Is there balance in Business Process Management?

by

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ABSTRACT

There has been plenty written on the topic of process management in business. This study focuses more on the need to research and develop a model to establish "balance" in process. Reengineering process and investing capital into current technology does not improve the outcome of process alone. The actual process activity coupled with human interface combined with technology determines the outcome of processes, however they do not indicate whether it is a balanced process or not. Wherein the word balance really means sustainable for long periods of time and easily reproduced by others. This study argues for the need of new research in the topic matter and its affects on company profitability, sustainability over long periods of time and tenure with employees.

DEDICATION

I dedicate this effort to my wife Holli Anne Jeffers and to our children,

Cameron, Spencer, Payton, Aaron, and Madelyn. To my parents; Maryann

and Bill Ray Jeffers.

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CHAPTER 1

INTRODUCTION

The usual methods for boosting performance - process rationalization and automation - haven't yielded the dramatic improvements companies need because the focus has been on software or technology and not on the process itself, and often it is not understood why companies and their employees perform the processes in the first place. In particular, heavy investments in information technology have delivered disappointing results, largely because companies tend to use technology to speed up outdated ways of doing business rather than evaluating and changing the processes or the ways they do business. Business cycles change often and if companies do not stay focused on their processes of how they deliver their goods and services to their customers through these changing cycles they will not survive. They leave the existing processes intact and use computers simply to speed them up (Hammer, 1990). But speeding up those processes cannot address their fundamental performance deficiencies and inefficiencies (Hammer, 1990). Many of the management philosophies, approaches, techniques, designs, control measures and organizational structures we use today were created in a business environment that existed long before the advent of the computers. The entire focus was, and still is, on efficiency and control measures. The management buzzwords then and now are still the same; creativity, speed to market, efficiency in production, innovation, total

quality management, and great customer service. The idea that

technology simply makes our processes better is not supported, it's the

process itself aided by computer technologies that determines desired

outcomes and prescribed success. Thus the process must be reevaluated

and reengineered if the dramatic performance increase that are needed

are ever to be realized.

CHAPTER 2

PROCESS REENGINEERING IN THE BUSINESS SECTOR

Among the general business audience, however, the usage of

reengineering has come to be near the middle of a broad spectrum of

uses (Davenport and Short, 1990). So what exactly does reengineering

mean? To some, reengineering means any attempt to change how work is

done, even incremental change, of small, sub-functional processes. To

others, process reengineering means an ambitious and extreme

organizational transformation, where major organizational changes occur

simultaneously in philosophy, strategy, approach, process, culture,

information systems, and all other organizational arenas. "A 1994 survey

of North American and European companies found that reengineering

activity was quite prevalent at 69% and 75% respectfully, and at least one

project under way. Of those not then doing reengineering, half were

planning or discussing projects. In both Europe and North America,

companies had more than three reengineering initiatives completed or

under way on average. As reasons, they cited more demanding

customers, increased competition, and rising cost as the primary drivers.

In the same survey, companies were asked what processes they had

addressed through reengineering. The most popular processes in North

America were customer service (25% of respondents), order fulfillment (16

%), manufacturing processes (15%) and customer acquisition (Davenport

and Short 1990)." So what happens to companies as they begin to

reengineer their entire organizational processes? Many companies do take a "clean-sheet" approach to designing a process or starting from scratch with a new clean slate hoping to instill positive real change that will transform the organization and all its elements. The creative design teams attempt to imagine "the best of all processes", without regard to the existing constraints of people, information systems or company organizational factors such as philosophy, culture, management style and approach. Therefore there should be no surprise that the new process designs that many firms create are quite radical, with ambitious plans for new technologies, new skills, and new organizational structures (Davenport and Short, 1990). However, only a fraction of companies attain their change goals typically due to problems with implementation, due to time frames, and due to costs and personalities within the organization (Davenport and Short,1990).

CHAPTER 3

PROCESS IMPORTANCE IN CONSTRUCTION

The construction management process is a necessary procedure in

construction companies' execution of their business (Cheng and Tsai,

2003). A construction company that employs an inefficient and ineffective

process management protocol and process structure will have a profound

impact on its project performance, financial performance and overall

company success. However, most construction business owners today

are not able to properly identify and determine a correct process because

they are too far removed from the day to day operations and requirements

of project management and current technologies associated with the

process. Therefore, these current business owners fail to establish

effective systems or processes or even be able to understand whether

they are reasonable and effective. These problems result in a redundancy

of business operations and are a waste of valuable human and time

resources (Cheng and Tsai, 2003). They can render management

ineffective to the degree that those individuals may not know how to

improve their predicament (Cheng & Tsai, 2003). If management is better

able to evaluate the existing management process and address

deficiencies before the implementation of automation or the establishment

of a standard operation process, the likelihood of computerization's

success will be greatly increased (Cheng & Tsai, 2003). Therefore the

process itself and its flow through the organization must be evaluated for

efficiency, effectiveness and value. One way to determine this is to select

a process that may need evaluating or reengineering and create a matrix

of business functions and their link to human functions within the

organizational structure.

CHAPTER 4

WHAT IS A BUSINESS PROCESS?

A business process is a collection of related, structured activities or tasks that produce a specific service or product (Toor and Dhir, 2011). "There are three main types of business processes:

1) Management processes; the processes that govern the operation of a system. Typical management processes include "corporate governance" and "strategic management".

2) The next business process is operational processes; processes that constitute the core business and create the primary value stream. Typical operational processes are purchasing, manufacturing, marketing and sales.

3) The third and last business process is supporting processes; which support the core processes. Examples include accounting, recruitment, and technical support. The analysis of these business processes typically includes the mapping of processes and sub-processes down to activity level (Toor and Dhir, 2011)."

A business process model is a model of one or more business processes, which defines the ways in which operations are carried out to accomplish the intended objectives of an organization. (Toor and Dhir, 2011) One of the benefits of business process modeling is the actual

function of modeling and simulation functionality that allows for pre-execution of "what –if" scenarios that then leads to post-execution optimization based on the analysis of actual "as-performed" metrics as noted in the business function process matrix. The key to business process reengineering is for organizations to look at their business processes from a "clean slate" perspective and determine how they can best construct these processes to improve how they conduct business (Toor and Dhir, 2011).

A major continuing stimulus for reengineering has been the emerging innovation and user friendly development of sophisticated information systems, networks and touch pad technology that enable us to manage numerous processes simultaneously, with greater ease than in years past. Leading construction companies are becoming bolder and more aggressive in using this technology to support and maintain innovative business processes, win strategies, and a competitive advantage in their market place rather than trying to refine ways of doing the same old project management processes. It is a holistic management approach that promotes business effectiveness and efficiency while striving for innovations, flexibility, and integration with technology (Toor and Dhir, 2011). As organizations strive for attainment of their objectives, business process management attempts to continuously improve

processes – the process to define, measure and improve your processes

– a "process optimization" process (Toor and Dhir, 2011).

CHAPTER 5

WHAT ARE THE CRITERIA FOR BUSINESS PROCESS MANAGEMENT

What are the criteria for business process management? It entails

several approaches: documenting the process to obtain an understanding

of how work flows through the process, the assignment of process

ownership in order to establish managerial accountability, manage the

process to optimize some measure of process performance, and

improving the process to enhance product quality or measure to process

performance (Gulledge and Sommer, 2002). Business process

management is actually an event driven process wherein one engages in

the planning of an event and manages an event from start to finish and its

interactions with other simultaneous events. To understand the events that

occur or should occur, an evaluation process must take place.

The evaluation is undertaken to inform decisions, clarify options,

reduce uncertainties, and provide information about programs, policies,

and processes, all within contextual boundaries of time, place, values, and

politics (Patton, 1990). This information is used to make decisions that

reduce uncertainties, improve effectiveness and identify reasons for

success or failure (Vakola and Rezgui, 2000). Evaluation gives reliable,

independent assessment of the results of continuing activities and

information on which decisions can be based (Vakola and Rezgui, 2000).

Managers need to understand the effects of their activities in order to look

for alternative approaches and test their results (Caulley, 1993). M. Scriven introduced two different types of evaluation in his book *The Methodology of Evaluation*, the first being "formative evaluation" which is based on the collection of information that can be used primarily for program development and improvement, and the other is "summative evaluation" whose primary purpose is to make an overall judgment about the effectiveness of a given program (Scriven, 1967). According to Sherwood-Smith (1994), formative evaluation in business process reengineering aims at impacting, in an incremental way, decision making throughout the reengineering process, whereas summative evaluation is used to validate or reject the final outcomes. Evaluation is a problem solving process or a process that provides information for decision making (Wholey, 1994). Additionally, evaluation relates to knowledge construction and capacity building (Segone, 1998). For example, the use of "lessons learned" at the end of a project is a critical success factor in the construction industry (Vakola and Rezgui, 2000). Evaluation also facilitates the process of knowledge transferability to similar situations (Vakola and Rezgui, 2000). Can the processes be duplicated by others and have the same outcome? Lesson are transformed into knowledge when they are analyzed, systematized, disseminated and internalized within an organization through evaluation processes (Segone, 1998).

As reengineering activities focus on outdated and inefficient processes in order to make changes that achieve the greatest impact, prior to execution, the present process must be reviewed to locate process barriers in order to ensure their targeting in process redesign (Cheng, Tsai and Lai, 2009). Process value, used to evaluate process performance, can be viewed from either of the following two perspectives: efficiency per unit of cost or efficiency per unit of time (Cheng, Tsai and Lai, 2009). Time is an important factor that impacts the overall cost in providing goods and services in that the longer the process takes to accomplish, the higher the financial price demand, therefore the less competitive a company can be. Although evaluation can facilitate the change process, and is a major asset in the business process reengineering effort, there are many factors that can potentially obstruct this process; fear of being blamed, fear of being shammed, fear of uncertainty, fear of politics, and fear that the evaluation will be unfair (Patton, 1990). "Process orientation has one fundamental problem: requiring organizations to formalize their business processes down to the task-level details required by BPM (Business Process Management) technology. But that rationalistic/mechanical approach is often infeasible or harmful to organizational behavior. First there is a trade-off between responsiveness and formalization. High formalization makes organizations less responsive to turbulent environments. Low formalization naturally increases responsiveness, but challenges the capacity of the BPM systems to effectively coordinate

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business activities. We also find a trade-off between detail and ambiguity (Antunes and Mourao, 2011)." Most service-oriented organizations deal with great levels of informality, variability and ambiguity (Saastamoinen, 1995). Therefore many work processes must be kept at very generic and often vague levels of detail (Antunes and Mourao, 2011). On the contrary, BPM systems often require detailed specifications about what, how, when, who and where activities should be executed (Antunes and Mourao, 2011). Besides these relatively confined issues we should also take a broader view of the organizational forces shaping BPM technology (Antuens and Mourao, 2011). Several researchers observed that computerization has been increasing and organizations are becoming more dependent on computer technology (Hollnagel and Woods, 2005). All along with this increasing dependency we find out that organizations and computing technology have become more complex, adopting new transformation processes, higher temporal demands, wider distribution and span of control, increased skills level and more intensive decision-making abilities (Hatch 2006). The consequence of this trend is that organizations have become more prone to hazards (Perrow, 1994). The transformational process mainly represents the application of conducted operational analysis and process modeling. The primary purpose of operational analysis is to define a processes operational category and hierarchical structure. Process modeling is used to provide a

comprehensive explanation of the relationship between operations (Cheng, Tsai and Lai, 2009).

In conclusion, business process management is actually an event driven process wherein we engage in the planning of an event and we manage an event from start to finish and their interactions with other simultaneous events. It is a method for boosting performance that requires constant evaluation and does not simply get better by adding technology to it in order to produce events faster. Therefore, processes must be evaluated and reengineered if we are to transform our organizations, change business strategies, and culture. The evaluation and reengineering of our processes is due to more demanding clients, order fulfillment, manufacturing ability and speed to distribution and customer acquisition. It drives every aspect of our business and how the business operates and our clients interface with it. It is the currency by which we exchange with our customers for goods and services. The analysis of our business processes typically involves mapping of our processes and sub-processes down to the activity level then documenting it for evaluation. A business process model can used to help better understand and define the ways in which we operate that can lead to process optimization. Evaluation is a problem solving process that provides information to enable us to make better decisions. Therefore the process itself and its flow through the organization must be evaluated for

efficiency, effectiveness and value. In all the literature reviewed, there was no mention of "balance in process management" meaning how to identify and quantify the process to determine if it is too much or too little for the organizational structure and the human and time resources to effectively and efficiently execute. Therefore, more research and study is required to truly gain an understanding of the balance in process management and its effects on the organization and its ability to successfully meet the ever changing competitive business climate in which we work.

However, the authors have taken the liberty of evaluating a process in the organization in which they work to evaluate the overall process and work flow of how an estimate of a project is performed and hereby provide an approach to consider in evaluating the balance of processes within any organization (Figure 1). It begins by looking at the work flow process of estimating a project and the simple steps required to arrive at a complete project budget or GMP, guaranteed maximum price budget.
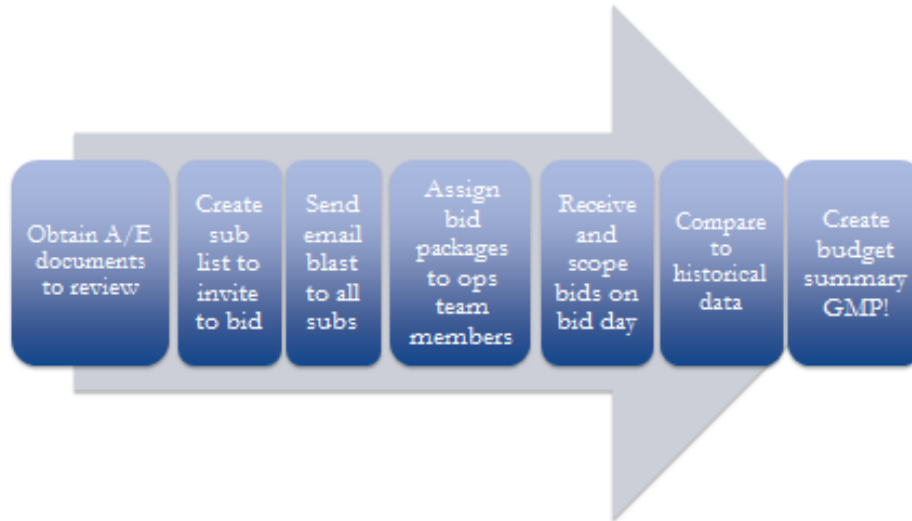
Table 1. Estimating Process Work Flow

In order to understand the graph above and how to create a budget summary or GMP, one must first comprehend the desired outcome from the process; the desired outcome is a complete and competitive, line item budget summary, with good scope coverage in every trade. Once it is known what the desired outcome is we can start the process with the end in mind. Each step must be evaluated as to its importance in the process, who does it, how long does it take them to complete, and how many people does it take to complete the task, does it add value to the process or budget and is the information produced accurate and complete? Notice in the table below the correlation between the tasks and the scoring

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criteria. The scoring criteria will help us see if our process work flow is balanced.

Table 2. Process Flow Evaluation

| | Estimating Process - Work Flow | | | | | | |
Criteria	Obtain A/E Documents	Create sub contractor list to invite to bid	Send email blast to all subs	Assign bid packages	Receive and scope bids	Compare to historical data	Create budget summary / GMP
Who Does it	1	5	1	5	5	5	5
How long it takes	5	5	5	3	5	3	5
Number of people	5	2	5	5	5	3	2
Does it add value?	5	5	5	5	5	5	5
Accuracy	5	5	5	5	5	5	5
Completeness	5	5	5	5	5	5	5
TOTALS	26	27	26	28	30	26	27

* score on a scale of 0 - 5 of level of importance with 5 being the highest or most important

Conclusions

Process engineering requires the proper amount of structure to afford maximum efficiency and governance, but at the same time must allow for critical thought, day-to-day flexibility for execution, and not restrict value-based behavior. The body of literature seeking to propose ways to measure process balance as having either too much structure and rigidity, too little, or just enough is nearly non-existent. A full evaluation must include organizational, personnel, and process components. This field of study currently affords much room for discovery.

VS.

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