Re-engineering of Library Acquisitions

Daulat Jotwani

Reengineering as a management tool has been effectively used in many business organizations to transform vast segment of their operations and has played a major role in the resurgence of large companies world over. Reengineering requires radical rethinking and redesign of practices and processes to achieve dramatic improvements in performance while keeping the customer at the center of the exercise. Many libraries in developed countries have applied reengineering to face the challenges of declining library budgets, increasing costs of various inputs and resources, and rising demand of users for newer and faster services. Internet and information technology offer tremendous opportunities to abandon a number of old and obsolete practices and procedures, reduce time gap between the demand and delivery and considerably improve the quality of services and user satisfaction. This paper attempts to define reengineering and states how is it different from restructuring, reorganization, or quality improvement, though all these may occur as a by-product. Paper also reviews various attempts to reengineer libraries or their practices and processes. "How do we begin" lists the key elements that need to be taken care while reengineering. It highlights the need for reengineering of library acquisitions and enumerates key processes involved in the acquisition of print and electronic resources. Suggests that the reengineering of library acquisitions shall include reengineering of acquisition policy, acquisition processes, acquired material (library collection) and staff. Stresses the need for a well made plan to implement the reengineering which shall include (a) clear definition of the goals of the reengineering, (b) selecting the reengineering team, (c) identification and analysis of the policies, systems, procedures, practices and products to be reengineered, (d) developing and testing of reenginered work flow / processes, (e) implementation and time frame, and (f) gap analysis, correction. Reengineering will not be an easy task for any library. It is also not a one time job, it is a continuous long process. Librarians and libraries will face several challenges while implementing reengineering which can be overcome with the support and commitment of all stakeholders.

Keywords: Re-engineering, Library Acquisition

1. Introduction

Re-engineering as a management tool became popular in the late 1980s and early 1990s, and aims to cut costs, increase productivity and provide higher levels of service. It involves identification, analysis and redesigning of key processes, while keeping the customer at the center of process redesign. The concept at the heart of the reengineering is the need to stay competitive in today's business world.

Hammer and Champy (2001) in their classic work, "Reengineering the corporation: a manifesto for

business revolution" define Reengineering "as the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as, costs, quality, service, and speed". According to them the Reengineering is about reinvention – not improvement, enhancement or modification. They identify four themes that describe the basic elements of reengineering:

- ⇒ Focus on processes not on products or organizational structures;
- **⇒** Aspire to making breakthroughs, not small incremental changes;
- Break with old traditions and rules; and
- Use information technology creatively to facilitate change.

In this work, Hammer and Champy caution against confusing reengineering with other management movements and trends. Reengineering is not merely automating existing processes, though automation may assist us in redesigning our processes. It is not reorganization, delayering or flattening of organizational structures, though this too may occur as a byproduct of reengineering. And reengineering is not implementing quality improvement programs though it shares many common elements with such programs. Quality improvement programs tend to enhance existing processes rather than aim for breakthrough changes that will replace old processes with new.

Reengineering is the examination, study, capture, and modification of the internal mechanisms or functionality of existing processes and practices in an organization to reconstitute them in a new form and with new features, often to take advantage of newly emerged or desired organizational requirements or technological capabilities, but without changing the inherent purpose of the organization itself. Reengineering can be carried out at the level of the organization, at the level of organizational processes, or at the level of the products and services that support an organization's activities. The entity to be reengineered can be systems management, process, product, or some combination. In each case, reengineering involves a basic three-phase systems-engineering life cycle comprising definition, development, and deployment of the entity to be reengineered (Sci – Tech Encyclopedia).

2. Re-engineering in Libraries

Libraries share with the business sector a common focus. While business looks towards its customers, librarians look towards their users. Both face competition: the business community from within the industrial sector and libraries with other information providers such as computing centers, publishers, information brokers, and the broadcasting/cable industry. In addition, both are preoccupied with an environment that has and will continue to experience massive and rapid changes.

With the growing emphasis on quality improvements, librarians are also searching for methods for cutting costs and improving services. The effort to understand and reduce costs, and to manage the rising demand for services to users coupled with stagnant or declining funding, has engaged the attention of library managers in institutions of all sizes. For many libraries the need to use limited resources to acquire and disseminate information products and services which were unknown a decade ago has forced a thorough reexamination of processes which have served exceedingly well for generations.

Reengineering is not a new concept in the field of library and information services (Graves and Martin, 1998, Bjoernshauge, 1999, Maharana and Panda, 2001, and Moran, 2001). As a process it has been applied to collection development and acquisitions (Courtney and Jenkins, 1998), to user services (Shapiro and Long, 1994), to e-resource acquisition (Vickery, 2001), to technical services (Smith, 2001), to knowledge management (Cronin, 2001), to cataloguing and web site (Eden and Bierman, 2002), to digital library (Schaffler, 2004), to library-vendor collaboration (Maurer and Hurst, 2003), and to customer services (Jeal, 2005).

Reengineering reveals a process's shortcomings. It leads to recognition of inefficiencies . . . that result from the way tasks are organized, staff is deployed, work is scheduled or training is conducted. Bottlenecks, delays, errors, redundancies, non-value-added work, and unnecessary variation or unpredictability become evident (Phipps, 2001). Reengineering also provides us with what we are aiming to achieve – it creates standardization, reliability, a focus on needs, and a whole-function review. It will bring our staff along with it.

This reengineering is not a passing managerial fad, but rather entails a remaking of library which will have long-term consequences for all stakeholders - librarians, users, funding organization, and vendors. Reengineering means asking this question: "If I were recreating this library today, given what I know and given current technology, what would it look like?

3. How do We Begin?

As we begin to reengineer our library organizations, our focus must be user centered or we will find ourselves managing a store of old information rather than being in the forefront of providing current and relevant information. Reengineering in an academic library should contain the following elements:

⊃ Focus on users: With extensive campus networking and electronic resources, how can we best serve our users? The system of providing information is so complex, that when our users have a problem, typically they are not sure of the source of their problem. For example, if one is having

difficulty accessing a remote database from a campus network, does the difficulty arise from a searching problem, a local network problem, a national network problem, or a problem with the telecommunications software being used? Should the user contact the reference desk, the library computing technician, or the computer help desk?

- Transform staff into case-workers: As our information infrastructure becomes more complex, it is more likely that the staff will not be highly skilled in a variety of specialties. Rather, they will have a basic general skill level with deep specialties in only a few areas. Once a user interacts with a staff, it must become his or her responsibility to see that the user's question or problem is adequately solved even if problems are referred to specialists.
- **Question Processes**: Just because something has always been done in a particular way does not mean that a process should continue. Also, processes should not be determined or merely influenced by organizational structure. Processes and structures must be developed that efficiently and effectively meet user needs.
- **⊃** Use Information Technology: Merely automating procedures and tasks is no longer acceptable. Information technology must be used to assist the library with achieving service and process breakthroughs.
- **⇒** Abandon the Notion that Every Technical Process Must have Numerous checks and Balances: Librarians have been compulsive about trying to achieve perfection in many parts of our operation. Some of what has been done no longer needs to be done and some of what still needs to be done, does not have to be done perfectly. Checks and controls should exist only when absolutely necessary.
- **⊃** Team-based Work Groups: Many libraries have begun to move into team-based organizational structures. Teams will gather to address specific problems and will disappear once the project has been completed or the problem solved. Team-based work groups are able to address an issue more quickly.
- **○** Collaboration and partnerships with stakeholders: We need each other if we are to survive. Our skills are complementary and our operations are, of necessity, symbiotic. Better collaboration with vendors could help libraries receive "shelf ready books and catalogue ready records".

4. Re-engineering Library Acquisitions

Libraries were designed primarily for the acquisition and handling of physical artifacts, but the rapid growth of electronic resources has called that design into question. The nature of access to information

has been transformed by the emergence of the Internet, which has changed the rules for the production, acquisition, and access. Library users no longer need resources that are available only locally. Rather, they require a variety of print and electronic, text and multimedia resources available both locally and from remote locations around the world.

The library acquisition as we know encompasses selection and procurement of books, journals, reports, theses, standards, patents, multimedia products, online (full-text, and bibliographic) databases from a variety of sources including publishers, database producers, vendors and/or their authorized dealers etc. Budget control and making inventory of the acquired material also form the part of library acquisitions.

The key processes in library acquisition for both print and electronic resources are :

4.1. Selection (under the frame work of selection policy)

- ⇒ Book exhibitions / Displays on approval
- vendor presentations
- trial access
- Recommendations by users
- ⇒ Display / circulation of announcement brochures, catalogues, other publicity material
- library recommendations
- e-version vs print
- quality of contents, ease of use

4.2. Procurement

- Registration / selection / identification of vendors, publishers, authorized dealers
- checking for availability / duplication
- funds availability
- inviting quotations, comparing rates and selection of highest/lowest bidder
- subscription model / one time purchase model
- price negotiations / consortia pricing
- placing orders, renewals

4.3. Payment, Budget control and Accessioning

- ⇒ receiving ordered items + invoices / bills
- checking received items with the order / good physical condition
- verifying prices, conversion rates, checking bills
- accessioning
- forwarding bills for payment

- budget updating
- forwarding material for technical processing

4.4. Access Management

- ⇒ IP based / user-id password
- ⇒ limited / unlimited concurrent users / downloads
- quality of search engine and other options
- integration with print resources / OPAC
- access through library web site
- local hosting vs publisher site access
- network issues

4.5. Licensing

- negotiations / terms and conditions for use
- owner vs licensed user
- ⇒ IPR issues
- redressal of disputes

4.6. Preservation and archiving

- perpetual access
- archiving local host / publisher site

Most of the libraries particularly in India invest a substantial number of their human resources in performing the above tasks. In fact acquisition of books and related material is looked after by a separate section. Similarly, periodical subscription is by another section. And may be acquisition of electronic resources by yet another section. Many of the above processes are not only repetitive in nature but also have become redundant with the application of IT. Since libraries are not at the liberty to hire additional staff, they hardly have adequate personnel to service the acquired material. They are also constrained to offer user-focused, value added, innovative services which will not only satisfy our patrons but will create a good will and trust for the library.

Reengineering offers librarians an opportunity to identify, analyze and redesign policies, procedures, processes and systems including those pertaining to the library acquisitions to improve efficiency, to minimize the time taken to procure and deliver required material to users, to remove redundancies, to utilize staff more effectively and cut costs wherever possible.

5. Re-engineering of Library Acquisitions Shall Include the following

- Re-engineering (review and reformulation) of acquisition policy: a fresh look at the collection development or resource building policy is a good starting point. It will also provide a frame work for redesigning of acquisition procedures. The policy shall reflect the vision and mission of the library, is futuristic and user-centered.
- ⇒ Re-engineering of acquisition processes : relevance, IT application, greater collaboration with users, vendors
- Re-engineering of library collection (reorganization, review, weeding out, print vs digital)
- Re-engineering of staff (reengineering team, retraining, redeployment): reengineering is not a technique so much as it is a method for developing a change in attitude about how work is accomplished efficiently and effectively. It is an effective tool for developing staff commitment to producing desired results.

6. Re-engineering Plan

A sound and well thought out plan is an important prerequisite for successful execution of any programme. A reengineering plan shall include :

- Clear definition of the goal of the reengineering (futuristic vision), frame of reference
- selecting the reengineering team (core competencies, commitment, IT personnel, users, vendors)
- identification and analysis of the policies, systems, procedures, practices and products to be reengineered
- developing reenginered work flow / processes (expectations), clean slate design, prototype / beta testing
- implementation / time frame
- gap analysis, correction

7. Challenges

7.1 Scope, Planning and Momentum

Defining the scope is a complex and involved exercise. There will be questions as what to include? These discussions may take longer to be resolved and slow the progress and increase the risk of credibility loss due to a loss of momentum. To mitigate the effects of the loss of momentum, a communications plan will help to inform changes as they occur and to report on the hurdles being faced.

7.2 Human Resources

Working within existing staff constrains is a challenge requiring much time, debate and creative thinking. We need to invest time in training them and in ensuring accuracy and helpfulness in their interaction with our users. We need to get the appropriate staff with appropriate attitudes in the right place. We need to manage them to ensure their effectiveness at all times. We need to make sure that the resources that support them are efficient in meeting customer needs, and we have to make sure they are getting excellent support from the relevant operational units.

7.3 A Sea of Emotions - Change Management

The reengineering has to situate itself within the culture of the organization. If reengineering starts changing the processes that affect academics and the ways they work, it may in fact be forcing a change of culture across the University / institution. This stresses the importance of a formal change management plan. A factor in successful change is the overcoming of resistance by recognising people's feelings and the organisational culture. The implication is that cultures are changed by changing the emotions that drive them, not the other way around (Kotter and Cohen, 2002).

7.4 Communication and Relationship Marketing

While managing the process of change within, we will have to establish the importance of relationships with our customers and recognise the emotional investment they make every time they use our resources and services.

7.5 No Quality Gaps

That we know what users expect, that we provide consistency in our approach and that our marketing adequately sets user expectations. Some work will have to go into the brand or "personality" we have for our service and how to generate and maintain trust in that brand.

8. Conclusion

Reengineering shall not be seen only as an exercise to cut costs as it can result in serious organisational problems over the longer term because their motivation is a relatively fast change. It should rather focus on making changes that will increase the efficiency of existing resources. Reengineering the library acquisitions will not be easy and there is no one way to reengineer. Each library will have its own particular situation that must be accommodated. If, however, librarians can reengineer their acquisition

processes successfully and bring in dramatic changes that are absolutely necessary and possible, it will demonstrate their caliber to the management and enhance the awareness of the potential of library staff. Successful innovation within an existing organization cannot occur without systematic abandonment of obsolete practices and products. 'Reengineering is iterative and mistakes will occur; but we must be flexible enough to keep what works and to abandon the rest.

References

- Bjoernshauge, L. Re-engineering academic library services: the case of the technical knowledge center and library of Denmark. Available at http://www.iatul.org/doclibrary/public/ Conf_Proceedings/1999/Bjoernshauge.doc (Accessed on 24/01/2010)
- 2. Courtney, N. and Jenkins, F.W. Reorganizing collection development and acquisitions in a medium-sized library. Library Acquisitions: Practice and Theory, 1998, 22(3), pp.287-293.
- Cronin, B. Knowledge management, organizational culture and Anglo-American higher education.
 Journal of Information Science, 2001, 27 (3), pp.129-137.
- 4. Eden, B. and Bierman, K.J. Knowledge access management at Lied Library: cataloging and web site reengineering. Library Hi Tech, 2002, 20(1), pp.90-103.
- 5. Graves, K.J. and Martin, E.R. Re-engineering the library for improved access to electronic health information: one research library's experience. INSPEL, 1998, 32, pp.1820188.
- 6. Hammer, M. and Champy, J. Reengineering the corporation: a manifesto for business revolution. London: Nicholas Brealey Publishing, 2001. 257pp.
- 7. Jeal, Y. Re-engineering customer services: University of Salford information services division. New Library World, 2005, 106 (1214/1215), pp. 352-362.
- 8. Kotter, J., and Cohen, D. The heart of change : real-life stories of how people change their organizations. Cambridge : Harvard Business School Press, 2002.
- 9. Maharana, B., and Panda, K. C. Planning business process reengineering (BPR) in academic libraries. Malaysian Journal of Library and Information Science, 2001, 6(1), pp.105-111.
- Maurer, M.B., and Hurst, M.L. Library-vendor collaboration for re-engineering workflow: the Kent State experience. Library Collections, Acquisitions, and Technical Services, 2003, 27, pp.155-164
- 11. Mohamed, M.S.[et. al.] The re-structuring of the information technology infrastructure library (ITIL) implementation using knowledge management framework. VINE: The Journal of Information and Knowledge Management Systems, 2008, 38(3), pp.315-333.

7th Convention PLANNER - 2010

- 12. Moran, B.B. Restructuring the university library: a North American perspective. Journal of Documentation, 2001, 57(1), pp.100-114.
- 13. Phipps, S. Beyond measuring service quality: learning from the voices of the customers, the staff, the processes, and the organization. Library Trends, 2001, 49(4), pp.635-661.
- 14. Reengineering Sci-Tech Encyclopedia. Available at http://www.answers.com/topic/reengineering (Accessed on 24/01/2010)
- 15. Schaffler, H. How to organise the digital library: reengineering and change management in the Bayerische Staatsbibliothek, Munich. Library Hi Tech, 2004, 22 (4), pp.340-346.
- 16. Shaipro, B.J., and Long, K.B. Just say yes: reengineering library user services for the 21st century. The Journal of Academic Librarianship, 1994, 20(5/6), pp.285-290.
- 17. Smith, G. Aiming for continuous improvement: performance measurement in a re-engineered technical services. Library Collections, Acquisitions, and Technical Services, 2001, 25, pp.81-92.
- 18. Vickery, J. Reorganization in the British Library to acquire electronic resources. Library Collections, Acquisitions, and Technical Service, 2001, 25, pp.299-305.
- 19. Wittenberg, R.C. Reengineering and the approval plan : new process or new perspective. The Acquisitions Librarian, 1996, 16, pp.61-67.

About Author

Shri Daulat Jotwani, Librarian, Indian Institute of Technology Bombay, Mumbai - 400076 E-mail: librarian@iitb.ac.in