

## MANAGEMENT CONTROL SYSTEMS IN INSURANCE COMPANIES OF NEPAL

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### **Abstract**

**Purpose** – The purpose of this study is to examine whether the mechanisms of MCS have been adequately developed and applied in the Nepalese Insurance Companies or not

**Methodology Used** – Descriptive and analytical research designs have been used for the study. Primary data have been collected through the questionnaires using judgmental sampling from the insurance companies of Nepal. Questionnaires have been developed in five scales and mean, standard deviation, coefficient of variation, correlation and factor analysis have been used as tools. Cronbach's alpha test has been done to test the reliability of the data.

**Findings** – All the insurance companies have applied the mechanisms of MCS in equal degree.

**Key words:** Management Control Systems

**Paper Type:** Research

### **Background**

The term “Management Control Systems” (MCS) refers to the deployment of various techniques in hierarchical organizations in order to monitor and measure employee performance against certain management targets. It is a process of making decisions and motivating individuals

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throughout the organization to act. It also facilitates forecasting revenue and cost-driver levels, budgeting, measuring, and evaluating performance (Kaplan & Atkinson, 2005).

Likewise, it is a logical integration of techniques to gather and use information to make planning and control decisions, to motivate employee behavior, and to evaluate performance. It refers to the design, installation and operation of management planning and control systems. MCS is the formal, information based, routines and procedures managers use to maintain or alter patterns in organizational activities (Simons, 1995).

MCS consists of organizational policies and procedures to provide reasonable assurance that programs function properly to achieve their intended results; resources are used consistently with the agency mission, functional resources are protected from wasteful use, fraud and mismanagement; rules and regulations are followed; reliable and timely information is obtained (Jawahar Lal, 2003).

Most service, government and nonprofit organizations have more difficulty in implementing MCS than do manufacturing firm. The main problem is that outputs of service and nonprofit organizations are more difficult to measure the products produced by manufacturers.

Anthony (1997) explained four steps in the MCS process in sequence as they are found in practice. They are:

- a) Programming
- b) Budgeting
- c) Execution
- d) Evaluation

### **Mechanisms of Management Control System**

The different mechanisms of MCS are Total Quality Management, Time Based Management, Activity Based Costing, Balance Score Card, Bench Marking, Re-engineering, Shareholder Value Analysis and Continuous Improvement Process.

- a) **Total Quality Management** is defined as a philosophy of management that is driven by continued improvement and responds to customer needs and expectations. Different elements of

TQM are “Customer Satisfaction, Continuous Improvement, Standardized Product Quality, Employee Involvement and Decision Making and Top Management Commitment”.

**b) Time Based Management** is the management philosophy which places highest value to time as a scarce resource. This philosophy enlightens managers to properly divide their time and optimally utilize & manage it efficiently and effectively. Different elements of TBM are “Time Resource, Time Saving Pattern, Time Management Technique, Category Activities and Productivity Consciousness”.

**c) The Activity-Based Costing** is a costing system which focuses on activities performed to produce products. ABC is that costing in which costs are first traced to activities and then to products. Different elements of ABC are “Activity Costing, Major Activities, Cost to Cost Pool, Cost Activity and Cost Driver”.

**d) The Balanced Scorecard** translates an organization’s mission and strategy into a comprehensive set of performance measures that provides the framework for a strategies measurement and management system. Different elements of BSC are “Financial Perspective, Customer Perspective, Internal Business Process and Learning and Growth”.

**e) Re-Engineering** refers to a radical redesign of all or part of a company’s work processes to improve productivity and financial performance. Different elements of RE are “Degree of Re-design, Traditional Approach, Organization Restructuring, Organization Effectiveness and Efficiency and Re-engineering Incentives”.

**f) Bench Marking** is the continuous process of measuring one’s own product, services and activities against the best level of performance. These best levels of performance may be found either inside one’s own organization or in other competing organizations or in organizations having similar processes. Different elements of BM are “Performance Benchmarking, Improvement Effort, Management Commitment and Benchmarking Types”.

**g) Shareholder Value Analysis** calculates the value of a company by looking at the returns it gives to shareholders, and is based on the view that the objective of company directors is to maximise the wealth of the company's shareholders. Different elements of SVA are “Estimating Shareholder Value, Wealth & Profit and Use of Shareholder Value.

**h) Continuous Improvement Process** is an ongoing effort to improve product, services or processes. These efforts can seek “incremental” improvement over time or “breakthrough” improvement all at once. Different elements of CIP are “Implementing Continuous

Improvement, Involvement of Employee, Customer Satisfaction and Organization Quality and Performance.

### **Insurance Companies in Nepal**

Insurance is an arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness or death in return for payment of a specified premium. It is necessary to develop insurance business in compliance with national need by embracing the globally accepted insurance norms to provide economic protection to all class of the people against natural and social risks while embracing the globally accepted insurance norms. Rights and interests of the insured are being safeguarded by regulating the insurance business through development, regularization thereby making the insurance business competitive and trustworthy in the delivery of quality and reliable insurance services to the public.

Insurance Committee, established on 14th May 1969, has been carrying out operations as a regulatory agency by systemizing, regulating, developing, and controlling the insurance business. Currently, there are 27 insurance companies in Nepal out of which 9 companies have been carrying out life insurance business, 17 companies in non-life insurance and 1 insurance company is engaged in reinsurance. According to figures of ownership structure of insurance companies, three are working as branches of foreign insurance companies, three on joint investment with foreign companies, 18 on private ownership, and two on Government ownership.

| <b>Types of Insurance Companies</b> | <b>Non-life</b> | <b>Life</b> | <b>Reinsurance</b> | <b>Total</b> |
|-------------------------------------|-----------------|-------------|--------------------|--------------|
| Government                          | 1               | 1           | -                  | <b>2</b>     |
| Private/Public                      | 13              | 5           | -                  | <b>18</b>    |
| Foreign                             | 2               | 1           | -                  | <b>3</b>     |
| Joint                               | 1               | 2           | 1                  | <b>4</b>     |
| <b>Total</b>                        | <b>17</b>       | <b>9</b>    | <b>1</b>           | <b>27</b>    |

(Source: Insurance Board)

### **Objectives of the Study**

The main objectives of the study are to analyze:

- Whether the mechanisms of MCS have been adequately developed and applied in the insurance companies of Nepal or not
- Whether all the elements of MCS mechanisms have been considered to be equally important by all the selected insurance companies or not

### **Limitations of the Study**

The study has been exposed to the following limitations:

1. Out of total twenty seven insurance companies in Nepal only four insurance companies have been considered.
2. Only eight mechanisms of MCS have been tested, i.e. TQM, TBM, BSC, ABC, BM, RE, CIP AND SVA.
3. Interviews with top, middle level and lower level employees have been taken.

### **Methodology Used**

This study has followed both descriptive and analytical approach of research. A questionnaire survey has been conducted for getting the answer of research questions. The questionnaire survey includes 20 questions. Questionnaires were distributed to 20 top, middle and lower level employees of various departments of each company. In order to increase the reliability and number of responses, personal visits to each and every respondent were made to distribute and collect the questionnaire.

Primary data have been analyzed using different statistical tools, like means, standard deviation, co-efficient of variance, correlation and factor analysis. Five scale Likert Scale has been used for analysis on which '1' represented worst and '5' represented best.

There are total of twenty seven insurance companies in Nepal, which constitutes the population of the study. For this study, only four insurance companies, i.e. Rastriya Beema Sansthan (RBS), Premier Insurance Company (PIC), American Life Insurance Company (ALIC) and Nepal Life Insurance Company (NLIC) have been selected as sample insurance companies. Selection of sample is based on judgmental basis.

Cronbach's Alpha test has been done to test the reliability of data. Each and every variable have been tested and it was found that every variable reliability test was above 87%.

#### Brief Profile of Sampled Insurance Companies

| Name of the Insurance Companies | Types         | Established Date | Ownership      |
|---------------------------------|---------------|------------------|----------------|
| Rastriya Beema Sansthan         | Life/Non-life | December 15 1968 | Government     |
| Premier Insurance Company       | Non-life      | April 21 1994    | Private/Public |
| American Life Insurance Company | Life          | August 2 2001    | Foreign        |
| Nepal Life Insurance Company    | Life          | January 7 1988   | Joint-venture  |

#### Respondent's Profile

In this section, characteristics of respondents have been presented first gender wise and then age wise.

##### a) Gender Wise Respondents

| Name of the Insurance Companies | Male (No.) | %           | Female (No.) | %           | Total     |
|---------------------------------|------------|-------------|--------------|-------------|-----------|
| Rastriya Beema Sansthan         | 14         | 70          | 6            | 30          | 20        |
| Premier Insurance Company       | 12         | 60          | 8            | 40          | 20        |
| American Life Insurance Company | 15         | 75          | 5            | 25          | 20        |
| Nepal Life Insurance Company    | 13         | 65          | 7            | 35          | 20        |
| <b>Total</b>                    | <b>54</b>  | <b>67.5</b> | <b>26</b>    | <b>32.5</b> | <b>80</b> |

Majority of respondents were males i.e. 67.5%. But female respondents were also satisfactory i.e. 32.5% or in number 26 out of 80.

Highest number of male respondents was in ALIC and females were in PIC i.e. 15 and 8 in number out of 20 respectively. Similarly lowest number of males respondents were in PIC and female were in ALIC i.e. is 12 and 5 in number respectively.

The reason behind low number of female respondents is that all companies have high number of male employee

#### b) Designation Wise Respondents

| Name of the Insurance Co.   | Lower Level | %           | Middle Level | %            | Higher Level | %            | Total     |
|-----------------------------|-------------|-------------|--------------|--------------|--------------|--------------|-----------|
| Rastriya Beema Sansthan     | 4           | 20          | 10           | 50           | 6            | 30           | 20        |
| Premier Insurance Company   | 5           | 25          | 11           | 55           | 4            | 20           | 20        |
| American Life Insurance Co. | 4           | 20          | 11           | 55           | 5            | 25           | 20        |
| Nepal Life Insurance Co.    | 5           | 25          | 9            | 45           | 6            | 30           | 20        |
| <b>Total</b>                | <b>18</b>   | <b>22.5</b> | <b>41</b>    | <b>51.25</b> | <b>21</b>    | <b>26.25</b> | <b>80</b> |

Above table presents the characteristics of respondents' designation wise. Majority respondents were found in Middle Level, i.e. 51.25%. Only 22.5% respondents were found in Lower Level. In RBS and NLIC Higher Level of respondents were high in number, i.e. 6 each compared to other insurance companies.

#### Management Control Systems in Insurance Companies of Nepal

| Name of the Insurance Co. | TQM  | TBM  | BSC  | ABC  | BM   | RE   | SVA  | CIP  | Total        | Mean        | S.D.        | C.V         |
|---------------------------|------|------|------|------|------|------|------|------|--------------|-------------|-------------|-------------|
| Rastriya Beema Sansthan   | 3.05 | 3.32 | 3.24 | 3.19 | 3.26 | 3.15 | 3.09 | 3.31 | <b>25.61</b> | <b>3.21</b> | <b>0.10</b> | <b>3.08</b> |
| Premier Insurance Company | 3.18 | 3.44 | 3.31 | 3.63 | 3.08 | 3.26 | 3.19 | 3.47 | <b>26.56</b> | <b>3.32</b> | <b>0.18</b> | <b>5.48</b> |
| American Life Insurance   | 3.15 | 3.45 | 3.44 | 3.13 | 3.34 | 3.27 | 3.38 | 3.46 | <b>26.62</b> | <b>3.33</b> | <b>0.13</b> | <b>3.96</b> |

|                                   |      |      |      |      |      |      |      |      |              |             |             |             |
|-----------------------------------|------|------|------|------|------|------|------|------|--------------|-------------|-------------|-------------|
| Co.                               |      |      |      |      |      |      |      |      |              |             |             |             |
| Nepal<br>Life<br>Insurance<br>Co. | 3.20 | 3.46 | 3.47 | 3.18 | 3.43 | 3.23 | 3.45 | 3.37 | <b>26.79</b> | <b>3.35</b> | <b>0.13</b> | <b>3.73</b> |

In all the insurance companies, the value of TQM has been above average, i.e. 3. NLIC leads all the companies in following TQM principles as indicated by its highest score, i.e. 3.20. To sum up, all the companies have been used the TQM approach satisfactorily.

The value of TBM in all the companies has been above average, i.e. 3. In case of NLIC, ALIC, and PIC the scores are 3.46, 3.45 and 3.44 respectively. This shows that all the companies have applied the principles of TBM effectively.

Similarly, the value of BSC has been above average, i.e. 3 in all the companies. It has ranged between 3.24 (RBS) to 3.47 (NLIC). This shows that all the companies have followed the principles of BSC effectively.

In all the companies, the value of ABC has been above average, i.e. 3. In case of PIC, it was the highest, i.e. 3.63 and in case of ALIC, it was the lowest, i.e. 3.13. This shows that management of all companies has effectively implemented the approach of ABC.

The value of BM in all the companies has been above average, i.e. 3. In case of NLIC it has been the highest i.e. 3.43. This indicates that all the companies have been used the approach of BM satisfactorily.

The value of RE has been above average, i.e. 3 in all the companies. In case of NLIC and PIC, it was 3.27 and 3.26 respectively. In RBS it was 3.15. This shows that all the companies have followed the principle of RE effectively.



In all the companies, the value of SVA has been above average, i.e. 3. NLIC leads all the companies in following SVA principles as indicated by its highest score, i.e. 3.45. To sum up, all the companies have used the SVA approach effectively in their organization.

Similarly, in all the companies, the value of CIP has been above average, i.e. 3. In case of PIC and ALIC the scores were 3.47 and 3.46 respectively. This shows that all the companies have applied the principles of CIP effectively.

From the above table, it has been observed that different mechanisms of MCSs have been followed by all the sample companies effectively. In other word the values MCS has been above average, i.e. 3 in all the companies. However, NLIC leads the other companies in this regard.

In all the cases, the value of standard deviation has been below 1 and coefficient of variation has been 3.08% to 5.48%. This clearly indicates the representative nature of the mean calculated. In other words, mean is dependable.

### Correlation Matrix of Management Control System

| R   | TQM   | TBM   | BSC    | ABC    | BM     | RE    | SVA   | CIP |
|-----|-------|-------|--------|--------|--------|-------|-------|-----|
| TQM | 1     |       |        |        |        |       |       |     |
| TBM | 0.959 | 1     |        |        |        |       |       |     |
| BSC | 0.743 | 0.837 | 1      |        |        |       |       |     |
| ABC | 0.312 | 0.164 | -0.392 | 1      |        |       |       |     |
| BM  | 0.116 | 0.197 | 0.697  | -0.885 | 1      |       |       |     |
| RE  | 0.815 | 0.914 | 0.641  | 0.308  | -0.083 | 1     |       |     |
| SVA | 0.745 | 0.825 | 0.998  | -0.398 | 0.717  | 0.607 | 1     |     |
| CIP | 0.633 | 0.735 | 0.352  | 0.498  | -0.384 | 0.941 | 0.308 | 1   |

Correlation is significant at the 0.05 level (2-tailed).

In the above table, the positive correlations have been found between all the variables except between ABC & BM, BSC, SVA and BM & RE, CIP. Correlation of all variables has been found significant at 0.05 levels. From the above data, it can be inferred that those insurance companies that have been extensively following principles of TQM have also been practicing

other principles of MCS and vice versa. This fact is much dependable which is warranted by the very low level of significance.

### Factor Analysis of Mechanisms of Management Control System

|              | <b>Factor 1</b> | <b>Factor 2</b> |
|--------------|-----------------|-----------------|
| <b>TQM</b>   | <b>0.918</b>    | 0.196           |
| <b>TBM</b>   | <b>0.989</b>    | 0.126           |
| <b>BSC</b>   | <b>0.901</b>    | -0.433          |
| <b>ABC</b>   | 0.021           | <b>0.951</b>    |
| <b>BM</b>    | 0.318           | -0.948          |
| <b>RE</b>    | <b>0.894</b>    | 0.380           |
| <b>SVA</b>   | <b>0.888</b>    | -0.457          |
| <b>CIP</b>   | 0.692           | 0.625           |
| <b>Total</b> | <b>58.296%</b>  | <b>36.58%</b>   |

Principal components analysis seeks to determine the number and characteristics of the factors or “variable groups” that affect tools of MCS decisions among the survey respondents. Two factors were identified with eigen value 0.5 that explains 94.876% of the variation in the responses.

Factor 1 explains 58.296% of the variation in the responses. This indicates that the responses are more concerned with the concept of the TQM, TBM, BSC, RE and SVA.

Factor 2 explains 36.58% of the variation in the responses. This explains that the concerned about ABC.

From the above analysis it is found that:

- a. All the insurance companies adequately developed and applied the mechanisms of MCS.
- b. All the insurance companies consider all the mechanisms of MCS to be equally important.

### Conclusion

It is concluded that MCSs are an integral part of every organization. The success or failure of every modern organization largely depends upon the fact that how effectively it has adopted and

applied MCS. The objectives of MCSs are to improve operational effectiveness, efficiency, employee creativity, company competitiveness by means of triggering feedback and corrective actions so that managers can adjust to changes in the environment.

It is found that all the insurance companies have adequately developed and applied the mechanisms of MCS. In terms of TQM, TBM, ABC, BSC, BM, RE, SVA and CIP all the insurance companies have performed satisfactorily. In other words, MCS has been satisfactorily followed by all the sample insurance companies. The outcome of private and joint venture insurance companies have been better than government insurance company.

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