



Akscellence Info

Serving Clients with Excellence



About Us

- Provide data driven **Business Growth** Solutions using power of **Data , Analytics, Artificial Intelligence (AI) and Machine Learning (ML)**
- Our BI & Analytics offerings are :
 - **Data Management/Data Governance**
 - Design & Develop Enterprise Data Warehouse
 - Data Quality Solutions
 - **Advanced Data Analytics using AI & ML**
 - Predictive Analytics, Optimizers, Text Analytics
 - **Data Visualization using Power BI**
 - Design and develop visual dashboards
- Other traditional offerings :
 - Custom Solutions using **Microsoft Technology**
 - Customer Experience Mgmt. using **Sitecore**
 - Integration solutions using **Web Methods**
 - Staff Augmentation



BI and Analytics Offerings

Our BI and Analytics services help you make the most of your own data, collect and integrate third-party data, and analyze all of it for the benefit of your businesses.

We have unique blend of Data solutions and Basic & Advanced analytics (using AI/ML) to help you setup the complete solution

We will help you:

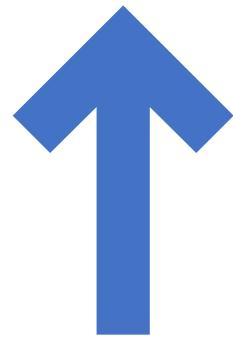
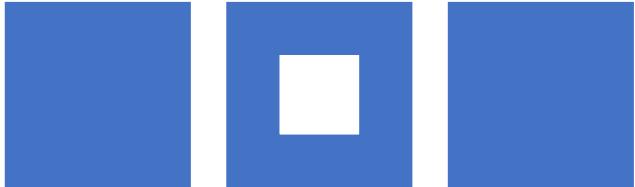
- Automate your Data Collection Process => **Reduce Efforts & Reduce Errors**
- Create Automated and Interactive Visual Analytics from your data (No manual intervention required)
- Write **Machine Learning Algorithms**
- Write Prediction Models with **Advanced Analytics**

Most important we have the capability of building custom applications to meet your specific requirements



Our Clients/Partners





SAMPLE
USE CASES

Warehouse Location Optimization (Using Machine Learning)



WAREHOUSE OPTIMIZATION

< ▾ Filters



THE PROBLEM

Client was interested in improving their warehouse processes and quality to match global standards of excellence in warehousing operations. Due to vast presence across country the standardization of processes across sites and benchmarking them with other sites within industry was a challenge for company.



THE REQUIREMENT

The dashboard will be evaluating the entire distribution strategy and implement changes that would directly translate into quantifiable benefits. Dashboard will evaluate Direct Delivery Model and its impact on the following -

- > Transport routing and scheduling
- > Order management and service levels



THE SOLUTION

We have developed POWER BI solution in which we have used Machine learning algorithms in python to find the number of warehouses

To achieve SLA we have factors which will influence it like distance and speed



THE BENEFITS

- > We provided a network roadmap for least cost distribution.
- > Significant savings through optimization of last mile transportation were identified.
- > Improvements resulted in around 12% reduction in cost.



Warehouse Optimization

Target SL %

99.00

SLA Calculaiton Base

Customer Count

Total Demand

Filters

of Warehouse

14

Distance Adj. (in KM)

5.50

Avg. Speed KM/day

180

S.Tran. Cost/KM/Carton

0.35

P.Tran. Cost/KM/Carton

0.25

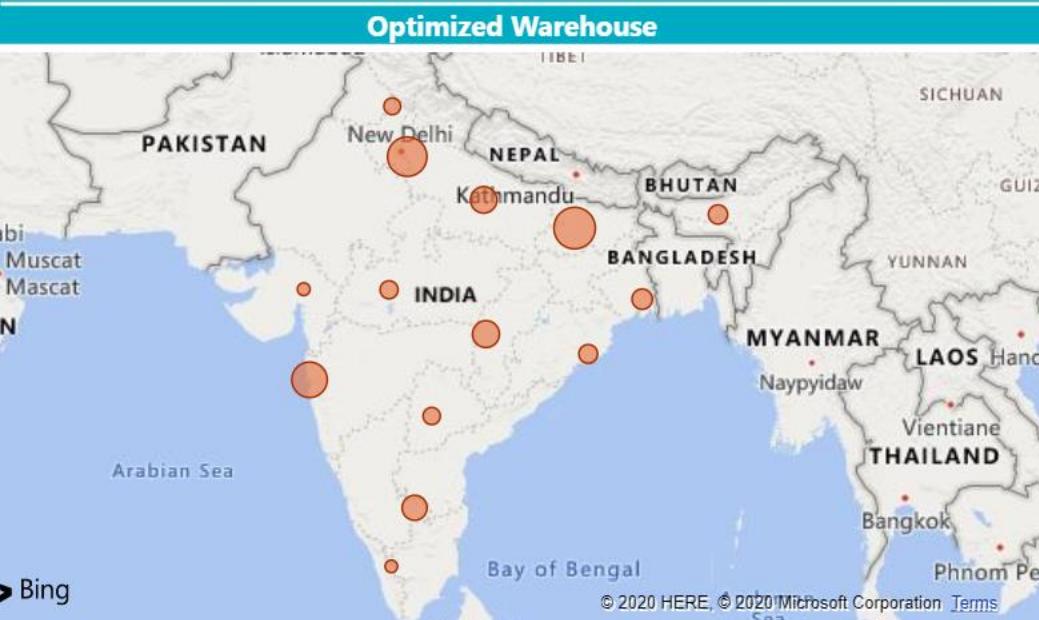
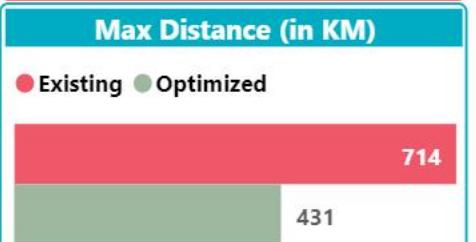
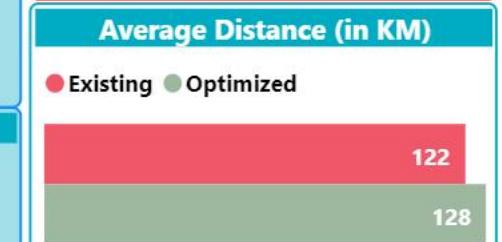
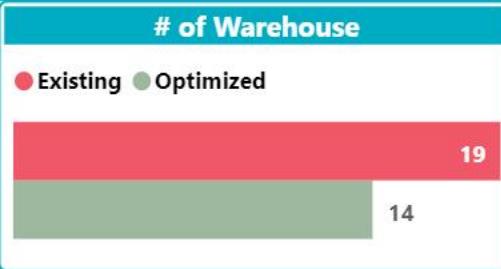
Cost

All

Secondary

Primary

Warehousing



Summary

Overview

Warehouse Map



Finance Dashboard (Predictive Analytics)

Overview

Total Sales

\$33.90M

Total Profit

\$8.25M

Total Unit Sold

357.71K



Year

2018

Month

All

Product

All

Segment

All

Discount Band

All

Country

All

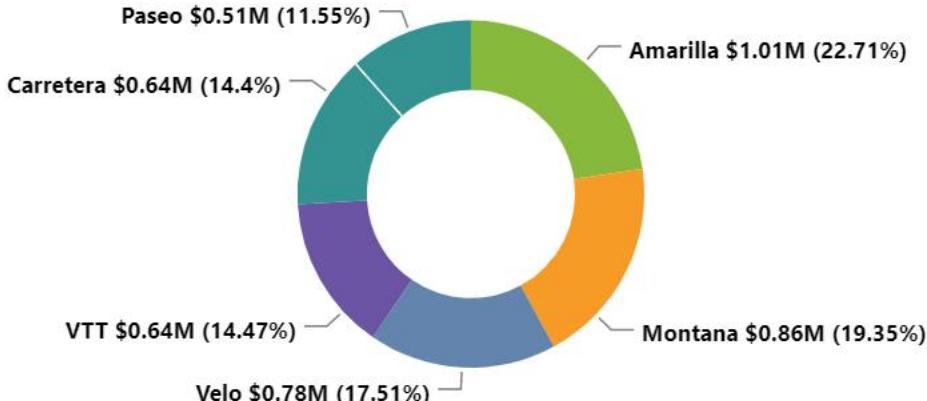
Sales by Month

MTD

YTD



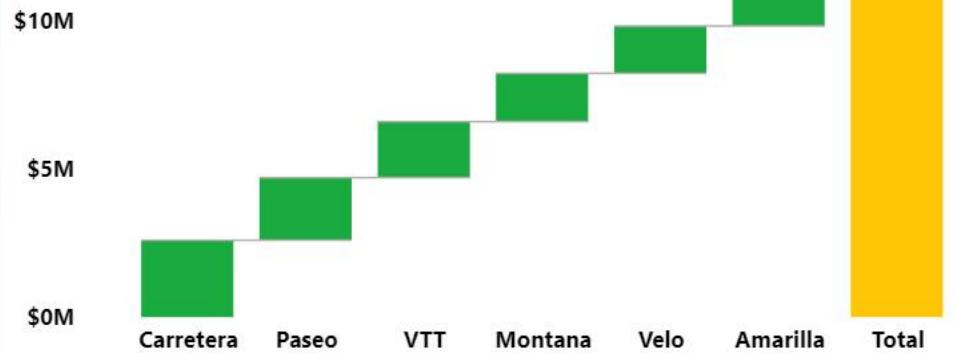
Product Profitability



Segment

All

Sales by Product



Sales by Country



Trends

Year

2018

Month

All

Product

All

Segment

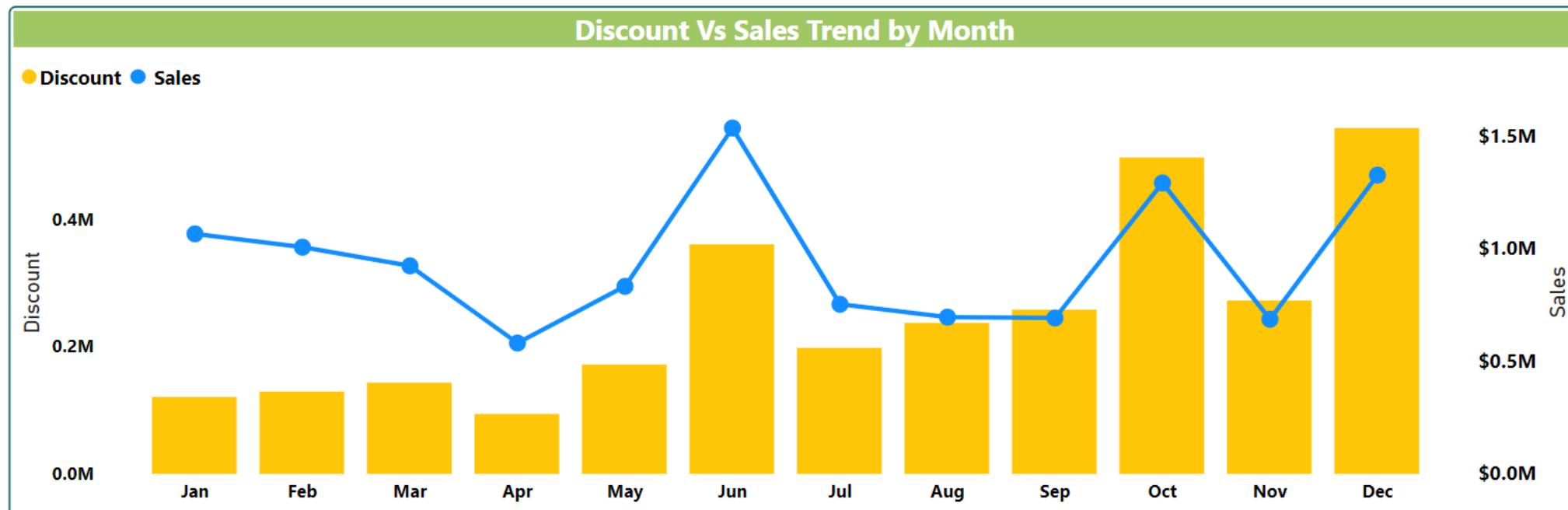
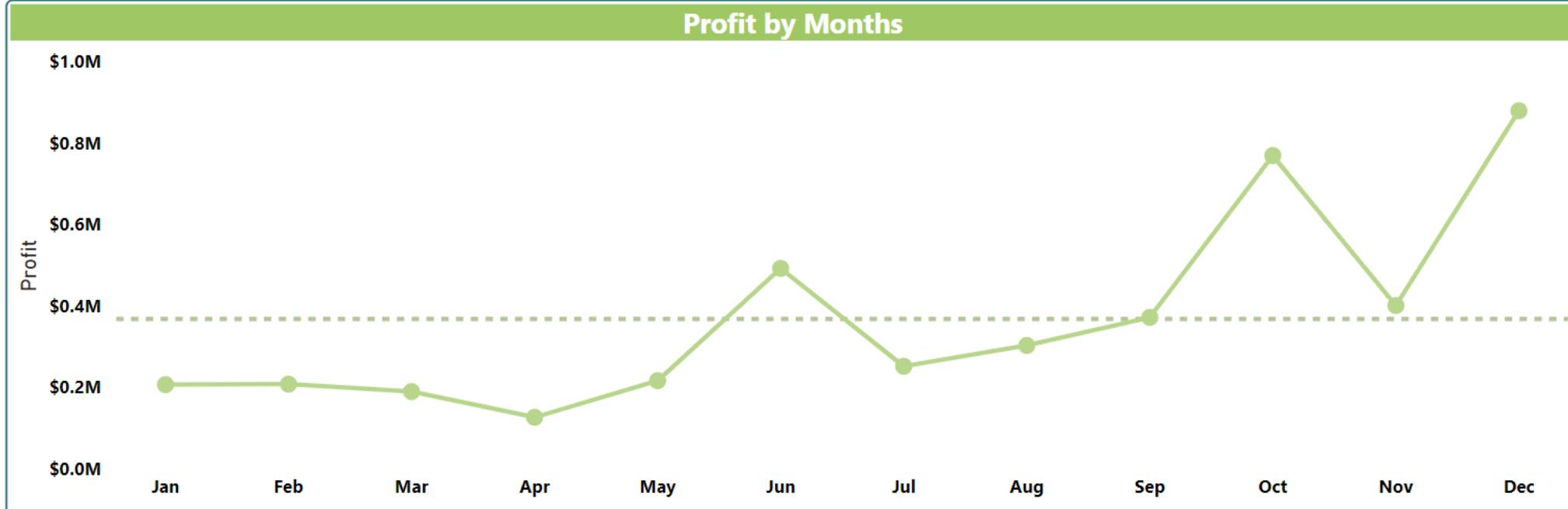
All

Discount Band

All

Country

All





Sales Influencers

< Filters

Year

2018

Month

All

Product

All

Segment

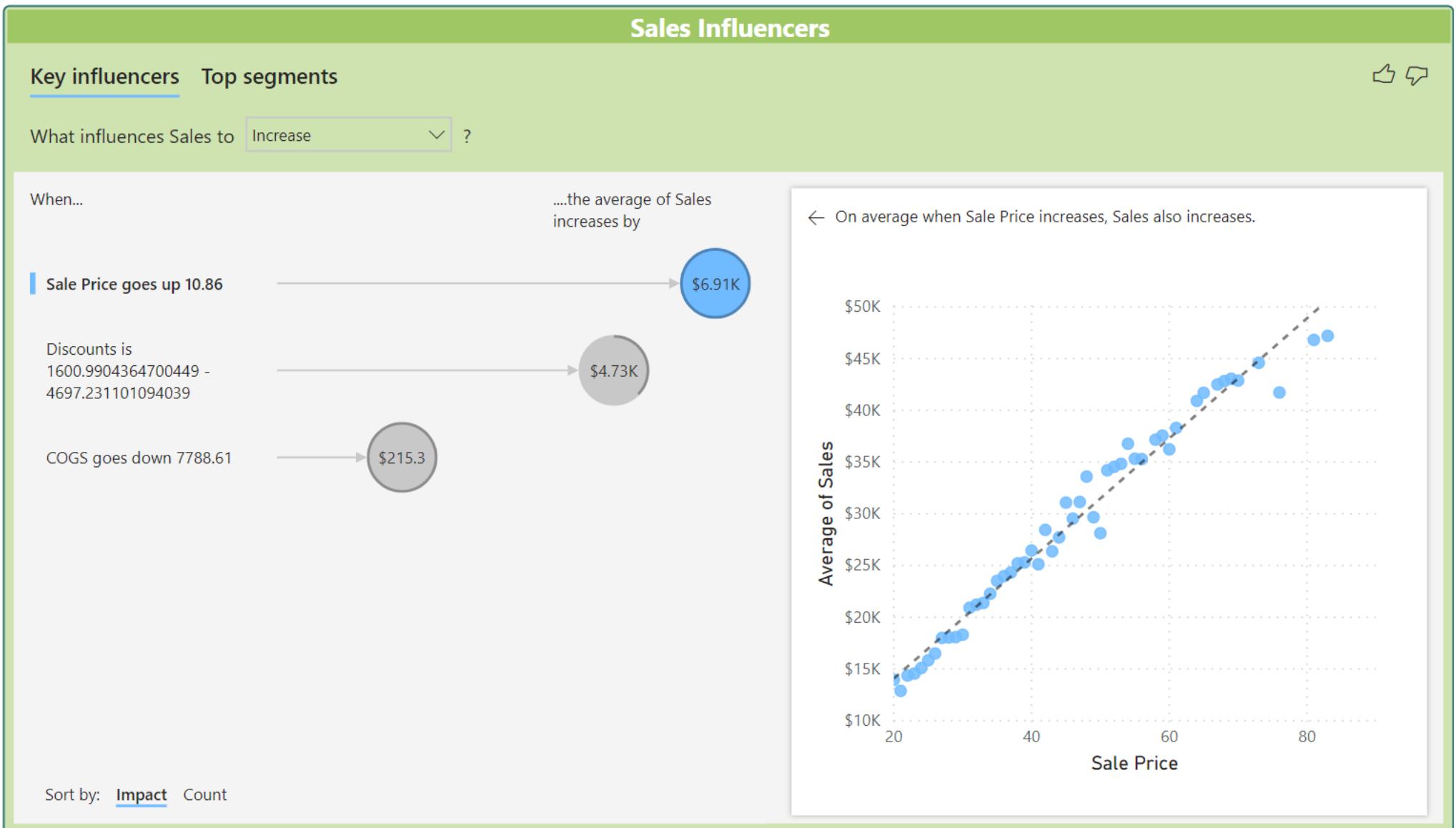
All

Discount Band

All

Country

All





Show/hide pane

-filters

Profit Influencers

Year

2018

Month

All

Product

All

Segment

All

Discount Band

All

Country

All

Profit Influencers

Key influencers Top segments

What influences Profit to Increase ?

When...

...the average of Profit increases by

Sale Price is 20 or less

\$4.55K

COGS goes down 7788.61

\$4.46K

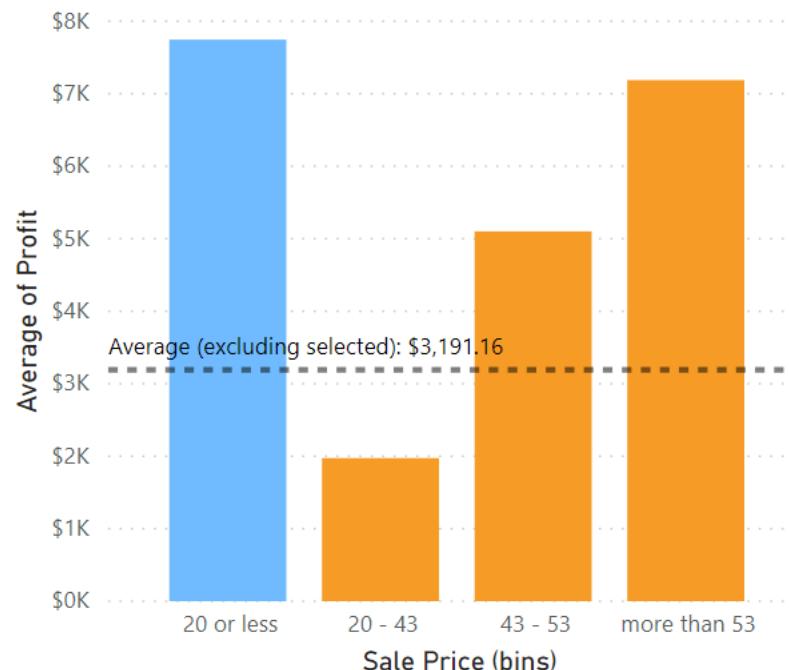
Sales is \$13,294.33 - \$16,464.00

\$3.87K

Units Sold goes up 135.56

\$880.3

← Profit is more likely to increase when Sale Price is 20 or less than otherwise (on average).



Sort by: Impact Count

Only show values that are influencers



Profit Optimizer Tool Using Machine Learning

< Filters

Select Sales Price

\$25.4

\$23.3(Actual Avg Sale Price)

Select Discount%

10.0%

15.2%(Actual Avg Discount %)

\$30.8

Best Sale Price to Maximum Profit

R2 score

0.8001

Predicted Unit Sale

195.08K

▲ 15.1%

Predicted Sales

\$4.5M

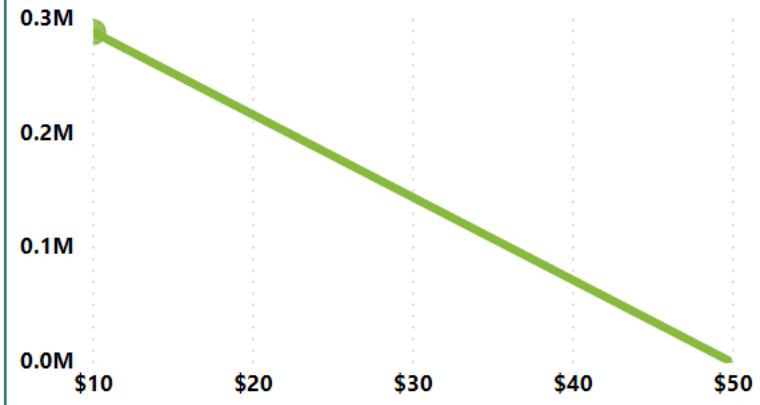
▲ 32.9%

Predicted Profit

2.20M

▲ 57.8%

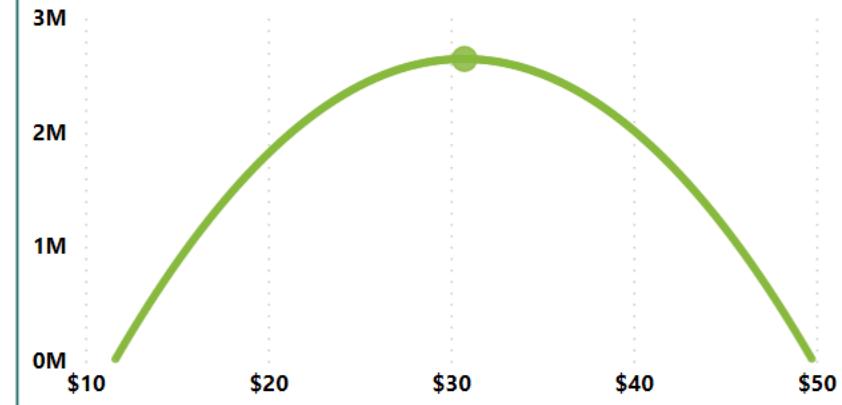
Predicted Unit Sale Vs Sale Price



Predicted Sale Price Vs Sale Price



Predicted Profit Vs Sale Price



Product

Amarilla

Carretera

Montana

Paseo

Velo

VTT

Predictive Analysis



Filters

Product

Amarilla	Paseo
Carretera	Velo
Montana	VTT

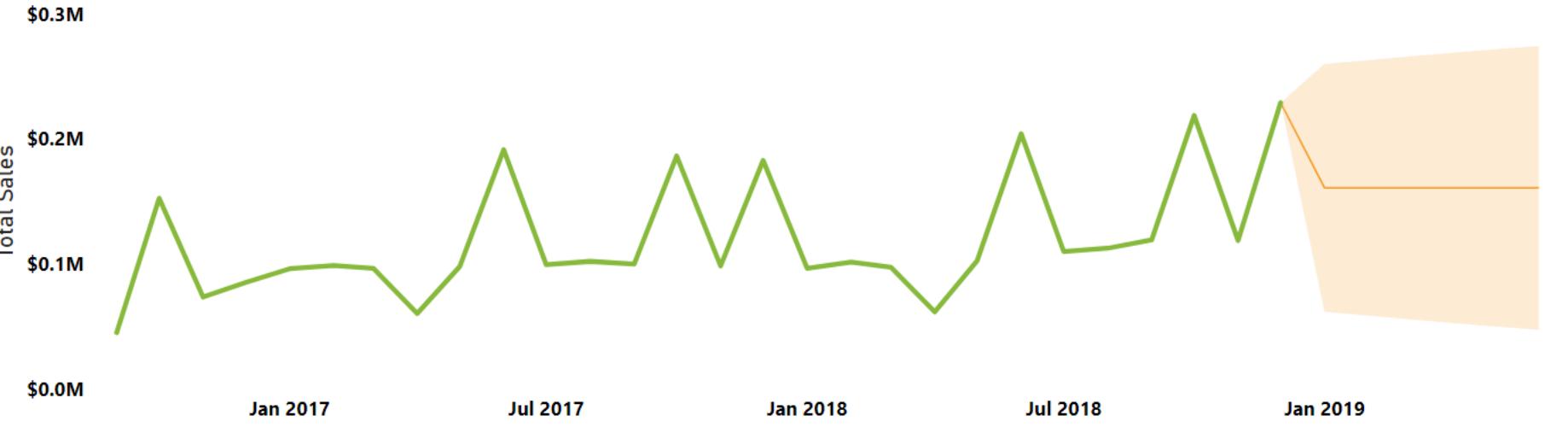
Country

Canada
France
Germany
India
Japan
Mexico
United Kingdom
United States of America

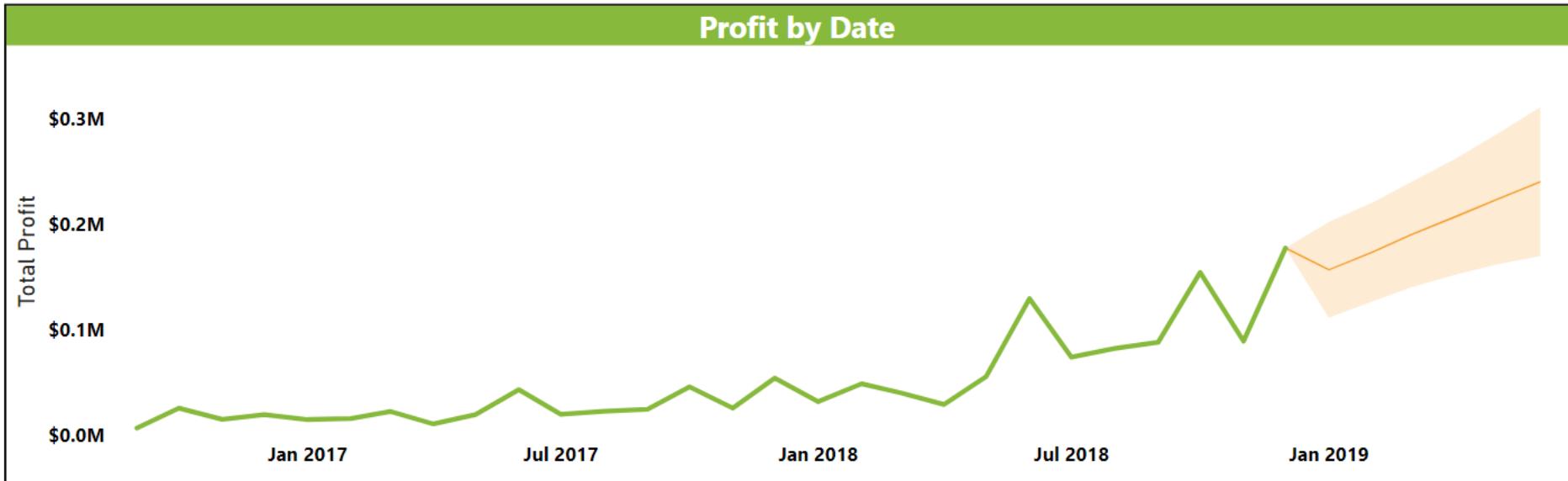
Segment

Channel Partners
Enterprise
Government
Midmarket
Small Business

Sales by Date



Profit by Date



Human Resources Dashboard



HUMAN RESOURCE DASHBOARD



THE PROBLEM

- > HR Executives may face problems in getting complete insight of their employees status, turnover rate, reason account for turnover.
- > Retaining, acquiring, and training good employees is a difficult and complex task in today's workforce environment.
- > Their data was in multiple IT System due to which they are not able to get a complete view and insight of their business.
- > This resulted in inefficiency while managing human resource of the company.



THE REQUIREMENTS

HR Dashboard provide HR analytics insights at every prospective. **Quickly address important business questions like:**

- > What does your corporate culture look like from age and gender?
- > How do salaries vary based on social demographics, job titles, etc?
- > How satisfied the employees are?
- > What is the promotion status based on year of service level?
- > What are the prominent reasons of turnovers?



THE SOLUTION

It is simple to collect, analyze, and share employee data without the help of IT. This dashboard enables your HR managers and analysts to analyze employee counts, salaries, and years of service to make better HR decisions.

The HR Analytics Dashboard provides a bird's eye view of an organization's Human Resource, based on factors like:

1. Attrition Rate & Turnover Rate
2. Hirings
3. Exits



THE BENEFITS

- > Appropriate measures can be taken to improve future hirings.
- > Employee satisfaction level can be improved if low rated.
- > Help executive in retaining employees.
- > Employees can get attention who are not promoted after long service period.
- > Effective recruitment source can be known by getting insight of turnover source.

Month

Year

Location

Department

Position

Marital Status

Recruitment Source

310

Total hiring

196

Employee count

103

Terminated staff

41

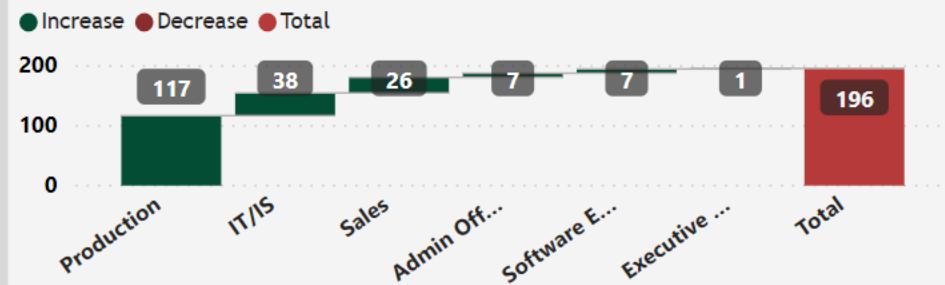
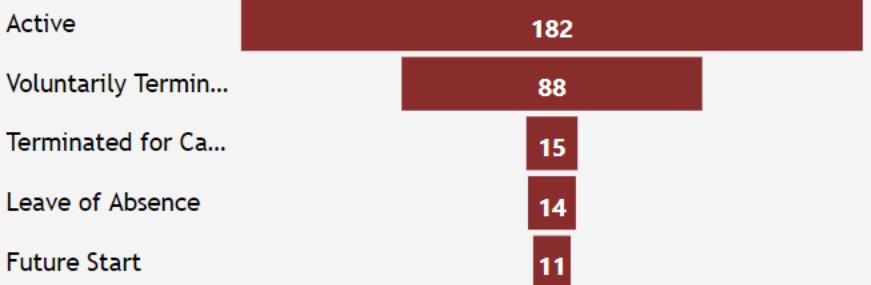
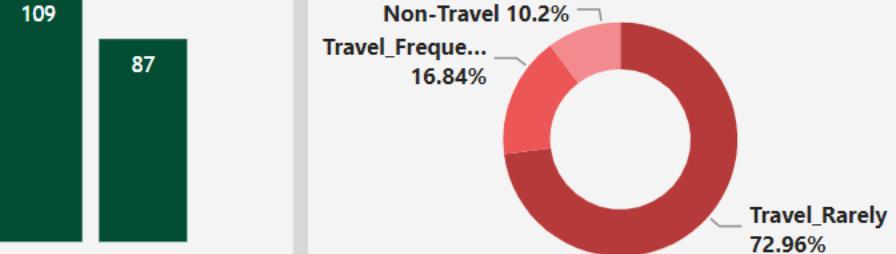
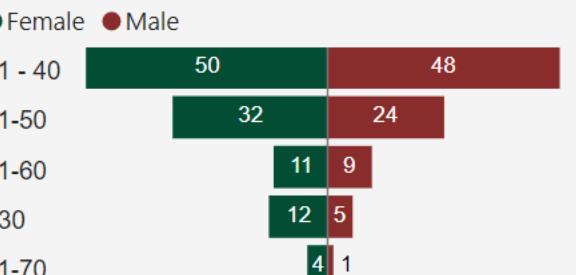
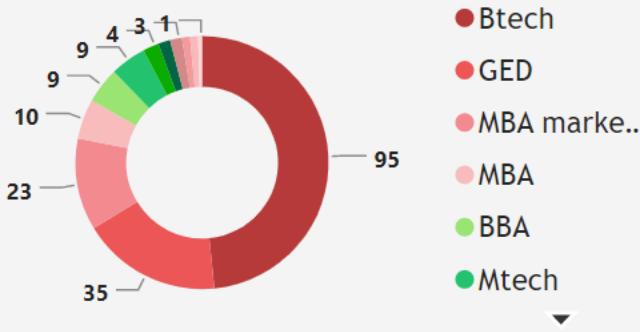
Average Age

27.05%

Turnover Rate

39.02%

Attrition Rate

Employee Hiring by Month**Current Employee by Department****Total Hired by EmploymentStatus****Current Employee by BusinessTravel****Current Employee by Location****Current Employee by Age & Gender****Current Employee by Highest Qualification**

Salary & Promotion

Month

Year

Location

Department

Position

Marital Status

Recruitment Source

289M

Total Salary

4M

Highest Pay

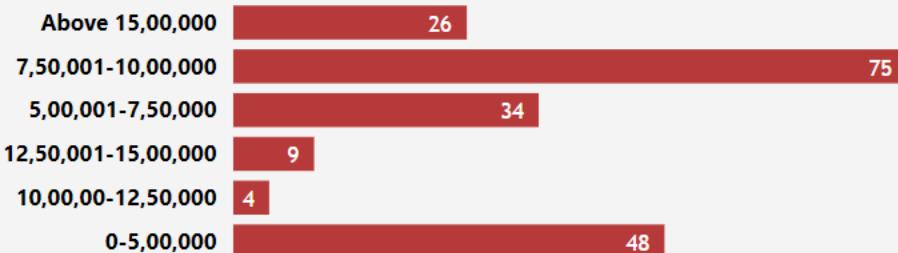
300K

Lowest Pay

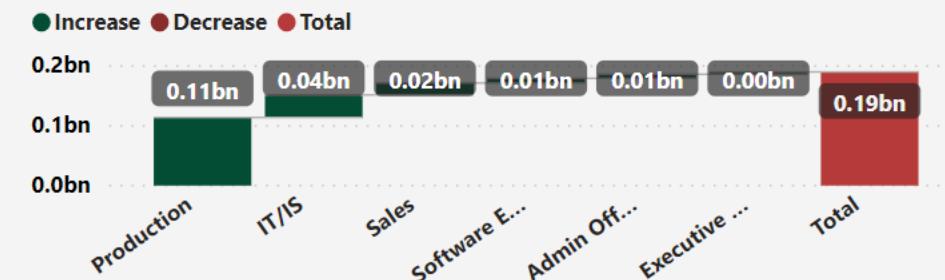
190M

Total Salary of Current Employee

Employee by Salary

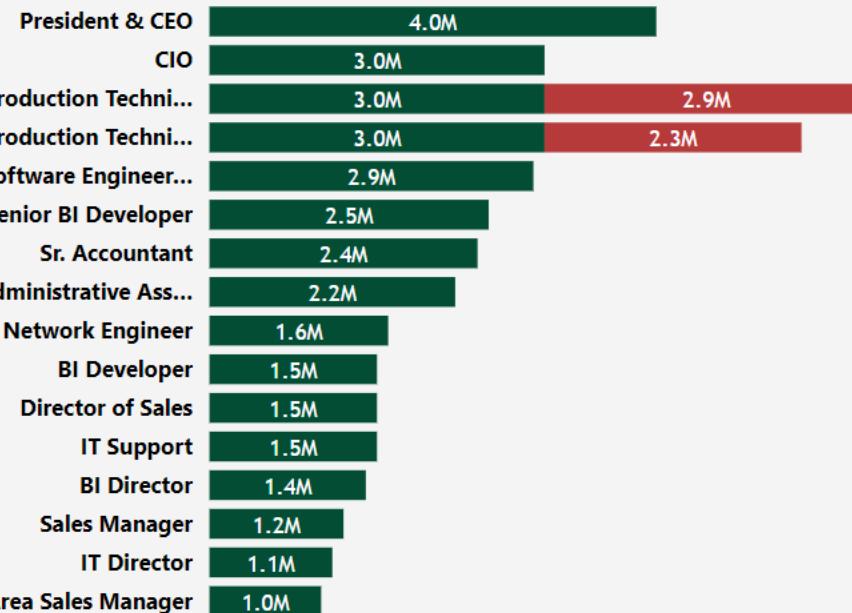


Current Employee Salary by Department

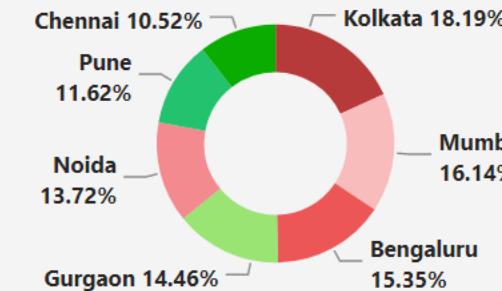


Max Salary by Position

EmploymentStatus ● Active ■ Leave of Absence

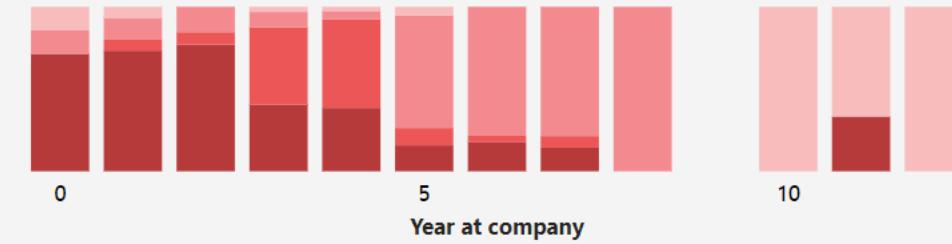


Salary by Location



Employee by Total Promotion & Experience in Company

Total Promotion ■ 0 ■ 1 ■ 2 ■ 3





Turnover

Month

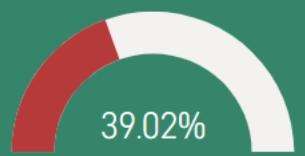
Year

Location

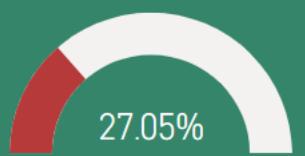
Department

Position

Attrition Rate

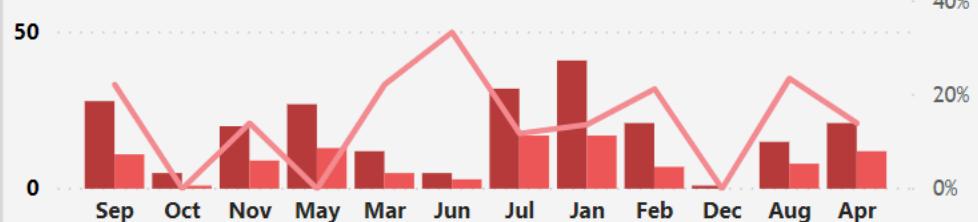


Turnover Rate



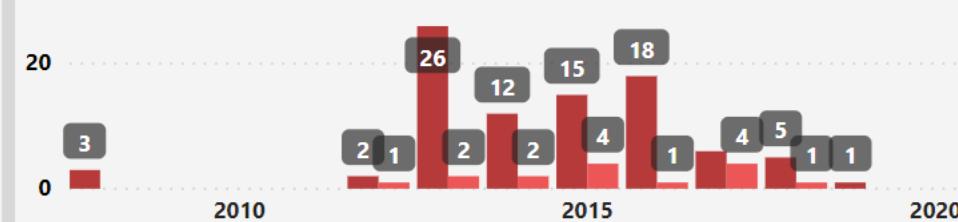
Employee count, Terminated staff and Turnover Rate

● Employee count ● Terminated staff ● Turnover Rate

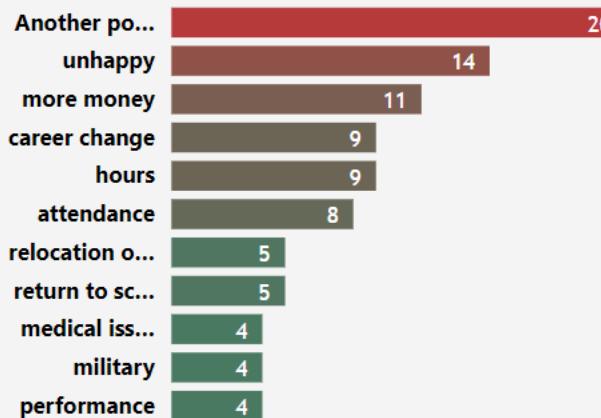


Voluntary leavers and Involuntary leavers by Year

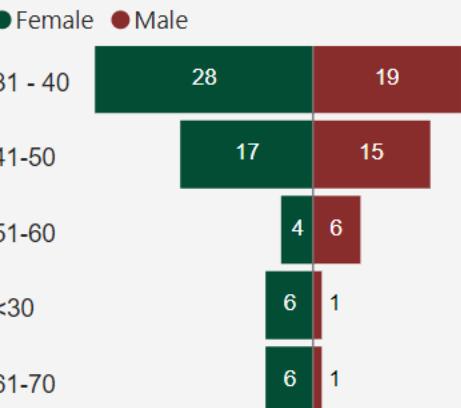
● Voluntary leavers ● Involuntary leavers



Terminated staff by TermReason

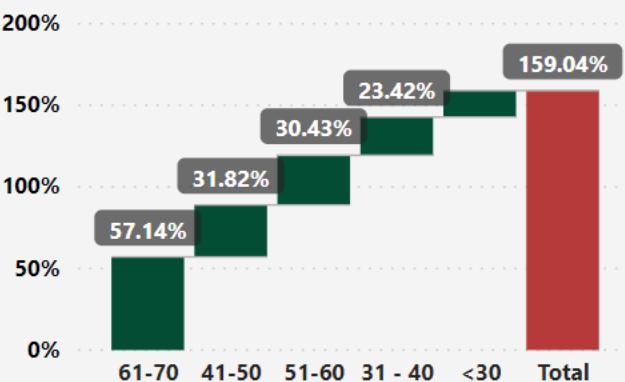


Termination by Age and Gender



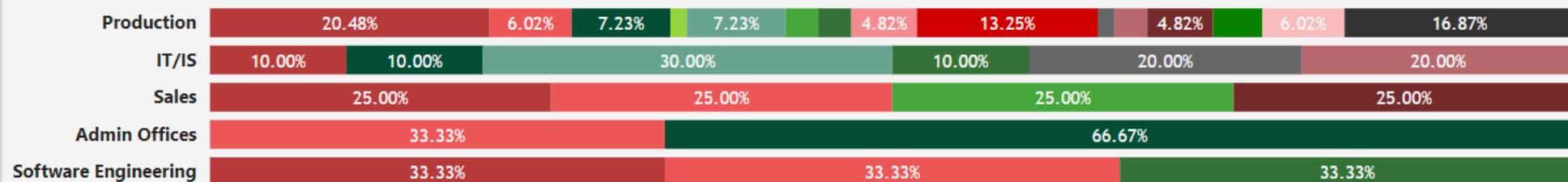
Turnover Rate by Age (groups)

● Increase ● Decrease ● Total



Leavers by Department and TermReason

● Another... ● attenda... ● career c... ● gross mi... ● hours ● maternit... ● medical ... ● military ● more m... ● no-call, ... ● perform... ● relocati... ● retiring ● return t...



Ticketing System



HELP DESK DASHBOARD



THE PROBLEM

In a Help Desk System it is very difficult to manage customer request, Help Desk actions , ticket resolution. Three main challenges that are face in help desk system are :

- > Difficulty in handling growing ticket volume
- > Complexity in managing ticketing process
- > Lack of proper reporting and key performance indicator that measure the Help Desk Performance



THE REQUIREMENT

In a Help Desk System when we look forward to improve business and service certain factors are required:

- > Roles should be defined. for ex: Manager, implementer and an Auditor
- > Authorities for performing activities should be set
- > Activities should be set to meet responsibilities on time.
- > The process Workflow Responsibilities Should be described in as much detail that the staff can follow
- > To resolve ticket on time your manager should have knowledge and tool



THE SOLUTION

For a business point of view the solution for a successful Help Desk System that we can think are like:

- > Categorizing tickets based on priority segment type, status.
- > Always keep in mind assignment time according to priority so that we close the ticket on time and satisfy our customer.
- > Always set and monitor ticket set status
- > In this dashboard we use buttons by using this we completely analyze Engineer performance.



THE BENEFITS

This dashboard will help to highlight some key points like:

- > Tracking Engineer performance.
- > Will help in reducing service level agreement breach.
- > key performance indicator will help to show the performance of the Help Desk system.
- > This Dashboard will help manager to go through each field , analyse it and plan for future activities.

overview



Date

1/1/2019 3/17/2020

Month

All

Priority

All

Type

All

SLA Status

All

Category

All

Subcategory

All

TOTAL TICKET

2500

CLOSE ● OPEN

CLOSE TICKETS

2443

● SLA OK ● SLA VIOLATED

OPEN TICKET

57

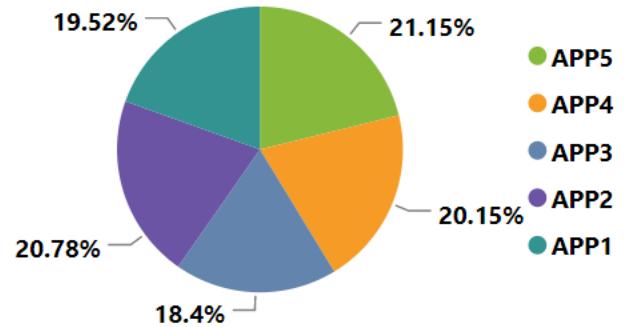
● BREACH SLA ● UNASSIGNED ● UNDER SLA

UNASSIGNED TICKET

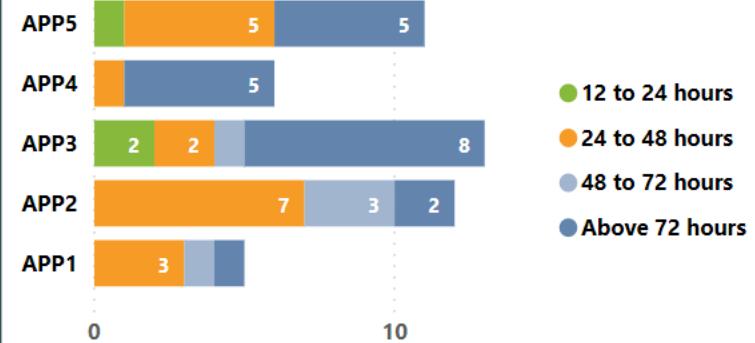
10

● High ● Low ● Medium

SLA VIOLATION BY APPLICATION

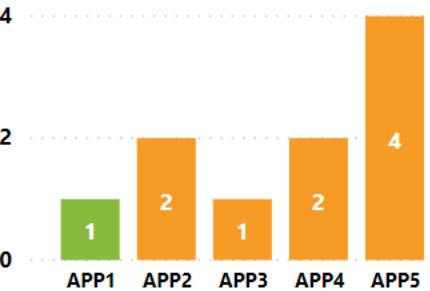


OF OPEN TICKET BY APPLICATION & AGEING



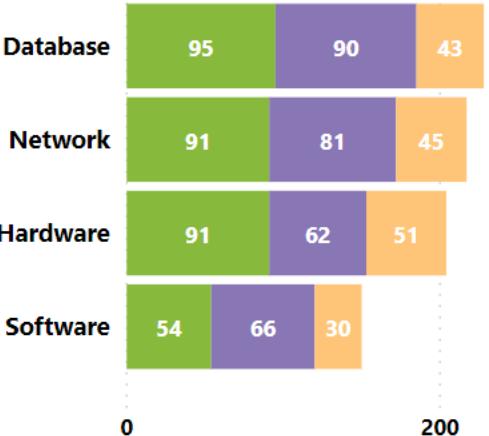
UNASSIGNED TICKET BY APPLICATION & AGEING

● 3 to 4 Hours ● Above 4 Hours



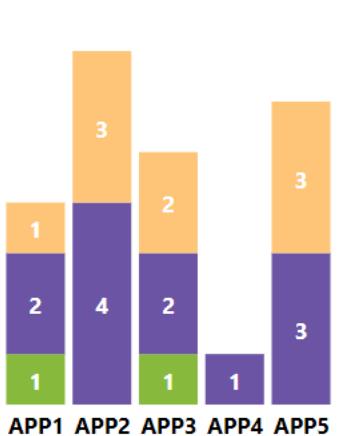
SLA VIOLATION BY CATEGORY AND PRIORITY

● High ● Low ● Medium

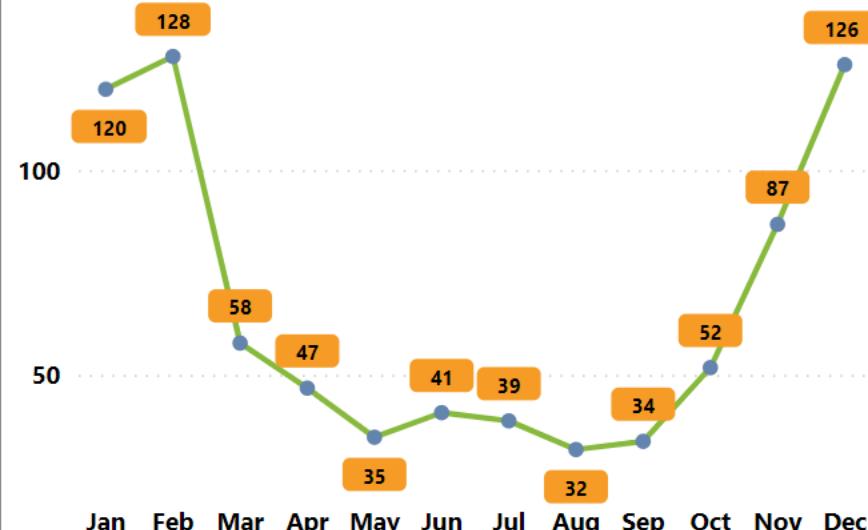


TICKET REQUIRED URGENT ACTION

● High ● Low ● Medium



SLA VIOLATION BY MONTH

[Go back](#)

Overview

▼

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↗

Filters

CLOSE TICKET ANALYSIS



Date

Month

Priority

Type

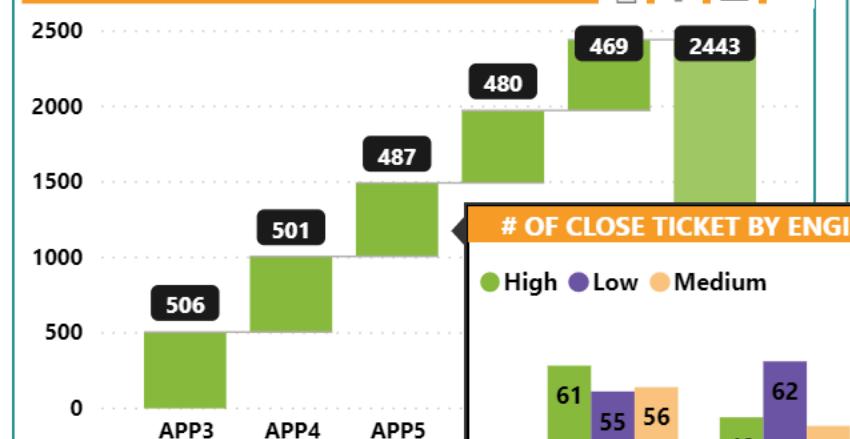
SLA Status

Subcategory

TOTAL TICKETS

2500

OF TICKET CLOSED BY APPLICATION



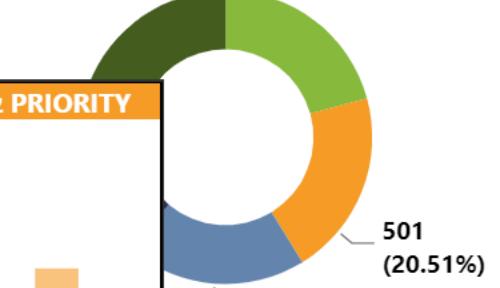
TOTAL CLOSED TICKETS

2443

OF TICKETS CLOSED BY CATEGORY AND MANAGER

Sachin Ajay Vikram Anup Rakesh

469 (19.2%) 506 (20.71%)



CLOSE WITHIN SLA

1644

CLOSE OUT OF SLA

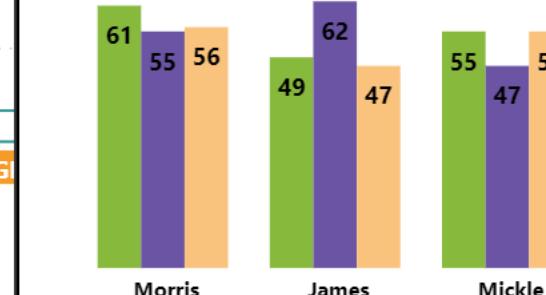
799

#OF CLOSE TICKET BY LOCATION



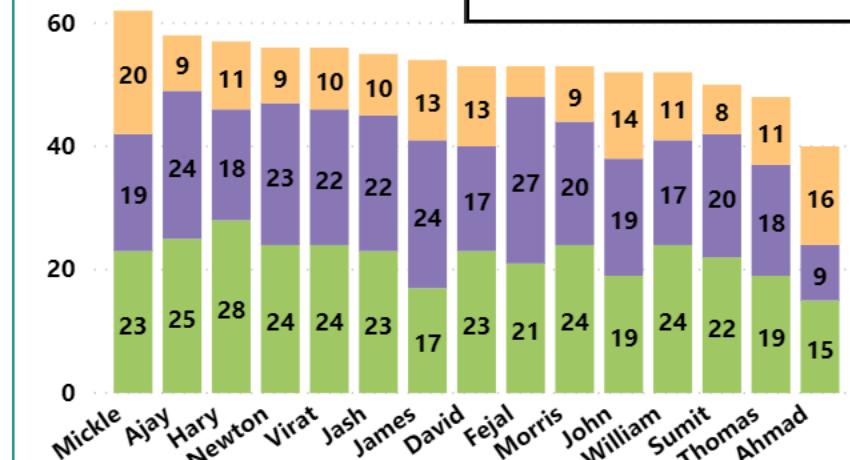
OF CLOSE TICKET BY ENGINEER & PRIORITY

High Low Medium



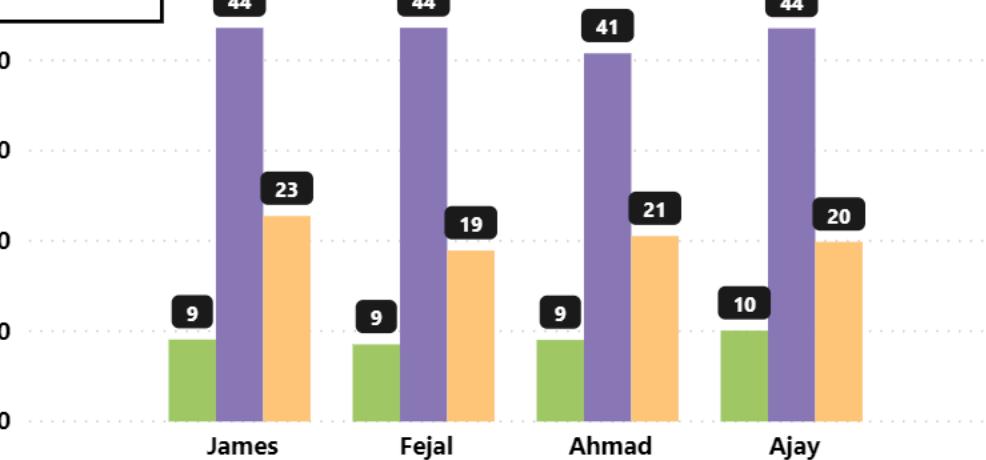
SLA VIOLATION BY ENGINEER

Priority High Low Medium



AVERAGE TIME TO CLOSE(in hrs) BY ENGINEER & PRIORITY

High Low Medium



Go back

Close Ticket Ana...

< >

IT HELP DESK DASHBOARD | Data updated 4/15/20

Filters

Open Ticket Analysis



Month

Day

Type

Priority

Category

Subcategory

Ageing

TOTAL TICKET

2500

OPEN TICKET

57

BREACH SLA

31

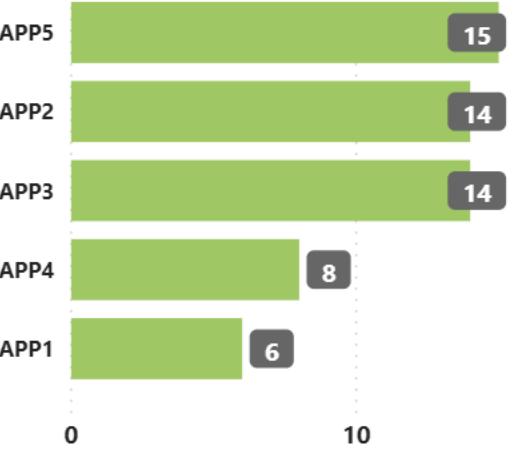
UNDER SLA

16

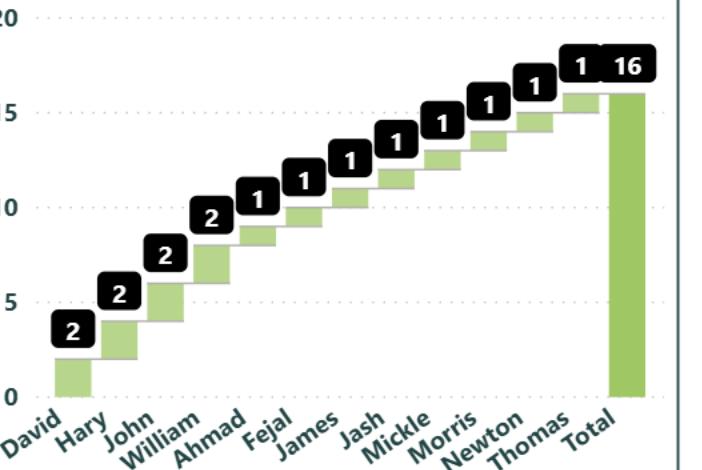
UNASSIGNED TICKET

10

OF OPEN TICKET BY APPLICATION



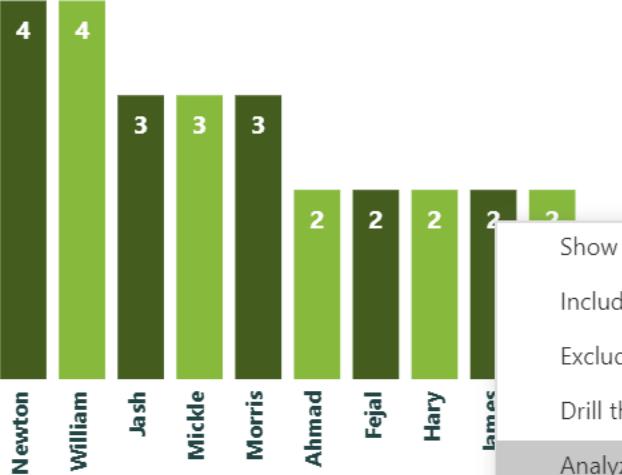
TICKET REQUIRED URGENT ACTION



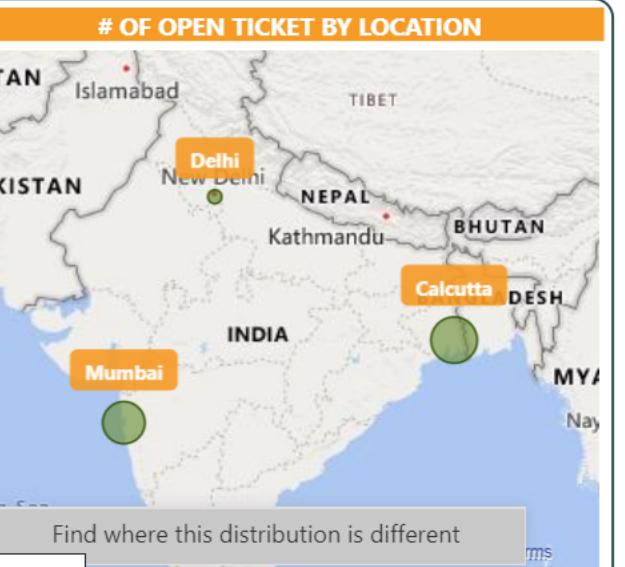
OF OPEN TICKET BY AGEING



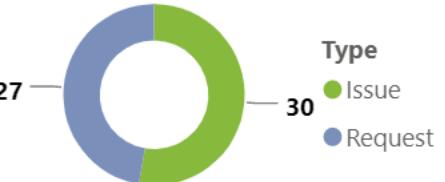
OF TICKET BREACH SLA



OF OPEN TICKET BY LOCATION



OPEN TICKET BY TYPE



Go back

Open Ticket An...

< >

IT HELP DESK DASHBOARD | Data updated 4/15/20

Filters

SLA VIOLATION ANALYSIS



Date

1/1/2019 3/17/2020

Month

All

Day

All

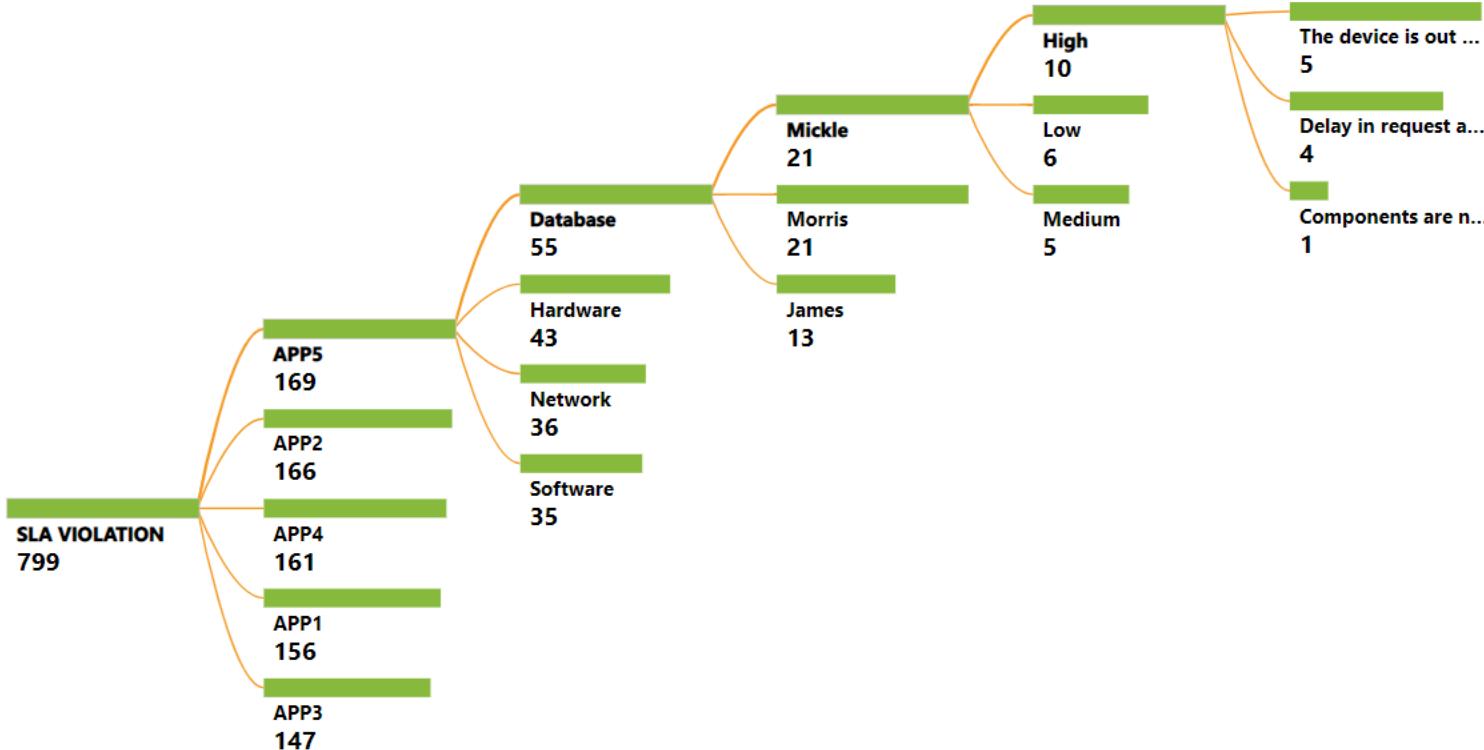
Type

All

Priority

All

Application Category Enginner Name Priority Reasons Assign Time (i... Subca



Filters

Go back

Root Cause Anal...

< > ↕

IT HELP DESK DASHBOARD | Data updated 4/15/20

Data Solutions Use Case

Use Case: Data & Analytics Solution

Objective:

Laid foundation and framework for

- Enterprise Data Warehouse
- Enterprise Data Management
- Reporting Automation and Visual Dashboards
- Role level security for report data access
- Notification features

Enabled the capacity for :-

- Operational / MIS Reports – to cater for day to day operations need
- Adhoc Reporting – Using OLAP Cubes to provide business users to generate adhoc reports
- Data feeds to external entity/sources for further utilization/consumptions
- Analytical Reports - using Drill down/Slice And Dice to monitor KPIs effectively
- Dashboards – for consolidated view of organization's performance and portable to mobile devices

Benefit

Reduce manual interference (Automation)

- Data Importing process
- Standard Report generation and delivery process

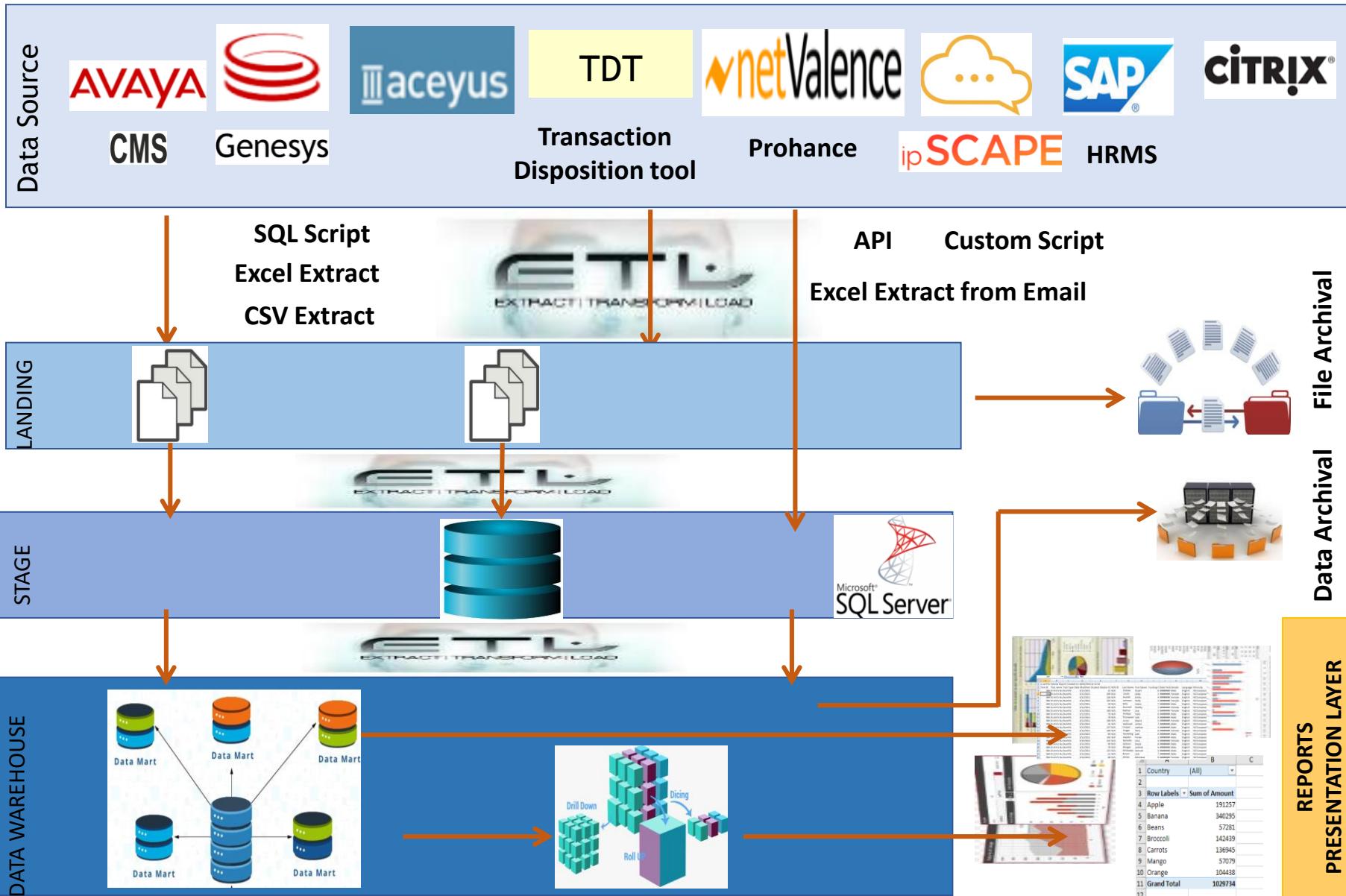
Brought in Best Practices in Data Management

- Centralized Master Data Management
- Data Validation to ensure Data Quality
- Data Security at Row and Role level
- Data/File Archival and Purging as per company norms

Scalable and Extendable

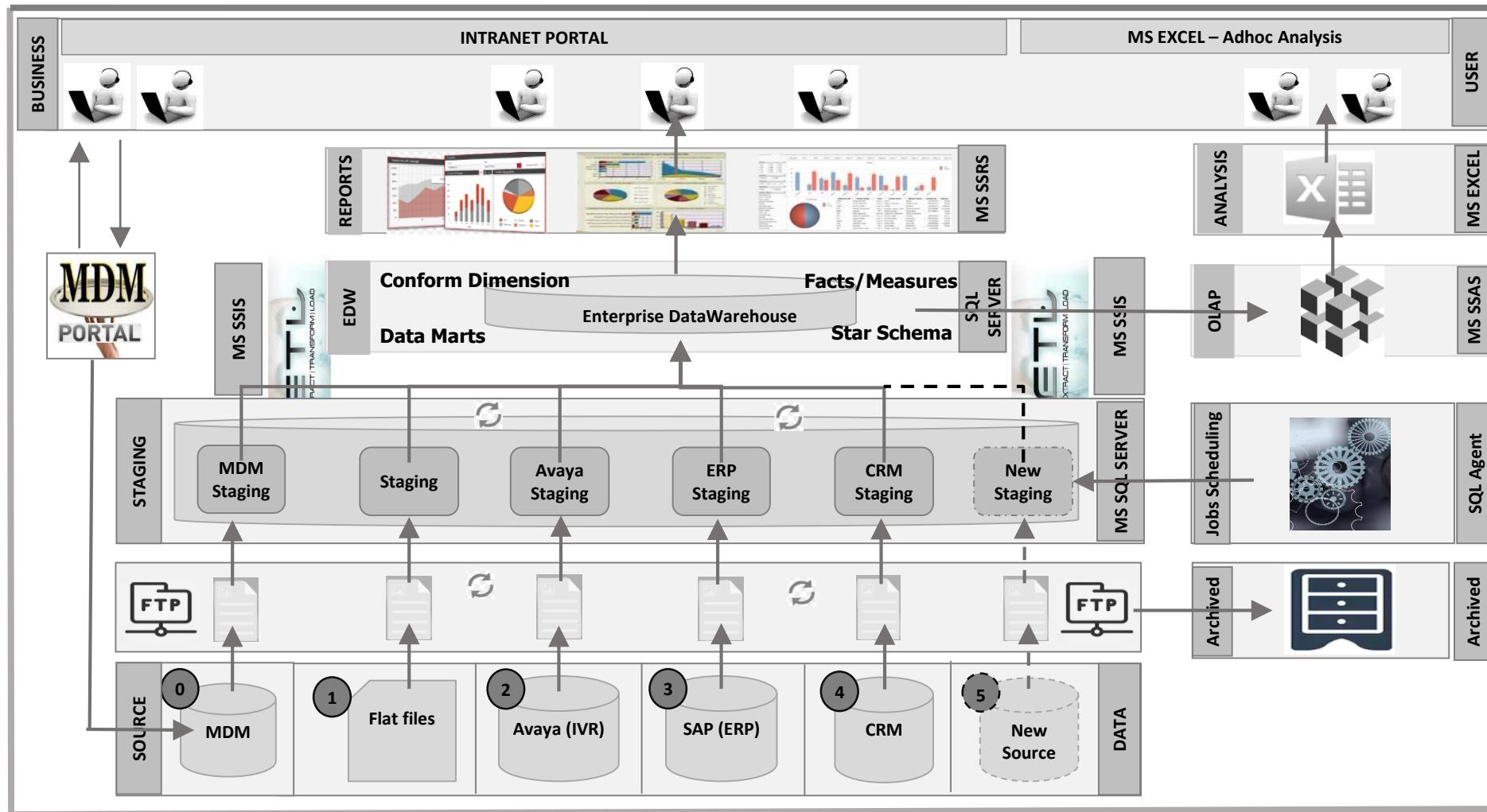
- Integration with new Data Sources.
- Quickly built new reports.
- Optimal Performance with data growth.

High Level Data Flow



High Level Architecture

Reporting and BI Solution Architecture



Power BI: The World Leader

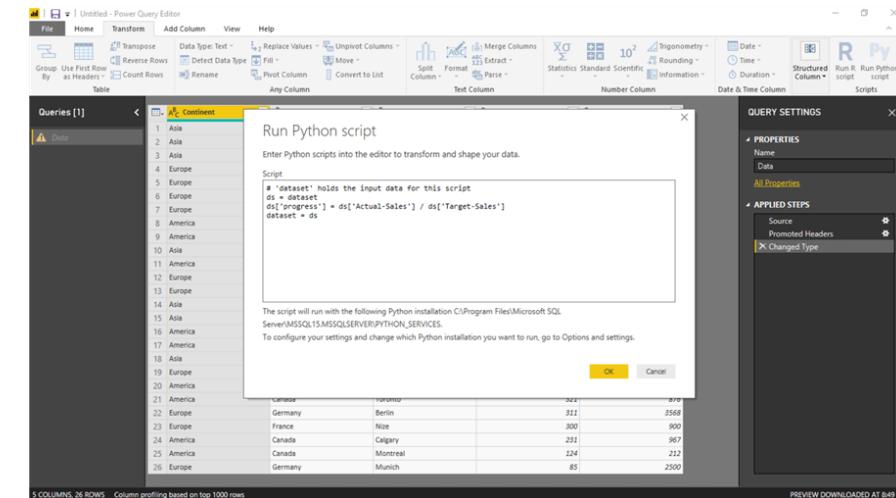
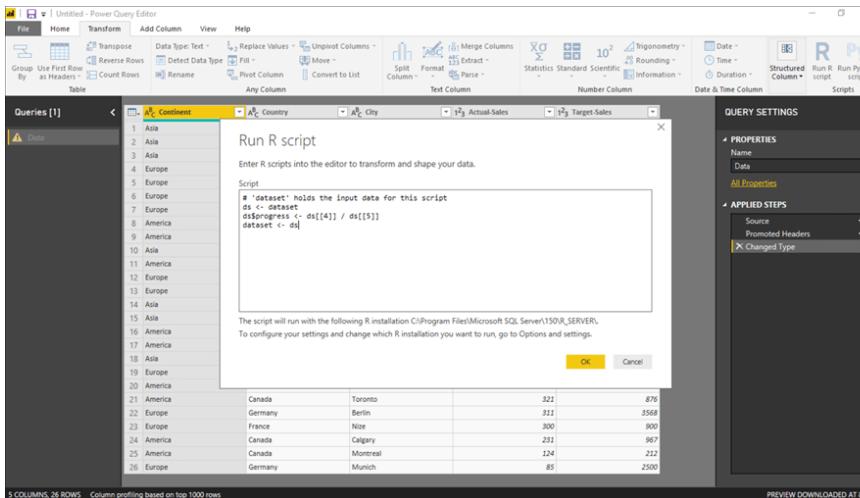
Gartner recognizes Microsoft as a Leader for the thirteenth consecutive year in the Gartner 2020 Magic Quadrant for Analytics and Business Intelligent Platforms.

Figure 1. Magic Quadrant for Analytics and Business Intelligence Platforms

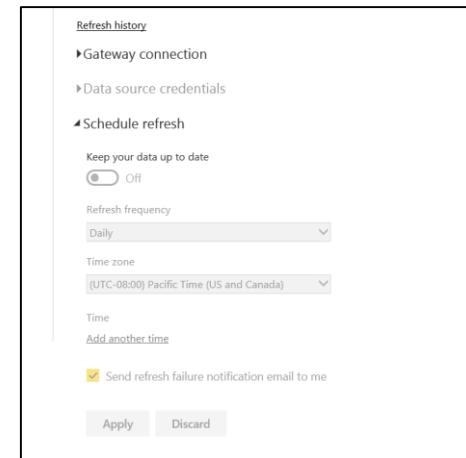


Power BI Key Features

- ✓ Data Analysis Made Easy: Extract, Transform and Load (ETL) Data with Power BI Desktop
- ✓ Transform Data in Power BI with R and Python

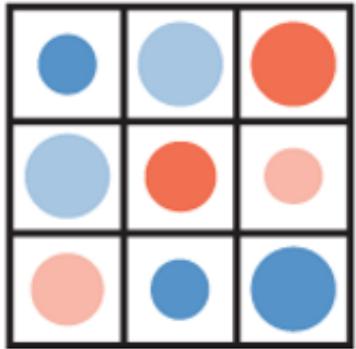


- ✓ Schedule Data Refresh: Schedule your data refresh to be daily or even hourly
No manual intervention needed

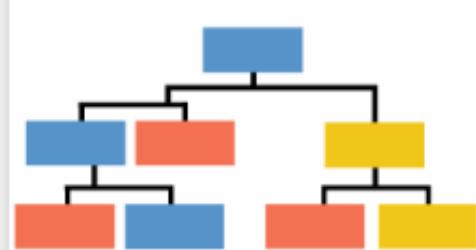


Power BI Key Features

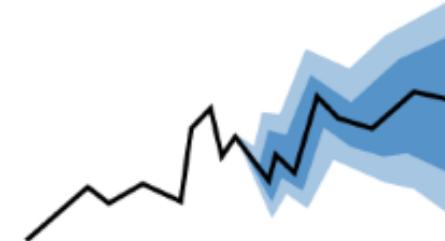
- ✓ Generate Custom visuals in Power BI using R and Python



Correlation plot



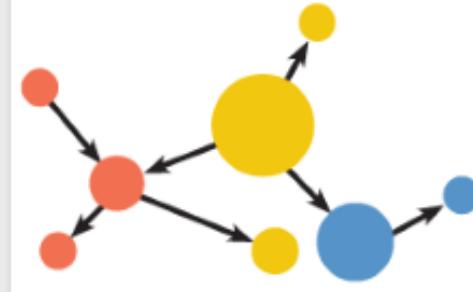
Decision tree



Forecasting

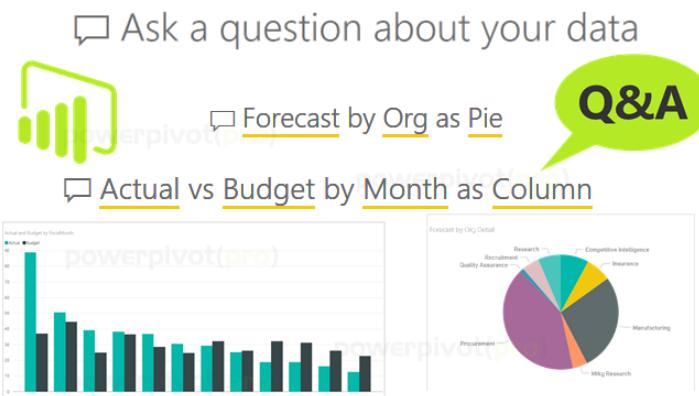


Clustering



Association rules

- ✓ **Natural Language Q&A:** This is one of the most powerful tools in Power BI. **Natural Language Q&A** allows users to write questions and provides the content and answer, which can be manipulated to match your visual need.



Power BI Key Features

- ✓ Artificial Intelligence (AI) & Machine Learning (ML) in Power BI



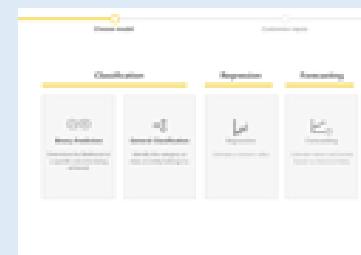
Extend with Azure ML



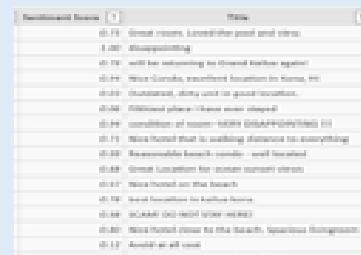
R Integration



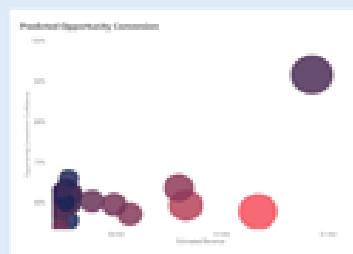
Create ML models



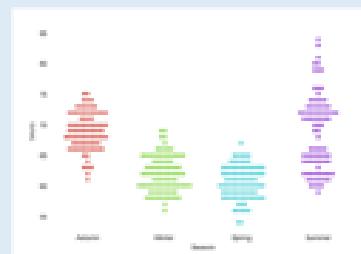
Sentiment Analysis



Integrate into reports



Python Integration



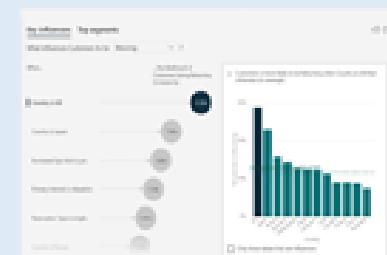
Explore predictions



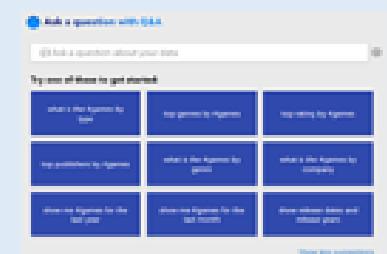
Key Phrase Extraction



AI Visualizations



Natural Language



Power BI Key Features

- ✓ Insights : Explain Increase/Decrease [Excel does not provide these features]

Sales Amount by Year

\$16M
\$14M
\$12M
\$10M
\$8M
\$6M
\$4M
\$2M
\$0M

2011 2012 2013

\$6.9M \$5.8M \$15.1M

- See Records
- Show data
- Include
- Exclude
- Analyze
- Analyze

Here's the analysis of the 158.47% increase in Sales Amount between 2012 and 2013

Sales Amount BY CALENDAR YEAR AND PRODUCT SUBCATEGORY

'Mountain Bikes' had the largest increase among Product Subcategory. The relative contribution made by 'Road Bikes' changed the most.

● Increase ● Decrease ● Total ● Other

\$15M
\$10M
\$5M

2012 Mountain Bikes Touring Bikes Road Bikes 2013

\$5.8M \$4.1M \$3.7M \$1.5M \$15.1M

- Like
- Dislike
- Add

Power BI Key Features

- ✓ Multiple Device Support

Stay connected from any device



- ➔ Native apps for iPad, iPhone, and Windows devices
- ➔ Receive alerts to important changes in your data
- ➔ Share and collaborate with colleagues and take action



Windows



iOS

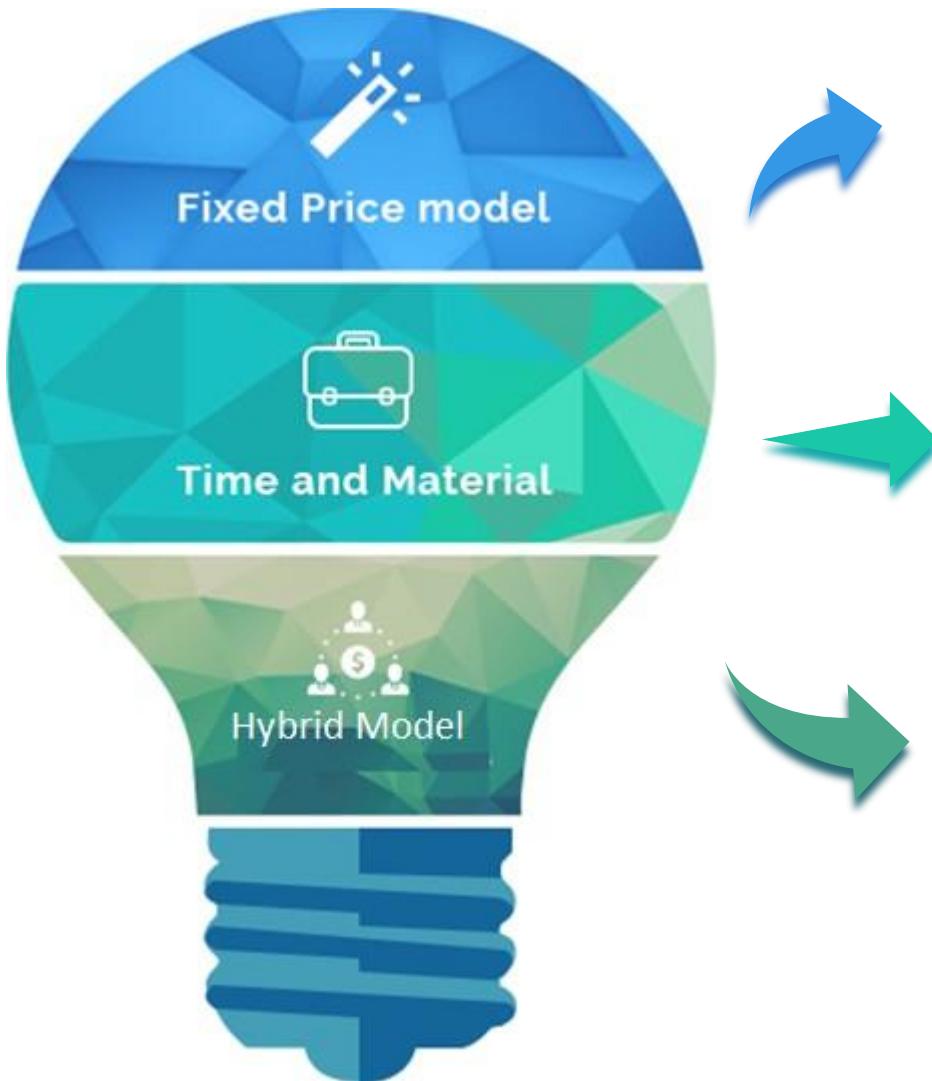


Android



HTML5

Engagement Model



- Scope is Defined and Fixed
- Cost is Fixed
- Payment on Milestones

- Staff Deployed on Client Project
- Monthly Billing based on the hours spent by the Staff Deployed

Mix of Fixed Price and T&M



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THANK YOU

