect representations of these relationships, from which effective decisions can be made. Hence this work is of national and international significance. This project is innovative as it will produce a new process that augments and operationalises existing theory and informs the IT decision process. The application of the Targeting Method to Business-IT alignment and the IT decision process is novel and innovative.

Many of the difficulties discussed in the introduction in connection to core competencies are the result of changing business conditions. Prahalad and Hamel (1990) stated in their seminal article on core competency that in the 1980’s top executives in an effort to improve profitability decluttered, delayered and restructured their corporations. In the 1990’s they suggested that organisations would need to focus on identifying and exploiting core competencies to ensure growth (Prahalad and Hamel 1990). Companies are still in a tight market economy, still require a focus on doing things not just well but better than competitors and now have less time to do it.

We propose that in order to improve the alignment of systems and processes there is a need to identify the critical and core competencies. We have suggested a model (Figure 2) which describes on a high level the relationship of strategy to critical processes, core processes and core competencies.
On the left of the model are the major tasks of strategy formulation, while on the right are the tasks of identifying benchmarking information (external competencies) and internal abilities and knowledge which inform the strategy processes. The strategy process informs the identification of critical processes and from these, core competencies. The outputs of these two tasks on the bottom right then inform the strategy tasks on the left as they themselves inform the identification of critical and 'core' processes.

Much of the complexities found in this area can be resolved by the research into the following questions. How does one clearly identify the alignment of vision with the business organisation and the technology? Similarly, how does one ensure that the organisational systems are aligned with the vision? Finally, how does one assess that the operational use of the system is aligned with the vision? Alignment of processes and systems is synergistic to the focus on core competencies. Core competencies support the ‘core’ processes of the organisation and as such are critical to the success of the company. Thus if ‘core’ processes are critical, then they must align with the vision of the organisation. Correctly defined core competencies should support organisational goals. Some means of coupling vision, strategy, objectives and processes would be of use here, as information systems support the processes.

The visualisation of the needs of a system and its direct link with the business strategies may lead to high organisational commitment. To transit to exploitation, a design and development process which promotes ownership is required. This should lead to owners feeling a sense of ownership over the final products as they have had significant input into the development processes. Thus, we see a need to have some means of engaging with the business process owners through the articulation of system requirements, based on the strategies and objectives of the firm.

We conclude that a method which is used to support change within these new forms of organisations should be:

a) Capable of supporting the new forms of strategic planning that are used within these organisations and

b) Capable of articulating the alignment of the business, the organisation and the technology.

CONCLUSION

This research in progress paper has identified that there is still considerable confusion amongst the business community concerning core competencies and as such ‘core’ processes. In order to effectively make decisions concerning outsourcing it is thus necessary to: identify the linkage between ‘core’ processes and core competencies, ‘core’ processes and critical processes and then use the targeting method to link ‘core’ processes to organisational goals. This must additionally be achieved by using a system that is able to cope with the rapid changes in environment experienced by today’s organisations.

REFERENCES


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