

Implementing A Software Driven Finance and Accounting Enterprise Resource Planning System in Micro Finance Organizations



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Abstract

The advent of information technology has brought a significant transformation in the means and mechanisms in which the business units operate. For example, today the focus has shifted from self-centred cubicles and individual functions to the process of an integrated business model. In other words, the executive business management want to focus on the entire business units in a holistic manner rather being concentrated on a single business vertical.

In the process of bringing about this significant transformation Information technology has played a crucial role. With the power of internet and faster processing speed it has ensured that the business verticals are integrated. Consequently with this integration, the focus of executive management team of Micro Finance organization has gradually moved towards a more robust, stable and data driven finance and accounting system for Enterprise Resource Planning. However, developing an integrated financial and accounting system for Enterprise Resource system for Micro Finance organization is not an easy task. Several constraints, issues and challenges are required to be taken into consideration.

For example, the problem of standardizing accounting standards and the need to arrive at the common terminology itself pose a big problem. This paper is thus an attempt to develop a finance accounting system for Micro Finance organization for the smooth functioning of Enterprise Resource Planning. It starts with the process of an extensive literature review followed by determining the gaps in the literature. Based on these findings, an attempt is made to develop software driven accounting system which will meet technological requirements of the executive management in the Micro Finance organization. The sampling used is purposeful sampling and the sample size used is 112 and comprised of people from the Delhi/NCR region. The contribution to the existing literature is that very little attempt has been made in the form of development of software in the Micro Finance organizations.

Keywords: Micro Finance, Organization, Enterprise Resource Planning, Finance and Accounting, Information Technology, Software.

Introduction

Technological advancements in information technology have disrupted the business scenario across the world and Micro Finance organizations are also deeply impacted by the revolutionary waves. For example, there has been an increase in competition among the business units like Micro Finance organizations as well as there has been a race amongst the business units to adopt technology and seamlessly and integrate it into the core business processes (Al-Mashari, 2001; Palaniswamy and Frank, 2000; Siriginidi, 2000).

Enterprise Resource planning is a technology which is developed to integrate several functions of an enterprise and at the same time ensuring that competitive edge is maintained (Nicolaou, 1999; Kavanagh, 2001). Thus, Enterprise resource planning in Micro Finance organizations seamlessly integrates the functioning of Human resource department, account and finance department, quality control departments and other functional units or departments to provide an integrated solution to perform

several functions across the organization by sharing common data stored at the repository (Shehab, Sharp, Supramaniam, & Spedding, 2004).

In other words, it can be construed to mean that the complete implementation of ERP in Micro Finance organizations (Enterprise resource planning) is to automate several business processes while sharing the common data across several organizational units and produce real time information so that it can be utilized in an effective manner (Spathis, Charalambos & Sylvia Constantinides, 2004).

In Micro Finance organizations the Enterprise resource planning systems are designed and implemented with the purpose of improving productivity and at the same time increasing the organizational effectiveness in terms of lower cost of inventories, reduction of product development timelines and other benefits such as improved customer services. ERP assists in the achievement of these benefits by providing timely and accurate information flow across the enterprise (Beheshti & Beheshti, 2010).

ERP thus assists Micro Finance organizations business in dealing with changing market dynamics by generating real time data and several reports which enable the executive management team of Micro Finance organizations to take pro-active decisions based on actual data generated by various operations (Ifinedo, Rapp, Ifinedo, & Sundberg, 2010). This is in sharp contrast to traditional legacy systems which generated reports based on historical data. (Poon & Yu, 2010).

Literature Review and Research Gap

Despite the benefits of having an ERP system, there has been wide concerns and inhibitions in the achievement of the basic objectives of ERP in Micro Finance organizations.

One of the main concerns of the Micro Finance organizations was the nature, scope and the context in which ERP was defined. According to some researchers ERP was conceptualized to represent computers and software systems that was to link the business processes within an enterprise while serving the users of the system (Arif, Kulonda, Proctor, & Williams, 2004; Swartz & Orgill, 2001)). While on the other hand ERP was thought of as comprising of components of enterprise resource management and business system respectively (Cobarsí, Bernardo, & Coenders, 2008; Davenport, 1998, 2000).

However, Klaus, Rosemann, and Gable (2000) referred to ERP as the conceptual entity comprising of comprehensive packaged solution by means of utilizing software and the various components of information system and presenting a complete picture of the business processes from the perspective of Information architecture with software as the base.

However, Marnewick and Labuschagne (2005) provided a new concept which is in line with the designing, development and implementation perspectives. According to them an ERP system is more than a software product and is divided into four components (a) software component (b) process flow

component (c) mindset of customer and (d) change management component.

This paper addresses the research gap by addressing the issues identified during the literature review process *namely*

1. Identifying a working definition of an ERP.
2. Development of software driven Finance and accounting ERP in Micro Finance organizations.
3. While developing the software system the inputs were taken from 112 respondents. The response provided by the respondents proved to be invaluable and culminated into working software for Finance and Accounting ERP in Micro Finance organizations.

Methodology

The development of an ERP system commenced in a structured manner. The following were the steps that were followed

1. The first step involved in the development of an ERP system in Micro Finance organizations is the identification of the users of the software system. As the software was limited to the accounting and finance department of an organization, the users identified were from the accounting and finance department only.
2. The following users *both direct and indirect users* were identified
 - a. Administrative user. This is the main user who is responsible for the overall functioning of the ERP system in Micro Finance organizations including the processes being followed in the organization as well as other aspects of the software system. For example, the administrative user of Micro Finance organizations would be responsible for inducting a new employee into the system and if an employee is shifted to other location it is the administrative user who will be responsible for updating the relevant records of the employee
 - b. The Finance and Account Head of the Micro Finance organizations. This is another user who will be carrying out the functions as defined by the job profile of the organization. In other words, it can be Head finance and accounting or it can be Vice President or it can be any other designated person of Micro Finance organization.
 - c. The finance and accounts executive of the Micro Finance organization. This is another user who will be using the ERP software in accordance with the defined roles and responsibilities in a Micro Finance Organizations.
 - d. All other designations and employees in accounting and finance department as defined in the organizational structure of the Micro Finance organizations.
3. Once the direct users have been identified then the indirect users are also identified in the Micro Finance organization. Indirect user is defined as an external entity but they perform business functions with the organizations. Examples include vendors, suppliers and other entities that form the bulk of the indirect users. Further, it all depends on the organizational policies as to degree

and extent that is required to be provided to these indirect users.

4. Once the users are identified then the next stage involves is the identification of the various interfaces of the finance and accounts department in the Micro Finance organization. The interfaces are responsible for providing the data that would be moving in and out of the various interfaces and which have financial implications in it. For example, the data from the HR department pertaining to the aspect of leave without pay is required to be moved from HR to the finance and accounts department at the time of preparation of salary in the Micro Finance organization.
5. At the end of this stage the next step involves the process of developing the processes required for executing the various functions of the Micro Finance organization unit. For example, the process required to prepare the salary of an employee commences with the HR providing the details such as employee number, designation, pay band, basic pay, house rent allowance and the like and in addition to these details the other aspects such as leave without pay, earned leave and casual leave etc. are passed to the salary department of the Micro Finance organization.
6. Once the processes are defined the next step involves the process of designing the interfaces. This includes aspects such as designing of web pages, designing of the processes and finally designing the database and its tables for the overall benefit of the Micro Finance organization.
7. Worth mentioning is the fact that the process of designing is quite cumbersome and it involves continuous communication from the required interfaces of the Micro Finance organizations.
8. Once these are taken care then the actual development process takes place. During the development process there are several changes in the processes, changes in the web pages and the like. All these are taken care off in the respective domain area of the Micro Finance organization.
9. At the end of the development process, the testing, implementation and the deployment process commences in the Micro Finance organization.
10. At the end of the deployment phase the actual software is put to the user acceptance testing wherein the ERP software is verified and validated from the requirements as provided by the customer. Once the user is satisfied the software is accepted for further steps in the Micro Finance organization.
11. Acceptance of the software is not the end of the ERP implementation phase in the Micro Finance organization. The training sessions form the next set of input. The training sessions are planned and are conducted in accordance with the training schedule for the concerned stakeholders of the Micro Finance organizations.

Challenges and Issues during The Implementation Phase

The implementation phase of the ERP software in Micro Finance organization is full of challenges and complexities. Some of the challenges include

1. Standardization of data form interfaces. This is the most important challenge that is encountered during the process of implementation of the ERP software in Micro Finance organizations. For example, if the Micro Finance organization deals with international clients the mode of currency would be in dollars or any other currency while the billing would be done in the case of any other currency. Also the rate of the currencies fluctuate and hence it becomes essential to fix the rate of the currency. This is the major challenge
2. The other major challenge encountered is the challenge of standardization of the various entities of the Micro Finance organization. For example, an international client deals with products in terms pound while in the Indian concept the same product is dealt in terms of kg. Also some other points of consideration include the aspects of standardization of product codes and uniformity in some of the processes.
3. The other major challenges and issues that are encountered is the compatibility of the ERP software in the Micro Finance organization. This basically means that the ERP software works very well in Linux whereas the Operating system possessed by the employees in another country is in Mac OS. This induces another round of challenges and issues which are required to be overcome.
4. The other challenges and issues which are faced by the implementers and the developers in the Micro Finance organization ERP system development includes the aspects of the project managers. ERP software cannot be developed without the interaction with the stakeholders. The challenges that are encountered include difference in time zones, political issues, cultural issues and the like.

Limitations and Future Scope

The limitation that was exposed during the process of the development of the research paper is the sample size of 112. An increased sample size would have enabled the author to gain more insight in terms of the practical problems encountered during the process of execution and which can be taken care off by the ERP system at the time of formulation, design, development and implementation in the Micro Finance organizations.

The future scope of the research paper lies in the fact that the parameters pertaining to various accounting system followed in a Micro Finance organization can be customized to meet the individual requirements of the all the stakeholder in the Micro Finance organizations.

Contribution to the Existing Literature

The contribution to the existing literature is the fact that limited study has been conducted in which the practical design and development of the

ERP system in the Micro Finance organizations had been taken. This aspect of practical consideration generates a new avenue for the implementation of ERP systems in the niche area of Micro Finance organizations.

Managerial Implications

The managerial implication that is generated during the development of the research paper is the fact that it provides practical exposure to the development and implementation of the ERP system in the Micro Finance organizations while this research paper also focuses on the aspects of HR, Finance and accounts and other functions required during the implementation of the ERP system in the Micro Finance organizations.

Conclusion

The present research paper has highlighted the practical aspects of the implementation of ERP software in the Micro Finance organizations while at the same time the research paper also highlighted the several issues and challenges and how they can be overcome during the design, development and implementation of the ERP software in the Micro Finance organizations. The inputs provided by the valuable respondents were a great help as the author was exposed to other practical problems encountered during the development of the ERP software in the Micro Finance organizations.

Thus the revolutionary waves which changes the lifestyle and consumption pattern of the customers, started in the form of food, machine, etc have also taken a new dynamics in the form of information technology. So the Micro Finance organizations are also affected by the baby steps of ERP system and the Micro Finance organizations slowly and gradually adopting the evolving ERP systems for the benefit of the entire stakeholder and society at large.

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