Date: 18th February 2022

To,

Bill Nixon,

Sr. Business Analyst,

Conestoga College,

Kitchener, ON

Subject- Regarding the Project 1 Solution - Final

Respected Mr. Nixon,

I hope you are doing well. I am Mayurkumar Rafaliya, the Project Manager of Team G. I am writing this letter regarding the project 1 solution final developed for the project Executive Dashboard for OHT. The following are few important documents created for the project 1 solution final deliverable:

* Background and overview of client
* Project Scope
* Gap Analysis
* Executive dashboard's metrics
* Briefing of executive dashboard

It would be a great honor for us if you could review the documentation and provide your valuable feedback, which would guide us for future analysis. I look forward to hearing from your soon.

Regards,

Mayurkumar Rafaliya

(Project Manager)

Executive dashboard project-1 solution  
FINAL REPORT

18th February 2022

**Team G**

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# 1. Document History (CM)

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| ID No. | Revised Date | Document Name | Prepared By |
| 1 | 2/18/2022 | Document History | Cathleen Mathew Mundat |
| 2 | 2/11/2022 | Client Background | Anusha Asokan Palat |
| 3 | 2/11/2022 | Initial Project scope in an Appendix, Changes to scope in a Report Section | Jigeesha Kocher |
| 4 | 2/10/2022 | Business Challenges | Mayurkumar Rafaliya |
| 5 | 2/10/2022 | AS-IS persons / roles / actors and interactions of Executive Decision-Making operations | Mayurkumar Rafaliya |
| 6 | 2/10/2022 | AS-IS Principles and AS-IS Decision Making Process Flow | Anusha Asokan Palat |
| 7 | 2/11/2022 | TO-BE persons, roles, actors, and interactions of Executive decision-making operations | Jigeesha Kocher |
| 8 | 2/11/2022 | Use-Case Diagram | Chaitanya Keesari |
| 9 | 2/11/2022 | Cockburn’s Use Case | Chaitanya Keesari |
| 10 | 2/10/2022 | Assumptions | Mayurkumar Rafaliya |
| 11 | 2/10/2022 | Difference between Strategic Vs Analytical Dashboard | Mayurkumar Rafaliya |
| 12 | 2/11/2022 | Entity Relationship Diagram | Mayurkumar Rafaliya |
| 13 | 2/11/2022 | TrackR\_DataGen Metric Data Sources | Prajwal Nayak |
| 14 | 2/11/2022 | List, Reference and General Details of suggested Metrics | Prajwal Nayak |
| 15 | 2/11/2022 | Executive Dashboard Metric Format 1 | Mayurkumar Rafaliya |
| 16 | 2/10/2022 | Executive Dashboard Metric Format 2 | Chaitanya Keesari |
| 17 | 2/10/2022 | Executive Dashboard Metric Format 3 | Cathleen Mathew Mundat |
| 18 | 2/10/2022 | Executive Dashboard Metric Format 4 | Anusha Asokan Palat |
| 19 | 2/10/2022 | Executive Dashboard Metric Format 5 | Prajwal Nayak |
| 20 | 2/10/2022 | Executive Dashboard Metric Format 6 | Jigeesha Kocher |
| 21 | 2/11/2022 | Executive Dashboard Operation Process - 3+ Risks and Possible Mitigations | Jigeesha Kocher |
| 22 | 2/11/2022 | Data List of 6 OHT VPs Monthly Finance Reports used | Jigeesha Kocher |
| 23 | 2/18/2022 | List of Deliverables and their reference documents | Team G |
| 24 | 2/11/2022 | Training Plan for the VPs | Mayurkumar Rafaliya |
| 25 | 2/11/2022 | VPs written briefing on ERP, TPS and query tools with SWOT | Jigeesha Kocher |
| 26 | 2/11/2022 | Written Brief on Data Lakes | Anusha Asokan Palat |
| 27 | 2/11/2022 | Written Brief on Data Marts | Anusha Asokan Palat |
| 28 | 2/11/2022 | Written Brief on Data Warehouses | Anusha Asokan Palat |
| 29 | 2/18/2022 | Suggested plan vision to implement an Executive Dashboard with 5, at minimum, metrics | Mayurkumar Rafaliya |
| 30 | 2/11/2022 | Suggested plan deliverables to implement an Executive Dashboard | Anusha Asokan Palat |
| 31 | 2/11/2022 | Suggested plan actions to implement an Executive Dashboard with 5, at minimum, metrics | Jigeesha Kocher |
| 32 | 2/11/2022 | Suggested plan resources to implement an Executive Dashboard with 5, at minimum, metrics | Jigeesha Kocher |
| 33 | 2/11/2022 | Suggested plan background to implement an Executive Dashboard with 5, at minimum, metrics | Prajwal Nayak |
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| 39 | 2/11/2022 | Executive DashBoard Creation | Prajwal Nayak |
| 40 | 2/17/2022 | Gap Analysis | Cathleen Mathew |
| 41 | 2/11/2022 | SWOT Analysis of Dashboard | Cathleen Mathew |
| 42 | 2/11/2022 | Persona | Cathleen Mathew |
| 43 | 2/17/2022 | Probable Benefits of Changing the Executive Decision-Making Process | Anusha Asokan Palat |
| 44 | 2/18/2022 | Possible Future Analysis and Development for Executive Decision-Making Process | Chaitanya Keesari |
| 45 | 2/17/2022 | Agile Development Document | Anusha Asokan Palat |
| 46 | 2/17/2022 | Psuedocode | Chaitanya Keesari |
| 47 | 2/17/2022 | Final RFI Report | Anusha Asokan Palat |
| 48 | 2/18/2022 | Annotated list of elements for the Executive Dashboard | Mayurkumar Rafaliya |
| 49 | 2/11/2022 | Appendix | Jigeesha Kocher |
| 50 | 2/11/2022 | References | Anusha Asokan Palat |

# 2. Client Background (AAP)

Oury Health Tech Ltd (OHT), a business-to-business organization, started its business in January 1998, selling medical equipment to the local medical clinic. The CEO of the company is Billy Bob. The organization has 6 Executives in 6 various departments. With a minimum of 100 employees, OHT managed to be the market leader in January 2016. OHT mainly focuses on quality and meticulously builds the product; hence was recognized for its reliability.

Being successful in business, OHT wanted to enhance its business and developed TrackR in February 2017. TrackR is a wearable fitness monitor with an application for home consumers. The newly launched product gained more public attention and also social media attention. The projected sales numbers for TrackR were about 5000 a month. Even the TrackR was appreciated for its design and awarded at CES in March 2017. The organization achieved record-high sales and celebrated the achievement.

In July 2018, a major retailer, big Box, returned 7000 TrackR's due to complaints about TrackR's application. The TrackR's wearable piece was working fine. Eventually, in December 2018, the company announced the potential bankruptcy in the upcoming two years. So, the organization planned to hire Business Analysts to help with better decision-making and eventually move the business back on track. The significant purpose of the hired Business Analysts is to study the client requirements and develop an effective dashboard by identifying relevant metrics.

More details about client background can be checked in the attached file with filename:

1. OHT Timeline Phase 1 210507
2. OHT Master Document 01 - Introduction 210507
3. P1 Exec Dashboard 21May07
4. OHT Org Chart as of 2018July - 210530

# 3. Initial Project Scope in an Appendix, Changes to Scope in a Report Section (JK)

There are no changes to the original scope. The original scope is attached in the Appendix

# 4. Business Challenges (MR)

1. In the recent interview with the VPs, we learned that the tracker business is not profitable on its own. It is dependent on the OHT's other business, "Digital Imaging." The tracker business is becoming a burden on the other business. It also uses cash from other businesses to maintain its cash flow.
2. While discussing the business process and decision-making process, we found out that they do not have a straightforward decision-making process established. Individual VP makes the decision for their department, and sometimes CEO also take part in the decision, but there is no decision-making process established for the tracker business.
3. They lack effective leadership. There is no one to guide the VPs. Each VP makes their own decision, and they do not have a person who has a long-term vision. Everybody focuses on short-term goals for the company.
4. They need to improve the application for the TrackR. Most of the negative reviews are for the application, and users are complaining about the application and its function, but they do not have an IT staff who can upgrade the app.
5. In our interview with the VPs, we found out that the CEO is not an effective decision-maker; he does not allow VPs to meet to make collaborative decisions. He is not willing to take part in the practical business process.
6. OHT's top management does not have any collaborative environment where all the VPs take each other's opinions to decide. Because of this their decision also make an unwanted effect on another department.
7. VPs have internal biases too. Some VPs suggest shutdown the TrackR business. But on the other hand, it's not possible, according to the HR VP. This situation creates uncertain circumstances in the company.
8. One of the biggest reasons, TrackR, is that their TrackR production is not profitable. They need an effective production process to cut down the cost. Because of this reason, they are not able to generate revenue.

# 5. AS-IS persons / roles / actors and interactions of Executive Decision-Making operations (MR)

|  |  |  |  |
| --- | --- | --- | --- |
| ID.No. | Involved Persons | Role/Actors | Description |
| 1 | Billy Bob | CEO | Client/Stakeholder |
| 3 | Manufacturing VP | Vice President | Stake Holder |
| 4 | Human Resource VP | Vice President | Stake Holder |
| 5 | Finance VP | Vice President | Stake Holder |
| 6 | Facilities VP | Vice President | Stake Holder |
| 7 | Marketing VP | Vice President | Stake Holder |
| 8 | IT VP | Vice President | Stake Holder |
| 9 | Tracker’s customers | Customer | Stake Holders |
| 10 | Medical Imaging’s customer | Customer | Stake Holders |

# 6. AS-IS Principles and AS-IS Decision Making Process Flow (AAP)

The below table shows the AS-IS principles followed in OHT under their various business.

|  |  |  |
| --- | --- | --- |
| ID. NO | AS-IS Principles | Business |
| 1 | Continued expansion of OHT | TrackR |
| 2 | Increase in sales quantity | TrackR |
| 3 | Fast Track development of TrackR | TrackR |
| 4 | Ensuring quality of build | Medical Imaging Machinery |
| 5 | Fine attention to detail during the build | Medical Imaging Machinery |
| 6 | No regular meetings with VPs | TrackR |

Figure 1: The following is a process flow diagram that depicts the AS-IS decision-making process in OHT:

Diagram

Description automatically generated

# 7. TO-BE persons, roles, actors, and interactions of Executive decision-making operations (JK)

|  |  |  |  |
| --- | --- | --- | --- |
| ID.No. | Involved Persons | Role/Actors | Description |
| 1 | Billy Bob | CEO | Client/ Stakeholder |
| 2 | Manufacturing VP | Vice President | Client/ Stakeholder |
| 3 | Human Resource VP | Vice President | Client / Stakeholder |
| 4 | Finance VP | Vice President | Client / Stakeholder |
| 5 | Facilities VP | Vice President | Client / Stakeholder |
| 6 | Marketing VP | Vice President | Client / Stakeholder |
| 7 | IT VP | Vice President | Client / Stakeholder |
| 8 | Medical- Imaging ‘s customer | Customer | Stakeholders |
| 9 | Tracker Customer | Customer | Stakeholder |
| 10 | BA | Developer | Stakeholder |
| 11 | BA | Consultant | Stakeholder |
| 12 | BA | Analyst | Stakeholder |

## 7.1 TO-BE PROCESS FLOW

Figure 2: The following is a process flow diagram that depicts the TO-BE decision-making process of OHT:

**TO-BE Decision Making Process**

**2022/02/07**

**Version 1.1**

**Team G**



# 8. Use-Case Diagram (CK)

Figure 3: The below picture depicts the system interaction and behavior in the organization through a use-case diagram.

Diagram

Description automatically generated

# 9. Cockburn’s Use Case (CK)

The table below depicts the goal, preconditions, primary actors, supporting actors in the system, and system design in the Cockburn's use case.

|  |  |  |
| --- | --- | --- |
| USE CASE # | AS IS OHT System | |
| Goal in Context | VPs to analyze reports for better understanding of the data. | |
| Scope & Level | The distribution of monthly reports to all the VPs is for them to better understand the KPIs for better decision making. | |
| Preconditions | All the VP's and CEO should be on board with expressing the suggestions for report circulation. | |
| Success End Condition | Identify the problem establish a solution to improve the sales and revenue of the company. | |
| Failed End Condition | When there is no action taken to improve the user experience and sale the company is bound to go bankrupt. | |
| Primary,  Secondary Actors | Secondary Actors: Billy Bob, Manufacturing VP, Human Resource VP, Finance VP, Facilities VP, Marketing VP, IT VP  Primary Actors: Finance Department | |
| Trigger | Finance dept generating monthly report | |
| DESCRIPTION | Step | Action |
|  | 1. | Logging In |
|  | 2. | Generating monthly report |
| EXTENSIONS | Step | Branching Action |
|  | 1 | <<include>>: Verify Credentials |
|  | 2 | <<Extend>>: Report Usage |
|  | 3 | <<Extend>>: Methods of Report Circulation |
|  | 4 | <<Extend>>: Understanding Dashboard |
|  | 5. | <<Extend>>: Suggestion for new methods |

# 10. Assumptions (MR)

## 10.1 Assumptions for project:

* All the funding and resources needed for the project are available.
* All the technology devices needed for creating the dashboard are accessible by the team.
* The standard quality of the project will not be compensated.
* According to all the client's business needs, the project will be completed before the deadline.
* The project working environment will be positive and understanding.

## 10.2 Assumption for training :

* All the VPs agreed to our training plan
* All the VPs are available for the training.
* Management has approved two weeks for the training.

# 11. Difference between Strategic Vs analytical Dashboard (MR)

## 11.1 Strategic dashboard

A strategic dashboard monitors companies' long-term financial goals while keeping critical success factors that may impact the business. They track performance metrics against time and other metrics for strategic goals. They are live. They keep on updating based on the live data. They are always associated with the long-term goal of the company. These dashboards are very helpful for executives to make decisions. They give live feedback on what is currently going on in the company.

## 11.2 Analytical dashboard

The analytical dashboard contains a large set of data in them. They are much more complex, and they are essential to the executive. They are based on historical data. Most of the time, the analytical team performs the calculation on the data and shows the data in the dashboard. This dashboard identifies patterns in the market and presents them to the executive to plan strategy.

## 11.3 Difference between the strategic dashboard and analytical dashboard (MR)

The below table depicts the difference between strategic and analytical dashboard.

|  |  |
| --- | --- |
| Strategic Dashboard | Analytical Dashboard |
| The strategic dashboard is based upon the live data. | The analytical dashboard is based on historical data. |
| A strategic dashboard gives a high-level picture to denote the companies' current picture. | Analytical dashboards perform analysis on the past data and give future projections. |
| These dashboards contain key success metrics for future projections. | This dashboard contains the analytical figures, patterns, and trends identified in the analysis. |
| These dashboards are associated with the long-term strategy of the company. | These dashboards are associated with short-term trends and patterns to navigate the company to long-term goals. |

# 12. Entity Relationship Diagram (MR)

Figure 4: The below diagram shows the relationship between each table and its attributes in the TrackR database.

Diagram

Description automatically generated

# 13. TrackR DataGen Metric Data Sources (PN)

The below table explains the data sources for each metric that has been used for creating the Executive dashboard.

|  |  |  |
| --- | --- | --- |
| ID No. | Metric | Data Sources\_Tables |
| 1 | YoY% Revenue | Daily Summary of Invoices |
| 2 | Monthly Sales Revenue | Daily Summary of Invoices |
| 3 | Return quantity by category | Product Return |
| 4 | Gross profit Margin % | Daily Summary of Invoices |
| 5 | Competitor Yearly Sales | Competitor sales of competitor |
| 6 | CSAT % | Customer feedback and Dummy data with positive response |

Data overview for all metrics are as follows:

1. **YoY% Revenue**: It uses data summary of invoices table from TrackrDataGen. Metric displayed in dashboard consists of the year from inventory date column and Revenue from SumofInvoiceItemsamount column.

2. **Monthly Sales Revenue**: It uses data summary of invoices table from TrackrDataGen. Metric displayed in dashboard consists of the month from inventory date column and Revenue from SumofInvoiceItemsamount column. Metric is displayed for months for the year selected using a slicer.

3. **Return quantity by category**: It uses a product return table from TrackrDataGen. Metric displayed in dashboard consists of product category from product code column and Quantity column.

4. **GrossProfitMargin**: It uses data summary of invoices table from TrackrDataGen. Metric displayed in dashboard consists of Gross profit margin calculated using tables SumofInvoiceItemsamount column, SumofInvoiceCostOfProduction and SumOfShipping and month taken from InvDate column.

5. **Competitor Sales**: It uses Competitor sales of the competitor table from TrackrDataGen. Metric displayed in dashboard consists of Competitor from Competitor code column and data from quantity sold column.

6. **CSAT%:** Customer satisfaction % uses customer feedback table from TrackrDataGen and dummy data with few rows of positive responses. Metric displayed in the dashboard consists of feedback response from feedback code column and category from product code column.

# 14. List, References, and General Details of Suggested Metrics(PN)

Below is the list of suggested metrics:

1. YoY% Revenue Growth
2. Monthly Sales Revenue
3. Return quantity by category
4. Gross Profit Margin %
5. Competitor Sales
6. CSAT %

References for these metrics can be taken from TrackR DataGenarator tables.

General Details:

1. **Year-over-Year Revenue**: This metric will help measure revenue for the company on a yearly basis and help the company gauge its sales.
2. **Monthly Sales Revenue**: This metric will give a detailed version of sales revenue on a monthly basis. The company can make a decision on its net income using these values.
3. **Return quantity by category**: This metric will help the company understand the most number of products returned by the customer category-wise.
4. **Gross Profit Margin %:** This metric will help the company to understand how much profit it has made after deducting general expenses.
5. **Competitor Sales**: This metric will show sales distribution with respect to competitors and give market shares with regard to sales.
6. **CSAT %:** This metric will determine the customer satisfaction percentage out of the total feedback given for the products.

It will be calculated as CSAT % = (Number of positive responses / Total number of responses) \* 100

# 15. Executive Dashboard Metric Format 1 (MR)

## 15.1. Metric:

YoY% revenue(Year on Year Revenue ) = (Revenue - Previous year revenue)/Previous year \* 100

## 15.2. Interpretation(definition):

Year over Year revenue is a widely used financial term to understand the company's change in revenue compared to the previous year. To get the year-over-year revenue company needs the current year's revenue and subtract it from the previous year's revenue, divide it into the previous year's revenue and multiply it by 100.

## 15.3. Purpose of the metric:

The purpose of the metric is to show the percentage growth difference/change in the revenue from the previous year to show whether they increased the sales and if they are other factors that we need to be considered to increase the profit and where they can improve the yield.

## 15.4. Value added to decision-makers:

This metric will allow decision-makers to compare the revenue to the previous year, and they will be able to get the difference between the two. They can pivot their decisions by examining the factors responsible for the change. This metric will trigger their thought to have a general idea of whether they are right or wrong.

## 15.5. Tables used for the data and their relationship

The table that we use for our data is the daily sales report. In the table from the sumofdailysales, we will divide it by years and subtract two different consecutive years and then divide by the previous year and multiply by 100.

(Year(Sumofdailysales) – year(Sumofdailysales))\*100

## 15.6. Graph type to display the metric.

The graph type that will be used for the metric is a bar chart

# 16. Executive Dashboard Metric Format 2 (CK)

## 16.1 Metric Name:

CSAT (%) by region CSAT = (Number of positive responses / Total number of responses) \* 100

## 16.2 Interpretation:

The CSAT will help quantify customer satisfaction. CSAT is calculated by dividing the positive feedback by the total feedback responses multiplied by 100 to quantify it in percentage. We take the data from the Customer Feedback table in the TrackR DataGen application's database.

## 16.3 Purpose of the Metric:

This metric is identified to quantify the positive feedback ratio to the total customer response to analyze customer satisfaction data. The goal is to collect the feedback and analyze the problem to strategize efficient ways to overcome the problem to ensure the customer that the company is listening.

## 16.4. Value added to decision-makers:

This KPI will help identify the loopholes in customer satisfaction and provide us with abundant data to analyze and identify different ways to impress the target audience. Customer satisfaction is crucial from the company's standpoint to not lose any more customers. Analyzing the feedback consistently and taking the necessary action to ensure customer satisfaction will yield the product's reputation and increase customer loyalty. Focusing on the same will gain healthy and consistent sales; the higher the CSAT number, the greater customer satisfaction.

## 16.5. Tables used for the data and their relationship:

Figure 4: Customer Feedback Table

****

## 16.6. Graph type to display the metric.

The feedback table and the dummy data would be efficient to display CSAT.

# 17. Executive Dashboard Metric Format 3 (CM)

## 17.1. Metric Name

Monthly Sales Revenue

## 17.2. Interpretation:

The monthly sales revenue determines the earnings acquired by the sales department within that month. The target achieved by the sales team to contribute to the revenue and the product's sales which the organization had for the financial year is also considered in the monthly sales dashboard.

## 17.3. Purpose of the Metric:

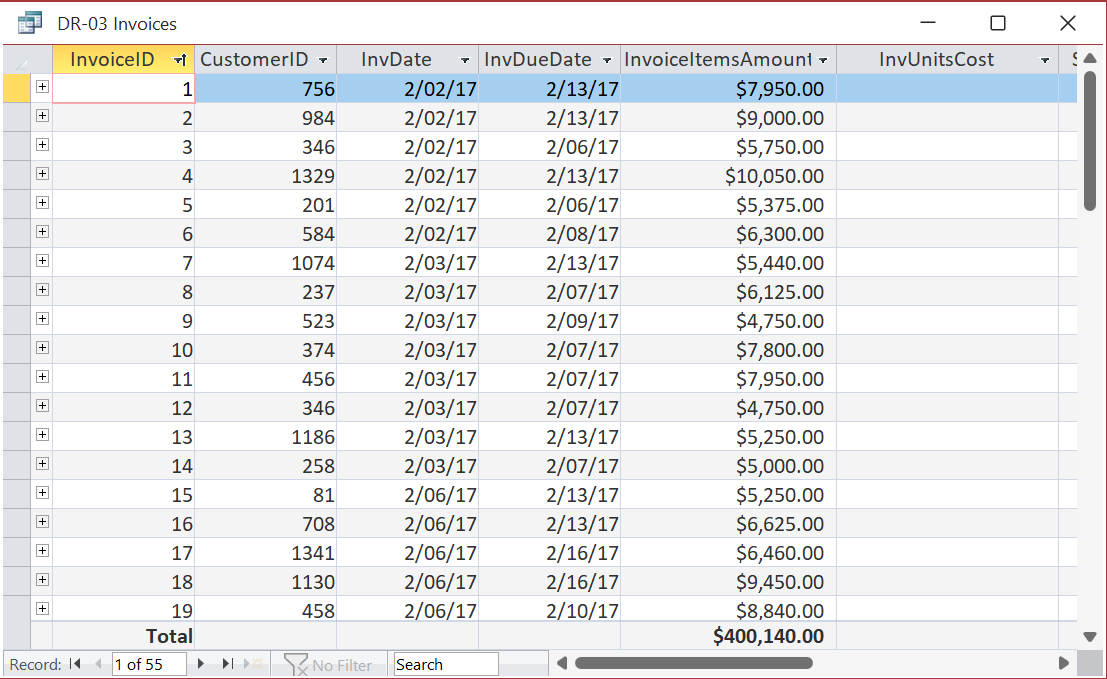
The metric is created to analyze the performance of the sales department, which contributes to the organization's growth. The gross revenue attained through various sales strategies to reach the products to the market to contribute to the organization's profit has been evaluated through these metrics. The profit assessment of various products contributes to the sales revenue report.

## 17.4. Value added to decision-makers:

The organization helps to analyze the sales information from the dashboard to improve its sales and marketing strategies. If the sales revenue report presents a consistency in the graph or if the sales department could present a good revenue to the company, the management can conclude that the organization is on a profitable run. Whereas, if the graph is inconsistent and presents a poor performance revenue, it could conclude that there needs to have more improvising measurements to be taken to increase the sales rate of the product to achieve the target or gain a profit margin for the products.

## 17.5. Tables used for the data and their relationship:

Figure 5: Invoice table



## 17.6. Graph type to display the metric:

Barchart with month-wise split up of sales report and revenue details along with year splitup slicer is used to display the metric.

# 18. Executive Dashboard Metric 4 (AAP)

## 18.1 Metric:

One of the metrics suggested to be added to the dashboard is the Product Returns by Category metric.

## 18.2. Interpretation(definition):

Product Returns include information about the product that the customers have returned for a reason. The product return details are gathered in a " Returns " database table. The specific database table includes information on the date of product return, product code, quantity, country, and information related to feedback.

## 18.3. Purpose of the metric:

We can identify which product type is returned, how much quantity of the product is returned, and the reason for the return. If there is a fault in a particular product type, the related management can immediately inspect and take measures to correct the problem. This metric notifies the management of product returns in a specific area. Hence the metric could give the management the wake-up call when the returns spike up. So, the management can fix the problem at the earliest and relaunch their product.

## 18.4.Value added to decision-makers

The organization can analyze the product returns information from the dashboard and take measures accordingly. If the product returns are less, the item is doing well in the market, and if returns are spiking, decisions can be made to take serious measures immediately. Such decisions will prevent the company from going into loss. Eventually, the business team can learn more about the customer's problems and preferences.

## 18.5. Tables used for the data and their relationship

The tables that are going to be used to data are,

Figure 6: Product Returns Table

Table

Description automatically generated

## 18.6. Graph type to display the metric.

Piechart is considered to display the product return metric.

# 19. Executive Dashboard Metric 5 (PN)

## 19.1. Metric 5:

Gross Profit Margin %

## 19.2. Interpretation(definition):

Gross profit margin is the difference between sales revenue and the cost of goods sold. It is calculated by subtracting revenue from the cost of goods sold and dividing it by sales revenue. To get the percentage, we need to multiply it by 100

## 19.3. Purpose of the metric:

It is a yardstick used to indicate how efficiently the company is doing business from their products or services as it shows the profit from sales revenue.

## 19.4. Value added to decision-makers:

The gross profit margin metric will help the executive assess the company’s financial health by calculating money left after subtracting the expenses of the goods. If gross profit margin fluctuates, it shows poor management or selling inconsistent products with inferior quality, and customer satisfaction in the market is very low. It also shows expenses for the cost of goods sold are changing too often.

## 19.5.Tables used for the data and their relationship:

Daily Summary of invoices Table

Gross Profit margin = (SumofInvoiceItemsAmount – [SumofInvoiceCostofProduction + SumofShippingCharge])

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SumofInvoiceItemsAmount

### Figure 7: Daily Summary of invoices Table

Table

Description automatically generated

## 19.6. Graph type to display the metric.

Line chart graph showing yearly line graph of gross profit margin % for all months in a year.

# 20. Executive Dashboard Metric 6 (JK)

## 20.1. Metric:

Competitors Yearly sales

## 20.2. Interpretation(definition)

Competitors Yearly sales is a metric used to understand the competitors' sales strategy every year, which helps open up new opportunities for their own business. It is also called competitive sales analysis. The information you uncover can be used to design your own sales strategy and select the appropriate business tool which will help to distinguish the sales strategy from that of the competition.

The main steps for doing a competitive yearly analysis are:

1. Identification of the competitors
2. Analyze your competitors
   * Business background
   * Location and facilities
   * Products and their quality
   * Pricing
   * Marketing (Brand, advertising, social media, email, offline)
3. Segment your competition
4. Determine your business opportunities

## 20.3. Purpose of the metric

With the help of competitors' yearly analysis, the company will be able to understand the competitors' sales strategy, which will help them understand their strengths and weaknesses to build a stronger strategy compared to theirs.

## 20.4. Value-added to decision-makers

Competitors Yearly Sales will help the company to make a comparison of their sales and to find the gap in the market. Moreover, it will tell the company how it can outdo its competitors and keep the customer's attention.

## 20.5. Tables used for the data and their relationship

The table used to calculate the Competitors Yearly sales is Competitor Sales by Competitor.

## 20.6. Graph type to display the metric

The BAR graph will be the appropriate graph to vividly show the comparison of yearly sales as it's the best graph to depict the measure of change over a specific time.

# 21. Executive Dashboard Operation Process - 3+ Risks and Possible Mitigations (JK)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID. No | Risk | Risk Occurrence | Risk Impact | Risk Description | Risk Mitigation |
| 1. | Lack of Knowledge | Moderate | High | The company and its executive members may not have detailed knowledge of the working of the dashboards and the benefits they can provide to the organization. | With the introduction of the executive dashboard, the executive members should be given the proper training of the working and the use of the dashboard to bring the maximum benefit to the company. |
| 2. | Over-reliance on Historical data | High | Moderate | Usage of historical data  Or traditional dashboard to track KPI's can lead to the missing of the data | Real-time data should be used while dealing with the executive dashboard. |
| 3. | Fragmented data | Moderate | High | If data used in the dashboard is fragmented, it may lead to the failure of the dashboard | Data entered in the dashboard should be appropriate and accurate, which helps in creating proper visuals. |
| 4. | Lack of correlation | Moderate | High | Lack of correlation can lead to delay and missing information which may lead to damage to the organization | Data can be correlated when considered across multiple metrics, even if there is no apparent connection. |

# 22. Data Listing of 6 OHT VPs Monthly Finance Reports Used (JK)

The below table shows the data listing of monthly finance reports used by 6 OHT VP’s

|  |  |  |
| --- | --- | --- |
| ID. NO | OHT VPs | DATA LISTING OF FINANCE REPORTS USED |
| 1. | MARKETING VP | Incomes |
| Costs |
| Staffing |
| 2. | IT VP | Expenses |
| Asset |
| Values |
| Payrates |
| 3. | FINANCE VP | Incomes |
| Costs |
| Staffing |
| Expenses |
| Asset |
| Values |
| Payrates |
| Raw material quantities |
| Inventory levels |
| Expenses |
| 4. | HUMAN RESOURCES VP | Pay rates |
| Expenses |
| 5. | MANUFACTURING VP | Expenses |
| Incomes |
| Raw material quantities |
| Inventory levels |
| Staffing data |
| 6. | FACILITIES VP | Costs |

# 23. List of Deliverables and their reference documents

The below table shows the list of deliverable and their document list for reference.

|  |  |  |
| --- | --- | --- |
| **ID. No.** | **Deliverables** | **Reference Documents** |
| 1 | Interview and/or survey of 6 OHT CPs | Please refer documents with filenames - Team G Interview Questions 220105 1545 Answered 220206 1945, Team G Phase 1 RFI Answers 220126 |
| 2 | Data Listing of 6 OHT VPs Measurements of Business Success |
| 3 | Data Listing of 6 OHT VPs attitudes toward change, and cooperation in management |
| 4 | Data Listing of 6 OHT VPs visions for a better managed OHT |
| 5 | Data Listing of 6 OHT VPs Response to Meeting 3 times per week |
| 6 | Interview and/or survey of 6 OHT VPs |
| 7 | Listing of 6 OHT VPs Knowledge of Computer Based methods of Report Circulation |
| 8 | Listing of 6 OHT VPs Computer Skills, Dashboard Tech Understanding |
| 9 | Listing of 6 OHT VPs Preferred learning style |
| 10 | Listing of 6 OHT VPs Preferred ways to implement new concepts |

# 24. Training plan for the VPs (MR)

We are planning to implement the training program in the 6 phases; in these phases, we will try to understand them and educate them about the dashboard and the new decision-making environment. All the six phases are listed down here:

1. **Gather training VPs needs**

We will meet all the VPs in person for a brief meeting to get the general idea of what part of the executive dashboard they needed the most training as well as we will also gauge the familiarity with the dashboard.

1. **Understand the needs**

Based on the response from the VPs, we will keep some specific focus points for each VPs. We will create a training plan for them.

1. **Provide them material**

In this, we will give them all the resources that we have prepared for the VPs. We will provide them training videos to explain the dashboard and how to use it. We will also give them all the written content for the dashboard.]

1. **Training**

We are planning to give them three days of training on the dashboard. We are trying to provide them with hands-on experience on the dashboard. We will also observe what part of the dashboard is more helpful and where they are having trouble. There will be constant guidance provided for each VPs.

1. **Monitor progress**

In the monitoring phase, We will be back seats and give them all the control on their own. We will monitor their progress and observe their questions and how they use the dashboard. In this phase, we will work on the feedback.

1. **Give feedback**

We will give them the feedback we observe during the training in the last phase. We will provide coaching for efficient dashboard usage. We complete the training session.

# 25. VP's Written Briefing on ERP. TPS and Query tools, with SWOT (JK)

## 25.1. ERP

ERP stands for Enterprise Resource Planning. It is software used for integrating and managing the crucial parts of the business by the companies. It can be used by the companies to manage their daily tasks such as manufacturing, finance, etc., or can be used to simplify individual activities like customer relationship management, risk management, etc. Moreover, ERP software applications are important as they help implement resource planning by integrating all the processes needed to run in the company within a single system. ERP will also help all the departments in the company to interact with each other and share information more easily. It will make the company even more self-aware by linking information about the production, finance, distribution, and human resources together, thereby reducing incompatible technology and costly duplicates.

**Benefits of using ERP**

* Communication between business departments
* Acts as a single source of information
* Accuracy and improvement in operations
* Real-time data reporting helps companies plan, forecast, and make an appropriate budget.
* Eliminates redundancies and increases productivity

**SWOT Analysis**

STRENGTHS

1. Helps to make regular decisions in routine
2. Estimate the cost and budget of the company's operation
3. Easy communication between the various departments
4. Able to achieve accuracy in the operations
5. Increase productivity with the help of analyses of various factors like production, distribution, cost, human resources.

WEAKNESS

1. It should be compatible with other systems
2. Employees should have significant training for the working of ERP process
3. Security of the ERP system
4. ERP is expensive to purchase
5. Poor skills of employees in the operation of the system
6. The company's dependencies on external consultants
7. Poor coordination with other members of the department.

OPPORTUNITIES

1. Development in Artificial Intelligence will help them better predict customer demand and make good recommendations.
2. In the emerging global market, the retail sector will boom.
3. Increase in the demand.
4. Social media promotion can help the company enter the international market.

THREATS

1. Opposition to the movement of goods and globalization.
2. Security of the company regarding the share of data over the network
3. Serious competition faced by the company from domestic and worldwide competitors and rapidly changing trends to expand their business and consumer preferences.

## 25.2. TPS

The Transaction Process System (TPS) is an information processing system used for managing data transactions within or outside the organization. The data transaction involves activities like collection, modification, and retrieving of data. It can also be restored if lost accidentally. TPS is also known as real-time processing because of its performance, reliability, and consistency.

**SWOT Analysis**

STRENGTHS

1. It helps to achieve a high level of customer satisfaction.
2. The company has a strong cash flow which results in a good amount of resources in their hands to expand into new projects.
3. It helps to make stronger connections with the community, which helps them invest in the company's sales.

WEAKNESS

1. TPS is not so good at product demand forecasting, leading to a higher rate of missed opportunities.
2. Financial planning is not done properly and efficiently.

OPPORTUNITIES

1. It has a low inflation rate which brings more stability to the market.
2. It also provides a great opportunity for the organization to build new product categories.

THREATS

1. Intense competition
2. Security of the company regarding the share of data over the network
3. Failure in the system

## 25.3. Query tools- Power BI

Power BI is a business analytical tool provided by Microsoft which is used to visualize the data in the form of various graphs and charts and share the insights. Also, it converts data into different sources to build interactive dashboards and business intelligence reports.

**SWOT Analysis**

STRENGTHS

1. Power BI is capable of connecting with multiple data sources and ERP systems.
2. It is secure.
3. Power BI has Artificial Intelligence capabilities.
4. It is capable of sharing the data.

WEAKNESS

1. Editing data is a bit difficult.
2. Every time the data is refreshed, which leads to the regeneration of visualization.
3. It is complex.
4. It is not capable of handling large databases properly.
5. Power BI is not capable of merging the imported data which is accessed from real-time connections.

OPPORTUNITIES

1. Power BI brings together data governance and security for the company.
2. The company will be flexible to publish reports across the Enterprise without requiring the recipients to be licensed individually.
3. Allows a company to collaborate easily.

THREATS

1. Low-level security
2. Shorter product roadmap
3. Data culture may be affected as it often requires changes in the status quo

# 26. Written Briefing on Data Lakes (AAP)

## 26.1. What is Data Lake?

Data Lake is central storage that allows the user to store structured and unstructured data. With the unstructured data, the user can run analytics from dashboards and visualize data processing, machine learning, and real-time analytics to aid better decision-making in an organization.

## 26.2. SWOT Analysis of Data Lake

1. **Strength:**

The organization that uses Data Lake shall do new types of analytics such as machine learning over the sources, which includes social media, data retrieved from click-streams, log files and internet-connected devices stored in the specific data lake. These organizations performed well compared to their competitors and boosted their revenue.

1. **Weakness:**

The raw data stored has no control over the content is a significant challenge in a data lake. In order to make the data usable in a data lake, the data stored must be secured and have a specified process to catalog. Without these mentioned components, it will be hard to find data or result in a data swamp. Data Lake lacks semantic regularity, control access, and governance.

1. **Opportunities:**

As the organization uses the data lakes, they can grow their business faster by attracting a vast customer base, retaining their customers, enhancing productivity, and making better decisions for their future business performance.

1. **Threat:**

As the data grows quicker day by day, the data lakes are getting bigger, but the computing power is not increasing at the same rate. Due to this problem, the organization will have to spend more on computing power to manage the data lake. Also, data lakes need to be set up and handled by professional expertise like data scientists and data engineers, and these skills are now in shortage.

# 27. Written Briefing on Data Marts (AAP)

## 27.1. What is Data Mart?

A data mart is like a subset of a data warehouse, and it is focused on a single topic or a particular business line, for example, sales, marketing, and finance. With the focused subject, data mart retrieves data from few sources, unlike data warehouse. The sources of data mart may include external data, a centralized data warehouse, and internal functioning systems.

## 27.2. SWOT Analysis of Data Mart

1. **Strength:**

A significant advantage of a data mart is that it allows quicker insights into the data analytics at a department level leading to more rapid decision-making in an organization. Also, as the data mart is centralized, it helps various departments use the same data to make decisions and take necessary action. In this case, the data, along with the predictions, are trustworthy.

1. **Weakness:**

The excessive number of data marts will lead to complexities and inefficiency. In addition, the data mart can only store the data related to a particular function which means that it does not hold an immense amount of data from different departments like the data warehouse.

1. **Opportunities:**

A specific team in business and the user can access any data subset rapidly and combine it with other data retrieved from different sources. After a successful connection to the required source of data is established, the live data from the data mart can be obtained at any time. As a result of this, the organization can improve productivity.

1. **Threats:**

The businesses will be unable to retrieve organization-wide data analysis from data mart as their data set is limited, which creates difficulty in decision making at some level. They are less expensive, unlike data warehouses, but they add up to the overall cost of the data warehouse in an organization.

# 28. Written Briefing on Data Warehouses (AAP)

## 28.1. What is Data Warehouse?

A data warehouse is a form of a data management system that will support and facilitate business intelligence activities such as analytics. The data warehouses usually contain a massive amount of historical data, and they perform queries and data analyses on data. The data is often retrieved from various sources in a data warehouse, such as transaction applications and log files of applications.

## 28.2. SWOT Analysis of Data Warehouse

1. **Strength:**

Data warehouses are subject-oriented as they are able to analyze the data about a particular topic or a functional area like sales. A well-modeled data warehouse executes queries quickly, will deliver high volume data and provides better flexibility to the user to increase and reduce the amount of data for a closer inspection to satisfy demands.

1. **Weakness:**

When the data is integrated through a data warehouse from different sources, there are chances for data inconsistency, redundancy, data omissions, and logical conflicts. These mentioned issues will lower the quality of data.

1. **Opportunities:**

A data warehouse usually centralizes and integrates a massive quantity of data from various sources. It possesses analytical abilities that enable businesses to retrieve valuable insights from the data to enhance their decision-making. Later, the data warehouse develops historical data invaluable to engineers. Due to these capabilities, organizations consider data warehouses a single resource of fact.

1. **Threats:**

Organizations face a hard time resolving issues like data inconsistency, repetitions, duplications, omissions, and conflict due to the inadequate knowledge of corporate users beyond their own system's reach.

# 29. Suggested plan vision to implement an Executive Dashboard with 5, at minimum, metrics (MR)

## 29.1. Assumption :

* 1. All the support to implement the dashboard is provided.
  2. VPs have agreed on the terms and conditions of this new implementation plan.
  3. Proper allocation of the resources is done.
  4. There is no restriction on time available.

## 29.2. Planning :

1. We are planning to implement this dashboard in a couple of phases.
2. We are planning to implement the dashboard over the weekends so that It does not clash with the work of other VPs. We are training VPs for the dashboard in the initial phase, which will go on for 2 weeks. Till this time, VPs will work with the paper base report.
3. As soon as the dashboard is implemented, we will monitor it 3 weeks to identify errors and improvements. We will work on the improvements and update the dashboard.
4. Lastly, after 3 weeks, our implementation phase will be done with the expectation of good results.

# 30. Suggested plan deliverables to implement an Executive Dashboard(AAP)

The deliverables required for the successful implementation of the Executive Dashboard are mentioned in this section.

1. Probable Risks and Benefits of the Suggestions in this Project.
2. Report and presentation on the five suggestive metrics.
3. Report and presentation on business data, Knowledge management, and SWOT analysis.
4. Report and presentation on comparison of Executive and Analytical Dashboards.
5. Report and presentation on fully operation executive dashboard.
6. Report and presentation on content and structure of the Executive Dashboard.
7. Report and presentation on the As-Is and To-Be states of executive decision making.
8. Report and presentation on content and structure of the data sources in the TrackR Data Generation engine through database relationship diagram displaying the tables involved for the dashboard creation.
9. Report and presentation on the specification on the user interface using wireframes, mockups, and texts.

# 31. Suggested plan actions to implement an Executive Dashboard with 5, at minimum, metrics (JK)

Implementation of the dashboard requires a well-disciplined approach to achieve tangible results. Some of the actions that can be taken to implement the executive dashboard are as follows:

## 31.1. Prepare for the business change

Before directly developing random metrics and key performance indicators (KPI), all the team members should sit down with the team and develop the overall team and project strategy. Implementation should start with the active participation of all the team members and the CEO. Having the CEO the authority to act as the project champion will drastically improve the project's success rate as sometimes some hard decisions will also be required to make in order to stay in line.

## 31.2. Establish the right metrics

Once the ground rules are set, the next step is to identify the right number and metrics to track the organization's progress towards its set up goal. Metrics can range from high-level goals like profit margin customer satisfaction to low-level goals such as client indicators. It is very crucial to measure the right factors for the established goal.

## 31.3. Get buy-in at all levels

Implementing an effective dashboard will require a significant change in the way managers view their job. A newly implemented system will change the existing reports and decision-making practices. All involved users will be fully on board with the new approach in order to make the system successful. An effective way of getting buy-in from users is to provide them with the needed training on the dashboarding concept and involve them in reviewing the metrics and providing feedback on user interface and reporting formats.

## 31.4. Use a simple development tool

IT should be able to use the technologies to build business dashboards in a rather quick manner. Selecting a toolset that will allow users a great deal of flexibility, such as changing their dashboard formats based on their individual habits and tastes, is critical. The right toolset will allow for the integration of corporate data from various sources, ranging from databases to spreadsheets.

## 31.5. Be prepared for surprises

Dashboard development projects may result in discoveries about your existing data and assumptions that have been in place without much notice for a long time. The dashboard based on inaccurate or inconsistent data will not result in many decision-making improvements. So, we should always be prepared to face new challenges.

## 31.6. Look at it as a journey

A successful executive dashboard project will get deeper and broader over time. As the system starts being used on an ongoing basis, its functionalities will need to become available to lower-level users in the organization. Also, as the initial rollouts prove successful, many other departments and functions within the business will jump on it, resulting in a wider adoption throughout the organization. It is best to set these expectations from the start rather promise that all managers from all functions at various levels will use the system out of the gate. Organization-wide utilization of dashboard technologies evolves over-time, and its value increases exponentially as more managers are added to the organization.

# 32. Suggested plan resources to implement an Executive Dashboard with 5, at minimum, metrics (JK)

The below table depicts the resource plan to implement the Executive Dashboard

|  |  |  |
| --- | --- | --- |
| ID No: | Types of Resources | Name of Resources |
| 1 | Human resources | Business Developer |
| Business Consultant |
| Business Analyst |
| 2 | Physical resources | YoY Revenue metric |
| Return quantity by category metric |
| Monthly Sales metric |
| Net profit metric |
| Agile development document |
| Training Videos |
| Surveys |
| Tracker Data Generator |
| Videos, text, and graphics for guidance on using the dashboard |

# 33. Suggested plan background to implement an Executive Dashboard with 5, at minimum, metrics (PN)

Oury Health Tech Ltd (OHT), a business-to-business organization, started its business in January 1998, selling medical equipment to the local medical clinic. The CEO of the company is Billy Bob. The organization has 6 Executives in 6 various departments. OHT managed to be the market leader in January 2016. OHT mainly focuses on quality and meticulously builds the product; hence was recognized for its reliability.

Being successful in business, OHT wanted to enhance its business and developed TrackR. TrackR is a wearable fitness monitor with an application for home consumers. The newly launched product gained more public attention and also social media attention. Due to some issues, customers started returning TrackR products, and the company started losing its market share. Eventually, the company announced the potential bankruptcy in the upcoming two years. So, the organization planned to hire Business Analysts to help with better decision-making and come up with metrics and executive dashboard that will help the company make strategic and informed business decisions.

List of current business challenges of OHT.

The following table lists the present challenges faced by OHT.

|  |  |  |
| --- | --- | --- |
| **ID.No** | **Current Business Challenges** | **Description** |
| 1 | Lack of proper metrics | The organization does not use appropriate metrics to make effective decision making |
| 2 | No regular meetings with VPs | The CEO does not meet with the VPs regularly; hence he will be unaware of the situation under each department. |
| 3 | Lack of awareness | The company is unaware of the computer skills and knowledge and the learning styles of 6 VPS |
| 4 | Minimal technical knowledge | The management possess minimal knowledge about business data and management technologies |
| 5 | No effective dashboard | Currently, there is no effective dashboard in place to make a vital |

# 34. General configuration of Executive Dashboard using PowerBI (PN)

1. Executive Dashboard is prepared for VP Executive to make an informed business decision and will be visible to all six VP's

2. Importing data from TrackR dataGen need to transform the data and clean it using power query and load data into the PowerBI tool.

3. After the ETL process Data visualization dashboard needs to be created

4. Executive Dashboard will have the main header: OHT Executive Dashboard with blue background and violet font colour.

It will have 6 metrics graphs and below are the graph templates used:

1. **YoY%early Revenue**: Bar Chart with blue color and title with font 14 Arial black.

2. **Monthly Sales Revenue**: Monthly bar chart with a violet color and title with font 14 Arial black.

3. **Return quantity by category**: Pie chart showing return quantity share in percentage as per product category with 3 different colors blue, violet, and maroon and title with font 14 Arial black.

4. **GrossProfitMargin%**: Line chart with different years in the color blue, violet, purple, pink, orange line spread across months showing gross profit margin % and title with font 14 Arial black.

5. **Competitor Sales**: Donut Chart representing competitor sales share in different colors and titles with font 14 Arial black.

6. **CSAT %**: Tables representing positive feedback % for all product categories.

# 35. Executive Dashboard Style Guide for Navigation Principles, Colours, Fonts (PN)

Heading Title: OHT Executive Dashboard

Font: 20, Arial Black

Colour: Violet

Graph Title

Font: 14, Arial Black

Colour: Black

# 36. Executive Dashboard Navigation Guide using Text, Wireframes and Mockups for Moving forward, Moving backward, Changing Timeframes (PN)

Navigation guide for moving forward, backward and changing time frames: Please refer video W22\_INFO8440\_TeamG\_ExecutiveDashboardGuidanceVideo

# 37. Guidance on Using the Dashboard - Video or Text+Graphics (PN)

Please refer the video : W22\_INFO8440\_TeamG\_ExecutiveDashboardGuidanceVideo

# 38. RACI+, Documentation, Backup Sheets (PN)

Please refer the W22\_INFO8440\_TeamG\_Project1\_RACIMatrix\_GanttChart

# 39. Executive DashBoard Creation (PN)

Please refer the W22\_INFO8440\_TeamG\_Executive Dashboard.pbix

# 40. Gap Analysis (CM)

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Current State | Target State | Required Action |
| Management | Lack skills and knowledge employees in the management team | The management team is trained in the latest technologies and dashboard query tools. | The executives are trained in the latest technologies like Data Lakes, Data Mart, Data Warehouses, etc. |
| Finance | The finance department prepares paper-based reports, and OHT management makes a decision on it | Finance reports are generated through the dashboard, and the OHT management makes collaborative decisions based on the dashboard reports. | Develop and implement the dashboard technology. |
| Sales | There is no rapid growth in manufacturing and sales to enhance the development of the company | The sales team can improve their sales rate to deliver the maximum production lined-up for the market. | The team identified the executive dashboard and draws live data from the TrackR application to analyze the sales growth. |
| Decision-Making | CEO meets each executive VP individually to discuss the relevant business issues | CEO decides to meet all the executives at least 3 times per week to discuss the issues and improve the business strategies of OHT. | The detailed plan to implement the dashboard for 5 metrics, at minimum, to be used by the executives during regular meetings. |
| Product | Receives frequent complaints from the customers and the products are returned. | Deliver customer satisfied products with better performance. | Using the CSAT% metric from the executive dashboard, the OHT team will understand the customer feedback and make informed decisions. |

# 41. SWOT Analysis of Dashboard (CM)

|  |  |
| --- | --- |
| **Strength:**  A significant advantage of dashboard is to quickly and easily analyze the yearly revenue, monthly sales revenue, returned products quantity, gross profit margin, competitor yearly sales and customer feedbacks. These reports will project the profit growth of the company. The revenue reports can strengthen the management & CEO to invest more into the business | **Weakness:**  The various dashboard reports mainly focus on the revenue, budget, or the organization's expenses. Moreover, it is difficult for the CEO to identify the additional or non-billable expenses for the company |
| **Opportunities:**  The training and new computer skills trained for the VPs will enhance the company since the employees and the management are improved to the latest technology usage. As they improvise their knowledge area, the organization can easily implement new features and applications to the management inorder to increase their business. | **Threat:**  If the trainee is not properly trained for the dashboard, it might result in fetching wrong data and reporting to the VPs, leading the business and decision-making of the CEO and management of the organization into a wrong path. |

# 42. Persona (CM)

|  |  |
| --- | --- |
| Man using laptop in the library  ***"Creativity doesn't wait for the perfect moment."***  PROFILE:  Age: 30 Years  Work: Marketing VP  Status: Married  Location: Kitchener, ON  Email:  [Connect2mark@OHT.com](mailto:Connect2mark@OHT.com)  HOBBIES:  Painting  Hiking  Running  Surfing | MARK JOE  Marketing VP  Biography  Mark Joe is a creative marketing professional. From childhood he was fond of painting and created portraits during his free time. He researches the latest marketing techniques, especially social media, which contributes to the growth of the OHT organization.  Goals:  Effective decision-making  Develop a collaborative environment  Improve the sales of the TrackR app.  Personality  Outgoing  Extrovert  Analytical Thinker  Charismatic  Team Player |

# 43. Probable Benefits of Changing the Executive Decision-Making Process (AAP)

Decision-making is highly significant in every organization; also, it is an equally important aspect for all executive members in the organization. Whether changing each department's financial plan, assigning tasks, or implementing an innovative action plan, the executive member's choice significantly impacts the company's success. The decision-making process does not always seem easy—the chances of making wrong decisions are very often like good decisions. A change in the decision-making process is always required to enhance the success rate of decisions in an organization.

One of the ways to bring change in the decision-making process is to involve the corresponding team in the decision-making process. And the other way to enhance the decision-making process is to use an executive dashboard. An executive dashboard helps filter the vital information to the organization's success which can be accessed quickly and efficiently to assist the informed decision-making process.

There are a few benefits of changing the executive decision-making process, which is listed below,

1. Prevent from defaulting to agreement
2. Enhance the people engagement
3. Improve collaboration
4. Recognize self blind-spots
5. Enhance internal and external communications
6. Quickly evaluate the performance of plans and take necessary action
7. Improve profitability
8. Improve decision-making process
9. Optimize internal business process
10. Increase operational efficiency

# 44. Possible Future Analysis and Development for Executive Decision-Making Process (CK)

1. Assess performance through a graphic representation of data- organizations can measure and improve by analyzing various KPIs of the data available throughout the company.
   1. By analyzing multiple data sets, we can correlations between operating conditions and business performance.
   2. Identify trends and make course corrections before problems arise.
2. Enhancement of internal communications. Dashboards can act as a great communication tool by establishing a common platform to measure, analyze and discuss the performance of various departments. Visualization of the company's data makes it easy for everyone to understand its metrics, leading to better decision-making.
3. Save time. A well-configured dashboard saves time because all the information you need is in one place. It helps in better communication among different departments as there is less duplication, manipulation, and report creation.
4. Boost employee performance. Consistently and accurately evaluating and analyzing the employee performance throughout different departments helps boost the individual performance and the organization's performance and decision-making process.
5. Increase profitability. The dashboard makes it easy to identify the problem by displaying trends, enabling us to focus on solving the problem and increasing its profitability.

# 45. Agile Development Document (AAP)

An agile methodology is an iterative approach for managing a project in breaking down a considerable part of projects into smaller manageable parts. The manageable tasks can be finished in a shorter iteration in a project life cycle. In this project, agile methodology is followed, and the following are the steps involved in the project development:

## 45.1. Project Planning:

Before starting the project, the team discussed and clearly understood the goals that needed to be achieved, analyzed how to reach the goal, and provided value to the client or organization. The team developed a project scope, which included the components of work needed and exact deliverables at the end of the project.

## 45.2. Product Roadmap Creation

The team created a metric list for the executive dashboard with necessary deliverables and features for successful project completion. These features are developed during every sprint. Also, the teams made sure of completing the deliverable at the end of each development cycle.

## 45.3. Release planning

The team arranged meetings and created a plan to list out deliverable releases. At the start of each sprint, these features and deliverable dates were revisited and re-evaluated to release in future stages. The team discussed the plan for completing the deliverables at the end of each sprint.

## 45.4. Sprint planning

Before every sprint, the team conducted scrum meetings to learn about the accomplishments of each team member during every sprint and evaluate the workload individually. The team divides the project work equally among the team members to ensure none of the team members is overloaded, and they can efficiently complete their respective tasks within the sprint. The RACI matrix was developed to maintain transparency within the team and remove bottlenecks.

## 45.5. Daily Stand-ups

The team conducted daily stand-up meetings, a short 15 minutes meeting, wherein each team member talked briefly about their accomplishment the day before and what they would be working on the present day.

## 45.6. Sprint review

The sprint review helps establish open communication with the clients, develops a relationship with the stakeholders, and discusses future issues. A sprint review will be conducted with the project stakeholders, where the team will discuss about the pending deliverables and modifications needed to be done on the particular sprint deliverable.

## 45.7. Sprint retrospective

The team will conduct a sprint retrospective meeting with the stakeholders to discuss what worked well, what did not go as planned, what should have been improved, was the workload heavy or light for each team member, and what was achieved during the development cycle.

# 46. Pseudocode (CK)

PERFORM yearly revenue growth report

DO click on Yearly Revenue growth

DO click on the generate report to generate a graphic report through Power BI

DO click on the view report to analyze the report.

WHILE report analysis

DO discuss with all the VPs and CEO.

DO make decisions for progress.

END WHILE

DO click on back to go back to main menu.

END PERFORM

PERFORM Return Quantity by Category report

DO click on Return Quantity by Category

DO click on the generate report to generate a graphic report through Power BI

DO click on the view report to analyze the report.

WHILE report analysis

DO discuss with all the VPs and CEO.

DO make decisions to decrease the return quantity.

Do implement the discussed solution

END WHILE

DO click on back to go back to main menu.

END PERFORM

PERFORM Gross profit margin report

DO click on Gross profit margin

DO click on the generate report to generate a graphic report through Power BI

DO click on the view report to analyze the trends in the graph.

WHILE report analysis

DO discuss with all the VPs and CEO.

DO make decisions to increase/maintain the profit margin.

Do implement the discussed solution

END WHILE

DO click on back to go back to main menu.

END PERFORM

PERFORM Competitor sales report

DO click on Competitor sales

DO click on the generate report to generate a graphic report through Power BI

DO click on the view report to analyze competitor sales

WHILE report analysis

DO discuss with all the VPs and CEO.

DO identify the top competitor.

DO make decisions to improve sales strategy.

Do implement the discussed strategy

END WHILE

DO click on back to go back to main menu.

END PERFORM

PERFORM Monthly sales report

DO click on monthly sales

DO click on the generate report to generate a graphic report through Power BI

DO click on the view report to analyze the trends in the graph.

WHILE report analysis

DO discuss with all the VPs and CEO.

DO make decisions to increase/maintain the sales margin

Do implement the discussed solution

END WHILE

DO click on back to go back to main menu.

END PERFORM

PERFORM CSAT% report

DO click on CSAT%

DO click on the generate report for customer feedback data analysis

DO click on the view report to identify customer satisfaction

WHILE report analysis

DO discuss with all the VPs and CEO.

DO make decisions to increase positive feedback.

Do implement the discussed solution

END WHILE

DO click on back to go back to main menu.

END PERFORM

# 47. Final RFI Report (AAP)

This section contains all the collective RFI documents for this project. The following are the names of RFI documents attached with this final report submission.

1. Team G Phase 1 RFI Answers 220126
2. Team G Interview Questions 220105 1545 Answered 220206 1945

# 48. Annotated list of elements for Executive dashboard (MR)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID No. | Object type | Default text | Functions[Behavior] | Comments | Screen # |
| 1 | Navigation button- Focus Mode | Null | Click - > Focus redirect to Graph Zoomed in | This applicable to metric 1 to metric 6 graphs | 1 |
| 2 | Navigation Button- Back to the Report | Back to the Report | Click -> Redirect to the Dashboard page | This is applicable to Metric 1 to Metric 6 | 2 |
| 3 | Button list– Time frames | Years in numbers | Click | This is will let you select particular year data | 3 |
| 4 | Button – Refresh | Refresh | Click | This will let you refresh your Graphs | 4 |
| 5 | Button – tooltip | Tooltip | Click | This will let you pull up the data for the individual product return quantity based on the region and on the year. | 5 |

Graphical user interface, application

Description automatically generated

Figure 8. Screen 1 – Home page of the Dashboard

Table

Description automatically generated

Figure 9. Screen 2 – Individual Metric

Chart, table, timeline

Description automatically generated

Figure 10. Screen 3 -Time Frames

Graphical user interface, application, Word

Description automatically generated

Figure 11. Screen 4 – Refresh

Graphical user interface

Description automatically generated

Figure 12. Screen 5 – Tooltip

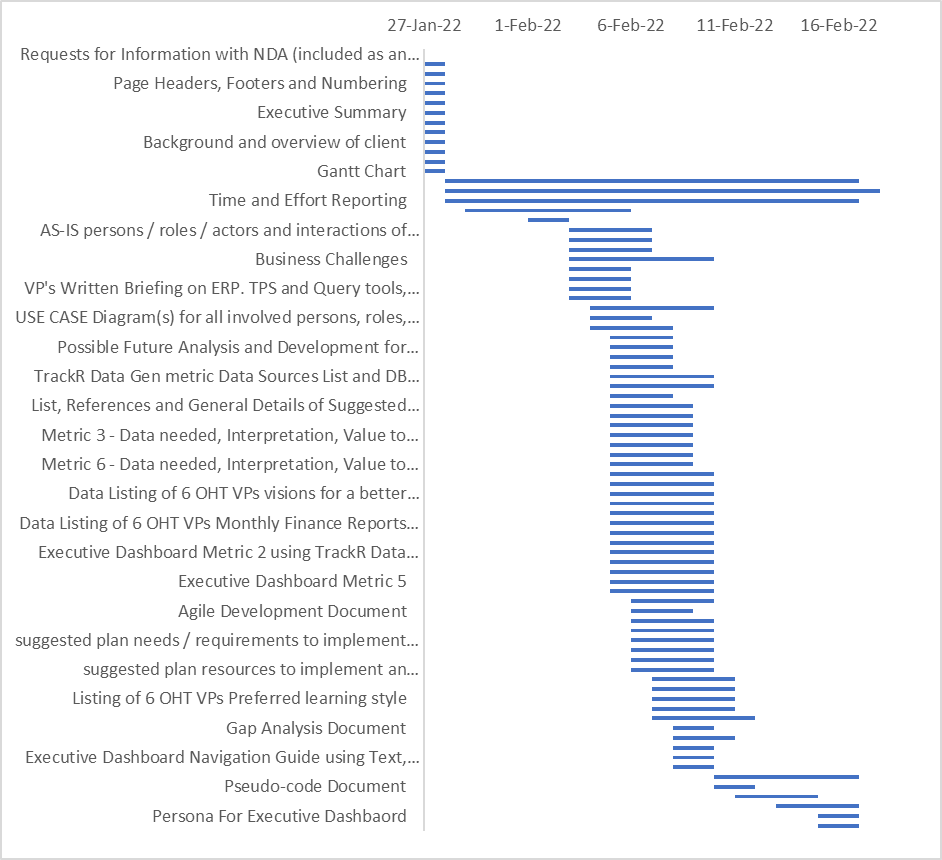
# 49. Appendix (JK)

## 49.1.Project Scope

|  |  |
| --- | --- |
| **Project Name:** | Executive Dashboard |
| **Date Submitted:** | 1/28/2022 |
| **Prepared By:** | Jigeesha Kocher |
| **Project Start Date:** | 1/10/2022 |
| **Project End Date:** | 2/18/2022 |
| **Senior Business Analyst:** | Bill Nixon |
| **Program Manager:** | MayurKumar Rafaliya |

## 49.1.1. Gantt Chart

Figure 13: The below figure depicts the planning and scheduling of the Executive Dashboard Project.



## 49.2. Known Client Requirements:

For more details, please go through points 1 to 10 in the attached document named P1 Exec Dashboard

21May07(Link:<https://conestoga.desire2learn.com/d2l/le/content/539481/viewContent/11890068/View> ). This document was provided to us by the client.

**Summary of Project Deliverables:**

|  |  |  |
| --- | --- | --- |
| **DlvID** | **Project Final Deliverables (RFIs and PM Docs Deliverables are optional)** | **Need / Requirement ID** |
| A | Cover Page | 20 |
| B | Cover letter | 20 |
| C | Page Headers, Footers and Numbering | 20 |
| D | TOC | 20 |
| E | Document History | 20 |
| F | Executive Summary | 21 |
| G | Assumptions | 21 |
| H | Conclusions | 21 |
| J | Background of client | 22 |
| K | Overview of Client | 22 |
| L | Project Scope | 24 |
| M | Requirement Elicitation Report | 42,43 |
| N | AS-IS Attitudes | 41 |
| P | AS-IS Regular data use | 43 |
| Q | Computer Skills and knowledge Doc | 43 |
| R | list of Learning styles of Executive VPs | 43 |
| S | Business Data and Knowldege Management | 44 |
| T | Historical & Live TrackR Data | 46 |
| U | References | 23 |
| V | Future Analysis and Development Report | 26 |
| W | Identifying Project Benefits | 26 |
| X | List and descriptions of Risks | 26 |
| Y | 6 Metrics for OHT | 41 |
| Z | Project Planning | 45 |
| AA | Gantt Chart |  |
| AB | Document Quality Check |  |
| AC | Scope Change document |  |
| AD | Interview report |  |
| AE | Survey Report |  |
| AF | Identify Flaws and/or Issues - Text and Diagrams | 26 |
| AG | SWOT Analysis of Dashboards | 44 |
| AH | Risk Management Plan | 52 |
| AI | Executive Dashboard Creation using PowerBI | 46 |
| AJ | Use Case Diagram | 54 |
| AK | Implementation Strategy Document | 45 |
| AL | Gap Analysis Document | 48 |
| AM | Process flow Diagram | 48 |
| AN | ERD Diagram | 49 |
| AO | Pseudo-code Document | 48 |
| AP | Agile Development Document | 51 |
| AQ | Personas | 50 |
| AR | Wireframes | 50 |
| AS | CockBurn Template | 54 |
| AT | Mockups | 50 |
| AU | Metric document | 45 |
| AV | Merged Final Report |  |
| AW | Powerpoint Presentation |  |
| AX | Final RFI report | 54 |
| AY | RACI+ Workbook Completed |  |
| AZ | Daily Worklogs for Each Team Member |  |

**Activities to do to produce the Deliverables**: For most of the deliverables mentioned, we will be researching, creating, developing, packaging, and publishing them.

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