A

Project Report

On

" Designing a Dashboard for Sales Analysis "

At

" Milgard Services India Pvt. Ltd. "

Submitted to the Savitribai Phule Pune University in

Partial Fulfillment of Requirement for the Award of Degree of

MASTER OF BUSINESS ADMINISTRATION

SUBMITTED BY

Siddhant Nitin Bhalekar

MBA –III Semester

UNDER THE GUIDANCE OF

Dr. Jayasri Murali

ATSS's

Institute of Industrial and Computer Management and Research

Pradhikaran, Nigdi, Pune

Batch 2021-23

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Siddhant Nitin Bhalekar** has successfully completed Summer Internship Project work entitled **" Designing a Dashboard for Sales Analysis "**. From 5th Sept. 2022 to 01st Nov. 2022.

He was getting Training from our BI senior on Power BI during the above period. He has worked sincerely and to our complete satisfaction. We wish him all the best for his future endeavors.

Date :- **29th November 2022**

Place :- **Pune**

Authorized Signatory

<u>FORMAL FEEDBACK AND EVALUATION SHEET</u>

This is to certify that **Mr. Siddhant Nitin Bhalekar** has completed Summer Internship at our organization. The task handle by him are as follows

- Nature and Quantum of work:

    1. He has done exemplary work with the Microsoft Power BI tool.
    2. He has shown enthusiasm throughout his internship period.

- Effectiveness and Overall Professionalism:

    1. He was highly effective and keen to learn.
    2. He was an extremely dependable resource to the organization.

- Learning outcome:

    1. Significance of Power BI tool and dashboard for sales analysis.

- Utility of SIP to the host organization:

    1. Project can easily help to understand and analyze the sales of the company.

Date :- **29th November 2022**

Place :- **Pune**

Authorized Signatory

Student Declaration

I, the undersigned, hereby declare that the Project Report titled **"Designing a Dashboard for Sales Analysis"** written and submitted by me to the Savitribai Phule Pune University in partial fulfillment of the requirements for the award of degree of Master of Business Administration under the guidance of **Dr. Jayasri Murali** is my original work and the conclusions drawn therein are based on the material collected by myself.

Date: Signature

Place: Name : Siddhant Bhalekar

Acknowledgement

I take this opportunity to express my profound gratitude to Our **Director, Dr. Abhay Kulkarni**, Our **HOD Adv. Manisha Kulkarni** whose wisdom as well as foresight, I continually benefit from. I am indebted to them for extending me all the cooperation and patronage they render towards us. They have been wonderful supporters and continuous motivators for me which helped me in turning my ordinary project into an excellent one.

I also take this opportunity to express a deep sense of gratitude to Company project guide **Montu Kar, Milgard Services India Pvt. Ltd.** for his/her cordial support, valuable information and guidance, which helped me in completing this task through various stages.

I am obliged to staff members of **Milgard Services India Pvt. Ltd.** for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my SIP.

It is my privilege to express my profound gratitude and deep regards to my project guide **Dr. Jayasri Murali** for his/her exemplary guidance, monitoring and constant encouragement throughout the course of this summer internship project. The blessing, help and guidance given by her/him time to time shall carry me a long way in the journey of life on which I am about to embark.

Lastly, I thank almighty, my parents, brother, sisters and friends for their constant encouragement without which this summer internship project would not be possible.

Place   : Pune   Signature of the Student
Date   :   Name of the Student

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CHAPTER – 1

EXECUTIVE SUMMARY

INTRODUCTION

In the case of data, a large amount of data is generated in the daily business process. When faced with big, random data, companies have a hard time understanding and applying them. In addition, responding quickly to the external environment of the business requires making timely decisions in the right way. Therefore, business intelligence has evolved into a very important solution for mining data, converting data from information to information, which contributes to decision-making. By simplifying smart business software, some parts of the business can rely heavily on support from the IT department. For example, to generally monitor the performance of sales in the sales department, employees may make reports that are easier to view information than to ask their technical colleagues to provide them. It can save time and improve job efficiency to create more value for sales performance.

In other words, companies should use the right technical solution to solve business problems. Business analysis is significant to any business to make sure that the business's needs are decisive and help embrace improvements and effective decision-making. This is expected to happen by bridging the gap between IT and business strategies confirming the core processes and delivering the required benefits to the businesses and their stakeholders. Business analysis enables data-driven decisions and communicating complex technical details more easily. Business strategies and tactics are the main defined topics that are advisable and drive upon business changes whenever required. Business analysis brings benefits with the power of data, making the businesses become analytically driven and helps to gain a new approach for making data-driven decisions. It brings deeper insights into business and is considered an imperative facet for nurturing business transformation and innovation into a customer-centric operation. Designing a sales dashboard using Power BI for a sales department to reflect sales performance will explore ways in which a dataset can empower business and build a report based on the sales and will provide interactive visualizations and Business Intelligence capabilities with an Interface Simple Enough for end Users to understand their reports and dashboards.

1.1 Objective of the Study

- The objective of this project is to design a sales dashboard for the sales department using Power BI to demonstrate sales performance which will provide data and user-related information.
- This project aims to seek ways to improve overall sales via analyzing the data and generate sales performance dashboards for better decision making.

1.2 Scope of the Study

The Scope of the study is limited to product wise sales, product wise profit of the company. The data is limited from the year 2011-2014.

1.3 Need of the Study

- To make the Data easier and to identify the patterns, trends and outliers in large datasets.
- Data Visualization gives us the ability to process information faster.

1.4 Timeline of the Project

The Timeline of the Project was from 5th September 2022 to 1st November 2022.

1.5 Research Methodology

Research Methodology is a way of explaining how a researcher intends to carry out their research. It's logical, Systematic Plan to resolve a research Problem.

A methodology details a researcher approach to the Research to ensure reliable, valid results that address their aims and objectives. It encompasses what Data they're going to collect and where from as well as how it's being Collected & analyzed.

Methodology

- **Data Collection** - Data Collection is the process of gathering and measuring information on targeted variables in an established systems, which then enables one to answer relevant questions and evaluate outcomes.

- **Data Storage** – Power BI uses two primary repositories for storing and managing data: Data that is uploaded from users is sent to excel sheet.

- **Data Cleaning** - Once the data is stored into power BI it is important to clean and transform data before you build any visualizations or reporting .This is essential step in building quality visualization. Cleaning and transforming data enables to build visualizations from sound and clean data. If it is not done diligently visualization will not behave as we except.

- **Data Analysis** - Data analysis is a process of inspecting, cleaning, transforming and modelling data with the goal of discovering useful information, informing conclusions and supporting decision making We use DAX (Data Analysis Expressions) for Data Manipulation and working on the data.

- **Visualization** - In this process we convert manually data into visualization is to visually display collected data by using various charts, graphs or other visualization types.

1.6 Data Analysis

Data analysis is the process of cleaning, changing, and processing raw data and extracting actionable, relevant information that helps businesses make informed decisions. The procedure helps reduce the risks inherent in decision-making by providing useful insights and statistics, often presented in charts, images, tables, and graphs.

1.7 Limitations of the Study

- Data of the few products only were shared and it was studied.

- Authenticity of the data was not known.

1.8 Learning from the Project

1. Learnt Power BI Tool.

2. Learnt to make sales dashboards.

3. Learnt to make sales reports.

4. Learnt Data visualization

1.9 Contribution to Host Organization

1. Created sales dashboards which provides an overview of total sales, with the ability to showcase yearly, quarterly, and monthly growth rates. Moreover, it allows anyone to dig through the data and understand the top-performing products, locations, and more.

2. Created interactive charts, graphs, maps, and other visuals in Excel and Power BI that bring data to life. Power BI desktop helps to get everything easily under the same solution to develop BI and data analysis experience.

CHAPTER – 2

ORGANIZATION PROFILE

Organizational Profile

Milgard Services India Private Limited is an unlisted private company incorporated on 09 August, 2019. It is classified as a private subsidiary of a foreign company and is located in Pune, Maharashtra. It's authorized share capital is INR 5.00 CR. and the total paid-up capital is INR 5.00 cr.

The current status of Milgard Services India Private Limited is - Active.

The last reported AGM (Annual General Meeting) of Milgard Services India Private Limited, per our records, was held on 29 September, 2022. Also, as per our records, its last balance sheet was prepared for the period ending on 31 March, 2022.

Milgard Services India Private Limited has two directors - Rakesh Thakorbhai Desai and Vinod Manoharan Santha.

The Corporate Identification Number (CIN) of Milgard Services India Private Limited is U36900PN2019FTC186003. The registered office of Milgard Services India Private Limited is at Plot No 30, 5th Floor, Tech Centre, Rajiv Gandhi InfoTech Park MIDC, Hinjewadi, Pune, Pune, Maharashtra.

Website	**https://www.milgard.com**
Industries	IT Services and IT Consulting
Company size	11-50 employees
Headquarters	Pune, Maharashtra
Type	Privately Held
Founded	2017
Specialties	Doors and Windows, Building Materials, IT , and Interiors

Milgard Manufacturing Mission Statement

We have one unwavering goal, and that's to be the best window and door manufacturer. We will settle for nothing less.

Milgard Manufacturing Vision Statement

To deliver value by manufacturing the finest windows, doors, and customer experiences every day, everywhere

Milgard Manufacturing Values

- Focus on the Customer
- Cultivate High Performance Teams
- Respect for the Individual
- Continuously Improve
- Drive for Results

QUALITY PILLARS – Fundamental values

- **Safety:** Ensure the Welfare of Others

- **Integrity:** Do the Right Thing in All Circumstances

- **Continuous Improvement:** Have a Relentless Pursuit of Excellence

- **Creativity:** Embrace Positive and Flexible Problem Solving

- **Profitable Partnerships:** Develop Mutually Beneficial Relationships

Shares Price of Company

It's authorized share capital is INR 5.00 cr. and the total paid-up capital is INR 5.00 cr.

Company Turnover

Company's Revenue is $ 813.6 Million.

Company Competitor

Milgard's competitors and similar companies include JELD-WEN, Kale Group, Heritage Office Furnishings and Ore Pac.

EMPLOYEES ARE THE KEY TO OUR SUCCESS

Our history of growth and success as a window and door manufacturer is due to the dedication of our employees. To be the best, we hire the best. More than 3,000 Milgard employees work hard every day to give our customers high-quality products and superior service. They're a big part of the answer to the question: **Why Milgard?** They see their jobs as we do—as careers.

Fifty Years of Innovation in Window and Door Manufacturing

In 1958, Maurice Milgard, Jr. and his son Gary started Milgard Glass Company in a small building in Tacoma, Washington. Gary's brother, Jim, joined the company in 1961. Within a short time, the Milgard diversified into aluminium windows.

In 1962, Gary Milgard left the glass company to start an aluminium window fabricating company called Milgard Manufacturing. The company's objective was to provide a reliable source of quality aluminium windows styled and crafted to meet the unique architectural requirements of the western United States.

In 1968, Milgard Manufacturing started producing sliding glass doors. Two years later, aluminium frames were redesigned to fit both single-pane and insulating glass. Milgard developed a type of aluminium frame that was suitable for cold weather areas where only wood frames had been effective.

The year 1989 marked the introduction of the first Milgard windows with vinyl frames. Wood Clad windows and doors, a dramatic new line of fiberglass windows and doors, was introduced in 1990.

Growth continues to be the norm at Milgard. In addition to the Tacoma operation, the company has manufacturing, sales and service locations in Portland, Oregon; Prescott, Arizona, Sacramento, Simi Valley and Temecula, California.

The Vertically Integrated Windows Manufacturer

While many window companies are simply distributors of someone else's products, Milgard is a vertically integrated window and patio door manufacturer. We make our own insulated glass units. We produce our own vinyl components. We make our own fiberglass frames. The Milgard vinyl plant, located in Tacoma, began extruding quality frame material in 1988. To ensure top quality from start to finish, Milgard begins by precisely controlling our vinyl compound formulation to withstand harsh climate conditions. We extrude our own frame material, and fabricate all vinyl windows and doors to order, giving us the tightest control over quality. Our fiberglass windows and doors receive the same level of attention. Almost all our frame materials are manufactured internally to provide the highest level of consistently high quality.

Milgard also goes so far to temper our own glass. In 1980, Milgard Tempering, Inc. was started in Tacoma to respond to a demand for high-quality tempered glass in the Northwest. In 1992, a second Milgard Tempering plant was opened in Dixon, California. Modern equipment and skilled employees enabled Milgard Tempering to become one of the most respected tempered glass suppliers in the country.

Through our vertical integration, Milgard is able to control quality at every step of the way. The result is higher quality products, all of which we confidently backed by industry leading warranties.

Acquired by MI Windows and Doors

Milgard was purchased by Masco Corporation in 2001. In 2019, Milgard was acquired by MI Windows and Doors, one of the nation's largest suppliers of precision-built and energy-efficient vinyl and aluminium windows and sliding patio doors. With plants in Arizona, Pennsylvania, and Texas, MI offers a broad spectrum of products for both the new construction and replacement markets.

How Milgard Gets Involved in the Community

Carol Milgard started the Milgard volunteer and giving program which became known as MG/CAT. It was created so Milgard employees could actively give back to the communities in which they live and work.

MG/CAT transitioned to the MI Foundation in 2020. The MI Foundation offers a variety of ways for employees to get involved in the charities they are passionate about supporting. Each Milgard location has designated committee members who help organize monthly events and projects. These events encourage employee participation, and each event benefits a local community charitable organization. Team members are eligible for up to 16 hours per year of paid time off to provide volunteer service to qualified organizations. In addition, the MI Foundation provides funding and support for local and national charitable organizations as well as our own team members.

The MI Foundation

It started with small gestures from one team member to another and grassroots giving efforts that provided support in times of need. That care and concern for others helped us realize that we could do more, and in 2015, the MI Charitable Foundation was born. From fundraising and volunteer events to local outreach, our team members are empowered to support charities they are passionate about, and the result has been rapid growth (and rapid giving) that continues to humble and inspire us.

On a national level, the MI Foundation partners with several organizations that support three noteworthy causes: veteran's affairs, child wellbeing, and cancer at large with a particular focus on cancer.

Giving back is part of our culture.

Service Appointment Precautions

Milgard Service Technicians are adhering to CDC guidelines for preventive care when performing their service visit. If you have an illness or any of the following symptoms related to Coronavirus (COVID-19): Fever and/or cough or difficulty breathing, we ask that you contact us at 1-800-MILGARD to reschedule your appointment.

While performing service, our technicians will:

- Adhere to CDC guidelines for preventative care, and use enhanced safety protocol.
- If a homeowner is presenting symptoms of illness, our Service Technicians will stop the appointment and work with supervisors to get the appointment rescheduled. This is for everyone's safety.

For more information on prevention recommendations, please visit the **CDC website**. If you have any questions or concerns regarding COVID-19 at Milgard, please email us at **info@milgard.com**.

CHAPTER - 3

TASK UNDERTAKEN

Task Undertaken

The study and learning at **Milgard Services India Pvt. Ltd.** was related to analyze the data of Sales and Manufacturing of Product Using Power BI. The work / task was assigned :-

1. To extract and Visualize the data.

2. To give useful insights from the raw data to manager for better decision making.

3. To build interactive Dashboards and Business Intelligence Report.

Objectives of the Study

*   The objective of this project is to design a sales dashboard for the sales department using Power BI to demonstrate sales performance which will provide data and user-related information.

*   This project aims to seek ways to improve overall sales via analyzing the data and generate sales performance dashboards for better decision making.

CHAPTER – 4

RESEARCH METHODOLOGY

4.1 Introduction

Research methodology is a way of explaining how a researcher intends to carry out their research. It's a logical, systematic plan to resolve a research problem. A methodology details a researcher's approach to the research to ensure reliable, valid results that address their aims and objectives. It encompasses what data they're going to collect and where from, as well as how it's being collected and analyzed.

4.2 Research Design

Research design is the framework of research method and techniques chosen by a Researcher. The design allows researcher to done in on research method that are suitable for the subject matter and set up their studies up for success.

Descriptive Research Design

Descriptive research design is a type of research design that aims to systematically obtain information to describe a phenomenon, situation, or population. More specifically, it helps answer the what, when, where, and how questions regarding the research problem rather than the why.

4.3 Sampling Design

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design also leads to a procedure to tell the number of items to be included in the sample i.e., the size of the sample. Hence, sample design is determined before the collection of data. Among various types of sample design technique, the researcher should choose that samples which are reliable and appropriate for his research study.

4.3.1 Sampling Type : Non Probability Sampling

Random sampling is a method of choosing a sample of observations from a population to make assumptions about the population. It is also called probability sampling. The counterpart of this sampling is Non-probability sampling or Non-random sampling. The primary types of this sampling are simple random sampling, stratified sampling, cluster sampling, and multistage sampling. In the sampling methods, samples which are not arbitrary are typically called convenience samples.

Convenience Sampling

Convenience sampling is a non-probability sampling method where units are selected for inclusion in the sample because they are the easiest for the researcher to access. This can be due to geographical proximity, availability at a given time, or willingness to participate in the research.

4.3.2 Sampling Size : 5

Sample size define as number of Observation used for determining the Estimated Sales, Production in specific country. The Sample size is a term used in market research for defining the number of observations included in the Sample size.

4.4 Data Collection

- **Primary Data** :- Primary data is information that is collected from the customers first handed by asking open ended or close ended questions. No Primary Data was collected.

- **Secondary Data** :- Data is collected by someone else, other than user, Common sources of secondary data for social Science include Censuses, Information collected by Government Departments, Organizational Records & data that was originally collected for Research Purpose.

a. Organizational Official Website

b. Reference Book

c. Research Paper

d. Internet

Power BI
Flow Process

Data Preparation → Data Modeling → Data Visualization
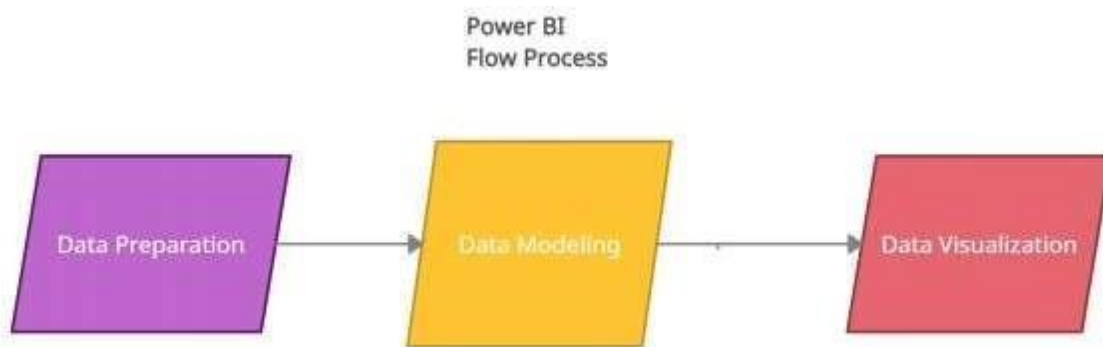
1. **Data preparation** – organizing the data in a flat table.

2. **Data modeling** – It is used to connect multiple data sources in BI tool using arelationship.

3. **Data Visualization** – It is the process of transforming huge data sets into graphs chartsand other visualizations**.**

How to upload raw data into Power BI

To Create Power BI, visualize dashboard, you need to download Power bi desktop and install. Once you have installed, then we need to follow below process (Microsoft Power BI documentation, 2021):

Click on Get Data => Excel workbook = > browse your raw file = > select required sheets and then click on transform => Power Query editor window will be open => then from each table you have to check all data types, then you have to click on close & apply.

4.5 Tools For Data Analysis

a. **Microsoft Excel :-** Microsoft Excel has the basic features of all spreadsheets, using a grid of cells arranged in numbered rows and letter-named columns to organize data manipulations like arithmetic operations. It has a battery of supplied functions to answer statistical, engineering, and financial needs. In addition, it can display data as line graphs, histograms and charts, and with a very limited three-dimensional graphical display. It allows sectioning of data to view its dependencies on various factors for different perspectives (using pivot tables and the scenario manager). A PivotTable is a tool for data analysis. It does this by simplifying large data sets via Pivot Table fields. It has a programming aspect, Visual Basic for Applications, allowing the user to employ a wide variety of numerical methods, for example, for solving differential equations of mathematical physics, and then reporting the results back to the spreadsheet. It also has a variety of interactive features allowing user interfaces that can completely hide the spreadsheet from the user, so the spreadsheet presents itself as a so-called application, or decision support system (DSS), via a custom-designed user interface, for example, a stock analyzer, or in general, as a design tool that asks the user questions and provides answers and reports. In a more elaborate realization, an Excel application can automatically poll external databases and measuring instruments using an update schedule, analyze the results, make a Word report or PowerPoint slide show, and e-mail these presentations on a regular basis to a list of participants. Excel was not designed to be used as a database

b. Microsoft Power BI :- Power BI is an interactive data visualization software product developed by Microsoft with a primary focus on business intelligence. It is part of the Microsoft Power Platform. Power BI is a collection of software services, apps, and connectors that work together to turn unrelated sources of data into coherent, visually immersive, and interactive insights. Data may be input by reading directly from a database, webpage, or structured files such as spreadsheets, CSV, XML, and JSON.

Power BI provides cloud-based BI (business intelligence) services, known as "Power BI Services", along with a desktop-based interface, called "Power BI Desktop". It offers data warehouse capabilities including data preparation, data discovery, and interactive dashboards. In March 2016, Microsoft released an additional service called Power BI Embedded on its Azure cloud platform. One main differentiator of the product is the ability to load custom visualizations.

CHAPTER – 5

DATA ANALYSIS & INTERPRETATION

Sales	Channel	Product Category
58976.4	Reseller	Computers
57604.5	Reseller	Computers
47252.7	Online	Cameras and camcorders
45900	Online	Computers
45900	Reseller	Computers
44000	Online	Cameras and camcorders
43982.4	Store	Computers
42560	Reseller	Cameras and camcorders
40851	Online	Computers
39933	Online	Computers
39856.7	Online	Computers

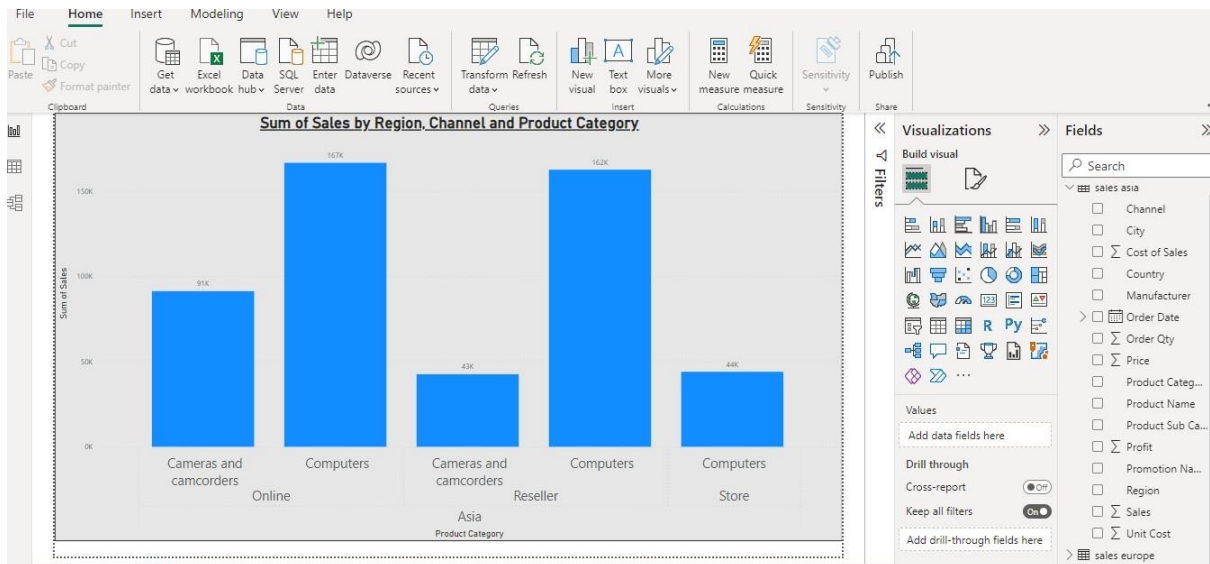**Table No. 1.1 :- Top 10 Sales of Product from Asia Region**

Fig 1.1 :- Sales by Region, Channel and Product Category from Asia Region

Interpretation :-

Above figure shows the sales of Product Category of Asia Region through different Channels. As we can see sales of computer is highest through Online and Reseller Channel. Cameras and camcorders sales is higher in online channel than Reseller channel. The sales of computers and cameras are lowest from the stores.

Sales	Channel	Product Category
54276.75	Online	Computers
49980	Online	Computers
45239.844	Online	TV and Video
33048	Reseller	Computers
30320	Online	Computers
29988	Reseller	Computers
29970	Online	Computers
29970	Reseller	Computers
29970	Online	Computers
29813.07	Store	Computers

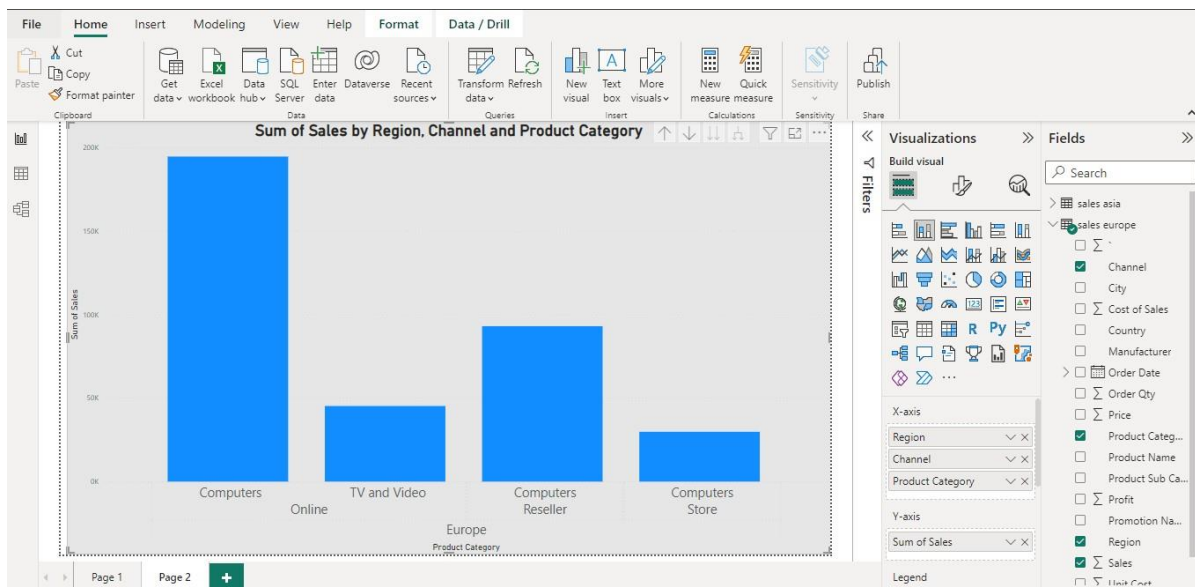**Table No. 1.2 :- Top 10 Sales of Product from Europe Region**

Fig 1.2 :- Sales by Region, Channel and Product Category from Europe Region

Interpretation :-

Above figure shows the sales of Product Category of Europe Region through different Channels. As we can see sales of computer is highest through Online Channel. TV and video sales can be seen only in online channel. From Reseller and Stores only computers sales can be seen.

Sales	Channel	Product Category
78312	Catalogue	Cameras and camcorders
70413	Catalogue	Cameras and camcorders
68850	Online	Computers
62475	Online	Computers
61161.75	Online	Computers
57834	Store	Computers
56204.66	Online	TV and Video
47400	Online	Cameras and camcorders
45900	Store	Computers
45900	Reseller	Computers

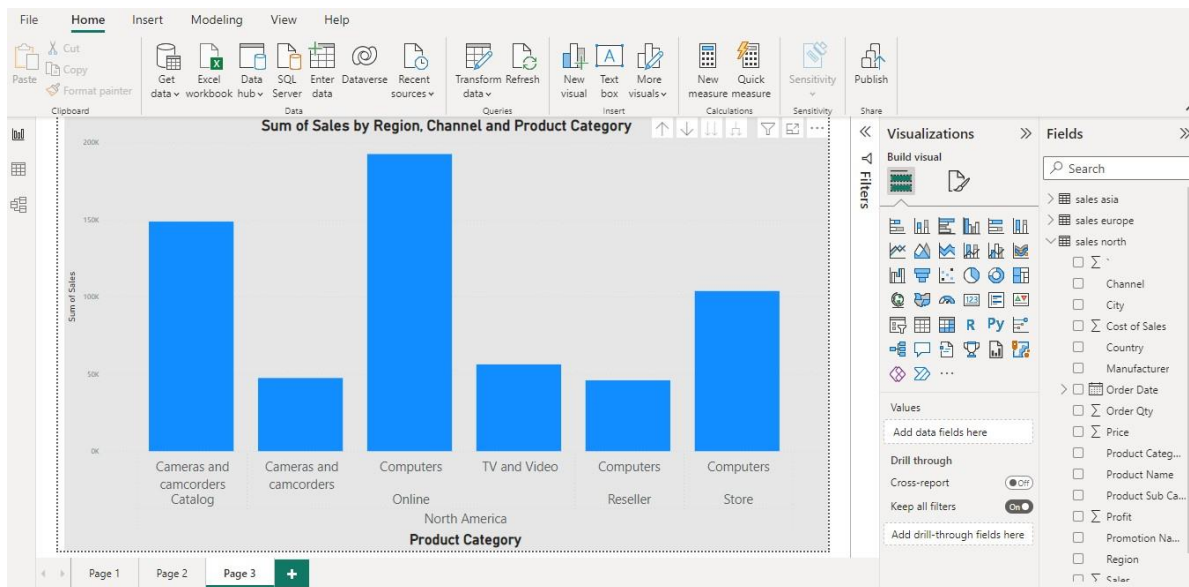**Table No. 1.3 :- Top 10 Sales of Product from North America Region**

Fig 1.3 :- Sales by Region, Channel and Product Category from North America Region

Interpretation :-

Above figure shows the sales of Product Category from North America Region through different Channels. As we can see Cameras and camcorders sales is highest from catalogue channel. As we can see sales of computer is highest through Online Channel. TV and video sales can be seen only in online channel.

Profit	Country
55692.56952	United States
52309.38962	United States
48449.26341	United States
44958.98661	China
44274.38626	Canada
42711.60649	United States
40896.70204	China
40589.18265	China
40473.37378	United States
37458.20253	China

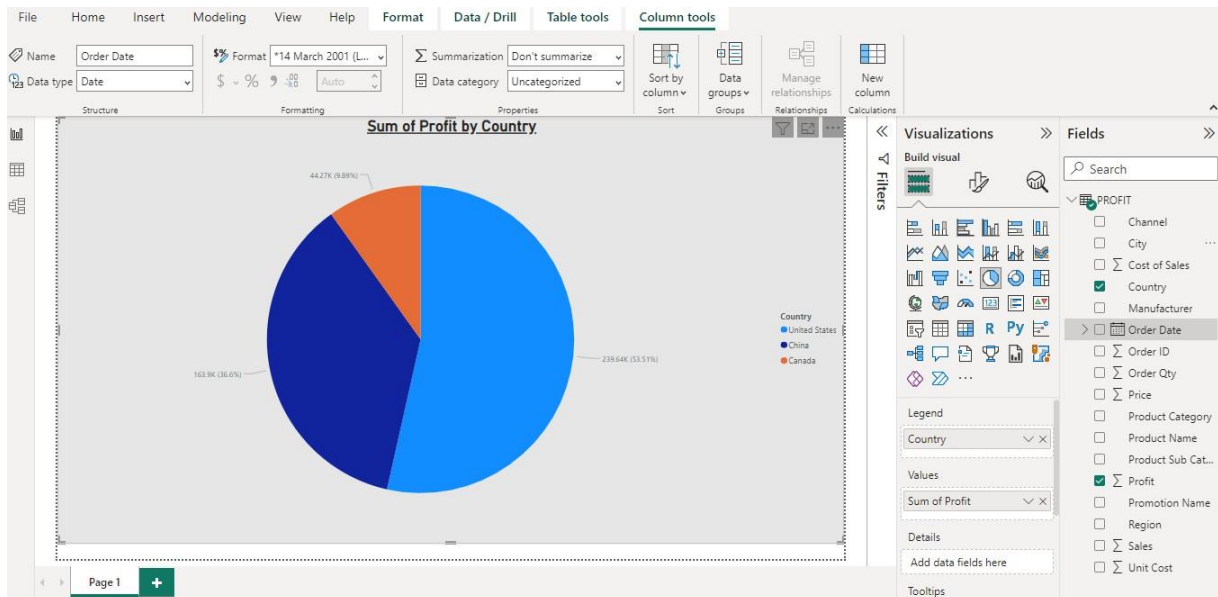**Table No. 1.4 :- Top 10 Profit wise Country**

Fig 1.4 :- Sum of Profit By Country

Interpretation :-

Above Pie chart shows top 10 profit wise country. As we can see only three countries shows the maximum profit. United States shares maximum profit of 53.51%. China shares 36.6% of profit and Canada shares 9.89% of profit.

Sales	Price	City
45239.844	2899.99	Berlin
33059.886	2899.99	North Har ford
28999.9	2899.99	Baumholder
28999.9	2899.99	Damascus
28999.9	2899.99	Berlin
26099.91	2899.99	Seoul
22619.922	2899.99	Berlin
16964.9415	2899.99	Damascus
16239.944	2899.99	Round Rock
16094.9445	2899.99	Beijing

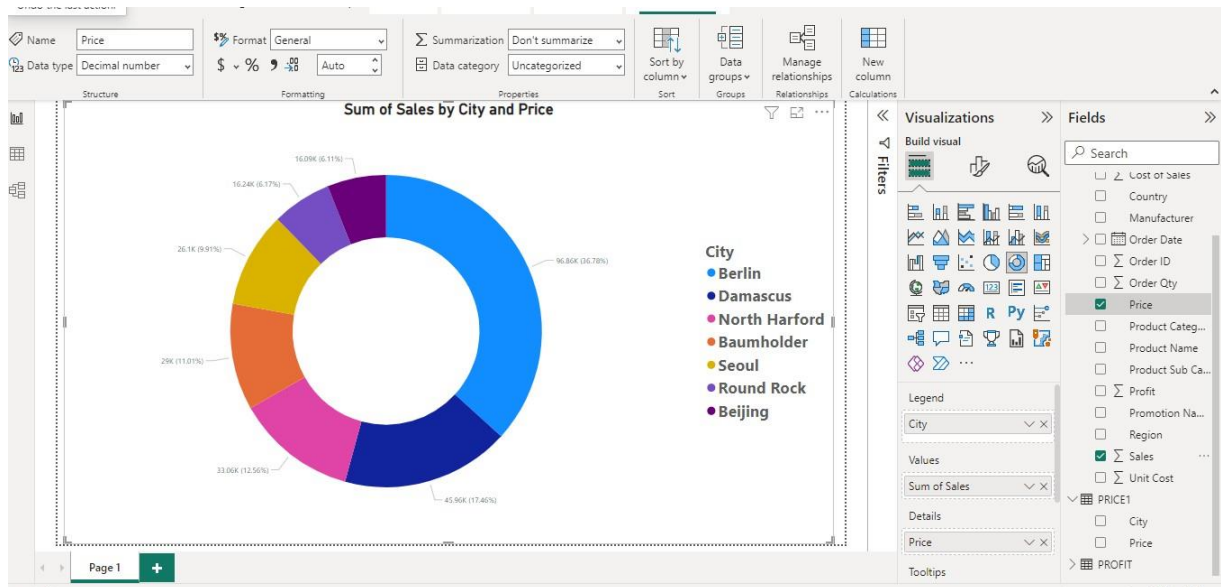**Table No. 1.5 :- Top 10 Sales and Price wise City**

Fig 1.5 :- Sum of Sales by City and Price

Interpretation :-

Above Donut chart shows Sum of Price by City. Berlin has the highest sales and pricing than other cities. Berlin has sales of 36.78%. Damascus and North Hard ford have sales of 17.46% and 12.26% respectively than other remaining cities.

Sales	Profit	Product Category	Region
78312	55692.56952	Cameras and camcorders	North America
70413	48449.26341	Cameras and camcorders	North America
68850	52309.38962	Computers	North America
62475	19483.86281	Computers	North America
61161.75	27092.68138	Computers	North America
58976.4	27213.00752	Computers	Asia
57834	27213.16074	Computers	North America
57604.5	33769.41855	Computers	Asia
56204.66	40473.37378	TV and Video	North America
54276.75	28747.32513	Computers	Europe

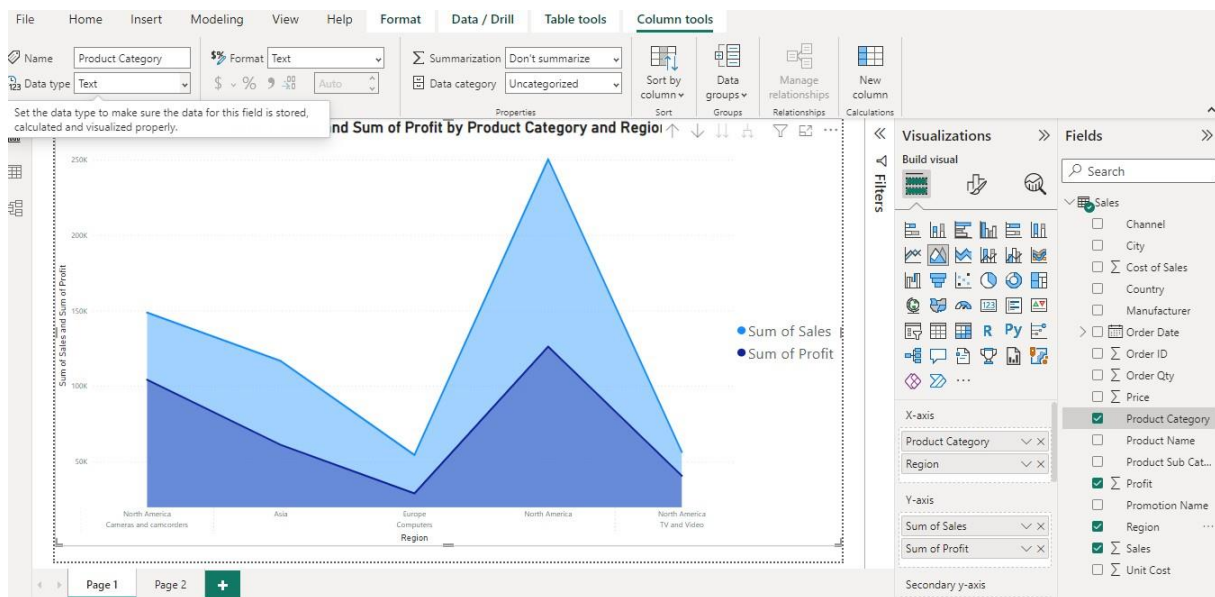**Table No. 1.6 :- Top 10 Profit and sales wise Region**

Fig 1.6 :- Sum of sales and profit by region

Interpretation :-

Above Area Graph shows sum of sales and sum of profit in specific region. In North America the sales and profit of camera and camcorders is the highest. In Europe Computers have the sales and profit than other products. TV and video also have the sales and profit in North America
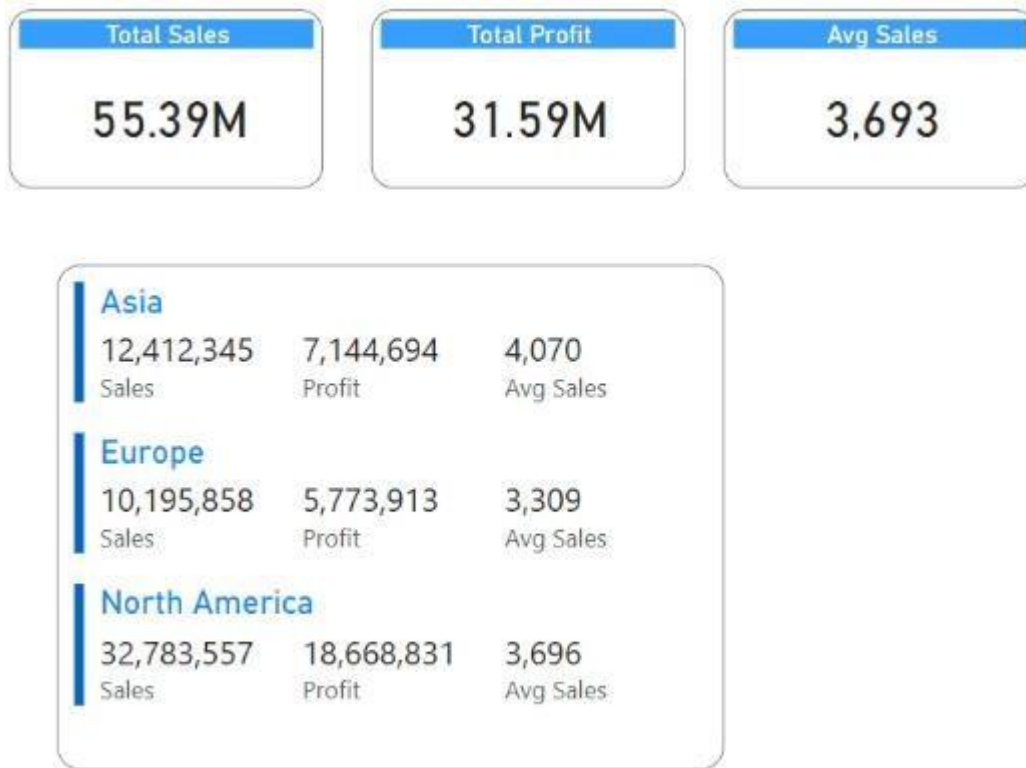
Total Sales	Total Profit	Avg Sales
55.39M	31.59M	3,693

Asia		
12,412,345	7,144,694	4,070
Sales	Profit	Avg Sales
Europe		
10,195,858	5,773,913	3,309
Sales	Profit	Avg Sales
North America		
32,783,557	18,668,831	3,696
Sales	Profit	Avg Sales

Fig 1.7 :- Sales of Camera

Interpretation :-

- From the above fig. we can interpret that total sales, total profit and average sales.

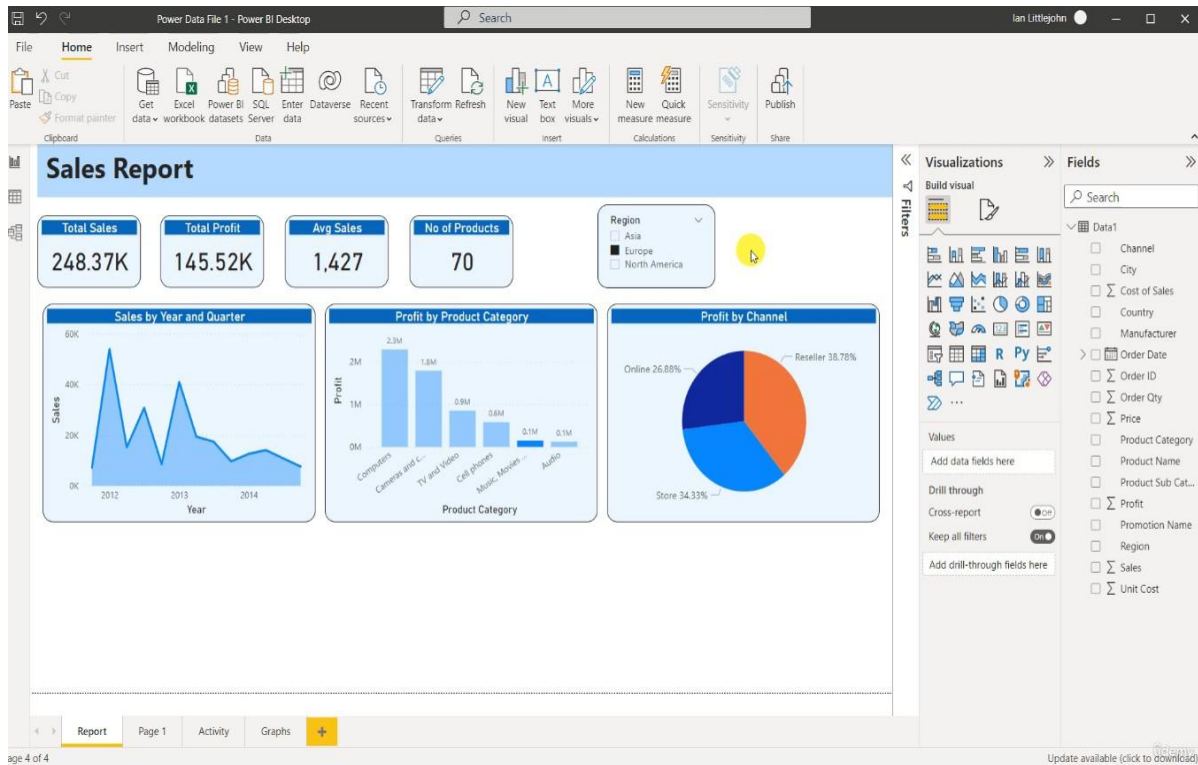- North America having the highest sales, profit than Asia and Europe

Fig 1.8 :- Sales Report

Interpretation:-

As in the above picture we can see the sales report of Europe region. We can see the total sales, total profit, average sales and number of products. Sales by year and quarter are shown in the area graph. Profit by Product Category is shown bar diagram. Profit by channel is shown in Pie Chart.

CHAPTER – 6

OBSERVATIONS

OBSERVATIONS

- In North America the sales and profit of camera and camcorders is the highest. In Europe Computers have the sales and profit than other products. TV and video also have the sales and profit in North America.

- Sales of computer is highest through Online and Reseller Channel. Cameras and camcorders sales is higher in online channel than Reseller channel. The sales of computers and cameras are lowest from the stores.

- The sales of Product Category of Asia Region through different Channels. As we can see sales of computer is highest through Online and Reseller Channel. Cameras and camcorders sales is higher in online channel than Reseller channel. The sales of computers and cameras are lowest from the stores.

CHAPTER - 7

SUGGESTIONS

SUGGESTIONS

- The Company needs to improve the performance of Power BI reports.
- The Company needs to improve data model for Power BI.

CHAPTER -8

KEY LEARNINGS AND CONTRIBUTION TO THE HOST ORGANIZATION

KEY LEARNINGS

1. Learnt Power BI Tool.

2. Learnt to make sales dashboards.

3. Learnt to make sales reports.

4. Learnt Data visualization

CONTRIBUTION TO THE HOST ORGANIZATION

1. Created sales dashboards which provides an overview of total sales, with the ability to showcase yearly, quarterly, and monthly growth rates. Moreover, it allows anyone to dig through the data and understand the top-performing products, locations, and more.

2. Created the interactive reports in seconds and visualize the metrics important to your team.

3. Created interactive charts, graphs, maps, and other visuals in Excel and Power BI that bring data to life. Power BI desktop helps to get everything easily under the same solution to develop BI and data analysis experience.

CHAPTER - 9

CONCLUSION

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A dashboard is used for presenting a real-time status of business, monitoring business performance in organizations. An effective dashboard is able to facilitate decision-making process and to quickly trigger actions by delivering information to end users. In this project, a sales department, facing a large amount of data every day, requires a visual communication. To achieve a better data visualization, Microsoft power BI is integrated to visualize and display sales data through dashboard.

CHAPTER – 10

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