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Abstract

Business Process Reengineering (BPR) and globalization of companies are two trends that have converged in the last few years. This convergence has led to several global companies taking the effort to re-assess their global business processes and in many cases reengineering these processes. This paper proposes a model and presents some of the preliminary findings based on few interviews. Though the model here is based on the pilot studies on the topic, the initial responses from the field do seem to validate the fundamental tenets of the model.

Background

Given the globalization trend, popularity of reengineering, and the pervasiveness of Enterprise Resource Planning (ERP) software such as SAP, it is surprising that we do not see any major research effort to understand reengineering efforts that are global. Except for one conference proceeding on the subject, Kutschker (1994), there have been no other works that have made any serious attempt to address this issue. While one could argue that this topic may not be of major significance it can be easily pointed out that some of the current trends are – globalization of companies, global alliances, establishment of new global business processes, implementation of ERP software, new global markets, all of which deal with issues directly/indirectly relating to global business processes. Kutschker (1994), states in his paper, “the reengineering of international business processes needs special attention because of the multi-faceted deeper structure of multinational corporations increases in complexity of business processes, thus influencing the options for redesign.” Though the basis of his paper were several case studies of German and Swiss companies he clearly indicates the need to address issues such as headquarter-subsidiary cultures, issues of coordination and control and technological infrastructure. The paper however fails to incorporate some of the major issues in an international environment, such as organizational structure, strategy, and dynamics of the reengineering process.

It almost seems that the only plausible explanation for the lack of research in this area is the inability to deal with the highly complex nature of the items surrounding the topic. Given our understanding of reengineering at a “domestic” level (Hammer and Champy, 1993; Davenport, 1995; Davenport and Short, 1990; Davenport, 1993; Appleton, 1995; Grover and Kettinger, 1995; Markus and Robey, 1995, Davenport and Stoddard, 1994), it is quite clear that for a study of global business process reengineering (GBPR), factors such as transborder data flow issues, legal issues concerning software, telecommunication issues, regulatory issues, vendor support in foreign countries, price/quality of telecommunications, level of information technology (IT), local cultural constraints, language barriers, work habits, national infrastructure will all have to be considered in some form (Deans, Karawan, Goslar, Ricks, and Toyne, 1991). All these items are not easily captured or controlled for in a research effort.

Global BPR

Since the literature does not provide any working definition of the term, we defined it as follows: "The radical design of global business processes, using information technology as an enabler, resulting in organizational transformation and affecting the organization structure, strategy, technology and people dimensions." Where a global business process is defined as, " any business process that cuts across the borders of at least two countries. This definition was intentionally kept consistent with most definitions on business reengineering. Further research into the subject would probably lead to some form of evolution of this working definition.

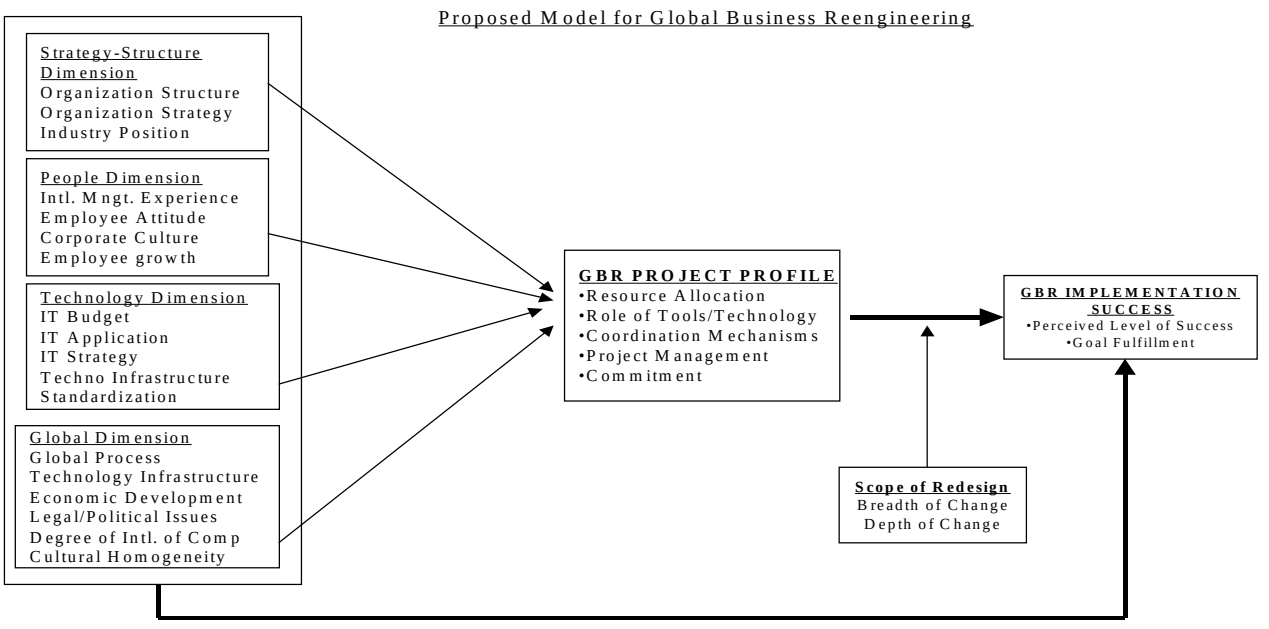
This research targets companies that have or are currently involved in reengineering projects that are global in scope and can be between organizations across at least two countries or between the same organization across at least two countries. The specific countries involved in the effort will also be identified to generate some amount of qualitative information about the project.

Global Elements to Consider

The proposed model of reengineering of global business processes has to include certain factors relating to reengineering itself as well as incorporate relevant global elements. In this section some of the factors are discussed. These factors are then used to develop the proposed global reengineering model.

Figure 1, below, shows the proposed research model for reengineering global business processes in organizations. It is a comprehensive model and we do anticipate that the model will be updated to some extent based on a pilot study that is currently underway. We do not envision any major changes in the dimensions or the variables being measured. However, there may be reason to modify the wording on some of the sub-items within the dimensions.

Figure 1



Proposed Model of Global Business Process Reengineering

Figure 1 above provides the proposed model for reengineering in global business processes. The different dimensions that are being considered include the factors, items and best practices from "domestic" reengineering articles and cases (Klein, 1993; Barrett, 1994, Markus and Robey, 1995; Krass, 1991; Martinez, 1995).

The three main dimensions taken from existing literature include the People Dimension, Technology Dimension and the Strategy-Structure Dimension, which was combined into one dimension. Further, given the nature of global business processes a global dimension was added. All the dimensions were approached from a global perspective and global element pertaining to each dimension is considered. Some of these specific items are discussed in the next section.

Essentially we made an argument based on indications from the literature and interviews with practitioners that the dynamics of the reengineering process itself will be similar. While this is true the four "macro-level" dimensions mentioned earlier would impact the execution and implementation of the global reengineering project.

It was also decided to include a moderating variable labeled the Scope of Redesign where we will attempt to account for the breadth and depth of change as defined by Andrews and Stalick (1994).

The measurement of the global reengineering outcome will be multidimensional. This would include the perceived level of success and fulfillment of goals. This technique has been successfully used by Teng et.al. (1995). Here the respondent is asked to provide their perceived level of success on a scale of 1 to 5 and then respond in another section to planned versus actual results on the goals of the reengineering project. This provides a fairly powerful combination of qualitative and quantitative measurement of the reengineering effort.

The Dimensions: Strategy-Structure, People and Technology

These dimensions are always considered when we deal with any radical change like reengineering. These items include - organization typology classifications such as the ones proposed by Bartlett and Ghoshal (1988; 1991; 1995), Miles and Snow (1989; 1991); also includes items such as international experience of the managers, corporate Culture with respect to international employees; technology elements such as IT budget, IT strategy, views on standardization or "laissez faire" attitude toward technology platforms, technology infrastructure and so on.

Based on the literature and interviews we expect the above items to have some bearing on the global reengineering effort. The specific relationships are

beyond the scope of this paper but will be investigated in a future paper.

The items in the Global dimension flow from the work of Deans et.al. (1991). Here we are going to investigate the global process by looking at the number of countries involved, which countries and amount of revenue currently generated from these countries. The technology infrastructure in these countries will be compared for bearing on the reengineering effort. The economic development, legal, political and cultural issues between the countries will be identified. The respondents will be asked to identify the degree of similarity on all these items. The premise here is the greater the similarity the higher the opportunity to apply domestic reengineering experiences to the global reengineering effort.

Though this research is currently a work in progress, the authors will definitely have some results available in the next two months.

Preliminary Findings

These findings are based on interviews and e-mail responses to some questions posed to practitioners and consultants in the business of reengineering. It was interesting to see that none of them claimed to be experts in the global reengineering area.

The most important item that the respondents wanted to talk about was the formation and management of an international or global team. They felt that this would be the essential ingredient in the global reengineering effort. Technology did not seem to be a main problem, though one respondent disagreed strongly with the need to use technology as an "enabler" for the reengineering effort.

In most cases consultants were involved at some stage of the reengineering effort. There was some confusion with the definition of reengineering and it was a general consensus that consultants helped in this learning process. During the interviews it was not possible to test the model in detail but a general listing of items from the model seemed to be fairly well received by the respondents.

Though the model will be definitely evolve in the next few years, it seems to incorporate most essential elements of the global business-reengineering phenomenon.

References: Available upon request