

**PERFORMANCE EVALUATION OF THE EXISTING VENDORS OF A
HEALTH TECH COMPANY USING LINEAR AVERAGE METHOD**

Summer Training Report
at
MedTel HealthCare Pvt Ltd

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A Report by
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OBSERVATIONAL LEARNINGS

INTRODUCTION

MedTel provides customised and omni channel “Connected Care Solutions” for patients. The solutions aggregates smart devices, real time dashboards and health data to create personalised remote monitoring and actionable insights.

It provides-

- Complete virtual health solutions
- Remote Monitoring for health conditions
- Multi-channel Telemedicine
- Connected Medical Devices
- WhatsApp Health Bot /SMS/ IVR
- Secured Medical Data

Value Proposition-

- Patient retention due to device and dashboard dependence
- Better management and prognosis of the patient
- Huge hours saved which were spent on hard data by the consultants
- Interventions can be predicted and executed
- Data analytics gives newer health insights

VISION: MedTel Healthcare plans to lead disease based connected healthcare solutions encompassing chronic health conditions, pregnancy, oncology and mental health. MedTel’s tech -based approach is providing healthcare is rooted in small connected care , digital therapeutics and inter-operability of data.

MISSION: MedTel intends to make hospitals, clinics, individual practitioners, and corporations empowered with its product MedTel iLab and iRPM. The patient monitoring devices market is projected to reach \$ 25.31 by 2023 and MedTel we envision building traction in the developing nations and go global.

The client deploys MedTel's connected care solutions for its patients through satellite clinics, remote patient monitoring and self-service connected health station.

Satellite Clinics: An affordable white labelled, customised virtual care solution that would allow care providers in remote areas (Remote Tele-Clinics) to perform a wide range of basic diagnostics for patients. MedTel iLAB provides the tools to gather and forward patient information.

Remote Patient Monitoring (Diabetes, Obesity and Hypertension): An easy to use, patient-centric digital health platform that gives real time access to care providers, strengthened with predictive analytics. The solution has advanced and evidence-based algorithms which is device and EHR agnostic.

Datweal Connected Health Station: A data driven, enterprise centric, consumer health activation platform to provide access points to a personalised health journey via a connected network of smart health stations.

White Labelled **WhatsApp Chatbot** for Patients:

- **Hey Health** -For hospitals, Polyclinics and doctors.
- WhatsApp Bot for all Patients Need
- Pharmacy and Lab Management

Performance Evaluation of the Existing Vendors of the Company using 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 the 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.

RATIONALE:

The purpose of this study was to carry out a performance -based evaluation for the existing vendors of a private health tech company on the basis of key indicators - quality, service responsiveness, sales and technical support and price competitiveness.

The vendors were classified into groups on the basis of product type- "MEDICAL DEVICES"

On the basis of collected data, comparison was made among the vendors on the basis of their scores in various criteria and were ranked accordingly.

The study was further used by the organisation for vendor selection.

OBJECTIVES:

Broad Objective:

To evaluate the existing vendors by using linear average method

Specific Objectives:

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

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	-To define a comprehensive vendor valuating method	Descriptive Observational Study	The various important criteria for vendor

			analysis of inter-relationship of vendor performance factors	-and to provide improvement strategy by utilising ISM Method.		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	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	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

RESEARCH METHODOLOGY:

Study Design/Type of Study: Descriptive Observational Study

Period of Study: June 2, 2021 - July 2, 2021

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

Mode of data collection:

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

The various criteria used for indicators include-

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

OBSERVATIONS:

S.NO	DEVICE	CRITERIA	VENDOR EVALUATION
1	Digital BP Monitor	Quality	<u>Vendor 1:</u> • CE Certification • CSI 13485 certification • Delivery lead time- 5 to 30 days • No reported defect so far • Packaging: Color box, Plastic box, English User Manual • Minimum order-1000 pieces • Stock has always been available so far • Right quantity delivered till now <u>Vendor 2:</u>

			• FDA ,EU, HSA approved • No reported defect so far • No minimum order limit • Stock sometimes not available • No reported defect so far • Packaging: A user manual, special storage pouch and 4* AAA batteries present apart from the device in the box. • Delivery time: 4-7 days <u>Vendor 3:</u> • CE Certification • Technical error reported once • No minimum order limit • Stock always available so far • Packaging: Cardboard box , user manual • Delivery: 7-10 days
		Service Responsiveness	<u>Vendor 1:</u> • Fast response • Easy replacement in case of any manufacturing defect • Query resolution time : 12 hours <u>Vendor 2:</u> • Easy replacement in case of any manufacturing defect • Query resolution time: Instantly/ within 6-8 hours • Fast response <u>Vendor 3:</u> • Good response • Product replaced with the delivery of the fresh product within 10 days • Query resolution time: 12-24 hours
		Sales and Technical Support	<u>Vendor 1:</u> • Battery life: Approx. 250 times • Measurement scope:0- 299 mm Hg, 40-200 ppm • Accuracy:+- 3 mmHg,+5 pulse rate

			• 1minute fast response • Backlit display-3 colors • Voice broadcast • Waterproof level IP*2 • Portable (280g) • Low voltage indication • Automatically turn off function • Bluetooth connected • Highly preferred by customers due to unique features and good quality • Sales- Avg. 72/year <u>Vendor 2:</u> • Bluetooth connected • Irregular heart beat detector • Sets reminders • One button operation • Sales-Avg. 47/year • Moderately preferred by customers <u>Vendor 3:</u> • Measurement range: 0-299 mm Hg • Measures BP, Pulse and shows hypertension level • LED Display screen • Auto shut feature • Irregular heart rhythm indicator • Sales-Avg. 42/year • Least preferred by customers amongst all
		Price Competitiveness	<u>Vendor 1:</u> • 3 years Warranty • Price /Unit- \$89 • Discount on bulk purchases <u>Vendor 2:</u> • 2 years local warranty • Price per unit- Rs 3999/- • Sold on MRP <u>Vendor 3:</u> • 1 year warranty • Price: \$97 • Sold on MRP
2	Digital BCA	Quality	<u>Vendor 1:</u> • CE Certification

			• ISO 9001:2015,FDA,FCC,RoHS • No reported defect so far • Cardboard box with bubble wrap • Delivery time: 7-10 days • Stock has always been available so far
		Service Responsiveness	<u>Vendor 1:</u> • Fast response • Query Resolution: Immediately or within 4-6 hours • Replacement policy: Within a week in case of manufacturing defects
		Sales and Technical Support	<u>Vendor 1:</u> • Bluetooth connected • 13 key body composition analysis • Step power on/Auto power off • Max User wt. 180 kg/400 lb • Clear crisp LED Display • 6 mm tempered glass • ABS integrated durable body • Sales- Avg. 167/year • Satisfied customers with a positive response • Sales-156/year • Preferred by customers due to its unique features and quality
		Price Competitiveness	<u>Vendor1:</u> • Price per unit-Rs. 1995 • 1 year warranty • Sold on MRP
3	Smart Otoscope	Quality	<u>Vendor 1:</u> • CE Certification • No defect reported so far • Delivery lead time: 7-10 days • Packaging: Alcohol cloth, silicon sleeves, trouble shooting card,user manual
		Service Responsiveness	<u>Vendor 1:</u> • Fast response

			• Query resolution: Within 3-6 hours • Replacement policy: Within 7-10 days (T n C apply)
		Sales and Technical Support	<u>Vendor 1:</u> • Wireless, USB connected • 6 adjustable LED lights • Can be used for all ages • 1080 P HD Lens • Camera head is IP 67 waterproof • Bluart technology • Sales: 72/year • Positive customer response
		Price Competitiveness	<u>Vendor 1:</u> • Sold on MRP • 1 year warranty • Price /unit-18366
4	Smart Glucometer	Quality	<u>Vendor 1:</u> • CE Certified • ISO 15197:2013 • ISO 13485:2003 • Packaging : Cardboard box with bubble sheet+user manual • No Technical error reported so far • Stock sometimes not available in desired numbers • Delivery lead time: 5-7 days <u>Vendor 2:</u> • CE Certified • No defect reported so far • Stock always available so far • Delivery lead time: 5-7 days • Packaging: Cardboard box with bubble sheet, user manual
		Service Responsiveness	<u>Vendor 1:</u> • Fast response • Replacement within 4-5 days • Query resolution: Immediately or within 2-4 hours <u>Vendor 2:</u> • Fast response

			• Query resolution: Immediately or within 6 hours • Replacement within 1 week in case of technical error
		Sales and Technical Support	<u>Vendor 1:</u> • Bluetooth connected • Tests results displayed in less than 5 seconds • Portable (<90kg) • Battery allows more than 100 tests • Sales: Avg. 107/year • Highly preferred by customers <u>Vendor 2:</u> Jack connected Easy to use Displays the results in 5 seconds Measuring range: 20-600 Sales: Avg.- 137/year Moderately preferred by customers
		Price Competitiveness	<u>Vendor 1:</u> • Price/unit-Rs 1499 • Sold at MRP • 2 years warranty <u>Vendor 2:</u> • Price per unit: 1399 • Sold at MRP • 5years warranty
5	Smart Haemoglobinometer	Quality	<u>Vendor 1:</u> • CE Certified • Packaging :Cardboard box with bubble wrap+ user manual • No defect reported so far • Stock always available so far • Delivery lead time: 6-8 days <u>Vendor 2:</u> • CE Certified • No defect reported so far • Stock sometimes not available in required numbers • Delivery Lead time: Around 1 week

			• Packaging : Cardboard box with bubble wrap <u>Vendor 3:</u> • CE Certified • No defect reported so far • Stock available so far • Delivery lead time: Aprrox. 5-7 days • Packaging : Cardboard box+ user manual
		Service Responsiveness	<u>Vendor 1:</u> • Fast response • Replacement within 4-6 days in case of any manufacturing defect • Query resolution: Within 6-8 hours <u>Vendor 2:</u> • Replacement within 7-10 days (T n C apply) • Query resolution: Within 3-6 hours <u>Vendor 3:</u> • Fast response • Replacement within 5-7 days in case of any manufacturing defect • Query resolution: Immediately /within 3-6 hours
		Sales and Technical Support	<u>Vendor 1:</u> • Precision: CV< 3% • Reading time: Quick results in a few seconds • Portable (250g) • Bluetooth connected • Factory calliberated • Sales: Avg. 156/year • Positive response from customers <u>Vendor2:</u> • Unlimited storage for lifetime • Portable device • Shelf life: 24 months • Automated

			• Results-in 5 min • Connection: 3.5 mm Jack • Weight -50 g • Sales-Avg-192/year • Preferred by customers <u>Vendor 3:</u> • Bluetooth and USB connectivity • Rechargeable battery • Weight 60g (Portable) • Time taken – less than 60 s • Accuracy: CV <3% • Sales: Avg. -213/year • Highly preferred by customers
		Price Competitiveness	<u>Vendor1 :</u> • Price per unit: Rs. 3300 • Warranty: 3years • Sold at MRP <u>Vendor 2:</u> • Per unit price: Rs 29999/- • Warranty: 5 years • Sold at MRP <u>Vendor 3:</u> • Price per Unit: Rs 4800/- • Warranty: 3 years • Sold at MRP
6	Smart HbA1c Analyser	Quality	<u>Vendor 1:</u> • CE Certified • ISO 13485, HSA,IFCC,NGSP • Packaging: Cardboard box with user manual • No defect reported so far • Stock has always been available so far • Delivery lead time: 5-7 days
		Service Response	<u>Vendor 1:</u> • Replacement within 1 week in case of any manufacturing defect • Query resolution: Immediately or within 2-4 hours
		Sales and Technical Support	<u>Vendor1:</u> • Measuring range: 4-15% • Assay Time: 3 min

			• CV< 3% • Weight -300g (Portable) • Cloud connected • Sales: Avg.- 162/year • Positive customer response
		Price Competitiveness	<u>Vendor 1:</u> • Price per unit: 29999/- • Warranty: 2 years • Sold at MRP
7	Smart Lipid Analyser	Quality	<u>Vendor 1:</u> • CE Certified • ISO 13485,HAS,IFCC,NGSP • Packaging: Cardboard box +user manual • Stock has always been available so far • No defect reported so far • Delivery lead time: 7-10 days
		Service responsiveness	<u>Vendor 1:</u> • Replacement within 6-10 days in case of any manufacturing defect • Query resolution: Immediately or within 3-6 hours
		Sales and Technical Support	<u>Vendor 1:</u> • Measures total cholesterol, HDL and triglycerides • Test time: Approx. 2 min • Blood vol-15 microlitre • Sales-Avg. 122/year • Positive customer response
		Price competitiveness	<u>Vendor 1:</u> • Price per Unit: 29999/- • Warranty: 2years • Sold at MRP
8	Digital ECG	Quality	<u>Vendor 1:</u> • FDA 510 cleared • Clinically tested at AIIMS Delhi, Jayadeva Bangalore and KEM, Mumbai with 98% morphological correlational accuracy • No defect reported so far

			• Stock not available sometimes in required numbers • Delivery lead time: 5-7 days • Packaging: Cardboard box with bubble wrap <u>Vendor 2:</u> • CE Certified • No defect reported so far • Stock unavailable sometimes • Delivery lead time : 7-10 days • Packaging: Cardboard box with device pouch
		Service Responsiveness	<u>Vendor 1:</u> • Replacement within 6-8 days in case of manufacturing defect • Query resolution: Immediately or within 2-4 hours <u>Vendor 2:</u> • Replacement within 4-6 hours in case of manufacturing defects • Query resolution: Immediately or within 3-6 hours
		Sales and Technical Support	<u>Vendor 1:</u> • Portable • Easy to use • Data maintained in cloud • No professional training required • Bluetooth connected • Sales: Avg. 131/year <u>Vendor 2:</u> • No of channels= 12 • No battery • Cloud based ECG system • Bluetooth connected • Sales: Avg. 145/year
		Price Competitiveness	<u>Vendor 1:</u> • Price per unit: 35000/- • Warranty- 2 years • Sold on MRP

			<u>Vendor 2:</u> • Price per unit:33000 • Warranty: 3 years • Sold on MRP
9	Digital Stethoscope	Quality	<u>Vendor 1:</u> • CE Certified • Packaging: Cardboard box with bubble paper • No defect reported so far • Stock available so far • Delivery lead time: 5-7 days
		Service Responsiveness	<u>Vendor1:</u> • Quick response • Replacement in case of any manufacturing defect within 7-10 days • Query resolution time: Immediately for within 2-4 hours
		Sales and Technical Support	<u>Vendor 1:</u> • Bluetooth enabled • Sound amplification • Recording and sharing of sounds • Noise cancellation • Bluetooth connectivity • Visualising sounds
		Price Competitiveness	<u>Vendor 1:</u> • Price per unit: 15800 • Sold on MRP • Warranty: 1 year
10	Smart Pulse oximeter	Quality	<u>Vendor 1:</u> • CE ,FDA Certification • ISO Certification, UKAS, IAF Certification • Stock available so far • Once technical error reported • Delivery lead time: 5-7 days • Packaging: Cardboard box with bubble sheet <u>Vendor 2:</u> • CE Certified • Pouch Packaging • Delivery lead time -6 to 10 days

			• No technical error reported so far • Stock always available
		Service Responsiveness	<u>Vendor 1:</u> • Query resolution: Within 2-4 hours • Replacement in case of manufacturing defect within 7-8 days <u>Vendor 2:</u> • Query resolution : Immediately or within max 3 hours • Replacement in case of any manufacturing defect within a week
		Sales and Technical Support	<u>Vendor1:</u> • Single button • Easy operation • Bluetooth connected • Audio visual alarm • Accuracy: +-2 bpm • Water resisitant • Sales-Avg.- 173 /year • Positive response from customers <u>Vendor 2:</u> • Bluetooth connected • High accuracy • Auto off • High accuracy • Quick reading • Portable • Sales: 213/year • Highly preferred by customers
		Price Competitiveness	<u>Vendor 1:</u> • Price per Unit: Rs 4000/- • Warranty: 1 year <u>Vendor 2:</u> • Price per unit: Rs. 2999/- • Warranty: 1 year

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)

(I) **DATA ANALYSIS:**

(1) Digital BP Monitor

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service responsiveness (25)	Sales and Technical Support (20)	Price Competitiveness (20)
Person 1 (Operations)	Vendor 1	25	20	16	18
Person 2 (Operations)	Vendor 1	27	18	16	18
Person 3 (Sales)	Vendor 1	26	18	18	18
Person 4 (Tech Team)	Vendor 1	26	20	18	18
Person 1 (Operations)	Vendor 2	30	22	15	18
Person 2 (Operations)	Vendor 2	32	20	14	16
Person 3 (Sales)	Vendor 2	30	20	15	16
Person 4 (TechTeam)	Vendor 2	28	22	14	18
Person 1	Vendor 3	24	20	12	15

(OPS)					
Person 2 (OPS)	Vendor 3	24	18	12	14
Person 3 (Sales)	Vendor 3	25	18	12	14
Person 4 (Tech Team)	Vendor 3	25	20	12	15

Linear Average:

Vendor 1- 80%

Vendor 2-82.5%

Vendor3-70%

(II) Digital BCA

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness(25)	Sales and Technical Support (20)	Price Competitiveness (20)
Person 1 (OPS)	Vendor 1	32	22	18	16
Person 2 (OPS)	Vendor 1	33	23	17	18
Person 3 (Sales Team)	Vendor 1	30	20	18	17
Person 4 (Tech Team)	Vendor 1	32	22	18	18

Linear Average:

Vendor 1- 88.5%

(III) Smart Otoscope

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness(25)	Sales and Technical Support (20)	Price Competitiveness(20)
Person 1 (OPS)	Vendor 1	30	22	18	16
Person 2 (OPS)	Vendor 1	28	23	18	15
Person 3 (Sales)	Vendor 1	28	21	17	17
Person 4 (Tech Team)	Vendor 1	30	22	16	16

Linear Average:

Vendor 1: 84.25

(IV) Smart Glucometer

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness(25)	Sales and Technical Support(20)	Price Competitiveness(20)
Person 1 (OPS)	Vendor 1	33	22	18	16
Person 2 (OPS)	Vendor 1	32	23	17	16
Person 3 (Sales)	Vendor 1	32	22	17	15
Person 4 (Tech)	Vendor 1	32	21	18	16
Person 1 (OPS)	Vendor 2	30	21	15	18
Person 2	Vendor 2	29	21	14	18

(OPS)					
Person 3 (Sales)	Vendor 2	30	20	15	17
Person 4 (Tech)	Vendor 2	28	20	15	18

Linear Average:

Vendor 1: 87.5%

Vendor 2: 82.25%

(V) Smart Haemoglobinometer

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness(25)	Sales and Technical Support (20)	Price Competitiveness(20)
Person 1 (OPS)	Vendor 1	30	21	15	17
Person 2 (OPS)	Vendor 1	28	21	15	16
Person 3 (Sales)	Vendor 1	27	22	14	17
Person 4 (Tech)	Vendor 1	29	21	15	16
Person 1 (OPS)	Vendor 2	27	23	16	17
Person 2 (OPS)	Vendor 2	28	23	15	17
Person 3 (Sales)	Vendor 2	28	22	16	16
Person 4 (Tech)	Vendor 2	28	22	16	16
Person 1 (OPS)	Vendor 3	28	23	18	18
Person 2 (OPS)	Vendor 3	29	23	17	18
Person 3 (Sales)	Vendor 3	30	23	18	17
Person 4 (Tech)	Vendor 3	29	22	18	18

Linear Average:

Vendor1 -81%

Vendor 2-82.5%

Vendor 3-87.25%

(VI) Smart HbA1c Analyser

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness(25)	Sales and Technical Support (20)	Price Competitiveness(20)
Person 1 (OPS)	Vendor 1	33	22	18	16
Person 2 (OPS)	Vendor 1	32	21	18	16
Person 3 (Sales)	Vendor 1	32	20	17	17
Person 4 (Tech)	Vendor 1	30	21	16	17

Linear Average:

Vendor 1-86.5%

(VII) Lipid Analyser

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness (25)	Sales and Technical Support (20)	Price Competitiveness(20)
Person 1 (OPS)	Vendor 1	33	22	17	16
Person 2 (OPS)	Vendor 1	32	21	17	17
Person 3 (Sales)	Vendor 1	32	21	17	16
Person 4 (Tech Team)	Vendor 1	31	20	18	16

Linear Average-

Vendor1 -86.5%

(VIII) Digital ECG

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service responsiveness (25)	Sales and Technical Support (20)	Price Competitiveness (20)
Person 1 (OPS)	Vendor 1	32	22	16	15
Person 2 (OPS)	Vendor 1	32	21	17	16
Person 3 (Sales)	Vendor 1	30	20	16	15
Person 4 (Tech Team)	Vendor 1	32	21	17	16
Person 1 (OPS)	Vendor 2	30	22	18	17
Person 2 (OPS)	Vendor 2	30	21	18	16
Person 3 (Sales)	Vendor 2	28	20	18	16
Person 4 (Tech Team)	Vendor 2	28	21	17	17

Linear Average:

Vendor 1-84.5%

Vendor 2-84.25%

(IX) Digital Stethoscope

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness (25)	Sales and Technical Support (20)	Price Competitiveness (20)
Person 1 (OPS)	Vendor 1	32	22	16	16
Person 2 (OPS)	Vendor 1	32	23	18	16
Person 3 (Sales)	Vendor 1	30	22	17	16
Person 4 (TechTeam)	Vendor 1	30	23	16	15

Linear Average:

Vendor 1-86%

(X) Digital Pulse Oximeter

Assessor Name	Vendor Name	Criteria			
		Quality (35)	Service Responsiveness (25)	Sales and Technical Support (20)	Price Competitiveness (20)
Person 1 (OPS)	Vendor 1	33	22	18	16
Person 2 (OPS)	Vendor 1	32	21	17	16
Person 3 (Sales)	Vendor 1	31	22	18	15
Person 4 (Tech Team)	Vendor 1	32	22	17	16
Person 1 (OPS)	Vendor 2	30	21	16	17
Person 2 (OPS)	Vendor 2	28	21	16	18
Person 3 (Sales)	Vendor 2	30	21	17	17
Person 4 (Tech Team)	Vendor 2	28	21	16	17

Linear Average:

Vendor 1-87%

Vendor 2-83.5%

(II) RESULTS AND DISCUSSION:

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

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.

(III) CONCLUSION:

The current evaluation shows that most of the vendors are strategic vendors except vendor 3 for Digital BP Monitor which is a Transactional 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:

The linear average method has the following limitations-

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

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