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Performance Measurement Practices in Nepalese Telecommunication Industries

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ABSTRACT

The main aim of this study was to examine the existing performance measurement (PM) practices in the Nepalese telecommunication industries. Nepal Telecom and Ncell have been selected as a sample of the study. Primary data have been collected through structured questionnaires and telephonic interviews using a five-point Likert scale. The study revealed that Nepalese telecommunication industries had used financial and non-financial measures for performance measurement. The financial measure has got significant use and importance than the non-financial measures. Performance measures have been considered a key managerial tool for evaluating performance. The study revealed that performance measures in Nepalese telecommunication industries had been modified when there were changes in the organization's strategies.

1. INTRODUCTION

Performance measurement has been recognized as a crucial aspect of improving business performance in any organization (Garengo et al., 2005). Nowadays, companies must compete in globalized and turbulent markets. Every organization needs to be able to satisfy all its stakeholders and excel in all aspects of performance dimensions to survive in dynamic and volatile environment organizations (Neely et al., 2002). Performance measurement is

dominant in translating organizational strategies into desired behaviors and results and communicating expectations. In addition, monitoring progress, providing feedback, and motivating employees through performance-based rewards and sanctions performance measurement is the foundation (Chow & Stede, 2006). Performance measurement provides a set of mutually reinforcing signals that direct managers' attention to strategically important areas that translate to organizational performance outcomes (Dixon et al., 1990).

Furthermore, it also guides managers' behavior toward key organizational outcomes. Thus performance measurement is regarded basis for an organization to assess how well it is developing towards its predetermined organization objectives. Further performance measurement identifies areas of strengths and weaknesses and decides on future initiatives to be undertaken with the specified goal of improving organizational performance.

The traditional financial performance measures worked well for the industrial era (Kaplan & Norton 1992). Achieving superior organizational performance in the financial and non-financial aspects is most organizations' ultimate goal, and the performance measures should be multi-dimensional and balanced (Kennerley & Neely, 2002, Atkinson, 1997). Neely et al. (2002) stated that a performance measurement system is a balanced and dynamic system that can support the decision-making processes within an organization by gathering, elaborating, and analyzing information. In performance measurement systems, balance refers to the need to use different financial and non-financial measures and perspectives (Kaplan & Norton, 1996). Superior organizational performance reflects the firm's sustainable competitive advantages (Fleming et al., 2009; Joiner et al., 2009) and organizational excellence (Moullin, 2007).

In a performance management system, PM can be regarded as quantifying the effectiveness and efficiency of decisive action and decisions to be made (Neely et al., 1995; Waggoner et al., 1999). In modern business entities, maintaining an effective PM system is a central issue in translating strategy into desired goals, communicating desired goals, monitoring improvement taking feedback, and motivating human resources through a performance-based scientific reward system. (Chow & Stede, 2006). Furthermore, Kaplan & Norton (1996) pointed out that performance measurement makes communication more precise, ensuring the managers adopt a long-term perspective and make it easy to understand and use. Kanji (2006) mentioned that checking progress towards the established goals is an immediate role of any performance measurement system.

Traditionally, financial perspectives to assess the organization's performance were widely used. Due to the increasing complexity between organizations and the competitive markets of the late 1980s, the historical financial data and only financial perspectives were not considered enough to satisfy the PM in the new economy (Kennerley & Neely 2002). Vukomanovic et al. (2007) identified that, during the 80s and early 90s, several organizations and industries criticized using financial measures to evaluate organizational performance. In addition, they have started to work towards implementing other non-financial aspects of performance

measures. As a result, the shortcomings of traditional financial perspective-focused measurement systems have triggered a performance measurement revolution (Pun & White, 2005). A balanced performance measurement system should be integrated with financial and non-financial perspectives and aligned with the organization's strategy (Kaplan & Norton, 1996). Therefore, the financial and non-financial measures should be complementary (Chow & Stede, 2006).

Table 1

Summary of the shift in the performance measurement system

Shift	Traditional PM	Balanced PM	Corporate PM
Emphasis	Internally concerned	Focused on both Internally and externally	Based on the need for relevant stakeholder
Scopes	Single	Multi-dimensional	Less focus on dimensions and greater emphasis on assumptions and links across dimensions of organizational performance
Drivers	Cost basis	Innovation and learning basis	Improvement of capabilities through the development of underpinning properties
Goals	Financial focused	Both financial and non-financial	Relative external and contrary to the competition
Expected benefit	Cost control	Communication of strategic direction	Performance improvement in a sustainable way based on business process improvement

Source: Bourne et al., 2003

Intensifying competition, changing external demand, and the role of the enterprise in forcing the enterprises to improve and ultimately achieve its business excellence requires developing and implementing a performance measurement system (Kanji, 2002). In this regard, Kaplan & Norton (2001) suggested PM as a basis for defining strategic objectives, continuous improvement, and a vehicle for cultural transformation in the organization. Furthermore, the liberalization and globalization of telecommunication industries with their service quality have leveled a significant differentiation direction to achieve business success in any country.

The rapidly growing market and increasing telecommunication business in Nepal are adapting to new technological imperatives to outperform their competitors to compete in the situation. In this phenomenon, the Turkish companies have utilized non-financial measures more frequently than financial ones; Turkish managers have perceived non-financial measures to be more effective than financial ones (Uyar, 2009). Wang et al. (2004) explored that quality-related factors have less importance on performance measurement in China's telecommunication industries. However, Kuhl (2015) pointed out that constant performance evaluation of

network industries enables their more effective and efficient lifecycle management. In this scenario, the Nepalese telecommunication industry's survival today is how to manage its product/service cost, quality, and performance. A company's survival does not depend solely on profitability (Pandey, 2005). Moreover, managers in practice have learned the hard way that an unequaled focus on the financial health of the organization results in several irreparable adverse consequences in the business. In Iranian telecommunication industries, outsourcing reduces cost, improves quality, increases flexibility, and better financial and non-financial performance and services (Khakia & Rashidi, 2012).

Furthermore, due to the lack of an integrated performance measurement system in the telecom industries, it seems that could hamper improving their processes and practices to meet the expectations of their customers for enhancing higher quality, lowering production cost, and improving service for its long-term success in a better way. At this phenomenon, it is relevant to examine how far the Nepalese telecommunication industries have updated and integrated performance evaluation measures into the performance measurement practices framework? In the background mentioned above, this research examines the performance measurement practices in the Nepalese telecommunication industries.

2. METHODOLOGY

The study was conducted in 2020 using a descriptive and analytical research design. Nepal Telecom and Ncell have been selected for the study, on performance measurement practices, in Nepalese telecommunication industries due to their significant contribution to the Nepalese economy and communication sector. A purposive sampling technique has been employed for selecting the respondents from the employee of accounts/finance/internal audit, operation/technical, business/customer, and other general administration departments of Nepal Telecom and Ncell. The primary data for this study has been collected using self-administered structured questionnaires and telephonic interviews. Five-point Likert scale questionnaire was used, with 1 indicating strongly disagree and 5 indicating strongly agree. Both quantitative and qualitative data relating to customer satisfaction, profitability, employees' satisfaction, organization operations, and product quality measures have been gathered from the Nepal Telecom and Ncell. Descriptive statistics have been employed to analyze the data. The financial and non-financial measure has been taken as performance measuring variables. The indicators like the customer, internal business process, and learning growth of employees have been taken as non-financial measures.

Table 2*Financial and Non-financial measures*

Financial measures	Non-financial measures
Revenue Growth	Customer satisfaction
Liquidity	Market share
Profit margin	Customer retention percentage
Earnings per share	Time taken to fulfill customers' request
Return on investment	No. of customer complaints
Economic value added	No. of new products or services
Cash flow	New product development time
Return on assets	Yield, defect rate
Residual income	Time taken to deliver product/service to customers
	Percentage of on-time deliveries
	Time taken to repair defective products/ services
	Time taken to repair defective products/ services
	Hours of customer training for using product/ services
	Quality and process-related
	Employee education and skill levels
	Employee satisfaction scores
	Employee turnover rates
	Percentage of employee suggestions implemented

Table 3*Respondents profile by departments*

Departments	Frequency
Accounts/Finance/Internal audit	36
Operation/Technical	9
Marketing/Business/Sales/Customer	11
General Adm./HR/LW/R&D/Other	8
Total	64

Source: Field survey, 2020

Fifty-seven percent of the respondents have been taken from accounts/finance/internal audit department, seventeen percent from marketing/business/sales/customer. The rest are from the operation and general administration departments with more than five years of service experience in telecommunication industries and those who know the organization's performance measures (financial and non-financial).

3. RESULTS AND DISCUSSION

Table 4

Use of financial measures for performance measurement in Nepalese telecommunication industries:

	Sales growth	Cash flow	Liquidity	Profit margin	ROI	EPS	ROA
Mean	4.78	4.82	4.89	4.90	4.88	4.87	4.87
Std. Deviation	.369	.362	.245	.243	.276	.335	.335

Source: Field survey, 2020

Table 4 indicates that the organization has significantly used financial measures such as sales growth rate, cash flow, liquidity, profit margin, return on investment, earning per share and return on assets. The mean value of different financial indicators in table 3 reveals approximately five and indicates the significant use of these measures. Financial indicators like residual income and economic value added have not been used.

Table 5

Use of different customer-related measures in Nepalese telecommunication industries

Measures	Mean	Std. Dev.
Customer satisfaction, complaints, and perception	4.37	0.562
Customer retention	4.15	0.591
Customer's wants and expectations on product quality, service, and price	3.82	0.432
Market share relative to competitors	4.43	0.377
Time taken to fulfill customer's request	3.67	0.351

Source: Field survey, 2020

Table 5 highlights the customer satisfaction, complaints, retention, wants and expectations on product quality, service and price, market share relative to competitors and time taken to fulfill customer requests as the performance measures used in Nepalese telecommunication industries. Market share relative to competitors has a 4.43 mean value showing this measure's significant use and importance. Customer's wants and expectations on product quality, service and price, time taken to fulfill customers' request, customer satisfaction, complaints and retention has also been significantly used.

Table 6 revealed the mixed results. The mean value of quality / cost and process-related measure 4.33 indicates this measure's significant use and importance in Nepalese telecommunication industries. Hours of training for products services and percentages of on-time deliveries have given moderate importance in use. It also revealed that other indicators such as time taken to repair defective product/services, time taken to deliver products/services, and time needed to produce new product/services related measures had been moderately used.

Table 6*Use of operational and process-related measures in Nepalese telecommunication industries*

Measures	Mean	Std. Dev.
Time needed to produce new products/services	3.84	0.289
Time taken to deliver products/services	3.73	0.691
Percentages of on-time deliveries	3.45	0.576
Quality /cost and process-related	4.33	0.382
Time taken to repair defective product/services	3.76	0.429
Hours of training for using product services	3.21	0.463

*Source: Field survey, 2020***Table 7***Use of learning, growth, and employee-related measures in Nepalese telecommunication industries*

Measures	Mean	Std. Devi
Employee satisfaction score	4.36	0.419
Continuous on-the-job training	4.63	0.423
Employee benefits and rewards	4.46	0.454
Employee turnover rates	3.31	0.507
Employee education and skill levels	4.02	0.342
Employee suggestions implemented	3.76	0.672

Source: Field survey, 2020

Table 7 revealed the importance of continuous job training, employee benefits, incentives and rewards, employee turnover rates, employee education and skill levels. Implementing employee suggestions as performance measures have been moderately used. Employee satisfaction score, employee education and skill levels, employee turnover rates, and employee benefits, incentives and rewards measures are significantly used.

In the context of the Nepalese telecommunication industries, PM has been considered a critical managerial tool for corporate valuation and future prediction. Usually, performance reports are prepared monthly, quarterly, half-yearly and yearly. Eighty-one percent of the respondents expressed performance measurement as a crucial job for the organization. This study found that PMs are modified during the changes in the organization's strategic objective. The companies have used different financial and non-financial measures as performance measuring indicators. A balanced scorecard as the performance measuring system has not been used in Nepalese telecommunication industries.

4. CONCLUSIONS AND IMPLICATIONS

Nepalese telecommunication industries have used financial and non-financial measures for performance measurement, but the financial measure has more significant use and importance than the non-financial ones. This study concludes that PM has been a key managerial instrument in the Nepalese telecommunications industry. Moreover, it has been modified

and updated during the changes in the industry's strategic objectives. The industries have not used the balanced scorecard as a performance measurement tool. In the long term, a successful balance should be made between financial and non-financial performance measures while designing the performance measurement system.

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