

Polemics of Reengineering-Senior Management Perspective

¹Suresh Dabke, ²Dr.Prashant.G.Kamble
¹Research Scholar, ²Professor
 PDACE Kalaburge

Abstract - Abstract: The purpose of this paper is to demystify the confusion on Business Process Reengineering(BPR).This is achieved through a review of the literature covering the period from 1996 to 2020 .Articles published in leading business journals were included in the review as well as book published on the topic. The review shows that considerable confusion exists as to exactly what constitutes BPR resulting in most of BPR projects failure due to lack of top management commitment. This paper contrasts and summaries the main findings of literature research and show further avenues for successful BPR efforts with senior management perspective

keywords - Keywords : Business process reengineering,, Information technology, , Mental models, Senior management.

1.INTRODUCTION

The term Reengineering evolved in the field of Information Technology as a broader change process. Any organization wants to be of world class reengineering field becomes a topical interest as a means to achieve search of excellence to make the organization more efficient and competitive. Only small number of organizations claiming to have reengineered themselves provides a niche for academicians to make the field richer.

2. REENGINEERING CHALLENGE

Hammer and Champy (1993) have defined reengineering as “The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.” They identified three kinds of companies that undertake reengineering. First companies that find themselves in deep trouble, second companies that are not in trouble but whose management can see trouble coming and third companies that are in peak condition and see an opportunity to over take their competitors.

History of reengineering reveals that participants involved in reengineering failed to achieve benchmarks set by the field because “reengineering of the corporation is not extending to actual management Practice”. [1] and “Empirical tests have not been conclusive regarding specific means through which technological change impacts on economic performance, technology is regarded as a driving force behind gains in quality and competitive position both at the macro- and micro-economic level” [2]as revealed by Wojciech Nasierowski..Recently improvement of business processes is the top priority for CIOs for the case of European governments requires “The establishment of a single point of contact for all administrative services and provides yet another major impulse for BPM initiatives.” [3]

3. LITERATURE SURVEY

Prof.Ronald [2010] stated that variability in BPR(Business Process Reengineering) success is rooted in many factors and emphasized on managers rational approach in “selecting the right type of information technology based upon a firm's process redesign goals, regardless of the type of BPR involved”.[4] Prof. Ruth Alas Prof.Mariz Zernand-Vilson , Prof.Maaja Vadi(2012) conducted empirical study in 2011and reveled ”The most popular management technique was BPR and BPR had also the strongest impact on company performance.” [5] “The stream analysis approach is used for analysis, diagnosis and management of process changes represented with IDEF model” [6] by Prof.Armen Zakarian and prof.Andrew Kusiak(2001). prof. Yasin Ozcelik (2009) shown “substantial benefits for firms that successfully implement the structural changes associated with BPR projects and investments in IT can contribute to a higher level of revenue if they are supported by BPR initiatives”. [7] A rank ordering challenged by the authors Prof.Tae Kyung Sung and David V Gibson(1998) concluded that “Korean BPR team leaders and CEOs rate strategic and methodological CSFs as most important while organizational and technological/educational CSFs are considered less important.” [8]

Prof.Vishanth Weerakkody, Prof.Marijn Janssen and Prof Yogesh K. Dwivedi (2011) contributed to the field of e-Government induced change in the public sector and their findings offer policy makers “A valuable insights into the complexities and possible strategies that need to be adopted.” [9] Prof.Libing Shu, Prof.Shifeng Liu and Prof.Liping Li(2013) put forward four suggestions to promote the process knowledge creation in terms of “business process reengineering, construction of knowledge mining mechanism, establishment of knowledge sharing platform, and cracking of knowledge locked effect.”[10] Process models to reference models are compared Prof.Mouna Tka, Prof.Prof.Sonia Ayachi Ghannouchi(2012) to detect differences and proposed improvements.[11] A unique dataset of 228 firms between 1996 and 1999 concluded that “Interaction of IT and BPR portfolios is positively associated with firm productivity and market value.”[12]About 350 respondents who participated in the survey within the period of three years (2009-2011) concluded in their research work that “Companies that routinely practice Business Process Management (BPM) are able to consistently

improve on the results obtained from existing processes”[13] “Reengineering requires involvement of people for radical rethinking of business process which can be achieved by empowering. The companies articulation for reengineering effort place more important in reducing resistance to change by employees. The exploration of purpose of reengineering directly helps in identification of processes. Reengineering refines the synergy effect due to the advent of information technology and it is a system synthesis process.” [14]

3.1 Concomitant part of reengineering.

Dr. Stephen L. Ghan, Chung For Choi(1997) referred in their literature with a survey report of Fortune 500 companies and large British companies stating that “They were pleased only partially with their results from reengineering” and summarized these failures into many categories. The Authors found that “There is a lack of methodology for BPR and an analytical framework to identify the major issues concerning BPR.” [15] This resulted in lack of top management commitment for successful BPR implementation. According to survey conducted by Arthur D. Little only 16% of senior executive were fully satisfied with reengineering programs and 68% were experiencing unanticipated problems due to many factors and one among them is “Management failure to change.” [16] “Lack of consistency in restructuring attempts” [17] is reported by Prof. Wojciech Nasierowski (1999) in their study on serious constraints in implementing fundamental and radical change in Mexican conditions. C. Ranganathan, Jasbir S. Dhaliwal-2001 presented the results of a survey of B.P.R. practices followed by firms in Singapore and concluded that “Top management must initiate, support, and champion B.P.R. efforts and key problems faced by them are top management short term view and rigid organization structure.” [18]

3.1.1 Senior Management Involvement

Prof. Alan R. Dennis, Prof. Traci . Carte , Prof. Gigi G. Kelly (2003) examined the successes and failures of BPR processes in four organizations suggesting a 50% failure rate owing at least in part to the lack of senior management involvement. Author believed that “Senior management involvement is important for three reasons. First, it serves as a signal that the project is important, something that would have helped reduce the initial reluctance to participate. Second, it helps ensure that the project results are aligned with the rest of the organization’s initiatives known to senior management. Third they believed most importantly, involvement helps senior management understand the real issues”. [19]

3.2 Rhetoric of reengineering influencing management practice

Prof. Ian Graham and Prof. Robin William (2005) conducted case studies and overview of case studies revealed that “Hammer’s texts did not provide a template for reengineering in any of the cases, and the Hammer texts were cited as a foundation for merging the rhetoric of reengineering with existing organizational change methods, whereas in Patient Records the texts were only used to problematise the weaknesses of existing systems. Reengineering proceeded largely by rhetoric was an advantage for the consultants, in that they could offer proprietary techniques, in some cases retrospectively badged as reengineering, and fill the hollow core with methodologies of their own devise.” [20] They observed symbolic link to the texts by Hammer and stressed the influence of the content of the texts on management practice despite of its methodological ambiguity.

Interestingly TRA approach is used by Prof. Ing-Long Wu(2002) in research work on “Understanding senior management’s behavior in promoting the strategic role of IT in process reengineering” which underlines determinants of the behavior in question and bases them to design effective treatments to change the behavior.[21]

3.2.1 Academic Literature Contributions

Many conceptual BPR models are developed right from inception of reengineering like Simulation model, Object-oriented model, Integration Definition (IDEF) model, Network model and .Knowledge-based model with their own methodologies to conquer on reengineering practice and this search is still evident from the recent literature contributed by David J. Teece who classed sensemaking under crisis as highest-order dynamic capabilities on which top management should be most focused for innovation and stressed upon “dynamic capabilities of top management team and proposed a defensible business model for guiding organizational transformation.” [22] Authors Özge Akbabaa, Erkut Altındağb conducted 310 surveys of companies in the Anatolian side of Istanbul revealed that “The reengineering concept is still not known sufficiently in Turkey” and perceived that “The academic studies performed on this concept should be examined thoroughly for the dissemination of the concept.” [23] An interesting fact about efforts for successful implementation of reengineering is still on, right from its inception of 3 decades and Authors Mahmoud AbdEllatif , Marwa Salah Farhan, Naglaa Saeed Shehata used PROM(Process Reengineering Ontology-based knowledge Map Methodology) to overcome the difficulties while implementing reengineering and stressed upon “senior management cognition and factual forecasts of BPR results” and concluded that efforts are still on to know more on the causes of a failure.[24]. Zomparelli, L. Petrillo. B Di Salvo, A. Petrill in their literature revealed that “The process re-engineering and delocalization, in recent years, is changing the production world in the developed countries and scientific literature is very active in the field of process re-engineering with the aid of simulation techniques in Scopus database”. [25]

4. SENIOR MANAGEMENT COGNITION

Hammer’s Text reveals that any company embarking on reengineering has to accept it as crisis that will not go away till it relies on classic methods of business improvements. David J. Teece who classed sensemaking under crisis as highest-order dynamic capabilities sensemaking under crisis becomes a paramount importance under such situations by senior management as most failures of BPR points towards it. “The key task for leaders in such situations is to develop a mental model, based on their schemas, consisting of causal beliefs for understanding and responding to the crisis.” [26]

“It is emphasized that mental models affect both leadership effectiveness and overall organizational development. They represent deeply ingrained assumptions or generalizations that influence how we understand the world and how we take action. Johnson-Laird (1983) proposes mental models as the basic structure of cognition which is plausible to suppose that

mental models play a central and unifying role in representing objects, states of affairs, sequences of events, the way the world is, and the social and psychological actions of daily life." [27] Figure 1. Shows Thinking-Action-Outcomes Model to explain the importance of mental models for leadership effectiveness.

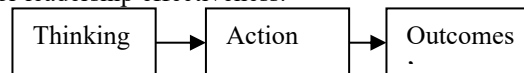


Fig. 1: Thinking-Action-Outcomes Model

(source: <http://whitewatercg.com/2011/04/leadership-models/>)

At this stage it is important to reveal Prof. Ryan K. Gottfredson, Christopher S. Reinab in their recent literature revealed the implications of deliberative mindsets for leadership effectiveness and asserts that these mindsets have enormous influence on how individuals process information which shapes direction and success of their organizations. "Leaders with a deliberative mindset appear much more inclined to be sensitive and open to new and novel information, and less biased in their processing." [28]

5. DISCUSSION

As such the popular text given by Hammer played an influential role in shaping management practice where symbolic value of foundational text is used to legitimize management practice and fulfill the needs of academics, but practitioners have achieved such a level of penetration of the text that rhetoric of reengineering given by Hammer formed the base to device their own methodologies calling it as reengineering. Reengineering being top down approach no attention is placed on cognition of senior management in business process reengineering for its successful implementation.

6. CONCLUSION

A conceptual frame work is required to delineate which can influence epiphanies of senior management and to decelerates psychological inertia by deriving on from symbolic force of rhetoric management text given by Michel Hammer and James Champy as a substantive text to form a base and guide for academicians and practitioners for successful implementation of reengineering with mental model approach as it heavily relies on deliberative mindset of extensive thinking.

Qualitative meta synthesis technique which can be used for interpretative translation of Hammer Text and can be integrated with qualitative studies from literature survey in the field of organization crisis to address the issue of senior management cognition for successful implementation of reengineering.

7. REFERENCES

- [1] Peter O'Neill, Amrik S, Sohal(1999) Business Process Reengineering A review of recent literature *Technovation* Volume 19, Issue 9, September 1999, Pages 571-581
- [2] Wojciech Nasierowski(1999) Technology and quality improvements in Mexican companies: some International comparisons *Journal of Quality Management* 5 (2000) 119±137
- [3] Bjoern Niehaves, Ralf Plattfaut, Joerg Becke *July 2013*
Business process management capabilities in local governments: A multi-method study *Government Information Quarterly* *Issue 3, Volume 30* pp217-225
- [4] Ronald Ramirez , Nigel Melville , Edward Lawler-2010 Information technology infrastructure, organizational process redesign, and business value: An empirical analysis *Decision Support Systems Journal* Volume 49, Issue 4, November 2010, Pages 417-429
- [5] Ruth Alas, Maris Zernand-Vilson, Maaja Vadi 2012-Management techniques in Estonian organizations: learning organization and business process reengineering *Procedia - Social and Behavioral Sciences* 62 pp. 494 – 498
- [6] Armen Zakarian, Andrew Kusiak - 2001 Process analysis and reengineering, *Computers & Industrial Engineering*, Volume 41, Issue 2 pp. 135-150
- [7] Yasin Ozelik-2009 Do business process reengineering projects payoff? Evidence from the United State *International Journal of Project Management* issue 8 (2010) pp. 7–13
- [8] Tae Kyung Sung, David V Gibson, July 1998, Critical Success Factors for Business Reengineering and Corporate Performance: The Case of Korean Corporations *Technological Forecasting and Social Change*, Volume 58, Issue 3 Pages 297-311
- [9] Vishanth Weerakkody, Marijn Janssen, Yogesh K. Dwivedi -July 2011, Transformational change and business process reengineering (BPR): Lessons from the British and Dutch public sector *Government Information Quarterly*, Volume 28, Issue 3, , pp320-328
- [10] Libing Shu, Shifeng Liu, Liping Li-2013, Study on Business Process Knowledge Creation and Optimization in Modern Manufacturing Enterprises, *Procedia Computer Science*, Volume 17, Pages 1202-1208
- [11] Mouna Tka, Sonia Ayachi Ghannouchi - 2012, Comparison of Business Process Models as Part of BPR Projects *Procedia Technology*, Volume 5, pp 427-436
- [12] Ronald Ramirez, Nigel Melville, Edward Lawler- November 2010, Information technology infrastructure, organizational process redesign, and business value: An empirical analysis *Decision Support Systems*, Volume 49, Issue 4 Pages 417-429
- [13] Valentina Nikolova - Alexieva-2012 Exploring the state of business processes management in the Bulgarian enterprises *Procedia - Social and Behavioral Sciences* 62 pp. 1350 – 1354
- [14] Suresh Dabke-Microscopic aspects of Reengineering, proceedings of International Conference on e-Manufacturing November 17-19, 2002 M.A. National Institute of Technology Bhopal India 2002 pp404-406

- [15] Dr. Stephen L. Ghan- Chung For Choi-1997, A conceptual and analytical framework for business process reengineering, international journal of production Volume 50, Issues 2–3, 16 June 1997, Pages 211-223
- [16] Mohsen Attaran-2004 Exploring the relationship between information technology and business process reengineering, Information & Management- 41 pp. 585–596
- [17] Wojciech Nasierowski-1999, Technology and quality improvements in Mexican companies: some international comparisons Journal of Quality Management 5(1) March 2000 pp.119-137
- [18] C.Ranganathan, Jasbir S. Dhaliwal-2001 A survey of business process reengineering practices in Singapore, Information and Management 39 pp.125-134
- [19] Alan R. Dennis a, Traci A. Carte b, Gigi G. Kelly c-2003, 47 Breaking the rules: success and failure in groupware-supported business process reengineering, Decision Support Systems 2003 pp. 31–47
- [20] Ian Grahama, Robin Williams-2005, The use of management texts: Hammer's reengineering, Scandinavian journal of management 21, Volume 21, Issue 2, June 2005, Pages 159-175
- [21] Ing-Long Wu-2003, Understanding senior management's behavior in promoting the strategic role of IT in process reengineering: use of the theory of reasoned action, Information & Management volume 41 pp.1-11
- [22] David J. Teece-2018, Business models and dynamic capabilities, Long Range Planning journal Volume 51, Issue 1, February 2018, Pages 40-49
- [23] Özge Akbaba, Erkut Altındağ 2016 The Effects Of reengineering, Organizational Climate And Psychological Capital On The Firm Performance Procedia - Social and Behavioral Sciences 235 12th International Strategic Management Conference, ISMC 2016, 28-30 , Antalya, Turkey
- [24] Mahmoud AbdEllatif , Marwa Salah Farhan, Naglaa Saeed Shehata Overcoming business process reengineering obstacles using ontology-based knowledge map methodology Future Computing and Informatics Journal volume 3 pages 7-18
- [25] Zomparelli, L. Petrillo, B. Di Salvo, A. Petril 2018 Re-engineering and Relocation of manufacturing process through a simulative and multicriteria decision model, IFAC papers onLine Volume 51, Issue 11, 2018, Pages 1649-1654
- [26] Ian A. Combe , David J. Carrington-2015 Leaders' sense making under crises: Emerging cognitive consensus over time within management teams, The Leadership Quarterly-26, pp. 307–322
- [27] Maša Magzan, 2012, Mental models for leadership effectiveness: building future different than the past, journal of engineering management and competitiveness (JEMC) Vol. 2, No. 2, pp.57-63
- [28] Ryan K. Gottfredson, Christopher S. Reinab, February 2020 Exploring why leaders do what they do: An integrative review of the situation-trait approach and situation-encoding schemas Leadership quarterly Journal Volume 31, Issue 1, February 2020, 101373.