SUMMER INTERNSHIP PROJECT REPORT

ANALYSIS OF THE REQUIREMENTS OF PERVACIO CUSTOMERS AND FINDING KEY PERFORMANCE INDICATORS

Submitted To

Pervacio Inc

Submitted By

Pavithran S

Management Intern

Indian Institute of Management Ranchi

ACKNOWLEDGMENT

Internship opportunity at Pervacio Inc was really helpful in learning a lot of new things and for professional development. I am extremely happy and proud to have worked in such an esteemed and visionary company. Meeting industry experienced people gave me a lot of insights that helped me a lot in doing my internship project.

I would like to express my sincere thanks to Mr. Aninda Chatterjee, Mr. Rajat Sinha, Mr. Ravishu Arora, and Mr. Sandeep Kumar for helping me throughout the project in spite of being extraordinarily busy with their assignments. Also, I express my sincere thanks to everyone who helped me for specific requirements at times. The necessary advice and discussions helped a lot in carrying out proper analysis. Pervacio had helped me in my career development by its precious guidance which I consider as extremely valuable.

EXECUTIVE SUMMARY

The project is intended to find out the requirements of possible Pervacio customers, study them and find out the Key Performance Indicators for measuring Pervacio's performance and which can also be pitched in for customer acquisition. Appropriate Pervacio products have to be pitched in for different customers after studying them. Post that, Key Performance Indicators are found out. Key Performance Indicators help in two aspects. They help in analyzing Pervacio's performance at regular intervals and they are extremely helpful when pitched for customer acquisition. My research started with exploring the areas where Pervacio has not seen its presence. When I started by secondary research on these lines, the areas that I found out were Information technology Enterprises and Recommerce companies or Refurbishers. Pervacio has clients from OEM and Retailers but not from Enterprises and Re-commerce companies. Since Pervacio has no presence in these sectors, I started my research in these sectors.

For Information Technology enterprises, IT Asset Disposition (ITAD) is a serious concern. **Pervacio Data Wipe** has a huge scope in IT sector. Hence, two Key Performance Indicators are found out. They are Cyber Attack Resilience and Data Breach Cost. Cyber Attack Resilience can be measured with the help of Cyber Resilience Review (CRR) and Data Breach Cost can be measured by finding out the direct and indirect costs associated with the data breach.

For Recommerce companies or Refurbishers, Inventory was found out to be the main concern. **Pervacio Data Diagnostics and Trade-in** has a huge scope because of their fast test speed and the additional number of special tests available. Hence, Inventory write-down, Inventory Write-off and manufacturing cycle time are found to be the Key Performance Indicators. Inventory write-down and Inventory write-off can be measured with the help of Cycle Counting at regular intervals and manufacturing cycle time can be measured using traditional methods.

An Analysis is also done on Business to Consumer (B2C) area. For retailers, **Pervacio Diagnostics, Trade in and Data Wipe** have got a huge scope. Two Key Performance indicators are found out. They are Customer Satisfaction score (CSAT) and Net Promoter Score (NPS). Both of these can be measured by capturing audience emotion with help of different forms of the questionnaire.

Detailed findings and analysis are explained in the report.

TABLE OF CONTENTS

PROJECT OBJECTIVE

To analyze the requirements of Pervacio customers and to find out the Key Performance Indicators for Pervacio that can also be pitched for new customer acquisition.

METHODOLOGY

As the first step, critical problems faced by possible customers were found out. After that, the root cause of the problem was explored and an analysis was done as to what Pervacio can contribute to the resolution of the problem. Findings and analysis were based on the secondary research data.

TARGET CUSTOMERS

While hunting for the problems faced by customers, some critical problems were encountered which were the areas where Pervacio is growing and can expect a huge scope for expansion. Pervacio has clients from OEM and Retailers but not from Enterprises and Re-commerce companies. Target Customers here are IT enterprises, Recommerce companies or Refurbishers and Retailers. IT enterprises are increasing every day thereby increasing the usage of IT assets. Recommerce companies or refurbishers are growing at a faster pace since people prefer to recycle or refurbish their phones after the retirement of devices instead of throwing them in the landfill and contributing to e-waste. Retailers are facing a tough time in satisfying their customers because of threat from e-commerce companies.

FINDINGS AND ANALYSIS

INFORMATION TECHNOLOGY ENTERPRISES

INDUSTRY ANALYSIS

Transparency Market Research had released a report on the opportunities available in the global IT Asset Disposition (ITAD) market. It says that ITAD market will reach a value of **US $18.18 billion** by 2024 since it grows at a CAGR rate of 7.1% between 2016 and 2024. Strict regulations by government force all enterprises to have a proper channel for ITAD for managing the IT assets in an efficient manner.

Enterprises use a high volume of the mobile devices which they provide to their employees for work-related activities. Even though some enterprises are encouraging "Bring Your Own Device (BYOD)" programs, there are many companies that provide their own mobile phones to their employees considering data security. The possibility of having critical client data on these mobile devices is very high. Once these mobile phones are designated for retirement, there is a

need for proper IT asset disposition (ITAD) which is a serious concern for these enterprises. Some companies prefer refurbishing these mobile devices. But, there is a huge possibility of data theft because of improper wiping that leads to a huge cost of data theft. Some enterprises prefer not to refurbish because of data theft risk and keep the devices with themselves increasing inventory and ending up in huge e-waste. Also, a few enterprises destroy these devices ending up in e-waste. Hence, there is a huge business scope for Data Wipe in the enterprise sector. Data diagnostics too has a scope in this sector to some extent. Given below are the most important parameters that enterprises are worried upon and which Pervacio can pitch in and prove their value addition from "Pervacio DataWipe".

PRODUCT SCOPE: Pervacio DataWipe

KEY PERFORMANCE INDICATORS

- **Cyber Attack Resilience**: Enterprise's ability to recover from the cyber attack
- **Data Breach cost:** Cost incurred as a result of data theft

Data Wipe will increase the possibility of Cyber Attack Resilience and reduce Data Breach cost. Companies can take part in **Cyber Resilience Review (CRR)** in order to assess the cyber attack resilience. These two KPI's can be pitched in for customer acquisition.

Pervacio Inc can extend its Data Wipe services to Hard disk since a high number of hard disks are also sent to IT asset disposition (ITAD).

RECOMMERCE COMPANIES OR REFURBISHERS

Industry analysis

According to a Deloitte India report, the used smartphone market in India is expected to reach a value of **US $4 billion** by 2020. Even though growth in this sector is rapid, there are some risks associated with it. One of the main risks is the Technology obsolescence. Shorter product life cycle pose a serious threat to this sector since they have to equip themselves with the rapidly growing technologies.

With technology developing at a faster pace, we see a lot of new mobile devices coming up every day. People often replace their smartphone with new ones to keep themselves updated with the technology. This had significantly increased the number of mobile devices in reverse supply chain.

Thus, recommerce companies or refurbishers like Gazelle, uSell, Budli, Greendust are finding a huge demand for them. The main issue faced by them is the inventory cost. Most of them undergo step by step manual process for diagnosis which is time-consuming and resulting in most of the incoming mobiles finding space in inventory. Value of these secondary market

devices gets depreciated every day and hence they need a faster method to process and reduce the number of devices in the inventory.

A research was made on Budli (One of the leading Recommerce companies in India) and it was found that they are using around 40 tests to evaluate mobiles (Attached inspection form in Annexure). Hence, Pervacio Data diagnostics and Trade-in with around 70 tests have a huge scope here. Below are the KPI's to monitor the efficiency.

PRODUCT SCOPE: Pervacio Data Diagnostics and Trade-in

KEY PERFORMANCE INDICATORS

- **Inventory Write-off**: Devices that are no longer valuable and cannot be sold
- **Inventory Write-down**: Devices whose value is depreciated but still can be sold for a marginal price
- **Manufacturing Cycle Time:** Time interval between Receipt to Refurbishment

Pervacio Data Diagnostics and Trade-in will help in reducing the Inventory Write-off and Write-down to a greater extent. Also, **Manufacturing Cycle Time** can be reduced.

RETAILERS

Industry Analysis

The retail industry is very critical in the sense that it directly deals with the end consumer. More than anything, the way customers are being handled plays an important role in gaining customer loyalty. So, our metrics should be measuring the customer satisfaction score to find out if we are moving on the right track. For retailers, the following industry followed performance metrics can be pitched in.

PRODUCT SCOPE: Pervacio Diagnostics, Trade-in and Wipe

KEY PERFORMANCE INDICATORS

- **CSAT score:** Measures the satisfaction level of consumers
- **Net Promoter Score(NPS):** Measures the willingness of a customer to recommend a product or a service

Pervacio should make the retailers realize an increase in both CSAT score and NPS through its **Pervacio Diagnostics, Trade-in and Wipe** applications.

MEASUREMENT OF KEY PERFORMANCE INDICATORS

INFORMATION TECHNOLOGY ENTERPRISES

KPI I: CYBER ATTACK RESILIENCE
Cyber attack resilience can be measured through Cyber Resilience Review (CRR) as explained below.

CYBER RESILIENCE REVIEW (CRR)

It is an initiative from U.S Department of Homeland Security (DHS) that helps organizations to understand their operational resilience and their ability to manage risks associated with cyber attacks.

It also gives an idea of the overall health of the organization's cyber security program. Eventually, it helps organizations to improve their ability to manage cyber risks.

Structure

- It is a no cost, voluntary, non-technical assessment
- It is a structured one day facilitated session
- It consists of a total of 297 questions
- Ideally takes 6-8 hours to complete
- Post completion of the assessment, the participant will get a summary report that gives possible recommendations

Participation

Participation from cross-functional teams is expected for CRR. It can have representatives from security, Information technology, Business, and Operations. Representatives from following roles and responsibilities are mostly preferred,
- IT policy and procedures - Chief Information Security Officer
- IT security planning & management - Director of Information Technology
- IT infrastructure - System/Network administrator
- IT operations - Change/Configuration manager
- Business operations- Operations manager
- Business continuity & disaster recovery planning - BC/DR manager
- Risk analysis - Operations/Enterprise risk manager

Domains

- Asset Management
- Controls Management
- Configuration and Change Management
- Vulnerability Management
- Incident Management
- Service Continuity Management
- Risk Management
- External Dependencies Management
- Training and Awareness
- Situational Awareness

Assessment will be based on all the above-mentioned domains that contribute to the organization's cyber resilience.

CRR Domains	Number of Goals	Number of Goal Practices	Number of MIL Practices
AM Asset Management	7	24	13
CM Controls Management	4	7	13
CCM Configuration and Change Management	3	15	13
VM Vulnerability Management	4	12	13
IM Incident Management	5	23	13
SCM Service Continuity Management	4	15	13
RM Risk Management	5	13	13
EDM External Dependencies Management	5	14	13
TA Training and Awareness	2	8	13
SA Situational Awareness	3	8	13
Total		167	130

Maturity Indicator Levels (MIL)

Maturity Indicator Levels (MIL) are used to measure process institutionalization in CRR. Higher Degree of MIL depicts a stable process.

- MIL 0 - Incomplete
- MIL 1 - Performed
- MIL 2 - Planned
- MIL 3 - Managed

- MIL 4 - Measured
- MIL 5 – Defined

Assessment will be conducted by navigators who work closely with appropriate subject matter experts (SME) of the organization. Execution is usually conducted by two navigators independently.

CRR Data Capture

Each domain is divided into goals with multiple practice questions. 3 possible answers to each practice questions are,

- Yes
- Incomplete
- No

Post completion of CRR, each navigator's answers will be compared and reconciled to find out any discrepancies and finally validated.

Below is the assessment form for one of the domains, "Asset Management". Different goals are clearly defined and each question under each goal can be seen.

1 Asset Management

The purpose of Asset Management is to identify, document, and manage assets during their life cycle to ensure sustained productivity to support critical services.

Goal 1 - Services are identified and prioritized.

	Yes	Incomplete	No	
1. Are services identified? [SC:SG2.SP1]	☐	☐	☐	c
2. Are services prioritized based on analysis of the potential impact if the services are disrupted? [SC:SG2.SP1]	☐	☐	☐	c
3. Is the organization's mission, vision, values and purpose, including the organization's place in critical infrastructure, identified, and communicated? [EF:SG1.SP1]	☐	☐	☐	c
4. Are the organization's mission, objectives, and activities prioritized? [EF:SG1.SP3]	☐	☐	☐	c

Goal 2 - Assets are inventoried, and the authority and responsibility for these assets is established.

1. Are the assets that directly support the critical service inventoried (technology includes hardware, software, and external information systems)? [ADM:SG1.SP1]

	Yes	Incomplete	No	
People	☐	☐	☐	c
Information	☐	☐	☐	c
Technology	☐	☐	☐	c
Facilities	☐	☐	☐	c

2. Do asset descriptions include protection and sustainment requirements? [ADM:SG1.SP2]

	Yes	Incomplete	No	
People	☐	☐	☐	c
Information	☐	☐	☐	c
Technology	☐	☐	☐	c
Facilities	☐	☐	☐	c

3. Are both owners and custodians of assets documented in asset descriptions? [ADM:SG1.SP3]

	Yes	Incomplete	No	
People	☐	☐	☐	c
Information	☐	☐	☐	c
Technology	☐	☐	☐	c
Facilities	☐	☐	☐	c

|			Yes	Incomplete	No	
	3.	Are protection and sustainment requirements of the critical service considered during the selection of facilities? [EC:SG2.SP2]	☐	☐	☐	

MIL2-Planned			Yes	Incomplete	No	
	1.	Is there a documented plan for performing asset management activities?	☐	☐	☐	
	2.	Is there a documented policy for asset management?	☐	☐	☐	
	3.	Have stakeholders for asset management activities been identified and made aware of their roles?	☐	☐	☐	
	4.	Have asset management standards and guidelines been identified and implemented?	☐	☐	☐	

MIL3-Managed			Yes	Incomplete	No	
	1.	Is there management oversight of the performance of the asset management activities?	☐	☐	☐	
	2.	Have qualified staff been assigned to perform asset management activities as planned?	☐	☐	☐	
	3.	Is there adequate funding to perform asset management activities as planned?	☐	☐	☐	
	4.	Are risks related to the performance of planned asset management activities identified, analyzed, disposed of, monitored, and controlled?	☐	☐	☐	

MIL4-Measured			Yes	Incomplete	No	
	1.	Are asset management activities periodically reviewed and measured to ensure they are effective and producing intended results?	☐	☐	☐	
	2.	Are asset management activities periodically reviewed to ensure they are adhering to the plan?	☐	☐	☐	
	3.	Is higher-level management aware of issues related to the performance of asset management?	☐	☐	☐	

MIL5-Defined			Yes	Incomplete	No	
	1.	Has the organization adopted a standard definition of asset management activities from which operating units can derive practices that fit their unique operating circumstances?	☐	☐	☐	
	2.	Are improvements to asset management activities documented and shared across the organization?	☐	☐	☐	
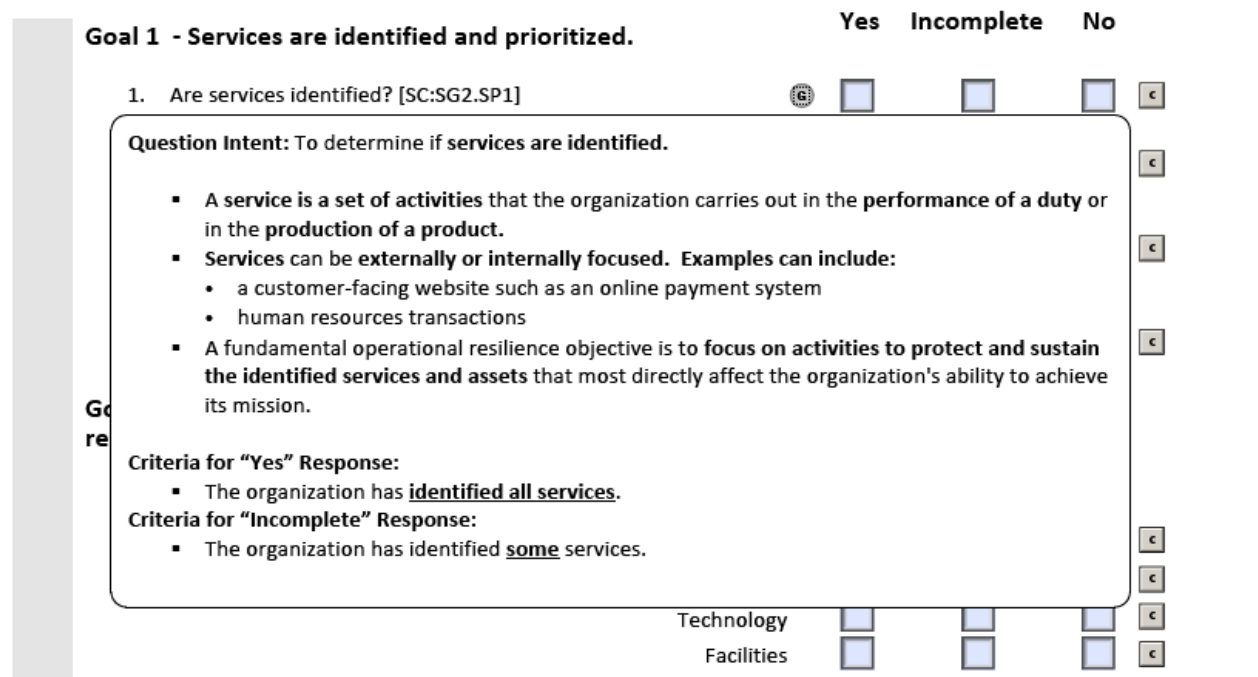
Above image shows information if we hover over the question. A clear description of reasons for each of the answers is given.

SUMMARY REPORT-CRR

Below is the final summary showing results of the assessment that was taken.
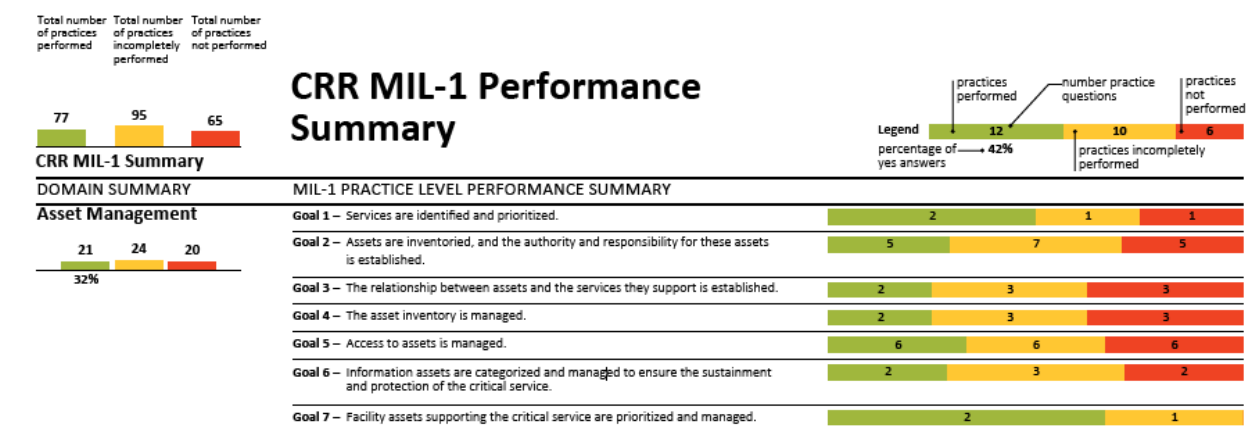
CRR Performance Summary

Domain Summary	MIL-1 Performed Domain practices are being performed.							MIL-2 Planned: Domain practices are supported by planning, policy, stakeholders, and standards.				MIL-3 Managed: Domain practices are supported by governance and adequate resources.				MIL-4 Measured: Domain practices are supported by measurement, monitoring, and executive oversight.			MIL-5 Defined: Domain practices are supported by enterprise standardization and analysis of lessons learned.	
Asset Management	G1	G2	G3	G4	G5	G6	G7	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Controls Management	G1	G2	G3	G4				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Configuration and Change Management	G1	G2	G3					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Vulnerability Management	G1	G2	G3	G4				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Incident Management	G1	G2	G3	G4	G5			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Service Continuity Management	G1	G2	G3	G4				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Risk Management	G1	G2	G3	G4	G5			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
External Dependencies Management	G1	G2	G3	G4	G5			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Training and Awareness	G1	G2						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2
Situational Awareness	G1	G2	G3					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1	Q2

Legend ▮ = Performed ▮ = Incompletely Performed ▮ = Not Performed
Q1 = Question Number   G1 = Goal Number

10 | CRR Self-Assessment V 8.0.0

Above image includes the total summary of all the domains.

1 Asset Management

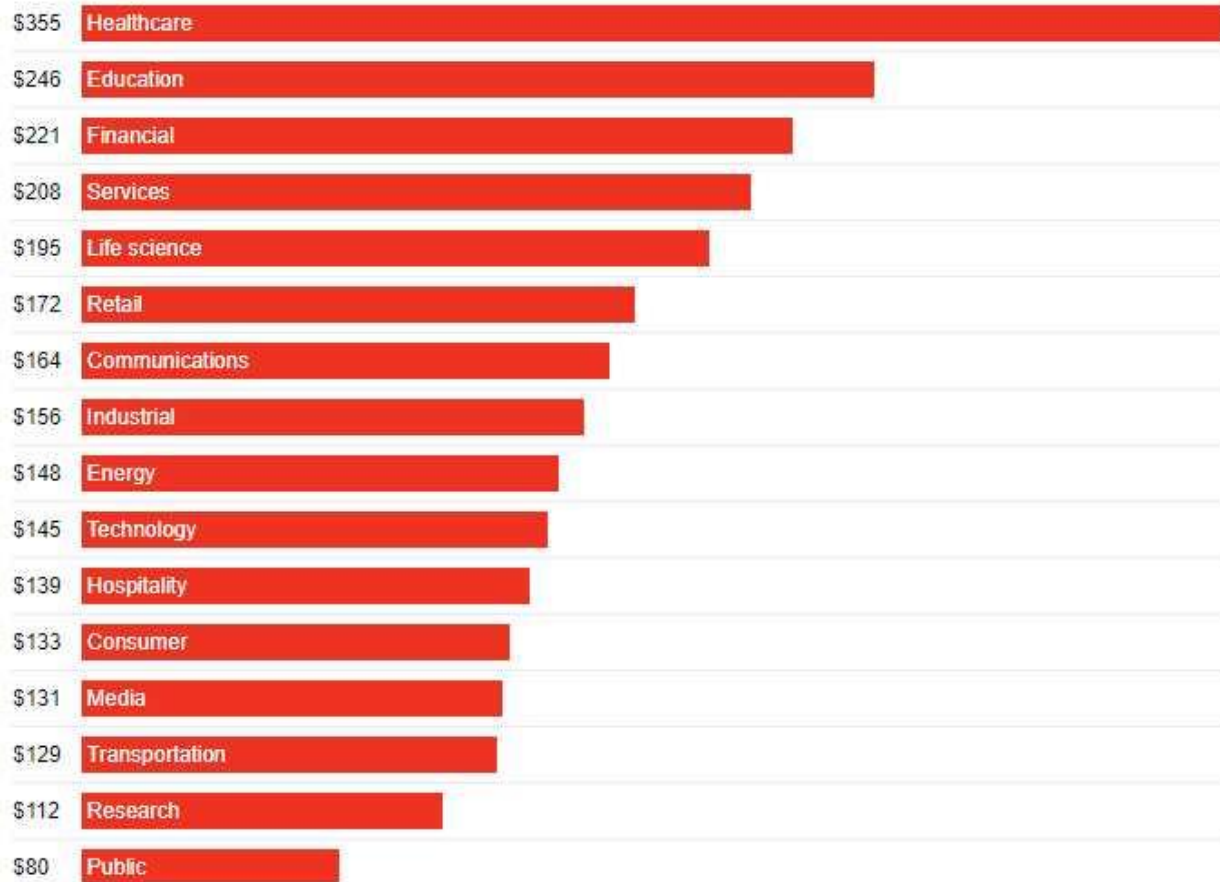|	Goal 1-Services are identified and prioritized.	
1.	Are services identified? [SC:SG2.SP1]	Yes
2.	Are services prioritized based on analysis of the potential impact if the services are disrupted? [SC:SG2.SP1]	Yes
3.	Is the organization's mission, vision, values, and purpose, including the organization's place in critical infrastructure, identified, and communicated? [EF:SG1.SP1]	Incomplete
4.	Are the organization's mission, objectives, and activities prioritized? [EF:SG1.SP3]	No
	Option(s) for Consideration:	
Q1	**CERT-RMM Reference** [SC:SG2.SP1] Identify the organization's high-value services, associated assets, and activities. A fundamental risk management principle is to focus on activities to protect and sustain services and assets that most directly affect the organization's ability to achieve its mission. **Additional References** Special Publication 800-34 "Contingency Planning for Federal Information Systems", Page 15-18 NIST CSF References: ID.BE	
Q2	**CERT-RMM Reference** [SC:SG2.SP1] Prioritize and document the list of high-value services that must be provided if a disruption occurs. Consideration of the consequences of the loss of high-value organizational services is typically performed as part of a business impact analysis. In addition, the consequences of risks to high-value services are identified and analyzed in risk assessment activities. The organization must consider this information when prioritizing high-value services. **Additional References** Special Publication 800-34 "Contingency Planning for Federal Information Systems", Page 16-18 NIST CSF References: ID.AM-5, ID.BE	

Below image is the final summary report that helps us in understanding the progress of the company in Cyber Attack Resilience. It plots the percentage of practices completed against domains. If a comparison is done before and after usage of Pervacio products, it will help us in understanding the progress made by the company after using Pervacio products.

Percentage of Practices Completed by Domain

Legend ■ = Your Results
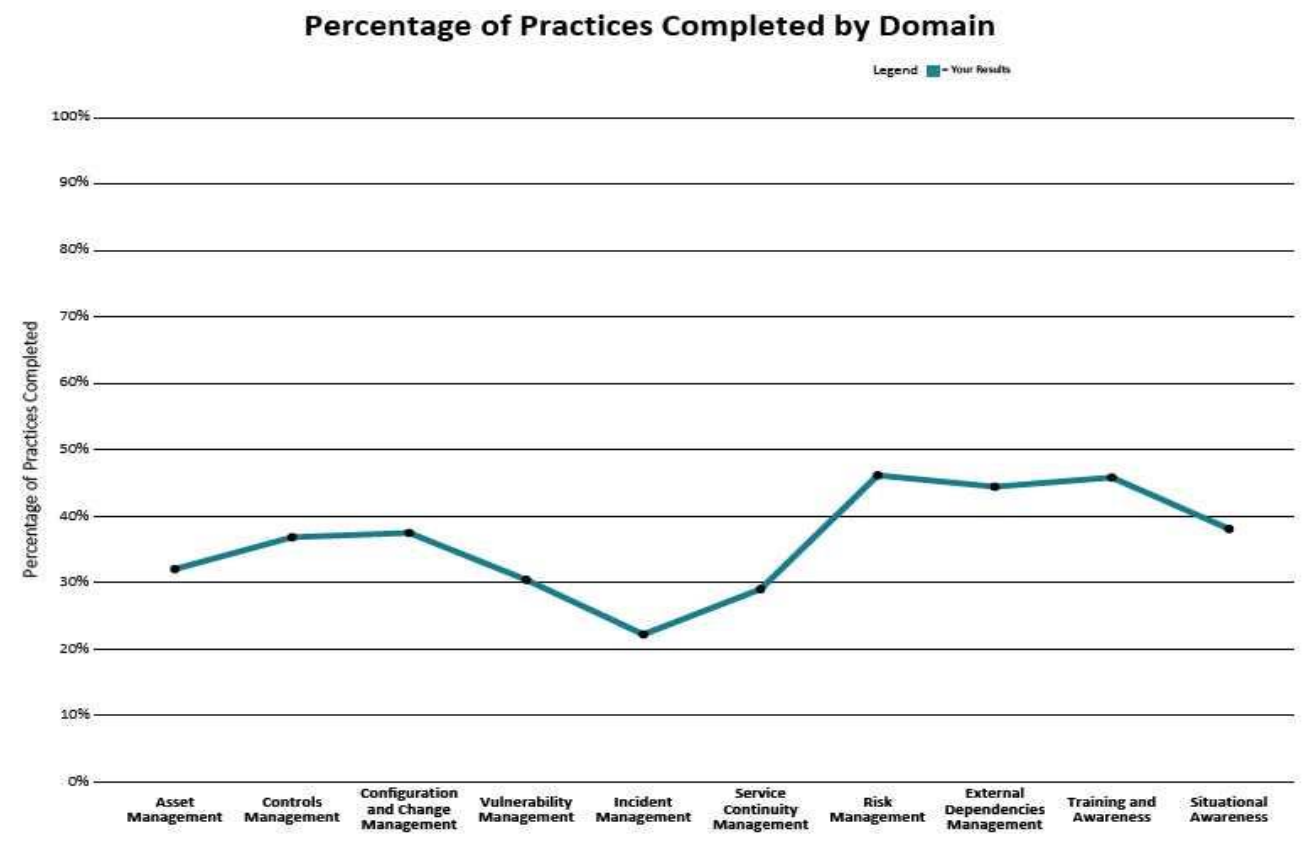
The Assessment package is included in this report as a separate document. It can also be customized and used and permissions are provided for the same by the issuing authority. Hence, we can add relevant additional questions if needed and exact results can be expected.

KPI II: DATA BREACH COST

With the rise in technology advancement, the cost of Data Breach is also increasing every year at a rapid pace. Below graph shows the average cost of a data theft obtained from a research done by IBM and Poneman Institute. It is observed that the cost incurred per record of a data breach in Information Technology sector is $145.

$355	Healthcare
$246	Education
$221	Financial
$208	Services
$195	Life science
$172	Retail
$164	Communications
$156	Industrial
$148	Energy
$145	Technology
$139	Hospitality
$133	Consumer
$131	Media
$129	Transportation
$112	Research
$80	Public

Source: IBM + Ponemon Institute

FORTUNE

Calculation of Data Breach falls into two main categories.

- Short-term
- Long-term

Short-term refers to the cost incurred when the actual data breach is happening whereas Long-term refers to the cost incurred as a result of the breach happening over weeks, months and years. There are direct and indirect costs associated with both short and long-term costs.

Direct costs: Reputation cost, Detection, Escalation
Indirect costs: Days lost, Value lost, turnover of existing customers, loss of future customers

> **Days lost = Hours spent away from normal work/Number of work hours per day**
>
> **Value lost = (Days lost/Number of work days per year)*Average salary**

RECOMMERCE OR REFURBISHING COMPANIES

KPI I&II: INVENTORY WRITE-OFF AND INVENTORY WRITE-DOWN

Inventory write-off and Inventory write-down can be calculated with the help of Cycle counting procedure as explained below.

CYCLE COUNTING

Cycle counting is a procedure wherein the inventory count is measured at regular intervals. Intervals are decided based on the industry and business trend. This helps in continuously monitoring the inventory count.

If the same level of inventory is maintained over periods, we can infer that there is no pile-up of incoming devices in the inventory. This means that diagnostics is running at a faster pace which clearly explains the success of "Pervacio Diagnostics and Trade-in"

KPI III: MANUFACTURING CYCLE TIME

The time interval between receipt and refurbishment of devices can be measured using traditional methods and if there is a decrease in the time interval, then Pervacio diagnostics and Trade-in has seen success.

RETAILERS

KPI I: CSAT SCORE

CSAT scores can be calculated by requesting each and every customer to fill out a questionnaire after availing services from our products.

- This questionnaire has to be a LIKERT scale questionnaire and either a 5-point scale or a 7-point scale ranging from "Extremely Dissatisfied to Extremely Satisfied" can be used.
- The scale of measurement is between 0-100%.

> **CSAT score = (Number of satisfied customers/Number of responses)*100**

Usually "Top-2-box" method is followed, wherein total number of "Satisfied and extremely satisfied" customer count is considered for the numerator.

KPI II: NET PROMOTER SCORE (NPS)

Net promoter score (NPS) can be calculated with data obtained from a questionnaire floated. The LIKERT scale can be used to find out customer's attitude on suggesting our products to others and below formula can be used for getting an NPS score.

NPS score = % of Promoters - % of Detractors

DASHBOARD

All of the above-explained Key Performance Indicators can be represented in the form of an actionable dashboard for continuous monitoring. It can be either Bar chart, Pie chart, Gauge scale or any other appropriate graphical representation. Dashboards help in easy interpretation and corrective measures can be taken in case of any discrepancies.

Especially for Inventory cycle count, most of the companies have **Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM)** tools in place. Both of these tools are built around an Inventory Management Systems which help them to track the inventory data in their warehouse.

The inventory management system has built-in "Dashboard" option which helps companies in creating a visual representation of the inventory levels in the warehouse. These graphs, when monitored at regular intervals, will help us in analyzing the pattern of inventory count over required periods. These reports are always customizable. Thus, Dashboards will help us in assorting information and data. We can appreciate this more when there is a multitude of data and information and when accuracy is our utmost importance.

ADDITIONAL RECOMMENDATIONS

No Trouble Found savings calculator application can be developed. This application should basically consider product specific inputs and come up with an approximate estimate of the cost which customer could save if that application is purchased from Pervacio.

NO TROUBLE FOUND SAVINGS CALCULATOR

Pervacio Inc can develop a tool to determine the cost incurred by Mobile Network Operators and Original Equipment Manufacturers because of improper diagnosis of mobile devices that lead to increasing NTF returns. It is estimated that NTF cost around $4.5 billion per year. The root cause of this problem is the improper diagnosis of devices. This tool ideally should help

Mobile Network Operators and Original Equipment manufacturers to realize the importance of properly diagnosing a device by giving them an estimate of total cost(Annual/Monthly) incurred by them if they don't diagnose properly. This tool basically should get the following inputs to estimate the cost.

- The total number of retail locations run by the Mobile Network Operator or the Original Equipment Manufacturer.
- The average number of mobile devices returned every month/year.
- The average cost incurred in processing each returned device.

The tool should help in understanding the financial repercussions of improper repairing and diagnosis of mobile devices.

ANNEXURE: Inspection form of Budli

Order Id: [   ]   ☐ Box   ☐ Invoice

☐ Declaration Form Duly Filled   PAN Card: [   ]
☐ Signed PAN Card
☐ Signed Address Proof(Driving Licence/Voter ID/Passport/Aadhar Card/Rental Agreement)   Aadhaar Card: [   ]

Brand:	Apple ▼	Model:	[ ]
IMEI No:	Exactly 15 digits	Colour:	Black ▼ [ ]
Serial No:	[ ]	RAM:	256 MB ▼
OS:	Android ▼	OS Version:	Based on OS ▼
Internal Storage:	130 MB ▼	Battery:	Average ▼ Factory Reset: Yes ▼
Data Connectivity:	2G ▼ Working ▼	Warranty:	No Warranty ▼ Date
SD Card:	Working ▼		

Accessories:	Working	Not Working	Damaged
Charger	○	○	○
Earphones	○	○	○
USB Cable	○	○	○
[ ]	○	○	○

Cellular:	Working	Not Working	Slot Damage
SIM 1	○	○	○
SIM 2	○	○	○

Touchscreen: [Good Condition ▼]
Keyboard: [All keys working ▼]
Display: [Good Condition ▼]

Cosmetic Condition:	Good	Average	Not Good	Broken
Front	○	○	○	○
Back	○	○	○	○
Left Side	○	○	○	○
Right Side	○	○	○	○
Top	○	○	○	○
Bottom	○	○	○	○

Buttons:	Working	Not Working	Pressing Hard	Not Available
Power	○	○	○	○
Volume Up	○	○	○	○
Volume Down	○	○	○	○
Home	○	○	○	○
Mute	○	○	○	○
Camera	○	○	○	○
Back	○	○	○	○
Options Key	○	○	○	○

Camera:	Working	Not Working	Flashlight
Front	○	○	○
Back	○	○	○

Camera Issues: [   ]

Ports:	Working	Not Working	Loose	Damaged
Headphone	○	○	○	○
Charging	○	○	○	○

	Working	Not Working	Not Available
WiFi:	○	○	○
Bluetooth:	○	○	○
Fingerprint:	○	○	○
Proximity Sensor:	○	○	○

Sound:	Working	Not Working	Cracking Sound
Ear Speaker	○	○	○
Loud Speaker	○	○	○
Vibrator	○	○	

Rooted: Yes ▼   Water Damage: Yes ▼   Microphone: Working ▼

Remarks: [   ]

Refurbishment Cost: [   ]   Category: A ▼

REFERENCES

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