

“Knowledge management, adaptability and business process reengineering performance in microfinance institutions”

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KNOWLEDGE MANAGEMENT, ADAPTABILITY AND BUSINESS PROCESS REENGINEERING PERFORMANCE IN MICROFINANCE INSTITUTIONS

Abstract

The purpose of this paper is to provide theoretical explanation of business process reengineering performance using emerging themes of adaptability and knowledge management in the context of developing economies. The study used a narrative cross-sectional survey conducted using qualitative data collection technique, specifically the appreciative inquiry. The study used operations managers and senior executive managers to gather qualitative data from Uganda's reengineered microfinance institutions to provide indepth explanation of business process reengineering performance. The authors find that adaptability, knowledge creation and knowledge sharing explain business process reengineering performance. The results suggest that business process reengineering be made mandatory to ensure sustainable competitiveness of the financial sector. The study provides novel insights of business process reengineering performance using a theory of change and a complexity theory. Methodological, theoretical, managerial and policy implications herein play pivotal role in bridging the knowledge gap that exists in microfinance institutions of developing economies.

Keywords

microfinance, reengineering, knowledge and adaptability

JEL Classification G20

INTRODUCTION

Microfinance institutions (MFIs) are operating in dynamic situations. As such, they are fundamentally changing their business processes such as: management, operational and support processes. Process thinking is becoming important for organizational survival, competitiveness, agility and performance enhancement (Sungau et al., 2013; Mahmoudi & Mollaei, 2014; Nzewi et al., 2015). Over the world, organizations that have opted to radically change their processes, achieve dramatic improvement in quality service, speed, resource utilization, customer satisfaction, cycle time, service, productivity, flexibility, competitive advantage, effective communication, reduced costs, new business opportunities and remarkable improvement in operational performance (Hammer & Champy, 1993; Davenport & Short, 1998; Sungau et al., 2013; Nzewi et al., 2015; Banham, 2010).

To a large extent, many microfinance institutions have successfully replicated the Grameen Bank model of delivering financial services to the low-income households in an attempt to alleviate poverty in communities. Despite these innovations, over three billion people in developing countries are still without effective access to loan and deposit services. The problem is worse in Sub-Saharan Africa, where on-

ly between 5% and 25% of households have formal connections with microfinance institutions. This raises a concern about the remaining percentage that represents household with informal connections. In East Africa, microfinance institutions play a vital role in the provision of financial services to support the economic activities of the poor in the economy as indicated by an estimate of 10 to 15 percent of the population relying entirely on non-governmental and informal organizations for financial services. The developing countries have gone ahead to realign the financial reform in the stated vision initiatives. While there are remarkable efforts in reduction of poverty for over the past decades, disparities in wealth creation across the developing communities still exist.

Recent studies on social performance management in MFIs in Africa have demonstrated business process reengineering improvements through the use of Baldrige and MALCOM models. Their study further content that microfinance institutions such as ECLOF, BIMAS and Opportunity bank, FINCA, have endeavored to bridge the poverty gap by lending to the poor to transform their lives through change management initiatives and provision of innovative products. Hence, the new approaches have created social changes. The incremental, radical business processes transformations support the theory of change. The objectives of such changes were to leverage structural changes, training, performance targets, budgeting, and resource allocation in that direction. In the context of microfinance institutions, reengineering is a radical and novel process of creating social changes with a view of serving the poor community in the most efficient and friendly manner. As microfinance institutions renew their commitment to service the poor, they are puzzled with a good theory that provides business innovative solutions.

In this study, an attempt is made to use a complexity theory as the theory of change to provide a better explanation of business process reengineering performance in the least developing economies. A complexity theory as the theory of change was adopted to provide a comprehensive description, illustration of how and why a desired complex, social and community change is expected to happen in the context of microfinance institutions (Byne et al., 2013). The complexity theory was further used to map out the current business process change initiatives or the business process reengineering interventions and how they led to desired goals of the microfinance institutions given the dynamic nature of their business operations. The contextual issues of business process reengineering failures call for the theoretical explanations.

1. STUDY CONTEXT

In the third world context, microfinance institutions are panacea to economic problems of the poor. Microfinance institutions are income generating and innovative segments that provide financial solutions and create self-starting businesses to the disadvantaged communities. They bridge the gap that the existing financial banking institutions have not been able to fulfil, such as failure to create employment ventures and move out of poverty (Tawakol, 2015). In this study, the argument is extended using two main reasons to explain business process reengineering performance in microfinance institutions. One perspective in the matter is to provide a theoretical explanation of business process reengineering performance in complex and dynamic situations. The rationale behind per-

formance of radical changes can be theoretically explained (Mlay, Zlotnikova, & Watundu, 2013; Nzewi, Ugochukwu, & Moneme, 2015). Secondly, the methodological perspectives are supported.

2. THEORETICAL REVIEW

The coherent understanding of theory of change is inherent in complexity theory. The theory is fundamental in studying the emergent order of business processes in dynamic environment. The theory originates from the systems theory that describes how to respond and adapt to the uncertainties and demands of global change. The theory postulates that small change in knowledge creation results in amplification of large effect of institutional changes (Lorenz, 1963). The the-

ory considers nonlinear dynamic systems, path dependency and complex process interactions (Mitchell, 1992; Goldstein, 1999; Millan, 2008). In the context of microfinance institutions, complexity theory explains the ability of microfinance institutions to interact with each other to create new knowledge and adjust the functional structures to create adaptive emergent behaviors in the serving centers.

2.1. Knowledge management, adaptability and business process reengineering performance

The central argument is the idea that knowledge sharing contributes to organizational performance through business process reengineering. Knowledge management is encouraged as good practice by academics focusing on voluntary behavior and increasingly by policy makers focusing on legal requirement. Accordingly, synthesized information and knowledge gained to facilitate organizational transformation and management transparency yielding benefits in employee satisfaction, commitment, motivation and organizational performance (Pfeffer, 1998; Kotter, 1995). Scholars have revealed that in order to create effective business process change, knowledge sharing plays a pivotal role in business process reengineering (Xin, 2005). Knowledge sharing is central process through which team members collectively utilize their available knowledge resources (Jessica et al., 2009). As such, organizations tend to rethink on the conditions and ways of doing business in order to respond to dynamic and competitive pressures through knowledge sharing (Mohammad & Mollaei, 2014). Knowledge sharing allows cost reductions, reduces waste and ensures quality (Fawcett & Birou, 1992), flexibility and improved responsiveness (Tachizawa & Thomsen, 2007). The impact of knowledge sharing on credit access and cost is stronger for small firms than larger firms. It is particularly valuable to guide banks in evaluating credit applicants who would be otherwise costly to screen, due to poor accounting knowledge or small loan volumes (World Bank, 2006).

Organizational adaptability has become an area of concern in this current world of dynamic competition. As such, organizations are seeking

for the new ways of organizing tasks, people and redesigning management technology systems so that the processes support the attainment of their goals through performance management (Matti, Rajala & Moller, 2004). Therefore, organizations are seeking for the new ways of organizing tasks, structural designs, narrowness to market, redesigning management technology systems and reward management systems so that the processes support the attainment of the set goals. Indeed, adaptability has been widely examined at both the individual and firm level of analysis (Gordon & Di-Tomaso, 1992; Mott, 1972). Previous theoretical and empirical literature on organizational adaptability appears to be reasonable in organizational research although its relevance in predicting business process reengineering performance remains questionable. As a result of the missing gap in empirical reviews, the study attempts to answer the research question "What is the relationship between knowledge management, adaptability and business process reengineering performance of microfinance institutions in a developing economy context?"

3. METHODOLOGY

Multiple case study methodology was chosen to provide an understanding of the dynamics within a single, real-life setting (Yin, 1994). The case study method is recognized as an appropriate method of empirical enquiry in this study. NVivo 9 statistical package was used to automate coding processes and analyze qualitative data. The typed notes and audio data were transcribed verbatim and analyzed. It was also ensured that each case was assigned a code number as recommended by Miles and Huberman (1994) and Creswell (2003). Data were further summarized, content analysis was made, converging radial diagrams and vignettes to combine different explanations from different senior managers into a general idea. The multiple cases were from three microfinance institutions, transcribed to generate views that inform the theory and practice (Qu & Dumay, 2011). Accordingly, Miles and Huberman (1994), Strauss and Corbin (1998) suggest three coding techniques, which were used to analyze the text data in this study. The three coding techniques used for analysis were open, axial and selective coding to

group responses and cross case analysis to determine the key factors of business process reengineering performance.

3.1. Validity and reliability

To ensure reliability and validity of the interview guide, the data were subjected to triangulation approaches. In research, triangulation helps address the limitations of a given methodology by complementing its weaknesses with the strength of the methods used (Bard et al, 2011; Baxter & Jack, 2008). Data source and investigator triangulations were employed in this study to avoid aspects of self-reporting. The fundamental views about business process reengineering performance from respondents in the listed microfinance institutions were validated by views from the customers and professional members of Association of Microfinance Institutions of Uganda (AMFIU report, 2015/2016). This triangulation of data reduced self-reporting biases. Further, to ensure validity, interviews were checked for correctness before making transcriptions to ensure that what has been captured is exactly what respondents have actually said.

3.2. Sampling design and procedures

Qualitative data was collected using an interview guide in form of appreciative inquiry from three reengineered microfinance institutions. The qualitative results from the purposively selected interviews were attained after saturation point. 12 interviewees were targeted, however, the saturation point was achieved after the third manager on average for each institution. From the three microfinance institutions, such as Pride microfinance, FINCA and Opportunity microfinance institutions, multiple cases were maximally generated at saturation level. In Pride Microfinance the saturation level was attained at the third interviewee, FINCA at the 4th and Opportunity at the 3rd respondents, respectively. The interviewees included: finance manager, relationship manager, transformation manager, information technology manager, operations manager, credit manager and risk manager. Further, the respondents involved in the reengineering of the business processes were the only ones interviewed. They were over 25 years in

age, graduates and had over 5 years of working experience in the studied microfinance institutions. The respondents that answered the appreciative inquiry had keen knowledge on the business process reengineering of microfinance institutions under study.

3.3. Description of the microfinance institutions under study

The studied microfinance institutions had business process reengineering experience of more than three years. The results revealed that the surveyed microfinance institutions had reengineered four categories of business processes, namely: management, network, operational, workflow and support processes. In the context of microfinance institutions, the operational processes included account opening, cheque processing and loan process; workflow support processes included: relationship management processes, queuing processes and risk management processes. The network processes included but not limited to back up processes, online registration processes, internet banking, and mobile banking processes. On the other hand, management processes included budgeting processes, human resource processes and strategic planning processes.

4. ANALYSIS AND RESULTS

This study was guided by the research question stated as “What is the relationship between knowledge management, adaptability and business process reengineering performance of microfinance institutions in a developing economy context?” In an attempt to answer the research question, three key themes emerged from the logical qualitative views as the major findings of the study.

Theme 1: Knowledge creation improves efficiency of business processes of microfinance institutions. The qualitative results reveal that knowledge creation improves efficiency of business processes. The results reveal that when microfinance institutions create knowledge in terms of central processing and storage of information, learning collaborations, mentorship and training, provision of brochures and training manuals, they create efficient business processes in terms of maximized pro-

cessing time of clients transactions, minimized operational costs and improved speed delivery of business processes.

Theme 2: Knowledge sharing improves effectiveness of business processes of microfinance institutions. When microfinance institutions share knowledge in terms of social media interactions, networking, brainstorming retreats, financial literacy and programmed meeting, they are able to improve their business process effectiveness in terms of responding to operational problem solutions, handling clients' requests, meeting timely budgets and service delivery.

Theme 3: Adaptability improves business process reengineering performance of Microfinance institutions. The results further reveal that when microfinance institutions adapt to environmental changes such as competition, regulations, technological and demand changes in terms of realignment of internal structures towards reward systems, modifying business process technologies and communication networks, changing customer and employee beliefs, they are likely to benefit from performance of the business process reengineering initiatives in terms of efficient and effective business processes. The qualitative data were analyzed and with emerging themes presented in the Appendix using the model of business process reengineering performance. The discussion of the study findings is guided by the above three stated emerging themes as detailed in the next section.

5. DISCUSSION OF RESULTS

The results are discussed relating to the relationship between knowledge management and business process reengineering performance as guided by the key emerging themes.

5.1. Knowledge creation improves efficiency of business processes of microfinance institutions

Knowledge creation was perceived to mean managerial knowledge in form of acquiring actionable information that is relevant, meets quality standards and is useful in responding to dynamic processes and customer demands. The new knowledge

acquired is transferred from different functional departments to central information processing units for immediate customer updates and stored in physical and electronic files for future reference. As microfinance institutions interact with each other, they create new knowledge to cope with internal and external demands. Such knowledge created helps decision makers and practitioners to make innovations, modify and redesign new ways of enhancing business process efficiency such as reduced processing time, quality service deliverables, reduced operational costs and maximized speed deliveries among and between microfinance institutions. The new knowledge helps the institutions to create awareness, detect weaknesses and failures of business process models and take corrective measures.

In the context of microfinance institutions, knowledge is acquired in form of actionable information and resources to enable managers renovate and innovate financial processes, technological inventions, incremental and radical changes. It is emphasized that in Uganda's microfinance institutions, knowledge creation is attained using expert opinions of consultants and auditors, imparting skills and experiences through interactions, collaboration, and mentorship of senior managers and team members. The concrete reality is that senior managers in microfinance institutions organize staff meetings, mentorship programs and learning collaborations, develop unique innovative process capabilities such as financial information management and performance management systems through which new information is acquired and transformed for radical and incremental business process changes. Senior managers and heads of units organize business and management conferences, on-job training, workshops, refresher courses, seminars, field trips to train staff to identify the process inefficiencies and generate the valuable information and resources.

The results provide empirical support that when knowledge is created it generates efficient innovative and complex network processes, workflow support processes, management processes and core processes (Rasula et al., 2014; Silva Melo et al., 2010). Previous scholars emphasize that knowledge as a crucial intangible resource can be created through socialization, externalization, com-

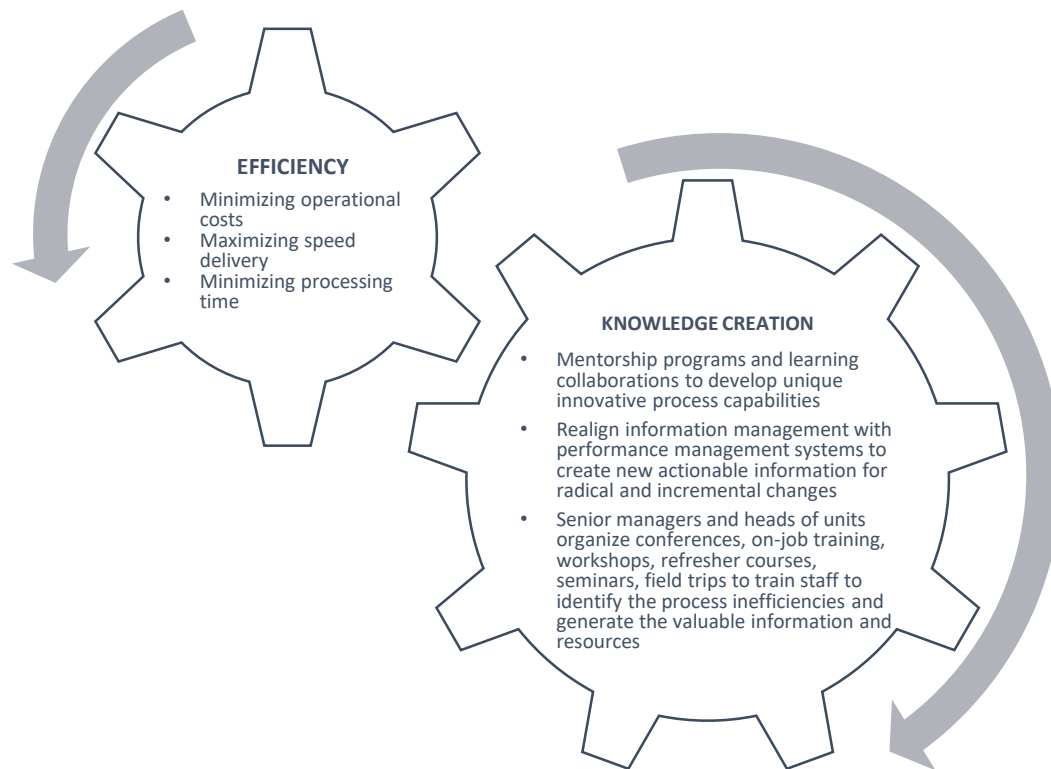


Figure 1. Improving efficiency of microfinance institutions through knowledge creation

bination and internalization. The inconsistent in this study is that knowledge creation is the creation of actionable information, not creation of an intangible resource. Not every knowledge that created and shared is actionable and shared to create value in microfinance institutions. The knowledge should be of quality, meet the intended purpose, the set objective and targets. Ideally, knowledge creation is a strategic practice integrated in an institution's strategy. This acquired knowledge can be managed, provided to create an environment for creating knowledge, communicating and applying it to achieve business process goals (Tiwana, 2000; Chaffey & Wood, 2005).

In this study, however, it is suggested that senior managers and the team endeavor to create conducive internal socialization, through meetings and informal talks among the information technology consultants and employees in charge of the financial service. So, Rasula et al. (2014) support that creation of knowledge achieves timely business process goals. However, Ghasem et al. (2016) assert that creative connections build knowledge access. In managing knowledge in financial services, five management information system appli-

cations such as decision support system, executive support system, management reporting system, intelligent information system and an office information system are integrated to accomplish the organizational information management needs (Salman et al., 2017). The qualitative results reveal the concrete existence of the emerging theme of knowledge creation and sharing in the context of microfinance institutions operating in Uganda. The qualitative findings are summarized in vignette as summarized below.

Microfinance institutions have centralized processing units where information is collected, stored, transformed and distributed to different users. Also, MFI, insurance organizations and banks organize staff meetings and trainings to check whether they are achieving their targets. They review their daily transaction records, profiling accounts and track non-performing loans and devise new ways of serving clients. They have digitalized their information systems to ensure timely information access to various stakeholders.

As microfinance institutions interact in complex situations, they learn and acquire new action-

able information to enhance process efficiency and gain local and global competitive advantage. The results provide support of complexity theory (Goldstein, 2004; Millan, 2008) that advocates for creation of interactions which create new knowledge that enhance business processes innovations. The aspects of microfinance institutions efficiency are geared by creation of knowledge using the gear process model as elaborated in Figure 1.

5.2. Knowledge sharing improves effectiveness of business processes of microfinance institutions

The second theme is that knowledge sharing improves financial process efficiency. In the context of the study, it is affirmed that knowledge sharing is the act of disseminating the information that is relevant and actionable to microfinance institutions. Microfinance institutions have created platforms for brainstorming retreats, bar coding systems to access services, electronic data interchange systems to share information, social media via internet and web-based access as means of sharing relevant knowledge on available products such as foreign exchange rates and interest rates. Microfinance institutions also communicate internally and externally through calendar and circulars. They hold meetings to share views on performance of business operations of different functional departments to serve clients better. Microfinance institutions conduct technical support training in sustaining network activities, communications and knowledge management systems. They strengthen participation in local and global international conferences to share knowledge on financial matters. The information shared helps in scheduling and sequencing of business activities and sharing achievements and rewarding the best achievers of the year. Microfinance institutions build knowledge sharing capacity, competencies and develop knowledge sharing strategies and award the best performing managers. The information is shared to align mission, goals, and objectives with the targets of different functional teams.

A number of institutions use financial knowledge on the new products such as bank assurance, pay easy, agent banking, electronic fund transfers,

money transfer services in terms of money gram and express money services, internet banking to access information on balances, mobile banking for cash transfers, information sharing about buying and selling of local and foreign currencies and electronic statements for prompt updates of financial transactions. In this study, it is clear that the new information in the financial institution is shared among the case managers and across functional teams to identify business process inefficiencies, namely identifying the critical problems such as delays in banking halls, increasing costs of credit in financial banks, claims and verification processing time in insurance firms, detrimental quality of services, delays in cycle processing time, customer complaints. As such, microfinance institutions often seek to apply the relevant knowledge for quality change of decisions outcomes in terms of reduced operational costs, minimal processing time and quality claim and verification processes.

The results are consistent with previous scholars who assert that the responsiveness to sharing of relevant knowledge through building collaborative structures and networks fosters organizational performance of process innovations (Valdez-Juarez et al., 2016; Mafabi et al., 2012). It is also emphasized that in order to transform knowledge into a valuable institutional asset, knowledge, experience, and expertise, knowledge must be formalized, distributed, shared, and applied to enhance process efficiency (Galandere-Zile, 2002). The study supports managing knowledge through knowledge sharing practices to spur process performance outcomes (Alegre et al., 2011). The results were also consistent with a field study of top management teams and knowledge workers which demonstrated that the rate of new product and service introduction was a function of organization members' ability to combine and exchange knowledge in financial markets (Smith et al., 2005; Ledgerwood, Earne, & Nelson, 2013). The presence of dynamic business processes requires knowledge management systems to be reorganized and restructured to share financial knowledge in order to achieve satisfactory levels of efficiency, flexibility and service delivery (Salman et al., 2017). Accordingly, knowledge sharing is capitalized to improve business process efficiency. Knowledge is transformed and capitalized into a valuable asset to ensure timely services and ensure business process efficiency (Valdez-Juarez et al., 2016; Vesnabosilj-

vukši, 2006). The results support knowledge generation model that integrates an external cycle with an internal cycle for knowledge generation (Nonaka & Takeuchi, 1997; Hammer, 2010; Hammer & Shampy, 1993). As such, microfinance institutions implement flexible knowledge sharing systems to design, evaluate, view, manage, and adapt in real-time a number of related business activities of one or more institutions, in a structured sequence to achieve a common goal. One perspective of sharing knowledge is presented in the vignette as summarized.

Knowledge is shared in microfinance institutions, through manual platform such as meetings, trainings, workshops and also through electronic platforms like social media, mobile phones and electronic banking systems. This enables them to transfer information, coordinate activities and respond to the clients' needs in time. They have also information systems, centralized processing centers and customer care call centers that provide timely feedback with reduced costs and improved customer satisfaction.

Furthermore, both quantitative and qualitative results provide an empirical support of the complexity theory (Byrne, & Callaghan, 2013; Goldstein, 2004; Millan, 2008) which postulates that knowledge is an actionable resource that is shared and utilized through collaborations and interactions to ensure efficient redesigned business processes. Complexity theory supports that interactions create responsive structures for learning and process changes. It is concluded that knowledge sharing is a double loop model that involves feed forward and feed backwards to create effectiveness of microfinance institutions as shown in Figure 2.

Further, in this study, a general conclusion is provided that knowledge management is a crucial actionable resource gained through interactions, collaborations, patterning both internally and externally, to learn, create, store, share and transform new knowledge to enhance the reengineered process efficiency, serve customers better and identify new financial market ventures.

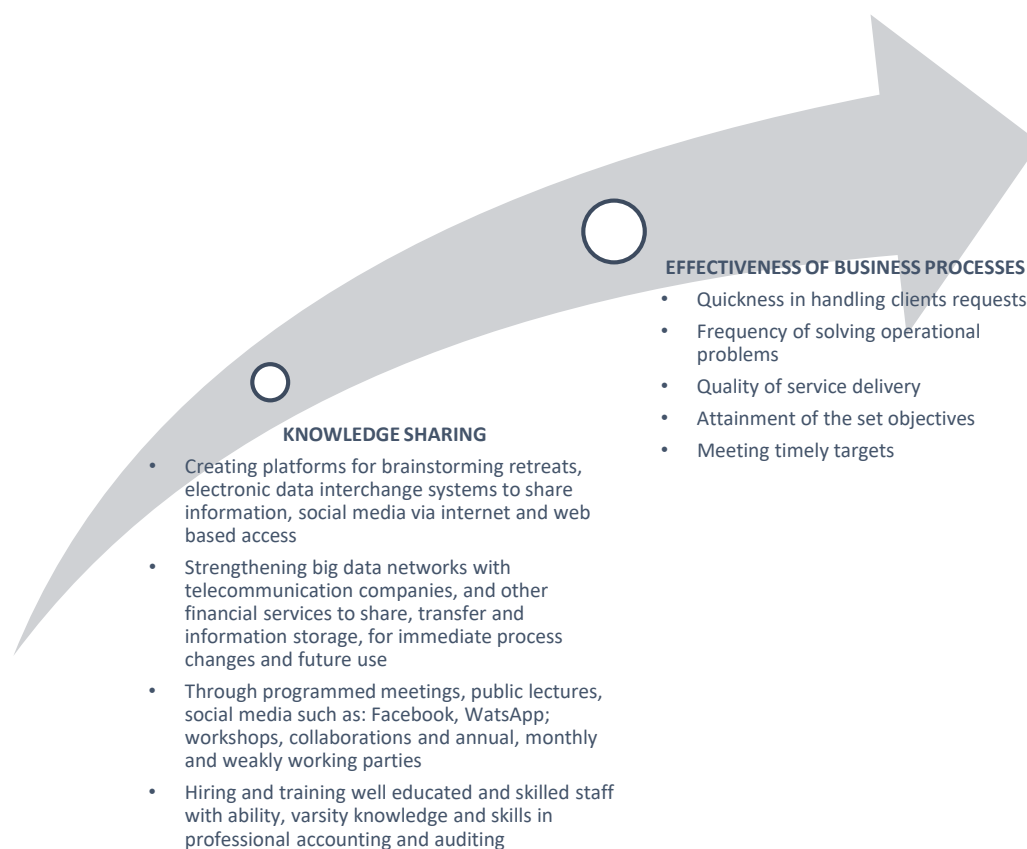


Figure 2. Double loop of knowledge sharing of microfinance institutions

5.3. Adaptability improves business process reengineering performance of microfinance institutions

Microfinance institutions take initiatives of creating adaptive management systems that respond to environmental concerns; they tend to redesign efficient processes that add value to customers. The results imply that management that design rewards based on performance outcomes, targets and strategic plans ensure sustainable redesigned process efficiency. Financial institutions are creating workflow management systems; multiple business process information and rapid innovations such as inter-switch systems to support the alignment of information technology and business activities both within internal institutional units and external business partners to create positive deviance. In this study, it is emphasized that improved business process reengineering practices reduce costs of operations and customer complaints in a microfinance sector (Razalli et al., 2015). It is also added that microfinance institutions that have continuously undertaken business innovative models such as business process re-engineering projects, re-organized and re-structured their business process operations to remain competitive in static environment, have not yielded significant results (Li & Belkin, 2010; Magutu, Nyamwange, & Kaptoge, 2010). Instituting automated systems that meet customer expectations is important for microfinance institutions (Boylan & Turner, 2017). Indeed, such microfinance institutions depend on technological innovations and knowledge adaptive systems to learn and change (Morgan & Wang, 2010; Shaar et al., 2015; Keshtmand & Hatami, 2016). It is also emphasized that building management systems that creates rewarding values based on idea generation is key (Bauman & Stieglitz, 2014), although

the question of whether the pay of performance diminishes intrinsic interest remains unclear (Fang & Gerhart, 2012). This is perhaps because managers are encouraged to create systems that deliver reliable services satisfying customers. The vignette below shows the role of adaptability in improving business process reengineering performance.

Microfinance institutions have continuously improved client satisfaction by creating new technologies, adaptive communication networks, reward systems and structural changes. They have adapted to environmental forces and installed new integrated systems across interfunctional units to serve clients better. The reengineering initiatives such as electronic queuing management system and social performance management systems have reduced queues and improved customer confidence. They have also revised the staff rewards and bonuses to meet the expectations of their clients on busy days and holidays. They have improved internal meeting schedules to reduce complaints and add value to customers.

It is summarized that in order to improve business processes, it is necessary to internally and externally create new actionable, quality, relevant, useful information and share it within flexible intra and interfunctional rewarding structures that maximize business value to ensure efficient and effective business processes (Baumann & Stieglitz, 2014). Further, if adaptability, knowledge creation and sharing are identified as key in microfinance institutions, academicians and practitioners can easily define flexible policies and strategies that align with improved innovative timely and cost-effective business processes. In the next section, the significant positive relationship between institutional leadership and adaptability of microfinance institutions in respect of the key emerging themes is discussed.

CONCLUSION AND IMPLICATIONS

Consequently, creating knowledge sharing environment is crucial for microfinance institutions that are able to systematically learn from mistakes and inefficiencies, create process value chains, continuously make reflections, foster competitive advantage and build on their business success. The knowledge sharing environment builds a conduit, through which financial solutions, complex ideas and key messages are shared among the departments and the external stakeholders. Such environment enables managers to learn and understand how best to deliver services to clients, communicate and team to solve busi-

ness process-based problems. The inherent outcome of knowledge sharing environment is making microfinance institutions employ staff with tacit knowledge, staff who have acquired experiences, able to transfer skills, share actionable information and are able to modify process innovative actions to reflect new knowledge shared. The knowledge environment supports the sharing culture and collaborations to improve service delivery.

Microfinance institutions that create adaptive environments are able to facilitate process reengineering practices. They adapt through interactions, create new knowledge internally and externally to enhance business process efficiency. Microfinance institutions that do not create strong adaptive systems to adapt to environmental changes are believable to fail. Microfinance institutions that have unclear management systems, cultures and structure are not sensitive to environmental changes and improve business processes.

The study augments complexity theory by emphasizing the two emerging themes of knowledge management such as knowledge creation and sharing that create efficient process innovations. As such, sharing the newly distributed knowledge and information creates positive and negative feedback that predict the emergent effectiveness of reengineered processes of the Microfinance institutions. This study contributes to business process reengineering practices and managers by effectively and efficiently transforming knowledge into new products, new processes. Managers of Microfinance institutions should involve themselves in building a strong knowledge management systems, through which facilitations inform of trainings and development programs of senior managers can be executed and apply knowledge resources to create the value adding business processes such as loan processing, queue network processing, insurance claim processing and check processing.

Microfinance institutions should institute a department of knowledge management headed by a chief knowledge management officer. This department will create collaborations, partnerships programs, strategic interactions and co-existence among local and international microfinance institutions, such as IMF, World Bank, to foster creation and sharing of new actionable information that creates reliable, relevant, efficient and effective business processes. The department will create new marketing opportunities, innovations, technological competencies that will inherently strengthen business process efficiencies, social networks, public, service based, manufacturing and agricultural sectors.

Policy makers of Bank of Uganda, Ministry of Finance and Economic Planning and Ministry of Trade Industry and Cooperatives should promote business process reengineering performance in microfinance institutions. The Government of Uganda through Bank of Uganda (BoU), Association of Microfinance Institutions of Uganda (AMFIU) and regulated microfinance institutions should provide robust trainings and capacity building to microfinance institutions in knowledge management, institutional leadership, and organizational adaptability, as well as strengthen the business process reengineering performance and take advantage of exploiting marketing opportunities both locally and globally.

REFERENCES

1. Al Shaar, E. M., Khataab, S. A., Alkaied, R. N., & Manna, A. Q. (2015). The effect of top management Support on innovation: The mediating role of synergy between organizational structure and information technology. *International Review of Management and Business Research*, 4(2), 499-513. Retrieved from <http://www.irmbrjournal.com/papers/1433436800.pdf>
2. AMFIU (2015/2016). *Overview of the Rural Financial Sector and Strategies to improve financial Inclusion in Uganda*, Uganda Microfinance Directory (7th ed.).
3. Banham, H. (2010). External environment analysis for small and medium enterprises (SMEs). *Journal of Business and Economics Research*, 8(10), 19-26. <https://doi.org/10.19030/jber.v8i10.770>
4. Baumann, O., & Stieglitz, N. (2014). Rewarding value-creating ideas in organizations: The Power of low-powered incentives. *Strategic Management Journal*,

- 35(3), 358-375. <http://dx.doi.org/10.1002/smj.2093>
5. Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and Implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559. Retrieved from <http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf>
6. Bosilj-Vukšić, V. (2006). Business process modelling: A foundation for Knowledge Management. *Journal of Information and Organizational Sciences*, 30(2), 185-198. <https://hrcak.srce.hr/20911>
7. Boylan, S., & Turner, K. (2017). Developing Organizational Adaptability for Complex Environment. *Journal of Leadership Education*, 16(2), 183-198. <https://doi.org/10.12806/v16/i2/t2>
8. Byrne, D., & Callaghan, G. (2013). *Complexity theory and the social sciences: The state of the art*. New York: Routledge.
9. Cathy, J. (2011). *Theory of changes Review*. Report commissioned by Comic Relief.
10. Creswell, J. W. (2003). *Research Design: Qualitative and Quantitative and Mixed-Method Approaches*. Thousand Oaks, CA, US: Sage Publications, Inc.
11. Davenport, T. H. (1994). Managing in the new world of processes. *Public Productivity & Management Review*, 18(2), 133-147. Retrieved from <https://www.jstor.org/stable/3380643>
12. Davenport, T. H., & Short, J. E. (1990). The new industrial engineering: Information Technology and business process redesign. *Sloan Management Review*, 31(4), 11-27. Retrieved from <https://sloanreview.mit.edu/article/the-new-industrial-engineering-information-technology-and-business-process-redesign/>
13. Fang, M., & Gerhart, B. (2012). Does pay for performance diminishes intrinsic interest? *The International Journal of Human Resource Management*, 23(6), 1176-1196. <https://doi.org/10.1080/09585192.2011.561227>
14. Goldstein (1999). Complexity Theory and Organization Science. *Organization Science*, 10(3), 216-232. Retrieved from <https://www.jstor.org/stable/2640328>
15. Goldstein, D. G., & Gigerenzer, G. (2002). Models of ecological rationality. The recognition heuristics. *Psychological Review*, 109(1), 75-90. <http://dx.doi.org/10.1037/0033-295X.109.1.75>
16. Hammer, M. (2010). *What is business process management? Handbook on Business process Management 2*. Springer-Verlag Berlin Heidelberg.
17. Hammer, M., & Champy, J. (1993). Reengineering the corporation: A manifesto for business Revolution. *Business Horizons*, 36(5), 90-91. [https://doi.org/10.1016/S0007-6813\(05\)80064-3](https://doi.org/10.1016/S0007-6813(05)80064-3)
18. He, X. J. (2005). A comparative study of business process reengineering. *Communications of the IIMA*, 5(1). Retrieved from <https://scholarworks.lib.csusb.edu/ciima/vol5/iss1/3/>
19. Keshtmand, Z., & Hatami, K. (2016). Relationship of Organizational Learning and Knowledge Management with Organizational Citizenship Behaviour In Kermanshah General Administration of Sport. *International Journal of Life Science & Pharma Research*, 2, 56-65. Retrieved from http://www.ijlpr.com/admin/php/specialissues/published_24_pdf.pdf
20. Kotter, J. P. (2012). *Leading change*. Harvard Business Review Press, Boston, Mass.
21. Ledgerwood, J., Earne, J., & Nelson, C., (2013). *The new microfinance handbook: a financial market system perspective* (Ed. book). Washington, DC: World Bank. <https://doi.org/10.1596/978-0-8213-8927-0>
22. Li, Y., & Belkin, N. J. (2010). An exploration of the relationship between work tasks and Interactive knowledge technology search behaviour. *Journal of American Society for Knowledge Technology Science and Technology*, 61(9), 1771-1789. <https://doi.org/10.1002/asi.21359>
23. Mafabi, S., Munene, J., Ntayi, J. (2012). Knowledge management and organisational resilience: Organisational innovation as a mediator in Uganda parastatals. *Journal of Strategy and Management*, 5(1), 57-80. <https://doi.org/10.1108/17554251211200455>
24. Magutu, P., Nyamwange, S. & Kaptoge, G. K. (2010). Business process reengineering for Competitive advantage: Key factors that may lead to the success or failure of the BPR implementation (The Wrigley Company). *African Journal of Business & Management*, 1, 135-150. Retrieved from <https://www.semanticscholar.org/paper/BUSINESS-PROCESS-REENGINEERING-FOR-COMPETITIVE-Key-Magutu-Nyamwange/7d5553f0a230dd3b471024d573c04189a6778299>
25. Martin, I. & Cheung, Y. (2000). SAP and business process re-engineering. *Business Process Management Journal*, 6(2), 113-121. <https://doi.org/10.1108/14637150010321286>
26. McMillan, E. (2008). *Complexity, Management and the Dynamics of Change*. New York: Routledge.
27. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded Source book*. Thousand Oaks, CA: SAGE Publications.
28. Mlay, S. V., Zlotnikova, I., & Watundu, S. (2013). A Quantitative Analysis of Business Process Reengineering and Organizational Resistance: The Case of Uganda. *The African Journal of Information Systems*, 5(1), 1-26. Retrieved from <https://digitalcommons.kennesaw.edu/ajis/vol5/iss1/1>
29. Mohammad, M. M., & Mollaei, E. (2014). The effect of business process re-engineering factors on Organizational agility using path analysis: case study of ports & maritime organization in Iran. *Asian Economic and Financial Review*, 4(12), 1849-1864. Retrieved from https://econpapers.repec.org/article/asiaefrj/2014_3ap_3a1849-1864.htm

30. Morgan, J., & Wang, R. (2010). Tournaments for ideas. *California Management Review*, 52(2), 77-97. <https://doi.org/10.1525%2Fcmr.2010.52.2.77>
31. Nonaka, I. & Takeuchi, H. (1997). *Criação do Conhecimento na Empresa: Como as Empresas Japonesas Geram a Dinâmica da Inovação*. Campus, Rio de Janeiro.
32. Nonaka, I., & Takeuchi, H. (1996). A theory of organizational knowledge creation. *International Journal of Technology Management, Special Issue on Unlearning and Learning for Technological Innovation*, 11(7/8), 833-845. Retrieved from <https://www.inderscience.com/info/inarticle.php?artid=25472>
33. Nzewi, N., Ugochukwu, C., & Moneme, P. (2015). Business process reengineering and performance of courier service organizations in Anambra state, Nigeria. *American Journal of Social and Management Sciences*, 6(1), 24-33. Retrieved from <https://ssrn.com/abstract=2780435>
34. Salman, B. M., Wajid, H. R., Sumaiya S. (2017). Operationalization of Knowledge management in knowledge-intensive Pakistani banks: a qualitative case study. *Knowledge and Performance Management*, 1(1), 36-45. [https://doi.org/10.21511/kpm.01\(1\).2017.04](https://doi.org/10.21511/kpm.01(1).2017.04)
35. Sungau, J., Ndunguru, P. C., & Kimeme, J. (2013). Business process re-engineering: the technique to Improve delivering speed of service industry in Tanzania. *Independent Journal of Management & Production*, 4(1), 208-227. <https://doi.org/10.14807/ijmp.v4i1.68>
36. Tawakol, F., (2015). The Regulation and Supervision of Microfinance Main Issues and Progress In Egypt. *An Online International Research Journal*, 1(4), 690-706.
37. Tuominen, M., Rajala, A., & Moller, K. (2004). How does adaptability drive firm innovativeness? *Journal of Business research*, 57(5), 495-506, [https://doi.org/10.1016/S0148-2963\(02\)00316-8](https://doi.org/10.1016/S0148-2963(02)00316-8)
38. Valdez-Juárez, L. E., García-Pérez de Lema, D., & Maldonado-Guzmán, G. (2016). Management of knowledge, innovation and performance in SMEs. *Interdisciplinary Journal of Information, Knowledge, and Management*, 11, 141-176. <https://doi.org/10.28945/3455>
39. Weiss, C. H. (1995). *Nothing as practical as a good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families*. In J. P. Connell, A. C. Kubisch, L. B. Schorr, & C. H. Weiss (Eds.), *New approaches to evaluating community initiatives: Concepts, methods, and contexts* (pp. 65-92). Washington, DC: Aspen Institute.
40. Xu, J., Rémy, H., Caillaud, E., & Gardoni, M. (2010). Macro process of knowledge Management for continuous innovation. *Journal of Knowledge Management*, 14(4), 573-591. <http://doi.org/10.1108/13673271011059536>
41. Yin, R. K. (2002). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications.

APPENDIX

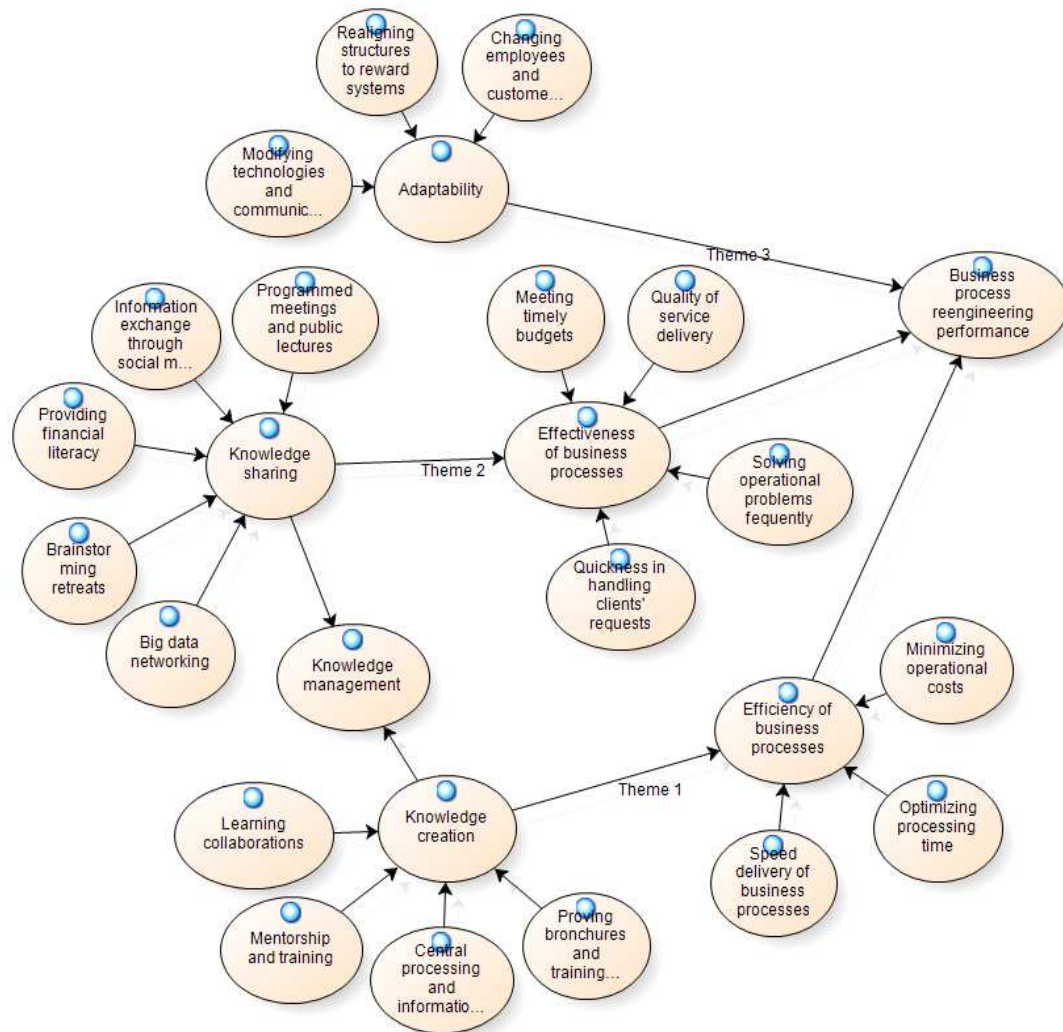


Figure 1A. Qualitative data analysis