INFORMATION SYSTEM FOR CREDIT DEPLOYMENT IN INDIAN COMMERCIAL BANKS

ABSTRACT
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1.0. INTRODUCTION

1.1. INFORMATION & INFORMATION SYSTEM:

Information is data that has been processed into a form that is meaningful to the recipient and is of real or perceived value in current or prospective action or decisions. (Davis and Olson, 1985). An information system can be defined technically as a set of interrelated components that retrieve, process, store and distribute information to support decision making, coordination and control in an organization.

1.2. CREDIT DEPLOYMENT

Credit deployment is nothing but distribution of bank funds for different purposes (IIIB, 1986). The concept of credit deployment by the commercial banks is understood to be their lending pattern.

1.3. INDIAN COMMERCIAL BANKS

Like the any developing country, in India too, commercial banking has been hub of the financial system and has played a pivotal role in economic development. The major function of any commercial banking system is to channel resources from individuals and entities with surplus resources to those with resource deficits. In doing so, the commercial banking system not only satisfies the savings need of the community but also facilitates the accumulation of investment capital that is critical to growth and development.

1.4. ROLE OF INFORMATION SYSTEM IN BANKING

The information requirements in banks depend on the various management levels where the information is put to use. In the field of bank credit deployment information requirements of the branch manager can be broadly divided into two broad areas—planning decision areas and control decision areas.
2.0. OBJECTIVES

The present study proposed to have a detailed investigation into the information system in a commercial bank. Therefore, it calls for insight into the users’ evolutionary needs, the existing information system and its efficacy in satisfying the needs of the users and the shortcomings therein. In order to have insights into the above areas, several research questions need to be addressed. Some of the pertinent questions are:

- What are the information needed by various users, who may belong to various categories like - decision makers at the bank and the customers?

- What are those varied needs of varied types of customers?

- What are the different types of information systems currently used in the commercial banks for the purpose of credit deployment?

- Are the present information systems efficient enough to provide adequate, qualitative, timely and relevant information to the users?

- What are the drawbacks of the present information systems?

- What remedial measures need to be adopted in order to make the existing system effective in satisfying the users’ requirement?

The present study was proposed to address the above research questions by incorporating the following broader objectives:

1. To ascertain information requirement of the branch level internal users of information system for credit deployment and analyze their varied pattern on the basis of the personal characteristic and functional responsibilities.
2. To study analyze the existing information system and assess its efficacy in providing adequate, qualitative, timely and relevant information to the branch and higher level internal users and customers.

3. To identify shortcomings of the existing information system and suggest some guidelines for designing and development of a better system for credit deployment at the branch level.

2.1. HYPOTHESIS

While accomplishing the above broader objectives the study aimed to test the following hypothesis:

H1: Information requirements of the customers and internal users (managers) of credit deployment information system of a commercial bank are significantly influenced by their personal characteristics like sex, age etc and type of the credit.

H2: There is no significant difference in terms of users' satisfaction, quality of information and decision-making between the types of (computerized, manual and partially computerized) information system.

3.0. METHODOLOGY

The proposed study basically, needs two types of primary data- data relating to the information system used for the credit deployment in commercial banks and data relating to the internal staff of banks and their customers of that system. Therefore, we adopted a two-fold methodology to collect and analyse these two types of data. Since the study involves the analysis of the information system, a micro-level analysis conducted at the branch level by breaking the credit decision of the branch into several micro decisions and by taking into consideration the special characteristics of the branches. Further, information regarding the users collected from the primary sources by means of a questionnaire based survey method.
The researcher invoked both quantitative and qualitative methodology involving interviews, surveys, descriptive statistics, correlation analysis and factor analysis to assess the status of information system in banking institutions and their relations with internal and external users’ personal and functional characteristics. Various components of the methodology are outlined below under different headings.

3.1. SELECTION OF THE COMMERCIAL BANK

State bank of India is the largest bank of the country as well as of the NE region in terms of volume of operations, number of branches and number of customers. It is considered to be the most innovative commercial bank in the area of both product and process development. A study on the credit deployment information system of State Bank of India has been not only revealing the advancement in the current practice but also indicate the information needs of varied groups of customers. This is precisely the reason to conduct the study confining its scope to the State Bank of India.

3.2. SELECTION OF GEOGRAPHICAL AREA

The study has been conducted in the state of Assam for the reason that Assam has the highest number of SBI branches. So far as the total credit deployment of SBI in NE region is concerned Assam enjoys the lion’s share in all sectors- industrial, agricultural and other credit. In order to have a more focused study the area has been further narrowed down to a district and for this purpose Kamrup district, the most developed district of Assam in terms of banking development is selected.

3.3. SAMPLE SELECTION

The sample consists of all the branches of State Bank of India located in the district of Kamrup. In the process the study has included altogether 29 branches comprising of 16 computerised and 13 manually operated branches. Stratified random sampling method has been used to draw the sample of users. The users’ has been stratified on the basis of their status as customer-users or branch official-users. In case of
branch officials 4 from each computerized and manually operated branch has been picked up to constitute the sample of branch officials or the internal users of the credit deployment information system. While picking up these officials, care has been taken so that the most involved (in credit decisions at the branch level) officials are included in the sample. Accordingly, the size the branch official I have collected 116 (29X4) samples for the same. The customers have been further stratified on the basis of their purpose of credit- agricultural, industrial or other purpose (Personal or professional). Two from each category of customers has been randomly picked up from every branch to constitute the sample of customer users. Accordingly, the size of the customer users sample shall be 174 (29X2X3) (i.e. 58 sample from each category). In both the cases of sampling the random number table has been used.

3.4. DATA COLLECTION

Data were collected from both primary and secondary sources. The primary data were collected by means of structured questionnaires personally administered to various users and information systems in charge at the branch level. Some designated officers (at regional or zonal office of SBI) associated with credit deployment information system were also interviewed to obtain some useful primary data. For secondary data, different specialized libraries were consulted.

4.0. ANALYSES AND INTERPRETATION

Data collected from various sources were analysed with the help of the appropriate statistical techniques. In case of information system analysis tools like information flow charts, process flow charts, document flow charts, input-output analysis etc shall be used. The major statistical techniques employed in the analysis of data are- Frequency distribution, cross-tabulation, chi-square tabulation, correlation etc. All statistical techniques were performed using SPSS (ver. 9.0) software. In addition to the above statistical techniques, the present study has also employed some descriptive statistical measures such as mean, standard deviation etc. Both the hypotheses were
statistically tested at 5% level of significance. Information system for Credit deployment in SBI was also analysed with various flow charts and data flow diagram.

5.0. MAJOR FINDINGS

The following are the major findings of the study:

1. There is a significant relation with the information requirements of the banker of credit deployment information system of a commercial bank, which is influenced by their personal characteristics.

2. There is no significant difference in terms of users’ satisfaction, quality of information and decision-making between the types of i.e., computerized, manual and partially computerized information system.

3. Majority of sample consist of computerized branch (60.3%).

4. A high percentage of 55.2% of bankers’ total length of services were in the range 21-30 years and the analysis showed that majority respondents from banker side were having their service in present position in 6-10 years.

5. Majority of the borrowers were in the age group (46-50 years) and the study reveals that majority of the borrowers were from the middle age group and analysis further reflects that borrowers were mostly graduates.

6. Majority of the respondents from all three types of bank branches seek information on relevance (92.7%), accuracy (97.4%), timeliness (84.5%) format clarity (63.8%), up-to-datedness (67.2%), adequacy (80.2%) and explicitness (54.3%) of information as most important attributes.

7. Respondents from computerised branches, manual and partially computerised branches took relevance (94.8%), accuracy (97.4%), timeliness (84.5%) format clarity (63.8%), up-to-datedness (67.2%), adequacy (80.2%) and explicitness (54.3%) attribute as most important criteria like that.
8. Highest weighted score of need was found from the personal loan borrowers side were accordingly Interest rate and Modality of calculation, Oral explanation, Repayment pattern and flexibility, Liabilities and Responsibilities, Loan scheme in general etc. Highest weighted score of need was found from the industry loan borrowers side were accordingly Loan scheme in general, Site inspection, Ration norms, Interest rate and Modality of calculation, Performance creation, etc. Highest weighted score of need was found from the agriculture loan borrowers side were accordingly Loan scheme in general, , Interest rate and Modality of calculation, Oral explanation, Repayment pattern and flexibility, Criteria for Grants/Concession/ Subsidy/Rebate etc.

9. Highest weighted score of need was found in the banker for Nature and amount of loan, Rate of interest & repayment pattern, Borrowers relationship with the bank, Economic & financial status of borrowers, Oral-supplementary.

References
