

8-25-1995

# The effect of Outside Consultants Involvement over the Success of BPR Projects

Ahmed A. Shabana

Texas A&M University, Shabana@tam2000.tamu.edu

Follow this and additional works at: <http://aisel.aisnet.org/amcis1995>

---

## Recommended Citation

Shabana, Ahmed A., "The effect of Outside Consultants Involvement over the Success of BPR Projects" (1995). *AMCIS 1995 Proceedings*. 165.

<http://aisel.aisnet.org/amcis1995/165>

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 1995 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **The effect of Outside Consultants Involvement over the Success of BPR Projects.**

Ahmed A. Shabana  
Texas A&M University  
College of Business Administration  
College Station, TX 77843-4217  
Shabana@tam2000.tamu.edu

## **Introduction**

Business Process Reengineering (BPR) is a radical, Information Technology based redesign of workflows and processes within and between organizations. Since the publication of the fundamental concepts of BPR (Davenport and Short, 1990 and Hammer, 1990), a steady stream of publications has reported on BPR implementations and the dramatic benefits it brought to the implementing organizations.

The fundamental concepts of BPR have emerged from the consulting rather than the academic domain. Today, consultants are frequently involved in the implementation of BPR projects. Their considerable role is reflected in current research. Their views on BPR implementations is the basis for a research stream on preconditions for BPR success (Bashein et al., 1994). But does the use of consultants result in more successful BPR projects? By addressing this question, this paper aims at complementing the existing body of research on BPR.

## **Theory**

Organizations often seek the services of outside consultants. The consultants bring to the organization specialized skills, experience and know how that the organization has a need for and cannot afford the cost or the time needed to develop them internally. Consultants also act as boundary spanners bringing to the organization both technical and administrative innovations. Their role is far more pronounced when organizations undertake novel projects such as BPR.

There are several reasons why introducing a consulting firm ought to increase an organization's chances to successfully implement a BPR project. First, consulting firms can bring their wealth of experience implementing similar projects in other organizations. Consultants can direct the reengineering effort to areas where it can have the most beneficial results. At the same time, by being outsiders to the organization, consulting firms can take a fresh look at existing processes and uncover unnecessary steps and conditions that become an integral part of existing processes without serving a specific purpose (Hammer, 1990). Finally, as consultants allegiances are to the project at hand, they can bring an objective vision to the project and thus act as facilitators of the change process by mediating the inevitable conflicts that arise with the changes introduced by BPR (Markus, 1984).

On the other hand, consultants can also be seen as having a potential negative impact on the implementation of a BPR project. First, by being outsiders to the organization, they have a limited knowledge of the existing processes. An extensive and lengthy study is the only way they can achieve some understanding of the peculiarities of the process in a particular organization. Delays in acquiring this basic information can only have a negative effect over the completion times of the project at hand. Even after such study, their knowledge of the process will remain somewhat limited as many of the political and organizational forces that have shaped existing processes might still remain undiscovered. Without this critical information, consultants might recommend actions that, although successful in other organizations, cannot survive or lead to the results sought in a particular organization.

One can make extensive arguments for or against the use of consulting services. The fact remains that some organizations take that route while others prefer to undertake projects internally. At the same time, all organizations do not use consultants services in the same manner. While some organizations use consultants to design and implement BPR projects, other organizations limit their involvement to either the design or the implementation stages of the project.

In this paper I look at the success of BPR projects on two separate dimensions. The first one is based on the direct outcomes of the project on measures such as quality, service level, operating and personnel costs and reduction in overall cycle time. The second success dimension is based on the project's performance in terms of meeting budgetary and time constraints. Projects that are completed within or close to such constraints are viewed as more successful than the ones that do not.

The first hypothesis tested in this study is the following:

***H1: The level of outside consultants involvement has an effect over the outcomes of BPR projects.***

I hypothesize that increased consultants intervention will lead to better project formulation, process selection and overall implementation which in turn ought to lead to more beneficial outcomes for the project.

In the second hypothesis, I examine the effect of consultants intervention over the project management dimension. The consultants experience with similar projects and their problems ought to make the implementation go more smoothly.

***H2: The level of outside consultants involvement has an effect over the project management performance of BPR projects.***

I test the above hypotheses on data collected as part of a larger research project aimed at better understanding organizations experiences with BPR projects and their implementation.

## Method

Data for this study were collected by means of a mailed survey. The survey instrument received several revisions as it was pretested with a number of IS executives and Management faculty. Using a commercially available mailing list, the instrument was mailed to a random sample of one thousand and seventy-three top IS executives. An attached letter explained the purpose of the study and promised a summary report of the results. An important issue that this study encountered early on, is the lack of consensus on what constitutes a BPR project. In order to avoid this problem, the instructions page of the instrument included Hammer and Champy's (1993) definition of BPR. In addition, the survey includes several questions to help identify projects that clearly do not meet the traditional BPR criteria. A total of 201 organizations returned filled questionnaires for a response rate of 19 %.

Respondents were asked to rate their projects on these dimensions on a seven point scale. A combined scale showed a high level of reliability and was used to represent the project's score on each of the two success dimensions.

Organizations in the sample ranged from small (less than \$50 Millions) to very large (Over \$1 Billion). This wide range confirms the widespread implementation of BPR projects among organizations of different sizes. The participating organizations also belonged to a wide variety of industries. The largest group of respondents come from the Manufacturing Industry (37%) followed by the service industry (19%). The distribution of respondents is in line with the general distribution of organizations in the economy as measured by the Internal Revenue Service statistics.

Projects were classified by the levels of consultants involvement in the BPR project. Projects where consultants were not involved formed the first category. The second category included projects where consultants were involved in the design phase. The third category included projects where consultants were brought in to implement the BPR project. The final category was assigned to projects where consultants were involved in both the design and implementation of the BPR project.

I analyzed the data to see if the outcomes and the project management performance differed significantly between each of these different levels of intervention.

## Analysis and Results

Among the responding organizations (201), 118 had completed BPR projects and could provide the necessary outcome measures. In terms of the breakdown by the level of consultants involvement, it was as follows.

No. Consultants	Consultants in Design phase	Consultants in Implementation phase	Consultants in both Design and Implementation phase
-----------------	-----------------------------	-------------------------------------	---

57	26	6	29
----	----	---	----

Table 1: Breakdown of BPR Projects by consultants involvement

Tables 2 and 3 report the ANOVA results.

	Sum of Squares	Degrees of Freedom	Mean Squares	F-Ratio	P-Value
Consult (btw)	3.2291	3	1.0764	1.008	0.392
Error (within)	121.7074	114	1.0676		
Total	124.9365				

Table 2: ANOVA results for the relationship between consultants involvement and the outcomes of the BPR Projects

	Sum of Squares	Degrees of Freedom	Mean Squares	F-Ratio	P-Value
Consult (btw)	3.4583	3	1.1528	2.582	0.057
Error (within)	50.9019	114	0.4465		
Total	54.3602				

Table 3: ANOVA results for the relationship between consultants involvement and the project management performance of the BPR Projects

The results of the analysis failed to support both hypothesis.

### **Discussion and Conclusion:**

Contrary to expectations, the level of consultant's interventions had little influence over the success of the BPR projects in both the outcomes and the implementation dimensions. There are several possible reasons why the data did not support the contribution of consultants to the success of the BPR projects. As the benefits of Reengineering became apparent to organizations, consulting firms have actively marketed their Reengineering services. While it is clear that the pioneering firms have developed over time the know how and gained the experience in similar projects, there is a wide fluctuation in the quality of services currently offered by consulting firms. Some of the comments of the respondents support this view.

While outside consultants can act as facilitators to the change process and provide the framework to implement the new process, the outcome of the project is ultimately dependent on the organization's commitment to the project. Organizations that hire consultants might fall into the trap of expecting consulting firms to reengineer their processes with little or no contribution on their part (Bashein et al.,1994).

At the same time I need to point out that while the study captured the level of involvement of the consultants in the different phases of the project, it did not address the extent of involvement whether measured by the number of billable hours or the overall financial remuneration to the consulting firm.

Organizations using the services of consulting firms might develop higher expectations from their projects than organizations that implement the projects internally. These higher expectations often stem from the experience and track record of the external consultants. Failure to meet similar outcomes can negatively affect the organizational perception of the degree of success of the project.

Finally, it is important to point out that projects in this study represent the second generation of BPR implementations. Organizations that implemented the first generation of BPR projects were pioneers and their involvement of outside consultants was almost a necessity. There were no established methodologies or tools to assist organizations going on their own. Since then, a wide range of tools and methodologies have become available to organizations and the widely published experiences of failures and successes have made undertaking BPR projects without outside consultants a less risky venture.

There are numerous organizational and technological issues that organizations need to address when implementing a BPR project. While using the services of consultants might help dealing with some of these issues, it is clearly not enough to ensure a successful BPR project.

Selected Bibliography: Available upon request

Bashein, B.J., Lynne Markus and Patricia Riley; Business Process Reengineering: Preconditions for Success and how to prevent Failures, Information Systems Management, Spring 1994.

Davenport, T.H. and Short, J.E. The New Industrial Engineering: InformationTechnology and Business Process Redesign Sloan Management Review Summer: 11-27, 1990.

Davenport, T.H.; Process Innovation: Reengineering work through InformationTechnology; Boston, Harvard Business School Press, 1993.

Hammer, M. Re-engineering Work: Don't automate, Obliterate, Harvard BusinessReview March/April: 6-11, 1993.

Hammer, M. and James Champy, Reengineering the Corporation: A manifesto for Business Revolution, New York; Harper Business, 1993.

Markus, M.L. Systems in Organizations: Bugs and Features, Pitman, Boston, MA, 1984.