THE UPS AND DOWNS OF BUSINESS PROCESS RE-ENGINEERING (BPR): A TALE OF TWO OFFICES IN BAHIR DAR TOWN, ETHIOPIA

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Abstract:
Since the early 1990's, Ethiopia has been running reform programmes to improve efficiency, effectiveness and accountability in the delivery of public services. One method has been Business Process Re-engineering (BPR). Using a concurrent quan-QUAL mixed study, this chapter analyzes two public bodies to examine whether their BPR projects have been appropriately designed and implemented, what has worked, what has not, and why. The finding is that BPR designs have been generally sound, but positive results have been prevented or compromised by a wide range of planning and implementation defects, including failure to institutionalize the new systems; lack of monitoring, measuring, and reviewing; and an inadequate incentive structure.

Key Words: Change management, Public sector body, re-engineering success

Introduction

Ethiopia's first Civil Service Reform Programme (CSRP) was launched in 1996 (UNDP, 2007), designed to improve the efficiency, effectiveness, and transparency of public institutions. It included sub-programmes to reform top management systems, human resource management, service delivery, government expenditure and control, and ethics. In 2001, the Government also launched a comprehensive National Capacity Building Programme (NCBP) to strengthen working systems, improve organizational effectiveness, and rapidly develop human resources in the public sector (ibid). Business Process Re-engineering (BPR) was introduced in 2003 and was applied as part of the CSRP (Gebrekidan, 2011).

There are very few studies on the outcomes and impacts of PBR reforms in Ethiopia, and even these provide inconclusive accounts. Some argue that BPR reforms have not brought the desired changes, while others indicate success stories. World Bank (2011) suggests that effectiveness, efficiency and speed of service delivery in Ethiopian public bodies is much talked about but little achieved. There are studies indicating some improvements in service provision as a result of BPR, and some failures (Tilaye cited in Debela, 2009; Debela and Hagos, 2011; Teklegiorgis and Amare, 2007). Empirical studies on the status of BPR reforms in the Regional Government of Ethiopia are scarce.

Focusing on the Amhara Region, this study explores the design and implementation of BPR programmes in two government offices in Bahir Dar town— Bahir Dar City Services Office and Bahir Dar University. Though the two offices provide different services, both do so to large numbers of customers, mobilize huge resources, and began re-engineering at the same time.

This study follows a mixed-methods approach, quant-QUAL, involving data collection both from numeric and text information either simultaneously or sequentially to best understand the research problem (Cresswell, 2003).This chapter's survey respondents were selected from organizational units (processes) which began implementing the re-engineering projects during 2010/2011. In Bahir Dar University (BDU) 15 officers from the teaching/learning process and 15 case-team leaders from the support processes responded to the questionnaire. At Bahir Dar City services (BDC) three case-team coordinators from head office and 27 officers from the *kebeles* responded to the questionnaire. Top-level officials from both organizations who were actively engaged in the re-engineering process were interviewed. Design documents, minutes of change management committees, review documents and other secondary information were consulted.

This study uses an analytical tool, which was developed and used in Botswana by Hacker and Washington[1] (2004) in measuring performance of large-scale projects. It measures the performance of

any large-scale change through six areas: result areas and goals; objectives; measurement processes; reviews; responsibilities; and evidence of continuous improvement. The tool uses a survey instrument of 39 statements within the six headings. Respondents are asked to rate the level of implementation of the items on a scale from 1 (not implemented at all) to 7 (fully implemented). The reliability of the tool (across time and other variables) is computed using Cronbach's alpha, with a result of 0.965 representing a relatively high estimate (Nunnaly cited in Davis, 2000:180).

I. The design and implementation of BPR in the two offices
1 Pre-BPR

BDU was established in 1999 by merging the then Bahir Dar Teachers' Education and Bahir Dar Polytechnic Institutes. The university now has more than 40,000 students in its regular, evening, distance and summer programmes, which include the humanities, social sciences, natural science, engineering, business and economics, agriculture and environmental sciences, legal studies and medical and health sciences. The academic and support staff number about 2,500.

Before BPR, the decision-making power was centrally held by the top management of the university, which included the President (Chief Executive Officer), Academic and Research Vice president, and Business and Development Vice President. Under the Academic and Research Vice President there were seven deans running their respective faculties. The support activities were run by the Finance, Administration, and General Services departments all organized under the supervision of the Business and Development Vice President. With the exception of student affairs and some aspects of staff affairs, all the powers relating to financial management and procurement were centralized at the top management level, especially with the President and the Vice Presidents. The Academic Deans of the faculties had little authority on hiring and firing of staff, management of their budget, or administering support staff and physical resources. They were responsible only for the day-to-day teaching/learning activities of their faculties.

BDC, the regional capital of Amhara State, has an estimated 220,000 residents (2007 Ethiopia Statistics Authority census survey). The city has a mayor as chief administrator, different sectoral offices, and the city services office. Its objectives are making the city suitable for living, investment, and provision of social services. Major services include development and provision of land for social services, investments, and residential construction; building of infrastructure, beautification and cleansing of the city; and provision of utilities and municipal services.

Before BPR, the BDC Services had a centralized structure and different functional departments. The Department Heads reported to the City Manager, who was accountable to the mayor. There were 17 sub-city administrators known as *kebele administrators* all reporting to the City Manager. Almost every major decision was centralized— for example, every land lease contract between the city and the citizen/investor had to be signed by the city manager. Service provision took an inordinate length of time and involved numerous procedures. For acquiring a plot of land and securing an approved site plan for constructing residential or commercial houses, an applicant had to wait for at least twelve months; in the process there were 30 different activities performed by different experts in different offices. *Kebeles* had no power with regard to provision of land, construction permits, collection of fees, transfer of title deeds to different parties, or delivery of utilities. Their authority was limited to minor issues like provision of citizen identity cards and minor dispute resolutions.

2 BPR Design Process

At BDU, the top management formed a team of experts and officials who identified ten business processes, of which five were selected for redesign based on their relative importance to the success of the mission of the university, the resources they consumed and the magnitude of the problems they faced.   These processes were: a) Teaching – Learning; b) Human Resource Development; c) Procurement and Property Administration; d) Planning, Implementation, Monitoring and Evaluation; e) Information and Strategic Communication

The university formed a separate team for each business process and gave each team a "Process Owner", who report to   the President of the university as the overall "Business Owner". A

Tsar was appointed to facilitate logistics and finance operations. A Steering Committee, comprising the Process Owners, is chaired by the Business Owner. .

BDU set a six-month deadline for "work units" to complete the new process designs. The sudden removal of the then President and Vice President from office disrupted the timetable and there was an over-run of five months. Various consultation meetings were conducted to refine the draft designs of each process. A national workshop was held to present the new work processes and obtain feedback from senior officials of the Ministry of Education, other university presidents, Amhara region officials, and experts.

The top management of the BDC started by conducting consultative meetings with all employees on the need to redesign various processes, and trained all on the principles of BPR. The city selected five processes for redesign – a) Land Acquisition and Administration; b) Design and Construction; c) Utilities Administration; d) City Beautification and Cleaning Administration; and e) Law Enforcement. Subsequently, BDC top management decided to re-engineer only one process - Land Acquisition and Administration – warranted by its strategic importance. The redesign process was finalized within the planned period of six months and various consultation forums that brought together the design team and employees were conducted. The Mayor held the position of Business Owner. A Tsar was also assigned.

Both BDU and BDC adopted Linden's (1998) methodology for introducing BPR, as prescribed by the central government. This method has three fundamental principles: a) challenging assumptions behind the old way of doing business; b) focusing on processes, not along functional lines, programme offices or budget departments'; and c) organizing around outcomes.

The general approach followed in both organizations included mapping the old ways of doing work, identifying problems, assessing rules), and verifying assumptions behind the rules. Desired outcomes of each process were articulated after focus-group discussions, interviews and surveys with customers and other internal and external stakeholders. The desired outcomes were converted to stretched objectives.

3 Post- BPR

The implementation of BPR resulted in some changes at both the university and the city services. Jobs and responsibilities were redefined, the number of activities was reduced, the time for each activity was determined, positions were reduced, and the philosophy of doing work was redefined.

As a direct result of BPR, the university made its Course System Knowledge Database (CSKD) permanent. Various graduate and undergraduate programmes may come and go, but the CSKDs from which they are derived will remain. Redesign of courses into end-to-end, holistic systems reduced the previous 800 separate courses to 250 CSKDs. Traditionally, courses were each instructor's property; now CSKDs have their respective managers who manage, renovate, continually update the systems, and make them available for delivery.

On approval of the organizational structure by the board, the university elected five Vice Presidents and Process Owners to lead their respective processes. A Change Management Team comprising Presidents, Institutional Transformation Officers and the Tsar was formed by the President to lead the change. The processes have only case teams reporting to the Process Owners; no other hierarchy was created, enabling one-stop services. To reach their customers easily, case teams were located in different parts of the university campuses. The system empowered Deans of colleges as well as faculties and schools reorganized by the design to have discretionary power on procurement, financial services and maintenance services.

BDU prepared an implementation plan and a human resources placement procedure approved by the University Managing Board. Both the plan and the procedure were widely communicated to the university community through meetings, notice boards and distribution of the documents to each organizational unit/process. Nomination and placement of employees and officers, took about eighteen months to finalize. The Change Management Committee undertook multiple BPR follow-up meetings, on average once every 20 days, for about 18 months. Some 60 percent of meeting time and decisions were related to placement of employees, nomination of officials, and handling of grievances. Less than five per cent of meeting time focused on review of the implementation plan. No

major progress reports were made, no follow up of prior reviews was conducted, and no plan revisions were done. After a year and six months, the implementation plan was not revised or improved. There was, however, a two-day observation of BPR progress conducted by external consultants.

BDC's redesign of Land Acquisition and Administration reduced the previous 62 activities in the process to just 11. The new process is customer-focused, orientated to results rather than activities, and employees are expected to work with team spirit. Each employee is given the authority to process leasehold bids to finality. The time to complete delivery of land on a lease basis, the preparation of site plans, and the processing of construction permits, is down from 529 days to just 20.

The city services developed the implementation plan of BPR in line with the general regional government strategic plan. This document was communicated to all City Services Office employees. A team comprising the Mayor, the Process Owner and the head of the capacity-building office was set up by the regional government to monitor re-engineering.

The new Land Acquisition and Administration process allowed one-stop-shop service delivery – for all activities starting with request for land to the provision of construction permits to residents and investors. The decision points are the case worker/expert or case manager or process owner, without additional reference to the Mayor's Office or the City Manager's Office. The 17 *kebeles* are reorganized as 9 sub-city administration units which take responsibility for granting construction permits and title deed transfers for buildings and collecting fees from citizens. Time taken for acquisition of construction permits for plots obtained on open bid went down from 12 months to an average of 14 days. The Change Management Committee ran weekly, monthly and quarterly review meetings to assess challenges and remedy legal frameworks in conflict with the BPR designs. However, after nine months the review tempo slowed and performance declined.

The following section presents the results of the survey on the level of implementation of PBR.

1. **Assessment of the level of implementation of BPR in the two offices**

Respondents from BDU and BDC were asked to assess the level of PBR implementation through five main indicators with 39 sub indicators. The main indicators were: result areas and goals, objectives, measurement and reviews, responsibilities, continuous improvement (see Annex 1 for the questions and the responses). Table 1 provides the summary of the results.

Table 1: Summary of survey result
Note:
1. The percentages indicate the proportion of respondents who have positively and negatively

	Item	Less Favourable		Favourable		Mean	
		BDU (%)	City (%)	BDU (%)	City (%)	BDU	City
1	Result Areas And Goals	19	41	73	34	4.89	3.99
2	Objectives	24	48	61	31	4.87	3.70
3	Measurement Processes	75	63	14	17	2.46	3.35
4	Reviews	54	59	26	21	3.46	3.37
5	Responsibilities	39	46	41	23	4.1	3.69
6	Continuous Improvement	88	70	6	14	1.96	3.03

assessed the level of BPR implementation.

2. The detailed survey result for each of the items is given in Annex 1

a) Result areas and goals: measureable unit goals linked to the overall vision of the organization are an indicator of proper implementation. It is essential to have clearly defined and understood goals and result areas (Hacker and Washington, 2004). The scores in Table 1 indicate that both the university and city services did well in these respects, and this was reaffirmed by interviews

with the top management of the two organizations. The BDC implementation plan also indicates the major goals, measures, targets, and bodies responsible for the different goals, though it does not show the different input requirements crucial for the success of the BPR project. For example, office, ICT and budget requirements are not indicated.

b) Objectives: another main indicator is when organizational goals guide organizational unit objectives, and unit objectives guide functional tactics or operational plans. Implementation of BPR is all about the "how", which involves translating strategic goals in to annual objectives, cascading them into all organizational units, including to employees, and ensuring resource provision (Hamel and Prahald, 2005; Kaplan and Norton, 2008). The survey result indicated that both the University and the City services office scored above average results in crafting well-defined objectives. There are, however, no documents support the survey result. The interviewees at both offices also contended that organizational objectives were not cascaded down across all units; organizational plans were not sufficiently aligned with organizational units and the objectives of each unit were not linked with the overall vision of the organizations. Although cascading helps to pass on organizational accountability to all units for the results they achieve, and to measure and evaluate their performance, this is not done adequately in either organization.

c). Measurement processes: both the BDU and BDC scored below the benchmark point of 3.5 (the mean score), showing their weakness in designing systems to measure the performance of the implementation process. During interview, an official from the university admitted that the university did not consider the measurement system while preparing the planning documents. As a result, the performance of the implementation plan was not – could not be – measured. Among reasons cited for this omission was that the President, Vice Presidents and Process Owners were preoccupied in daily routines and other priorities like 'emergency or urgent' assignments from higher political bodies and negotiations with service providers. BDC did not have their own measurement plans, but followed a system established by the regional government.

d) Review processes: both university and city scored below average on the availability of a well-designed review process. The university did conduct occasional reviews, but these were limited to the hearing of progress reports and presentations of challenges faced by the process owners. No organized quarterly reports were produced, no follow-ups from previous reviews were heard, no term plans were prepared, and clear accountability was not mentioned. Most change management meeting time (60% of the agenda for more than eighteen months) was about the placement of employees and handling of employee grievances rather than the performance of the implementation process. The university also struggled for lack of legal frameworks to support the new processes; the financial management and procurement and property administration proclamations enacted by the federal government reduced BDU's autonomy and flexibility in implementing BPR projects and reviewing the processes.

BDC, however, showed improvement in the delivery of services because it was led by regulations, emanating from the regional government, that supported the new designs and empowered managers at all levels. During the first six months of implementation (in 2008) BDC held daily review meetings at unit level with employees, weekly meetings with management and monthly meetings with the mayor's office. In those meetings, decisions important for the smooth-functioning of the new design— like amendment of rules, procedures, formats and other matters - were made by management. But this review process was not sustained and the office's delivery of services declined. Reasons for decline included the office's inability to develop and implement employees' performance measurement and incentive systems, and the frequent turnover of management before the system was institutionalized. The Federal and regional labour laws do not allow for performance-based benefit packages (see, for example, FDRE (2004) proclamation No. 377/2003). The regional government's top political leaders, 'who lacked trust in the middle and lower managers of the city service offices', (interview) took back the discretionary power given to BDC. This situation not only stalled progress but also frustrated regular employees and process owners and led to high turnover of employees.

At BDU, the managing board replaced the President, three Vice Presidents, and four Process Owners during the implementation stage. Similarly, in BDC the Mayor, the City Manager and other city administration cabinet members were replaced. This turnover of top functionaries was mainly for political reasons. It disrupted implementation of BPR projects. Moreover, in the case study offices,

there were no continuous review meetings which led to loss of strategic direction while management was immersed in what one interviewee labeled 'irrelevant, minor daily routines'.

e) Responsibilities: Both organizations under study scored high in terms of having well-defined responsibilities. This shows that responsibilities were fixed to the persons assigned for the different duties.

f) Evidence of continuous improvement: the survey scores and interviews reflect little continuous improvement in either the BDU or BDC – because there was no measurement system, no data, and review was inadequate.

These results (Table 1) indicate weaknesses on items related to the monitoring, evaluation and revision of the implementation process. Measurement systems should include determining what to measure, identifying proper data collection methods, and collecting the data. Review systems are essential to determine whether different organizational activities are achieving desired results and whether new decisions should be made. Continuous improvements are extensions of the review systems and indicate the ability/willingness/diligence to redirect when the situation demands.

Conclusion

Aligning large-scale change initiatives to organizational mission and vision, designing strategic plans accordingly and installing robust measurement systems would greatly improve the effectiveness of these change projects. Since change projects such as BPR require huge amounts of time, budget and manpower, it is crucial that organizations monitor the performance of strategic initiatives through measurement systems that enable them to continuously learn and improve.

The organizations under study are good at designing, but find execution of those designs a major problem. Shortfalls include leadership commitment and continuity, alignment of organizational objectives to lower-level units, and understanding of employee intentions or resistances, and translating nominal responsibility into practical accountability. The following points indicate the major issues that transpired from the discussion in this chapter:

- While Planning, both strategic and operational, is perceived by top management as very important in leading organizations, not enough is done to ensure measurement systems for the plan, monitoring the plan and continuously improving the strategic initiatives and operational activities.
- High turnover of officials, especially at the top level, breaks continuity and demands countervailing hand-over and replacement mechanisms.
- ICT is an essential enabler for successful BPR, but it is given little attention while implementing BPR projects. .
- New processes demand the design and execution of performance measurement systems alongside incentive structures.
- Public offices shy away from change management efforts when there is a perception by management that the change process is a political project.
- Persistent and diverse communication strategies are vital for selling a change agenda; successful change begins with acquiring employees' buy-in to the strategic plan and change process.

Notes

1. Though the Hacker and Washington (2004) instrument was used by the authors in a sub-Saharan country, Botswana, a focus group discussion about the validity of the questionnaire and practical applicability of the instrument in the Ethiopian context with three middle level officials indicated the need for a few adjustments - like reducing the variables from 42 to 39 and changing the names of organizational units to the current organizational contexts under study. (Please see the slightly modified questionnaire in Annex 1. For the original version of the questionnaire developed by Hacker and Washington (2004) please visit Hacker, M. and Washington, M. (2004), How we measure the implementation of large-scale change, Measuring Business Excellence, Vol. 8 No. 3page 56.)

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Annex 1
Survey result for each of the factors (own computation)

1. Well-defined goals and result areas

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	S D
Linked to the organization vision	3	7	5.33	1.37	2	7	4.4	1.69
Goals defined as appropriate	3	7	5.17	1.27	2	5	3.9	1.02
Cross office result areas identified as needed	2	6	4.60	1.43	2	6	3.9	1.17
Measurable	2	6	4.67	1.56	1	7	4.0	1.50
Targets	2	7	4.67	1.61	2	7	3.9	1.27
Total Mean			**4.89**				**3.99**	

2. Well-defined Objectives

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	SD
Linked to specific key result areas	2	7	5.25	1.71	1	7	3.4	1.50
Strategies defined as needed	1	7	4.50	1.98	2	6	4.0	1.43
Prioritized critical few	1	7	3.91	2.07	2	7	3.9	1.39
Measurable	1	7	4.92	2.07	1	6	3.5	1.28
Long term targets	2	7	5.33	1.44	2	6	3.9	1.31
Annual Targets	2	7	5.33	1.37	2	6	3.7	1.28
Total Mean			**4.87**				**3.70**	

3. Well-defined measurement processes

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	SD
Accepted measures	1	7	3.58	1.73	1	6	3.2	1.28
Understanding of measures	1	6	3.17	1.53	1	6	3.2	1.24
Reliable data sources	1	5	2.42	1.38	2	5	3.3	1.02
Reliable survey mechanics	1	5	2.17	1.40	1	6	3.4	1.23
Plotted as time series	1	5	1.92	1.38	1	7	3.5	1.50
Control charted	1	6	2.08	1.62	2	7	3.6	1.32
Special causes investigated	1	5	2.18	1.33	1	6	3.2	1.15
Control limits revised as appropriate	1	6	2.09	1.76	2	6	3.3	1.25
Data interpretations accurate	1	7	2.55	2.16	1	7	3.5	1.54
Random variations understood	1	5	2.45	1.63	2	7	3.4	1.39
Total Mean			**2.46**				**3.35**	

4. Well-established review processes

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	SD
Quarterly reviews conducted with PS*	1	7	3.75	1.76	1	6	3.1	1.23
Monthly reviews conducted with department heads	2	5	2.91	.94	1	5	3.2	1.04
Status reports generated	2	6	3.92	1.38	1	6	3.7	1.35
Follow up from previous reviews	1	7	3.91	1.70	1	6	3.1	1.52
Lessons learned discussed	1	5	3.10	1.60	1	6	3.3	1.29
Discussions include plans for next quarter and longer	1	7	3.17	2.04	1	7	3.5	1.58
Performance accountability exists	1	7	3.50	2.20	2	7	3.9	1.49
Total Mean			3.46				3.37	

5. Well-defined Responsibilities

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	S
To Vice Presidents*	1	7	4.18	1.72	1	7	3.6	1.79
Process Owners	1	7	4.25	1.76	2	7	3.7	1.35
Deans/Directors	1	7	4.25	1.86	1	7	3.5	1.47
Case team coordinators	1	7	4.17	1.85	2	7	3.8	1.16
Case team workers	1	6	3.67	1.87	1	7	3.9	1.29
Total Mean			**4.10**				**3.69**	

6. Evidence of continuous improvement

	Bahir Dar University				Bahir Dar City services			
	Minimum	Maximum	M	SD	Minimum	Maximum	M	SD
PMS* annually assessed	1	6	2.83	1.85	1	5	3.0	0.92
Change efforts of work units aligned with key result areas	1	5	2.33	1.50	1	6	3.1	1.27
Training on PMS conducted broadly and systematically	1	3	1.67	.89	1	7	2.9	1.54
New employees trained in PMS	1	3	1.50	.85	1	7	2.9	1.59
Communication plans keep organizations aware of the status of PMS	1	4	1.75	.97	1	7	3.1	1.58
Internal PMS benchmarking across all organizational units	1	3	1.67	.98	1	5	3.2	1.08
Total Mean			1.96				3.03	

Note: PMS stands for performance measurement systems