

Shouldn't "Engineering Business" be Needed Before "Business Engineering"?

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Abstract

To maximize effectiveness, not just efficiency, of the applications of Business Engineering approaches, all design and implementation works must be geared towards the fundamental essence of business. In the core sense of business, the effectiveness should be seen as the profitability and sustainability of a business. A generic business framework that can withstand an ever changing and dynamically complex business environment is to provide better ways of translating business processes to higher business strategic objectives; and to suggest directions of constructing processes and workflows. Business Engineering aims at facilitating the success of business through methodical design approaches and IT implementations. To meet with corporate strategic objectives and to pursue the success of a business, it is beneficial to have a better comprehension of the fundamental essence of business first.

This paper is to propose a business system from the perspective of management requirements with a focus on strategic management view. The business system connects essential factors in a concise manner, which allows senior managements to be able to capture a holistic picture of their enterprises and the markets they confront for better strategic planning and management. Business in its nature is a holistic and indivisible undertaking, yet it is complex, volatile and conceptual. In this regard, specifically, our achievement can be realized by boiling down an entire business to 44 factors and 80 relations in a visualized graph. The development of the framework involves the effort of re-engineering business concepts at fundamental level, linking essential concepts from otherwise separated subjects, yet without violating the general business principles. Its holistic coverage of business can be realized in the integration and coherency of components – finance, business functions and market; and the integration and coherency of management functions – business process management, functional management and strategic management.

Keywords Business Engineering, Business Mindframe, Business process, Strategic management, Management functions

Introduction

What is missing, but is important?

Since the inception of the management notion, there have been many splendid theories and concepts dedicated to strategic business management. Among these, the better known strategic frameworks are SWOT, Five Forces, value-chain, Balance Scored Card, PEST, VRIO (Barney, 2002) etc. None of these concepts and tools provides a holistic and integrative approach in reasoning a business in strategic perspective. In fact, those business strategic models have been striving for the balance between holistic coverage and practicality. SWOT is one of the best approaches, which describes business strategy by using four essential factors: Strengths, Weaknesses, Opportunities and Threats. However, its simplicity leads to highly general, vague description of a business operation, which limits its use to detailed strategic analyses, and contributes virtually nothing to business process management. Besides, due to its oversimplification, different people could end up with quite different analytical outcomes while attempting to analyze the same business circumstance.

Business Engineering as a discipline aims at providing methods and models which support all phases and aspects of collaboratively constructing men-machine systems in business. Methods and models cover business strategy development, business process development and information system development (Österle, 1995, Österle and Winter, 2000, Winter, 2003). It involves the development of design methods and implementation of business solutions, from business operations and organizational structures to business processes to information applications and infrastructure with the desirable objective of achieving high sustainability and adaptability to environmental change. With the objective set, all relevant factors must be taken into consideration before they are logically assembled for strategic judgment and decision-making. The question of how to put everything in a right and concise perspective becomes the crucial endeavor to success. For the purpose of integrating factors and formulating ideas, a framework of thinking is considered an effective approach for representation and reasoning. As Hrebiniak (2005) put it, the frameworks are most useful in strategy formulation. Business frameworks strive to achieve in modeling the essence of the business in some or all aspects (some could be overly concise, or unnecessarily complicated). Ideally, a good framework should comprise the unchanged factors, and be able to capture a holistic view of business, which can help readily capture the essential indications for judgment and decision-making at certain scenarios, provide grounds for reasoning things out and give people explicit perceptions of insight and foresight of business. Furthermore, a desirable feature of a framework is being logically structured and as concise as possible but without losing its essence, thereby allowing it to be reasoned in the human mind, and that is what we call the “Mindframe”.

By far, there lacks a top-level architectural framework for a single business, which allows users to visualize an overview of a business status-quo, strategic positioning, financial well-being, capabilities of major business functions, market potential confronted, market trend, appropriateness of cost allocations towards market, and the last but the most important aspect -- their coherency. It is obvious that the said tasks are held at the strategic level of business management and are of primary concern to top management. The organizational structures of enterprises need be designed to facilitate the business operations to run and to be transformed effectively and efficiently according to strategic plans. But, determining the structure and business processes entails sound managerial decisions that must be in line with the directions indicated by strategic plans. A strategic plan is the result of how top managements match between the internal capability and external environment they perceive and foresee. Therefore, effective strategic management must be in place and communicated top-down to business process management for supporting relevant decisions in the design and operations of business processes, IT application and infrastructure. The key to success in the communication lies in a clear and clean interface in between.

This paper proposes a systematic framework that connects essential factors in a concise manner, which allows senior managements to be able to capture a holistic picture of their enterprises and the markets they confront for better strategic planning and management. On the other hand, the framework helps the senior managements channel their strategic ideas to business process designers and developers as part of the strategy implementation.

In order to overcome the complexity and vagueness of business management, the development of our framework involves re-engineering business concepts from the ground up, in which a structure of business knowledge is constructed with fundamental business elements defined (or redefined.) However, the redefined business knowledge structure does not violate the general business principles. Rather, we re-organize and integrate business knowledge to make it more sensible and concrete. Besides, we developed four reasoning principles - Basic, Integrative, Holistic and Systematic, by which the re-engineering process of this framework was conducted:

- *Basic*: Identifying fundamental, essential and distinct business elements; aggregating similar concepts into homogeneous elements;
- *Integrative*: Arranging the elements into a highly logical structure with defined relationships;
- *Holistic*: Putting necessary basic concepts in place for a representation of the entirety of a business;

- *Systematic*: Making it systematic by devising guiding principles, objectives, evaluation criteria, steps & procedures etc. to drive the framework for performing business undertakings at strategic level. We make sure the construct provides suitable reasoning methods for resolving business problems.

Over the years, we have put our system through intensive studies and verifications repeatedly with a large volume of practical business cases.

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