

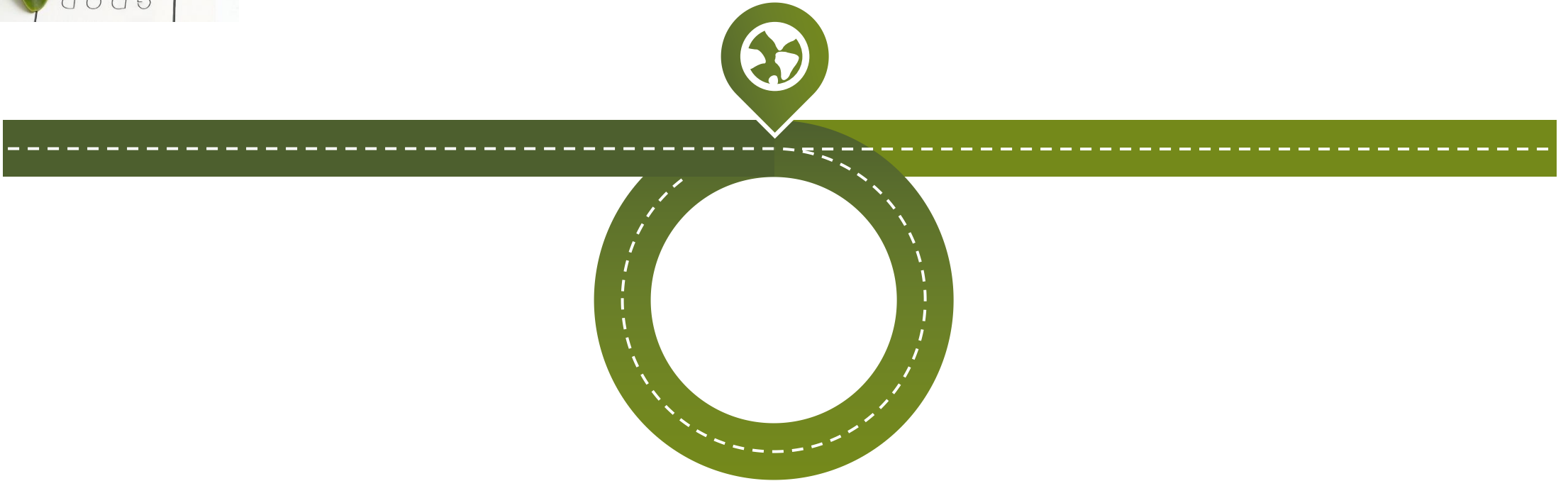


Hospital Emergency Room Dashboard – MIS Project

My First Excel MIS Dashboard on ER Performance



PURPOSE OF PROJECT



We need to create a Hospital Emergency Room Analysis Dashboard in Power BI to improve efficiency and provide useful insights. This dashboard will help stakeholders monitor, analyze, and make better decisions for managing patients and improving services.



Project Overview

01

First end-to-end Excel
MIS Dashboard

02

Built during
foundational data
analytics journey

03

Focus: Real-time
Emergency Room
(ER) operations

04

Enables data-driven
decision making in
healthcare



Project Context

Hospitals face
challenges in managing
ER operations

Without reporting →
delays & inefficiency



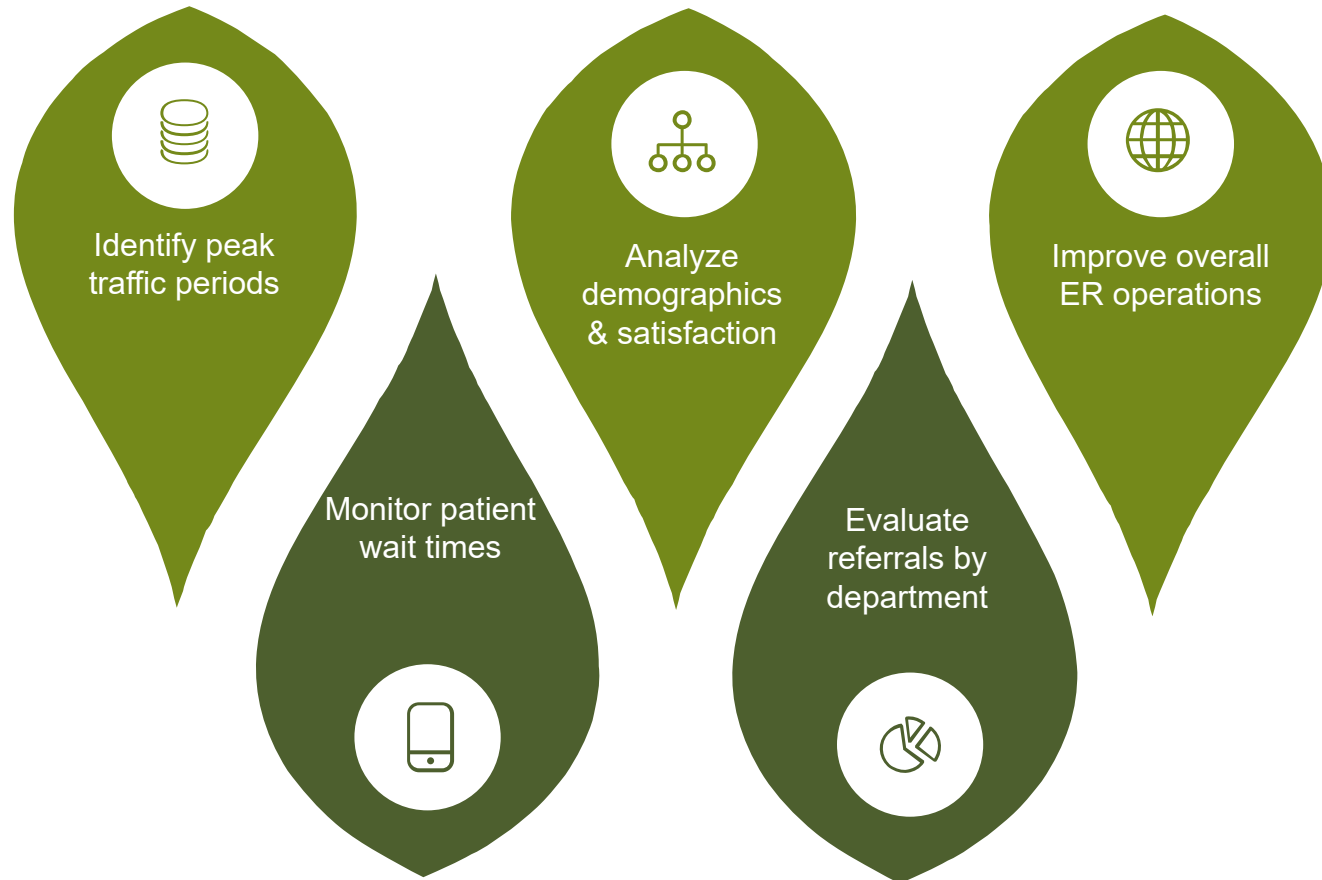
Difficulties: tracking wait
times, peak loads,
patient satisfaction

Dashboard solves by
centralizing ER insights



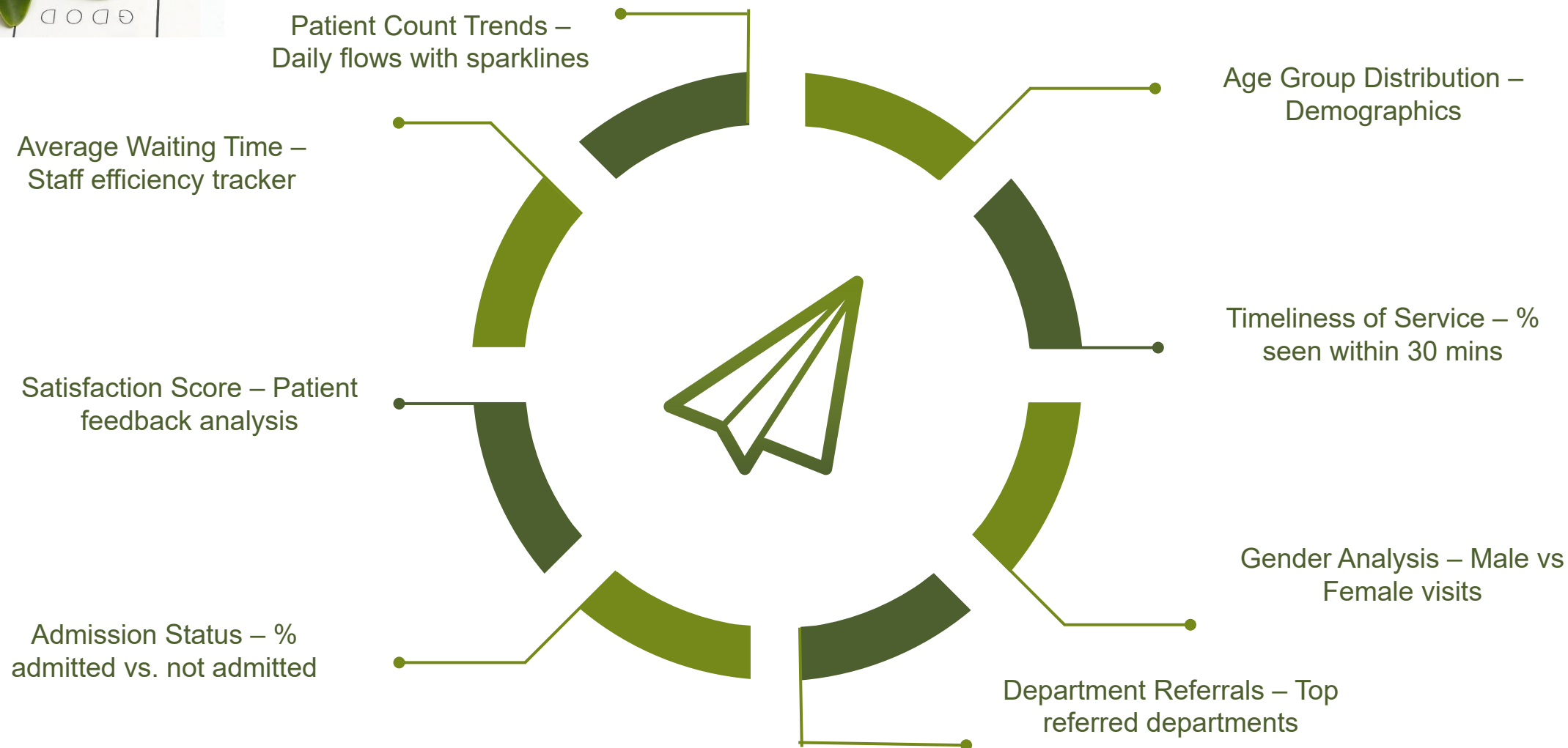
Project Objectives

The dashboard empowers hospital stakeholders to:





Key Dashboard Features





Dataset Details

Records: Patient-level ER visits

Fields:

- 
- 
- Patient ID
 - Date of Visit
 - Waiting Time
 - Satisfaction Score
 - Age Group
 - Gender
 - Admission Status
 - Referral Department



Tools & Excel Techniques Used



Data Cleaning &
Structuring



Pivot Tables
for summaries



Charts – Bar, Pie,
Column,
Doughnut



Sparklines –
Trends



Conditional
Formatting – KPI
highlighting

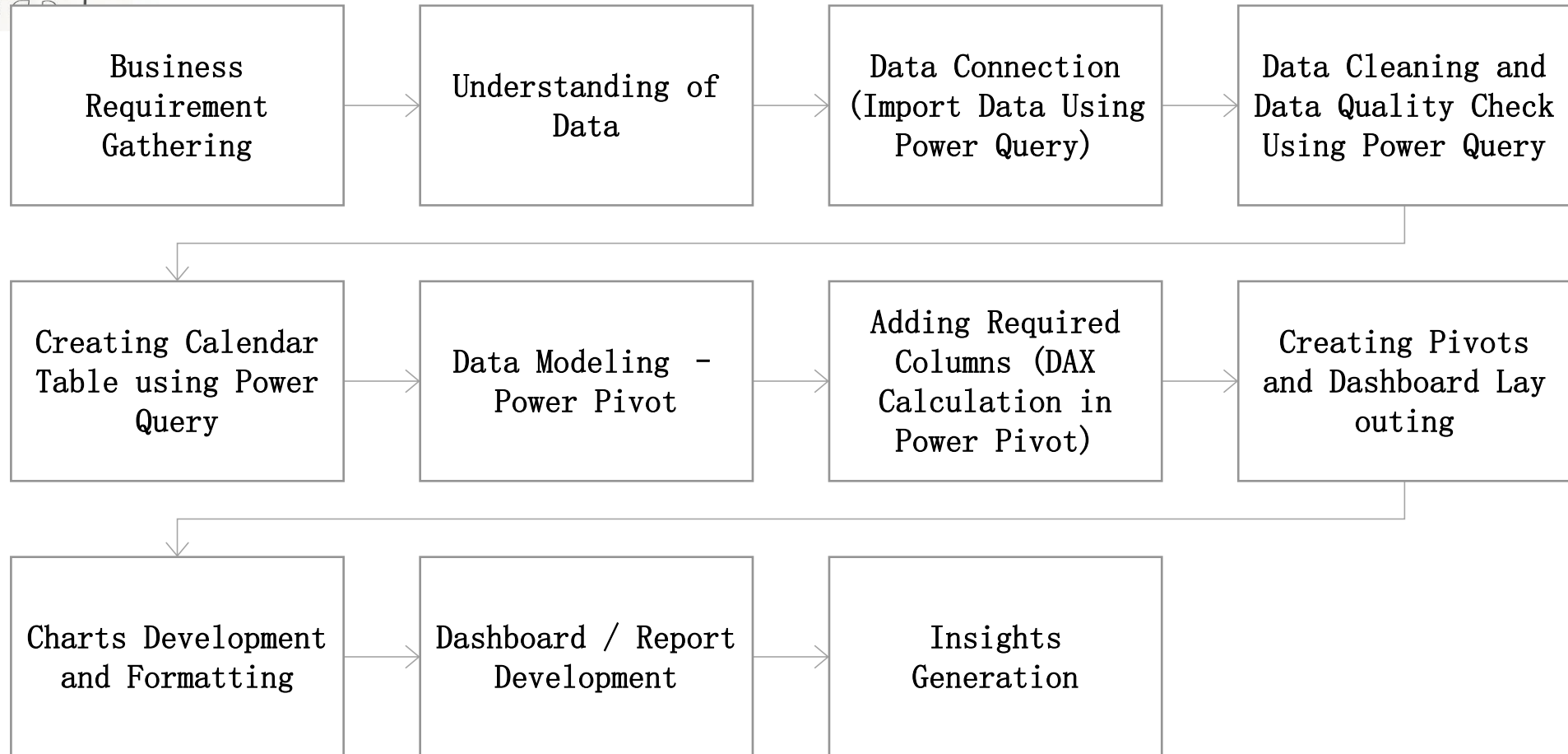


Excel Formulas:

- IF(), AVERAGEIF(), COUNTIF()
- INDEX-MATCH(), SUMIFS()
- Logical + aggregation functions



Project Steps





Formula

Calendar Table Formula

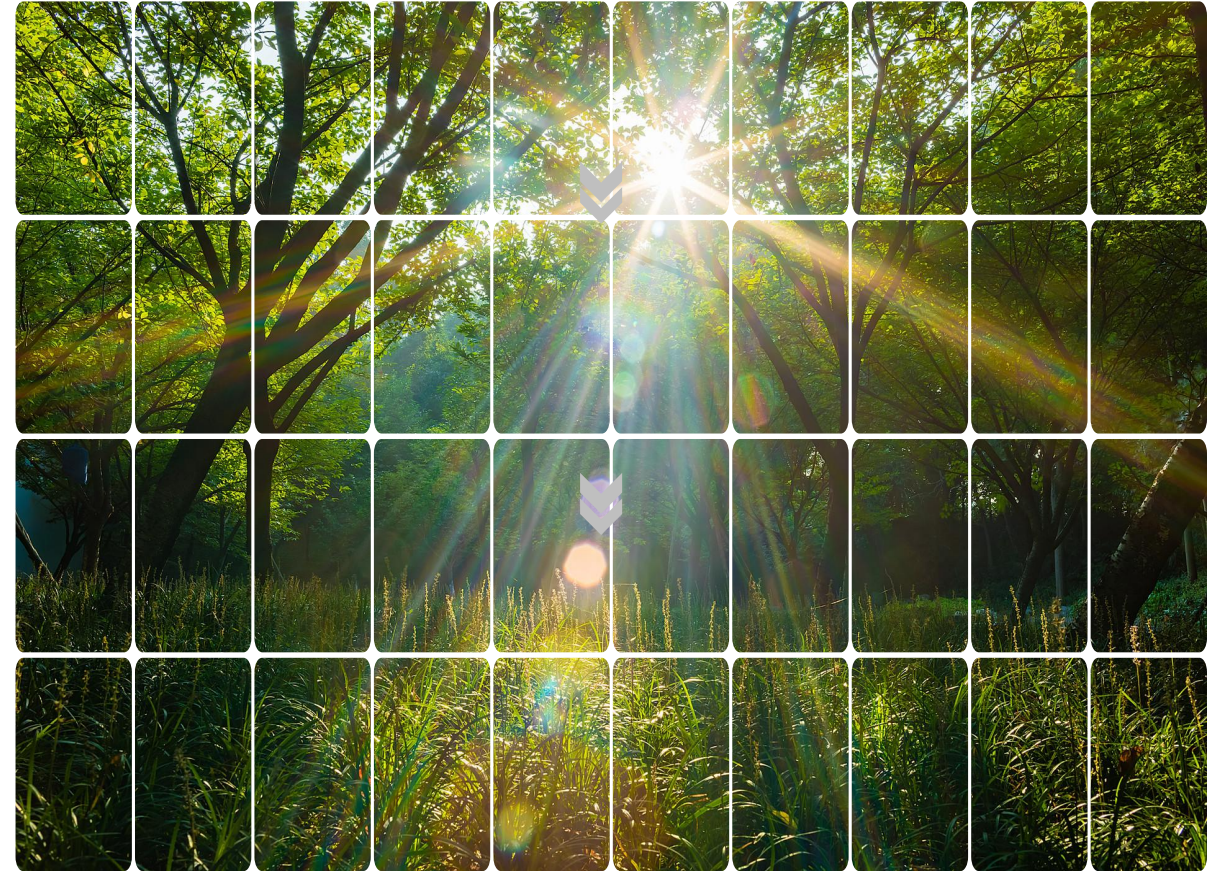
=List.Dates(#date(2023,01,01),731,#duration(1,0,0,0))

DAX Formula for Age Group :

=IF([Patient Age]>=70,"70-79",IF([Patient Age]>=60,"60-69",IF([Patient Age]>=45,"45-59",IF([Patient Age]>=30,"30-44",IF([Patient Age]>=15,"15-29",IF([Patient Age]>=5,"05-14","0-4"))))))))

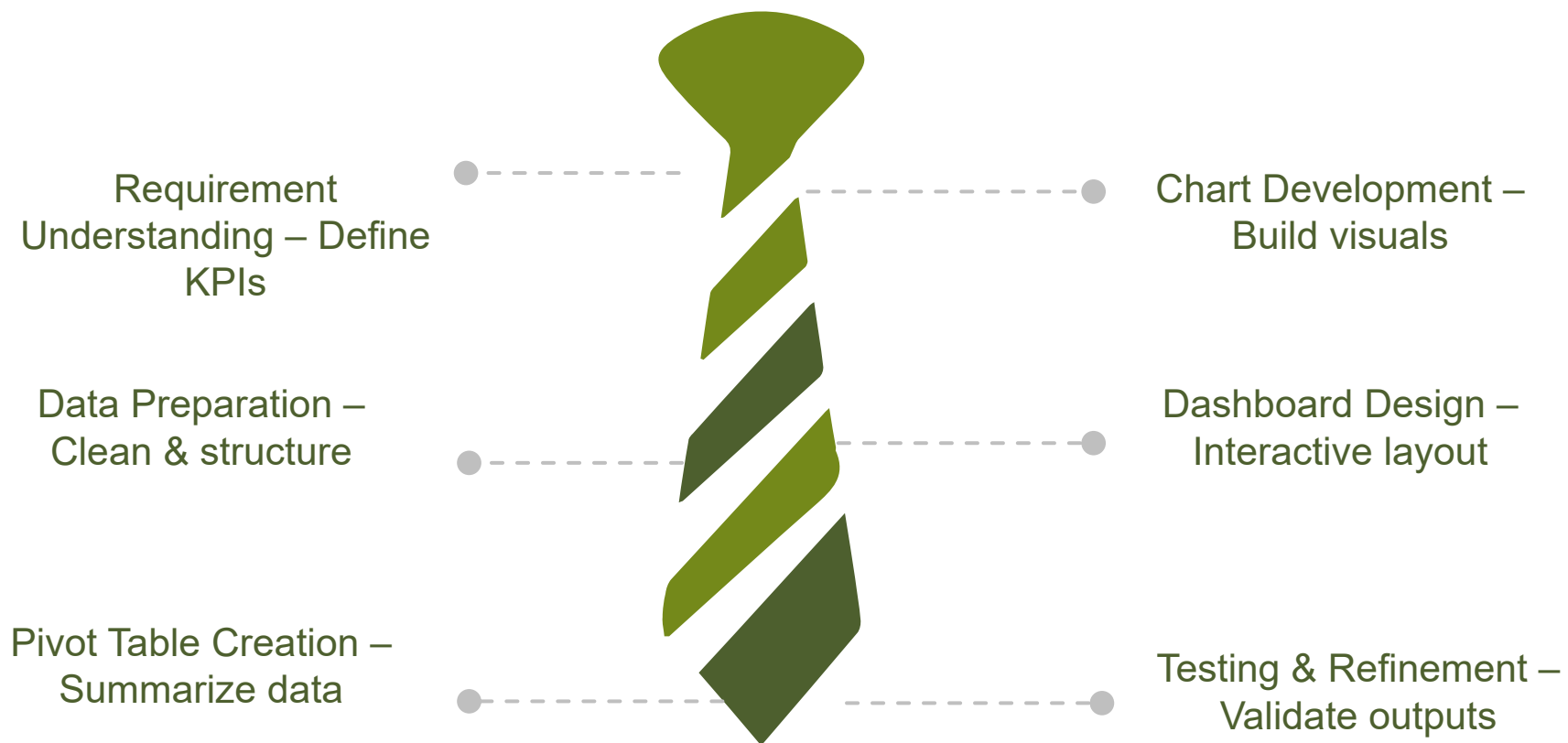
DAX Formula For Patient Attend Status :

=IF([Patient Waittime]<30,"Within Time","Delay")





Project Workflow





Charts to Create

- **Patient Admission Status:** Show how many patients were admitted vs. not admitted.
- **Patient Age Distribution:** Group patients by age.
- **Timeliness:** Measure the percentage of patients seen within 30 minutes.
- **Gender Analysis:** Display the number of patients by gender.
- **Department Referrals:** Check which departments patients are referred to the most.





Project Learnings

Value of clean data for
accuracy

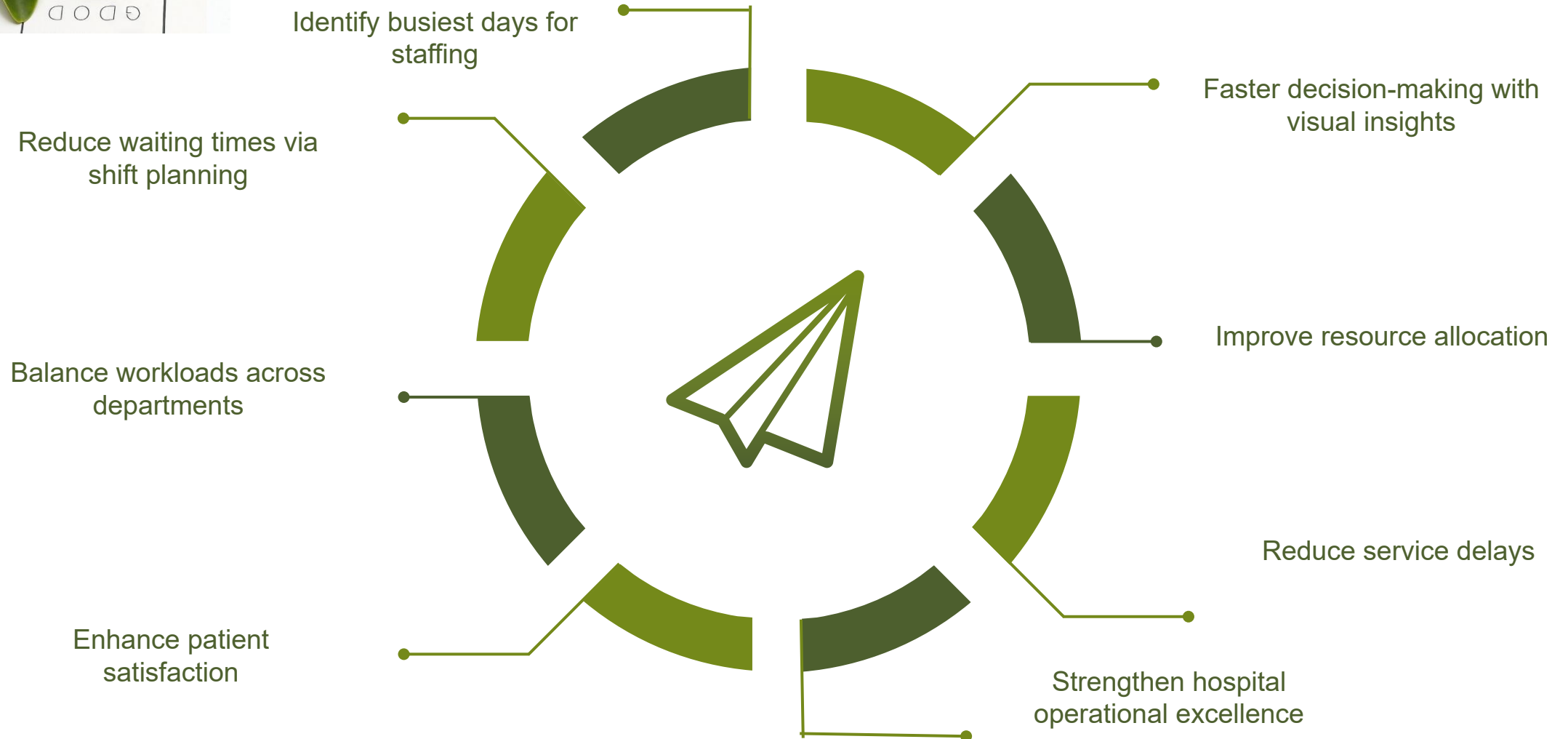
Visual storytelling aids
decisions

Excel is a powerful BI tool

Gained confidence to
independently build MIS
dashboards



Business Impact





Comparative Analysis

ER performance
compared across
weekdays vs weekends

Admission rates
compared across
referral departments

Wait time differences by
gender & age group

Helps spot hidden
trends in service
delivery





KPI Scorecard Snapshot

Quick summary of the most critical ER KPIs:

Avg. Patient Waiting
Time

Admission vs.
Discharge Ratio



% Patients Seen Within
30 Minutes

Patient Satisfaction
Score

Designed for “at-a-glance”
decision making



Stakeholder Benefits



Hospital Management:
Optimize staff & reduce
delays



Doctors: Prioritize
urgent cases effectively



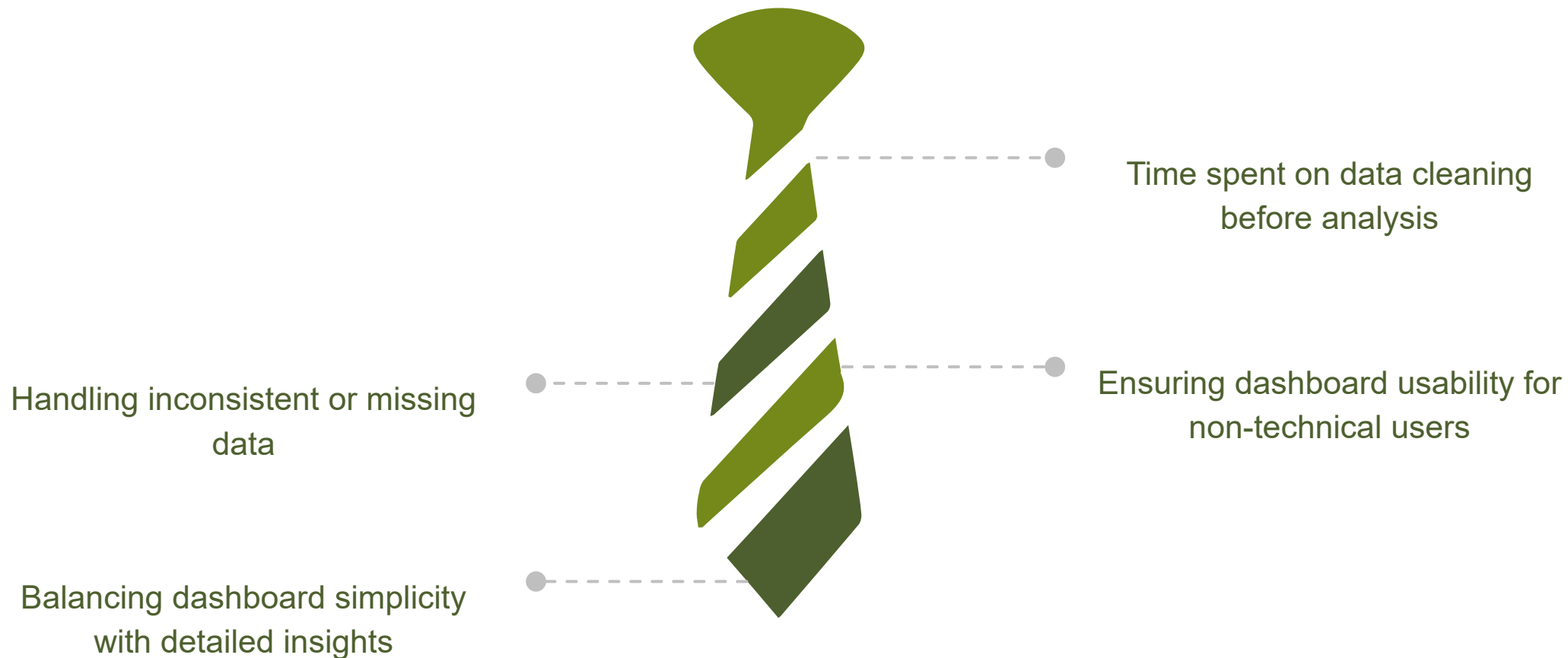
Nurses/Admins:
Manage patient inflow
with clarity



Patients: Better care,
faster service, higher
satisfaction

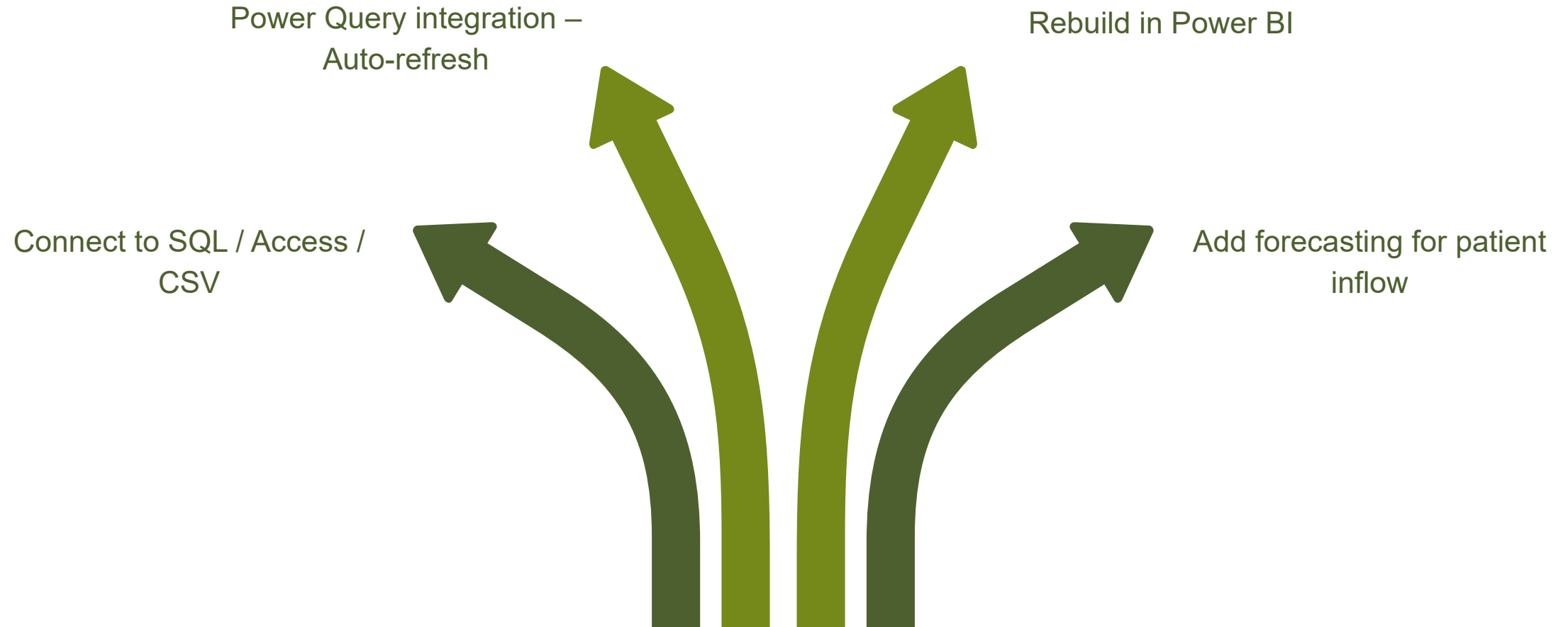


Challenges Faced





Future Scope



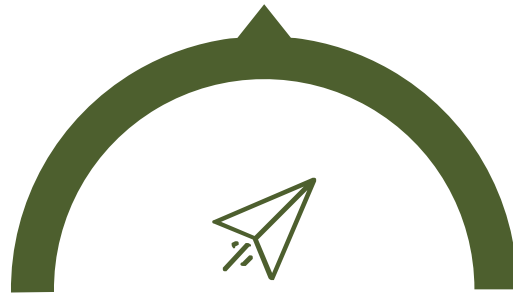


How to Use This Project

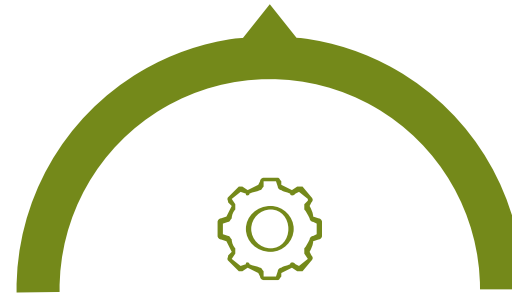
Download/Clone the
repo



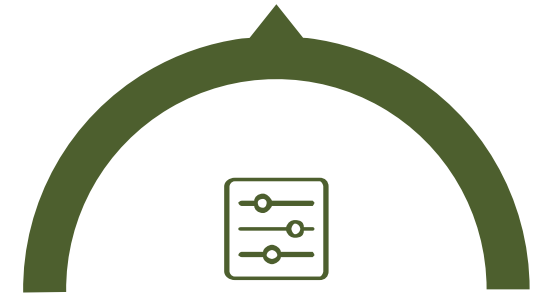
Open the .xlsx file



Explore dashboard
sheet



Modify dataset →
auto-updated results

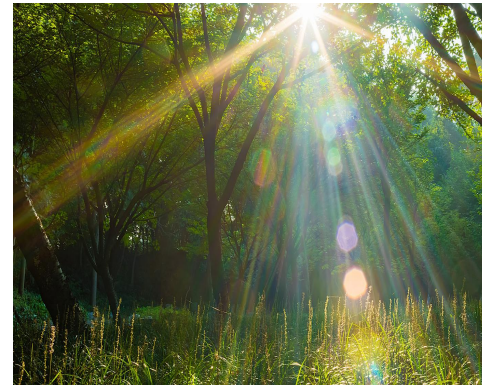




Conclusion & Call-to-Action



Dashboard = Real-world application of Excel as BI tool



Learnings will extend into Power Query & Power BI



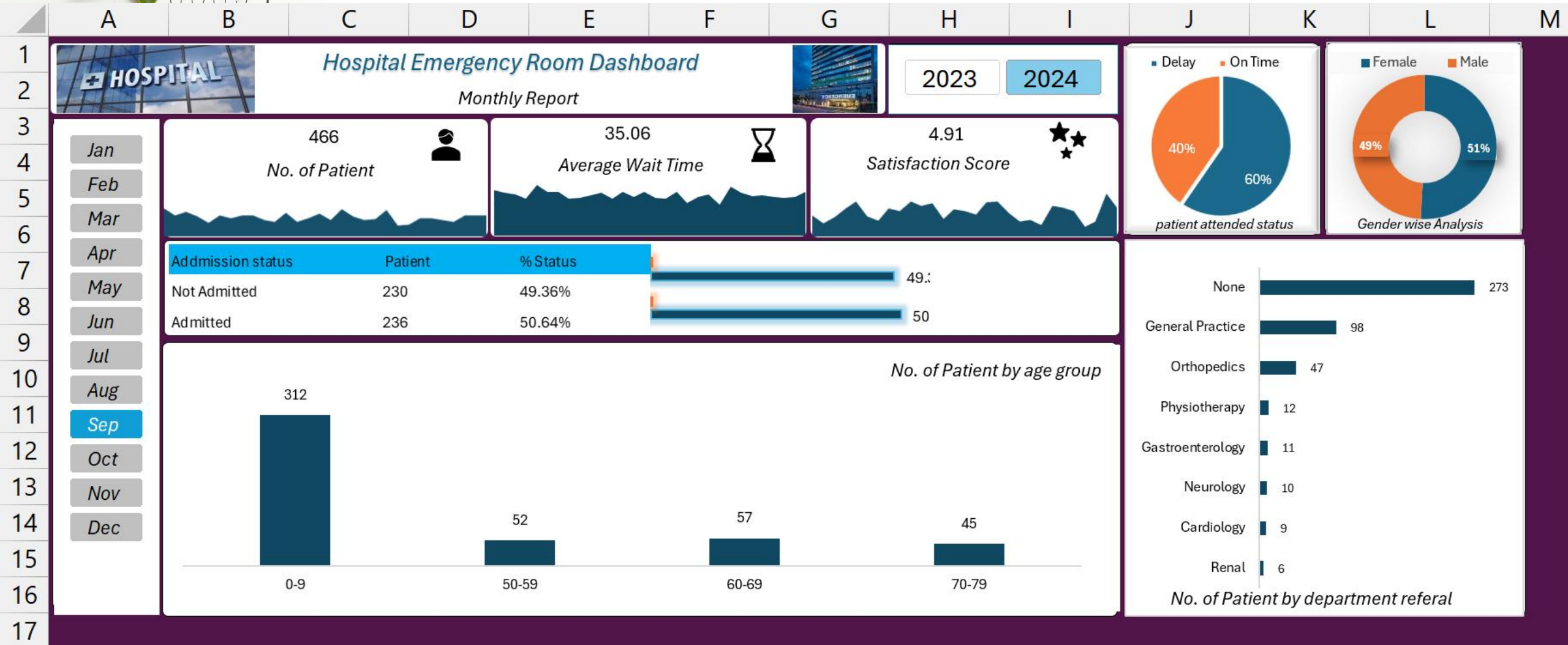
First step into Healthcare Data Analytics



Let's connect to explore Data + Healthcare innovations



Final Dashboard





Every great presentation is complete with a great audience —
and that's you!

Excel Project



MIS



Pivot Table