

A REPORT ON
Business Insights Dashboard
Using Power BI

BY

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AT
INK IN CAPS (IIC) INTERACTIVE LABS PRIVATE LIMITED,
MUMBAI

A Practice School—I Station of



BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI
June, 2025

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Suyash Mangla	2023A7PS0593P	B.E. Computer Science

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AT
INK IN CAPS (IIC) INTERACTIVE LABS PRIVATE LIMITED,
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Appendix-C

**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE
PILANI (RAJASTHAN)
Practice School Division**

Station: Ink In Caps (IIC) Interactive Labs Private Limited

Centre: Mumbai

Duration: 2 months

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Date of Submission: 24nd June, 2025

Title of the Project: Business Insight Dashboard using Power BI

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ID No: 2023A7PS0593P

Discipline: B.E.Computer Science

Name and Designation of the Expert: Divya Jain, Software Developer at IIC

Name of the PS Faculty: Prof. Jitender Kumar .

Project Areas: Data Analytics & Modeling

Abstract:

During my Practice School-I internship at IIC Interactive Labs Private Limited, Mumbai, I worked on a project titled "**Business Insights Dashboard using Power BI.**" The objective of this project was to gain hands-on experience in developing dynamic and interactive dashboards that transform raw data into meaningful business insights. The project involved connecting diverse data sources to Power BI, performing data cleaning and transformation using Power Query, designing robust data models, and creating visually impactful dashboards tailored to business needs. This experience enabled me to understand the complete workflow of a modern Business Intelligence solution—from data integration and modeling to dashboard design and insight generation. Overall, this project enhanced my technical skills in Power BI and deepened my understanding of how data analytics drives strategic business outcomes in a professional setting.



Signature of Student

Date 23 June 2025

Signature of PS Faculty

Date 23 June 2025

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INTRODUCTION

IIC Interactive Labs, based in Mumbai, is a cutting-edge MarTech and experiential design agency founded in 2021. As a full-service firm, it blends immersive technologies—like AR/VR, projection mapping, gesture recognition and spatial computing—with interactive installations, CGI, motion capture, and IoT solutions to craft engaging brand experiences. They also offer traditional digital services such as website and app development, AI-based systems, as well as 2D/3D animation and motion graphics.

Their collaboration portfolio is impressive, featuring projects for industry giants including Jio, BMW, Amazon, Netflix, Star Sports, Google, Maruti, Royal Enfield, and Disney+, where they've delivered immersive showrooms, virtual events, metaverse experiences, gesture-based activations, and projection-mapped campaigns.

During my time at IIC Interactive Labs, I aimed to gain hands-on experience in data modeling and visualization by building interactive Power BI dashboards. My goal was to understand the end-to-end BI workflow—from connecting raw datasets and transforming them into structured models, to designing dashboards that provide clear, actionable insights for business decision-making. As suggested by our mentor, I also completed a certified course covering the entire Power BI platform, which strengthened my understanding of data modeling, transformation, DAX functions, and dashboard design—skills that I directly applied during my project at IIC Interactive Labs. So far, we have developed three interactive dashboards using two distinct raw datasets, applying data cleaning, transformation, modeling, and visualization techniques within Power BI to extract actionable business insights.

As we progressed in the project, we decided to transition from Power BI to Google Data Studio (now Looker Studio) due to compatibility challenges. Since many team members use macOS, and Power BI Desktop is not natively supported on Mac, along with certain limitations in the web version, our mentor advised us to continue the upcoming tasks using Google's platform. This shift ensures better collaboration, accessibility, and seamless dashboard development for the entire team.

Comprehensive Overview of Dashboards & Business Insights

During my time at IIC Interactive Labs, I aimed to gain hands-on experience in data modeling and visualization by developing interactive dashboards using Power BI. As part of this initiative, I successfully built three dashboards using two raw datasets, applying key Power BI functionalities such as data transformation, relationship modeling, DAX calculations, and dynamic visual design to extract meaningful business insights. To begin with, we completed a certified Power BI course, which provided a strong foundation in data integration, transformation, modeling, and dashboard design. This equipped us with the essential skills required to effectively apply Power BI throughout the project.

Regarding POWER BI Learnings :

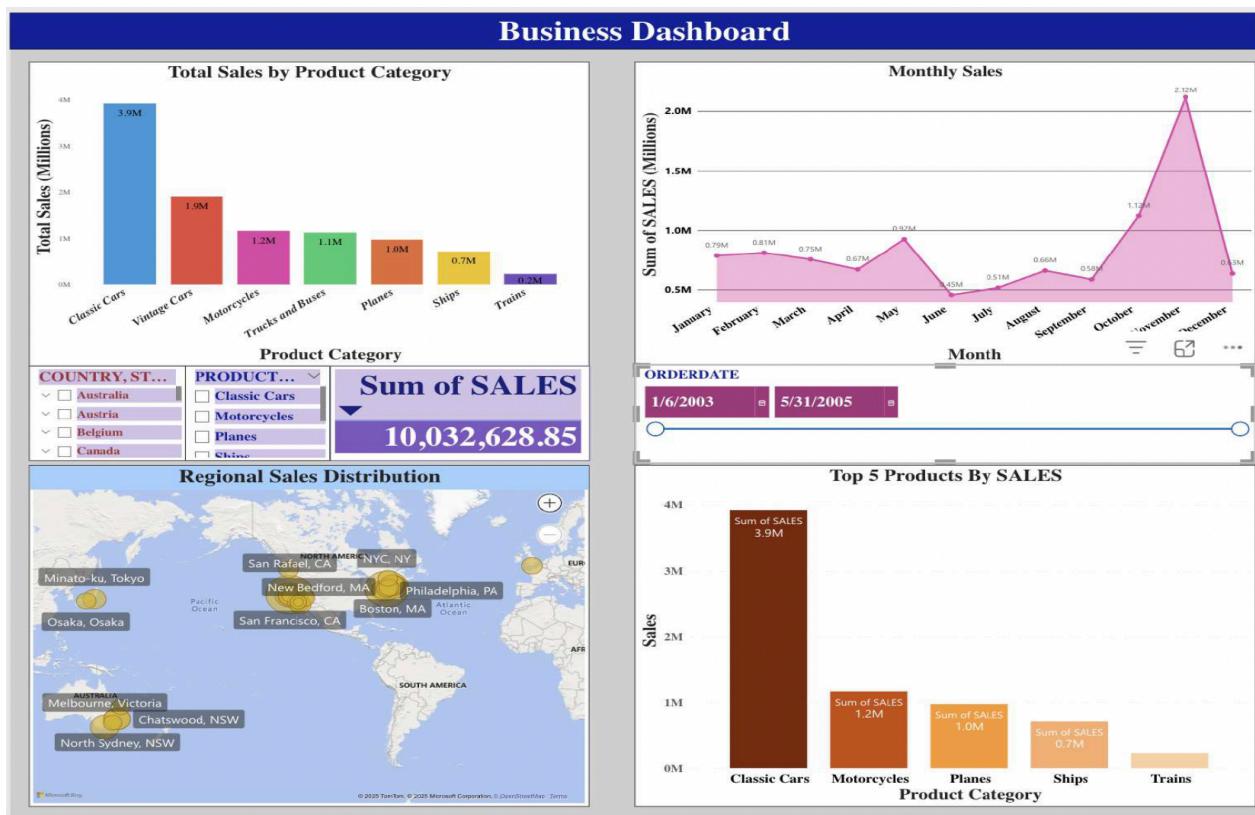
As recommended by our mentor, I completed the “Power BI Basics” course offered by Simplilearn (hosted via SkillUp). This beginner-friendly, self-paced program spans approximately 6 hours of video lessons and provides 90 days of free access, culminating in a completion certificate.



The curriculum covered all core aspects of Power BI—including its main components, Power Query for data transformation, DAX functions, data modeling, and dashboard creation—offering a solid foundational knowledge that directly enhanced my ability to build interactive dashboards in my project. In addition to the certified Power BI course, I also watched several introductory video tutorials recommended by our mentor to build a solid understanding of key Business Intelligence concepts and Power BI fundamentals before starting the hands-on project work.

Business dashboard 1:

As part of my Practice School-I project at IIC Interactive Labs, I developed an interactive Business Dashboard for a fictional retail store using Power BI. The objective was to apply concepts learned from a certified course and mentor-led tutorials to analyze and visualize sales performance data. The dashboard provides a holistic view of key metrics, including **total sales of ₹10,032,628.85**, **top-performing product categories (with Classic Cars leading at ₹3.9M)**, and monthly trends highlighting a **significant sales spike in November**—indicating possible seasonal factors or promotions. It also maps regional sales distribution, showing strong performance in cities like San Francisco, Philadelphia, Tokyo, and Sydney.

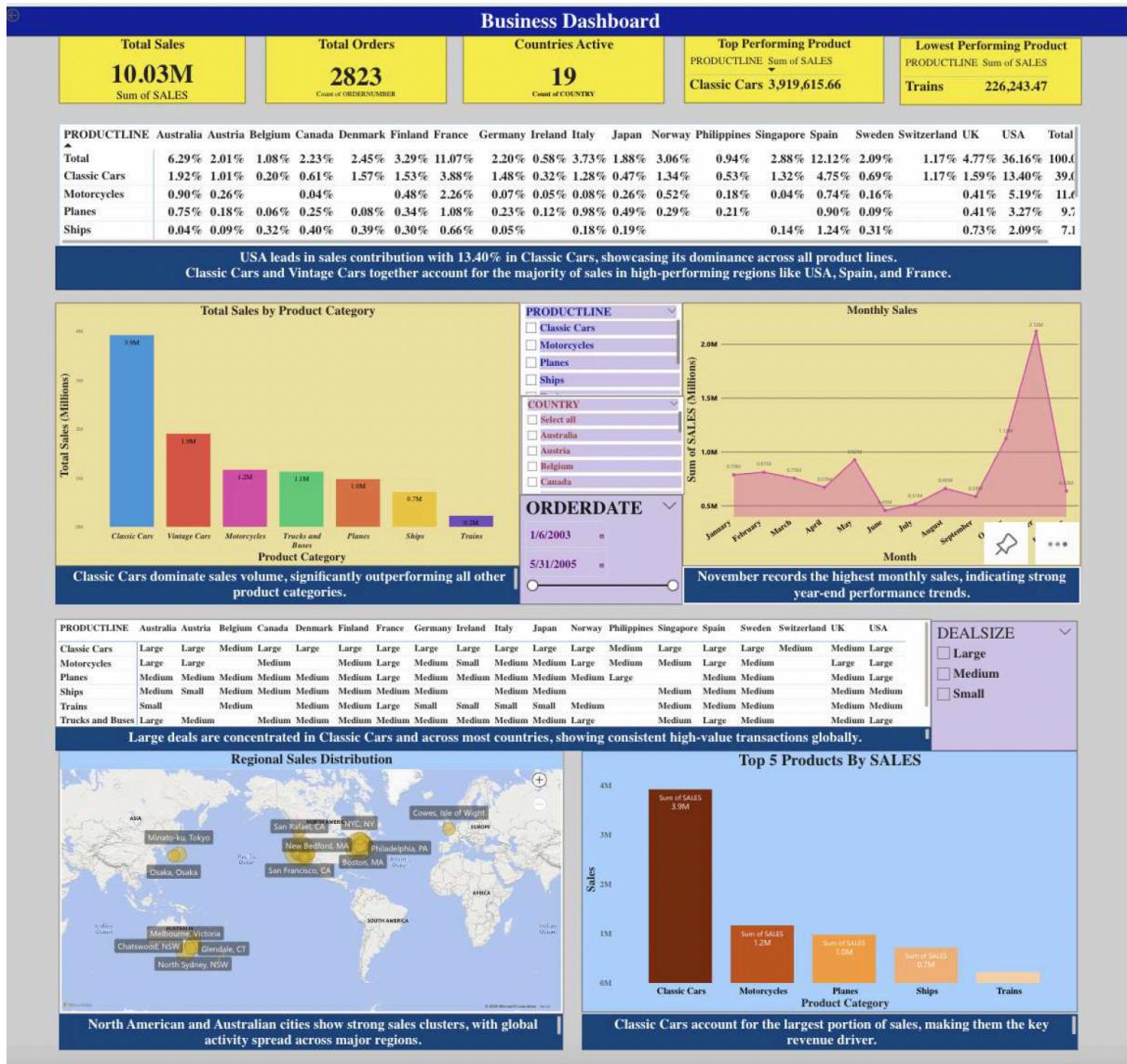


The **Regional Sales Distribution** map makes it easy to understand geographic performance visually. This project enhanced my skills in data transformation, DAX, and storytelling through visual analytics. The slicers for Region, Product Category, and Date Range are strategically placed at the center of the dashboard for easy accessibility. Top 5 Product Categories by Sales chart uses varying shades of the same color — from dark to light — to visually represent sales volume, with darker shades indicating higher sales. Slicers and filters for dynamic interactivity are implemented. Tools used include mainly Power BI web versions.

Business dashboard 2:

Based on our mentor's feedback, we restructured the dashboard to ensure that the first view offers a clear, high-level summary of the business data. The updated layout begins with a dedicated top row showcasing key performance indicators such as **Total Sales (₹10.03M)**, **Total Orders (2,823)**, **Countries Active (19)**, along with the **Top Performing Product (Classic Cars - ₹3.91M)** and **Lowest Performing Product (Trains - ₹226K)**. This redesign aligns with the best practices of business intelligence reporting by giving users an immediate snapshot of overall performance. Additionally, we reorganized visual elements to highlight regional sales distribution, product category trends, monthly performance spikes (notably in November), and the scale of deals across geographies. These enhancements not only improve the visual hierarchy of the report but also support better storytelling and faster decision-making for stakeholders.

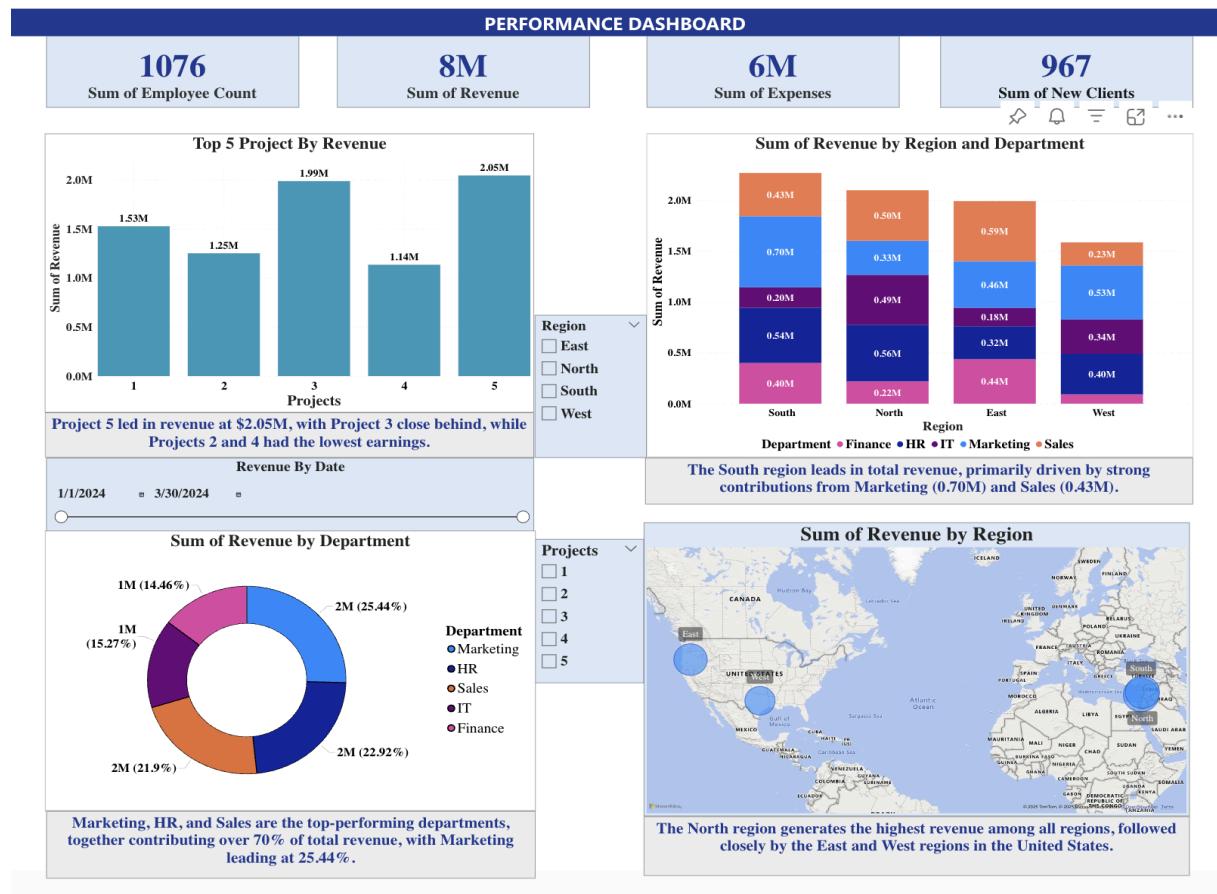
Following further guidance from our mentor, we refined the dashboard structure to move beyond surface-level insights and deliver deeper, decision-oriented analysis. The next-level enhancement focused on showcasing product performance across specific regions—such as countries and territories—to help identify which products perform well in which markets. This regional-product mapping empowers stakeholders to make geography-based business decisions.



Building on this, we included targeted graphs comparing product categories with sales and then drilled down by region for layered insights. Another critical improvement involved analyzing deal size distribution to understand which products generate more high-value (“Large”) deals and in which locations—an insight crucial for strategic targeting. We also optimized the use of filters by creating context-aware slicers: for example, the order date filter now applies across the entire report, ensuring consistent temporal comparisons across all visuals. Finally, to strengthen clarity and interpretation, we introduced concise, one-line conclusions beneath each graph, summarizing its core takeaway. These narrative cues guide the viewer’s attention and align the dashboard with business storytelling best practices.

Business dashboard 3:

The performance dashboard provides a comprehensive overview of the company's operational metrics across projects, departments, and regions. Among the top-performing projects, **Project 5 leads in revenue with \$2.05M**, closely followed by **Project 3 with \$1.99M**, while Projects 2 and 4 contribute the least—suggesting potential areas for strategic reassessment. From a departmental perspective, **Marketing** emerges as the highest contributor, accounting for **25.71%** of total revenue, followed by **HR (23.17%) and Sales (22.14%)**. Together, these three departments generate over 70% of overall revenue. Regionally, the North region performs best, with East and South not far behind, whereas the West lags and may require targeted interventions. A deeper look into regional-departmental impact shows that in the **South, Marketing and Sales dominate with \$0.70M and \$0.43M respectively**, while in the **East, Sales alone contributes \$0.59M**, making it the key revenue driver for that area. These insights enable data-driven decisions regarding resource allocation, regional focus, and departmental performance optimization.



Based on our mentor's guidance, we also implemented a professional color-coding scheme to enhance the visual clarity and consistency of the dashboard. The chosen palette was designed to maintain a balance between aesthetics and readability—using cool tones like blues and greys for neutral metrics, green for positive trends, and red or orange to highlight areas of concern or underperformance. This helped differentiate key insights at a glance, such as identifying top-performing projects and departments versus those needing attention. The application of a uniform visual language not only improved the dashboard's professional appearance but also made it easier for stakeholders to interpret data quickly and accurately.

CONCLUSION

Over the course of my Practice School-I internship at **IIC Interactive Labs**, I successfully completed a certified course on **Power BI Basics** offered by Simplilearn, which laid a strong foundation in data modeling, transformation, and visualization. Building on this knowledge, I developed **three interactive business dashboards** using two raw datasets, each designed to extract actionable insights for decision-making. The dashboards focused on analyzing sales performance, regional trends, product-level insights, and deal size distributions. Through iterative design and mentor-guided refinements, I implemented advanced features such as conditional filters, graph-specific slicers, and a professional color-coding scheme. These efforts have not only enhanced my technical skills in Power BI and data storytelling but also deepened my understanding of how Business Intelligence tools are applied in real-world business scenarios to drive strategic decisions.

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GLOSSARY

S.NO.	TERM	DEFINITION
1	Power BI	A Business Intelligence (BI) tool by Microsoft used to visualize and analyze data.
2	Looker Studio	A free tool from Google that allows users to create interactive dashboards and reports from various data sources.
3	Dashboard	A collection of visuals like charts, KPIs, and maps displayed on one page for analysis.
4	Dataset	A collection of data loaded into Power BI for modeling and visualization.
5	DAX(Data Analysis Expression)	A formula language used in Power BI to create custom calculations and measures.
6	Slicers	A visual filter that allows users to interactively refine report data.
7	Power Query	The ETL (Extract, Transform, Load) tool in Power BI for shaping and cleaning data.
8	KPI	Key Performance Indicator – a visual that tracks progress toward a measurable goal.
9	Filters	A tool used to restrict the data shown in a visual, page, or entire report.