

SUMMER TRAINING AT MEDTEL HEALTHCARE PVT LTD.

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PERFORMANCE EVALUATION OF THE EXISTING
VENDORS OF A HEALTH TECH COMPANY BASED
ON LINEAR AVERAGE METHOD



INTRODUCTION

- ❖ One of the most important processes performed in an organisation is evaluation, selection and continuous measurement of the vendors.
- ❖ Vendor performance evaluation is used to track, analyse and manage vendor's performance. Measuring and evaluating vendor performance is paramount for reduction in costs, increased proficiency and business performance and increased customer satisfaction. They help to prevent product issues and post payment defects and drive improvements in the supply chain.
- ❖ Diagnosis and improvement of the vendor's performance through strategic scores ensures long-term relationship.
- ❖ A proper vendor evaluation system must assess all the vendors on a common scale and include all the important evaluating factors.



VARIOUS METHODS FOR VENDOR PERFORMANCE EVALUATION

- ❖ Weighted Linear Method
- ❖ Analytical Hierarchy Process
- ❖ Matrix Method
- ❖ Linear Programming
- ❖ Grouping Methods
- ❖ Categorical Method
- ❖ Cost Ratio Method
- ❖ Analytical Network Process
- ❖ Data envelopment analysis
- ❖ Discrete Choice Analysis Experiments
- ❖ Multi-Objective Programming

LINEAR AVERAGE METHOD

- ❖ Linear Average Method is the most commonly used method for Vendor Performance Evaluation.
- ❖ Specific quantitative performance factors are used to evaluate supplier performance.
- ❖ The most commonly used factors are-
 - Quality
 - Delivery
 - Service Responsiveness
 - Price Competency
- ❖ It involves assigning weights to each performance factor, such that the total weights of each factor adds upto 100.
- ❖ The assignment of these weights is a matter of judgement and top management preferences.



LITERATURE REVIEW

S. No	Authors	Year	Title	Objective	Methodology	Main Findings
1	Sri Talluri, Ram Narasimhan	2016	Vendor evaluation with performance variability – A max-min approach	To derive the vendor performance variability measures using max -min approach	Descriptive Observational Study	Identification of the maximum and minimum efficiencies based on the ideal targets set by the buyer -Defined and effectively incorporated a measure for the performance variability in evaluating alternating vendors
2	Ya-Ti -Lin, Gwo Hshiung, Chia-Li-Lin	2011	Utilisation of interpretive structural modelling method in the analysis of inter-relationship of vendor performance factors	To define a comprehensive vendor valuating method -and to provide improvement strategy by utilising ISM Method.	Descriptive Observational Study	The various important criteria for vendor evaluation include- Delivery, Quality, Service Capability and Price
3	H. Shirouyehzad, H.Panjehfouladgaran , R. Dabestani, M. Badakhshian	2011	Vendor Performance Measurement using Fuzzy Logic Controller	To apply the Fuzzy Performance Management System for Vendor Performance	Descriptive Observational Study	High number of outputs indicate poor performance and low number of outputs indicate good performance in the FPM
4	C. Elanchezhian, B. Vijaya Ramnath, Dr R. Kesavan	2010	Vendor Evaluation using Multi-Criteria Decision Making Technique	To apply the MCDM Technique which involves ANP and TOPSIS method to select the best vendor	Descriptive Observational Study	Various matrices formulated to identify the best and provide the ranking of the suppliers on the basis of criteria-on time delivery, quality, cost, responsiveness, Facility and technology

OBJECTIVES

Broad Objective:

To evaluate the performance of the existing vendors of a private health tech company by using linear average method

Specific Objectives:

- ❖ Establishing the performance indicators
 - ❖ To chose the best vendor within a vendor group
 - ❖ Classifying the vendors into the following categories on the basis of results
-
- Strategic vendors
 - Preferred vendors
 - Transactional vendors

RESEARCH METHODOLOGY

Study Design/Type of Study: Descriptive Observational Study

Location of Study: A Private Health Tech Company

Source of Data:

- Official website of vendors
- Department of Sales
- Department of Operations
- Department of Technical Support

Type of data: Secondary Data

Tools used for data collection:

The data was collected in tabular form with the help of data sheets. A data collection sheet is a tool that is used to collect and organise data. Separate data sheets were made for each device.



DATA COMPILATION, ANALYSIS AND INTERPRETATION

The vendors were evaluated based on the following performance indicators-

1. Quality

2. Service Responsiveness

3. Sales and Technical Support

4. Price Competitiveness

S.NO	INDICATOR	CRITERIA
1	Quality	• CE/BSI Certification • List of other certifications • Reliability/Zero defects • Delivery at the right time • Delivery in the right quantity • Packaging • Mode of delivery
2	Service Responsiveness	• Capacity of handling abnormal quality/Repair • Query resolution • Time taken for resolving the issues
3	Sales and Technical Support	• No: of sales • Customer preference • Features and design • Uniqueness • Conformance to specifications
4	Price competitiveness	• Warranty and Claims Policy • Annual Maintenance Cost • Price per unit • Discount

RESULTS AND CONCLUSIONS

Acceptance Criteria:

Above 90%- Excellent

Between 70-90%- Good

Between 60%-70%- Acceptable (Inform the vendor about the reduced factors)

Between 50%-60% - Below Average (Look for other options)

Below 50% -Unacceptable (Cancellation of MoU)

Three categories of suppliers-

- ❖ **Strategic Suppliers:** The suppliers that are most important to the buying firm. They supply the buying firm with essential materials and capabilities that are not easily replaced.
- ❖ **Preferred Suppliers:** They are those that are important to the buying firm, but alternative suppliers could be found with some effort.
- ❖ **Transactional suppliers:** Those suppliers that can be easily replaced in a short period of time.

S. NO	DEVICE NAME	VENDOR NAME	LINEAR AVG. %	INTERPRETATION	TYPE OF VENDOR
1	Digital BP Monitor	Vendor 1	80%	Good	Strategic Vendor
1	Digital BP Monitor	Vendor 2	82.5%	Good	Strategic Vendor
1	Digital BP Monitor	Vendor 3	70%	Acceptable. Inform the vendor about the reduced factors.	Preferred vendor
2	Digital BCA	Vendor 1	88.5%	Good	Strategic Vendor
3	Smart Otoscope	Vendor 1	84.25%	Good	Strategic Vendor
4	Smart Glucometer	Vendor 1	87.5%	Good	Strategic Vendor
4	Smart Glucometer	Vendor 2	82.25%	Good	Strategic Vendor
5	Smart Haemoglobinometer	Vendor 1	81%	Good	Strategic Vendor
5	Smart Haemoglobinometer	Vendor 2	82.5%	Good	Strategic Vendor
5	Smart Haemoglobinometer	Vendor 3	87.25%	Good	Strategic Vendor
6	Digital HbA1c Analyser	Vendor 1	86.5%	Good	Strategic Vendor

7	Digital Lipid Analyser	Vendor 1	86.5%	Good	Strategic Vendor
8	Smart ECG	Vendor 1	84.5%	Good	Strategic Vendor
8	Smart ECG	Vendor 2	84.25%	Good	Strategic Vendor
9	Digital Stethoscope	Vendor 1	86%	Good	Strategic Vendor
10	Digital Pulse Oximeter	Vendor 1	87%	Good	Strategic Vendor
10	Digital Pulse Oximeter	Vendor 2	83.5%	Good	Strategic Vendor

DISCUSSION

- ❖ Digital BP Monitor: Vendor 1 and Vendor 2 are almost same in performance. When we have to order the device in bulk and have items in stock we can order from Vendor 1 as it provides discount on bulk purchases and when we have to order in less numbers we can prefer Vendor 2.
- ❖ Vendor 3 needs to work upon its quality and should validate it by getting extra quality certifications, needs to reduce its service response time and can improve upon its certifications.
- ❖ Digital BCA: Only one vendor is present and has good performance record in terms of all criteria.
- ❖ Smart Otoscope: Only one vendor is present which shows good performance.
- ❖ Smart Glucometer: Vendor 1 has a slightly better performance than vendor 2 as it has more quality certifications, better service response and is Bluetooth connected as compared to second which is jack connected.
- ❖ Smart Haemoglobinometer: Vendor 3 shows the best performance amongst all the vendors. The performance of Vendor 1 and Vendor 2 are comparable. Vendor 3 takes over them as it provides better features at reasonable pricing.
- ❖ Digital HbA1c Analyser: Only one vendor present and shows good performance.
- ❖ Digital Lipid Analyser: Only one vendor present and shows good performance.
- ❖ Smart ECG: Both the vendors show almost the same performance.
- ❖ Digital Stethoscope: Only one vendor present. Shows good performance.
- ❖ Digital Pulse Oximeter: Vendor 1 has slightly better performance than Vendor 2 as it has extra quality certifications and some better features.



CONCLUSION

The current evaluation shows that most of the vendors are strategic vendors except vendor 3 for Digital BP Monitor which is a preferred vendor. It can work to upgrade itself if informed of its shortcomings. The vendors should be evaluated periodically to check for the consistency in their performance. For some of the devices, only one vendor is present. Though having a single vendor has its own benefits like probability of offering discounts in future due to bulk purchases, lower implementation challenges and procurement efforts and less training efforts but having multiple vendors reduces the risk of dependency and provides more opportunities for product upgrades.



LIMITATIONS OF THE STUDY

The study has the following limitations-

- Assigning of weights in an objective manner.
- Standardisation of all the attribute units.



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THANK YOU