



ABSENCE OVERVIEW

Select Year

2007	2009
2008	2010

1726

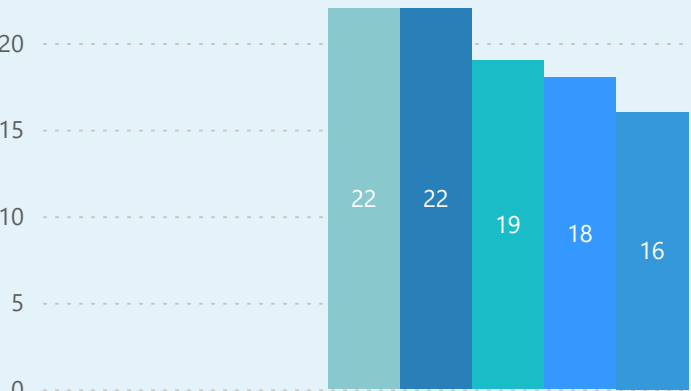
Total Absent Hours

Select Reason for Absence

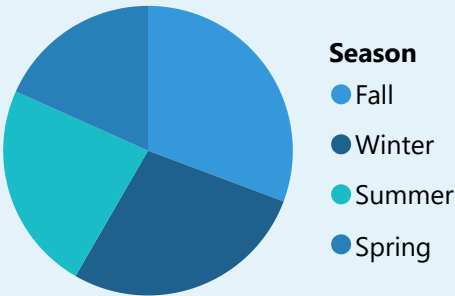
All

Days Friday Monday Thursday Tuesday Wednesday

Number of Absent Employees



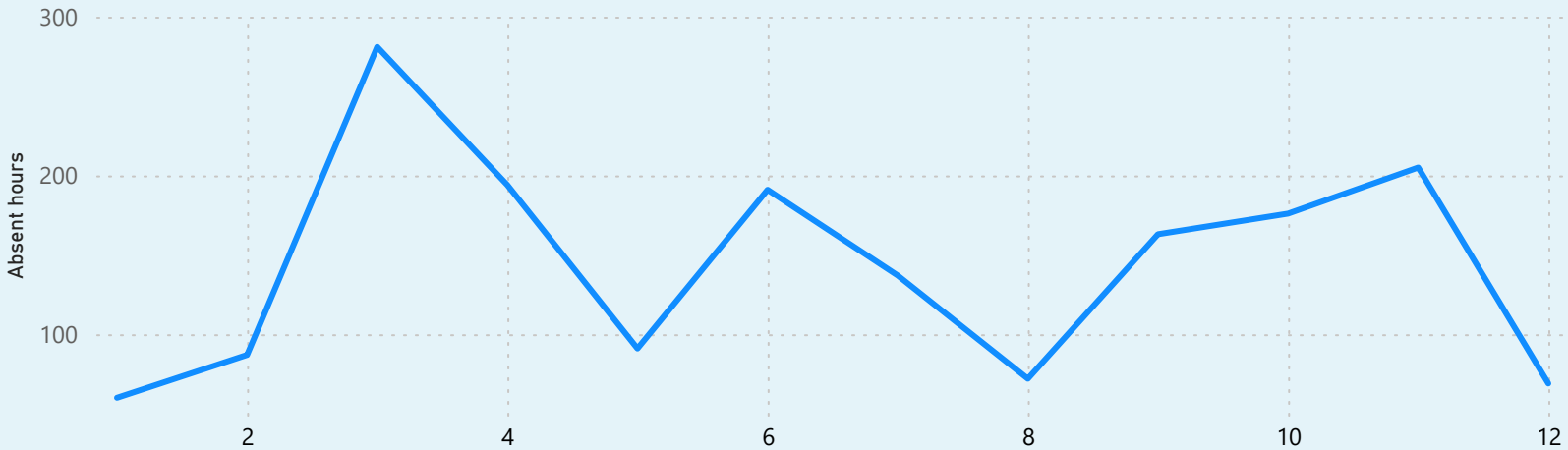
Absent hours by Seasons



Drill through for Monthly Data

Year	Absent Month	Absent Hours	Employee Count
2008	1	60	6
2008	2	87	11
2008	3	281	12
2008	4	194	12
2008	5	91	11
2008	6	191	10
2008	7	137	10
2008	8	72	12
2008	9	163	9
2008	10	176	13
2008	11	205	12

Absenteeism Trends: Month and Day Analysis





MONTHLY ANALYSIS DASHBOARD

Month: 2008 April

5124

Total Absent hours

120

Maximum Absent Hours

0

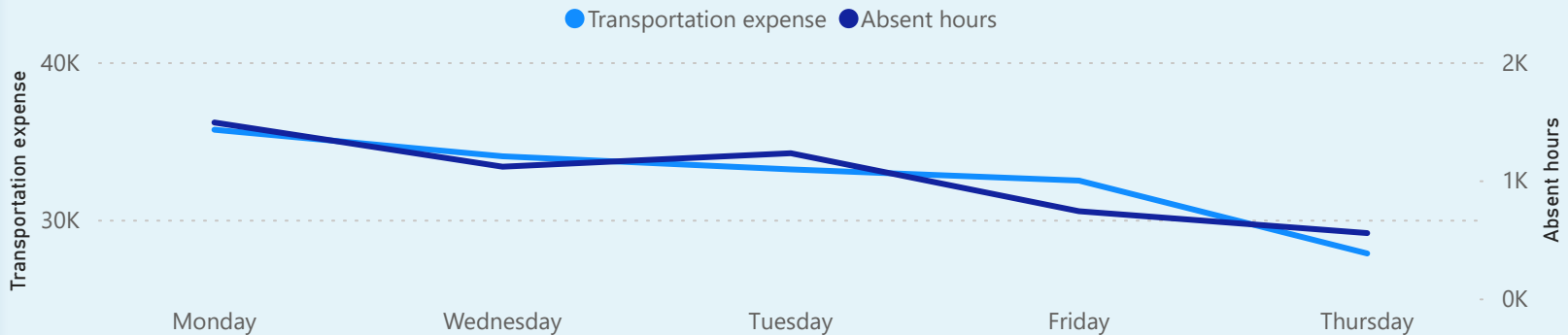
Minimum Absent Hours

Employee Absent Hours and respective reasons

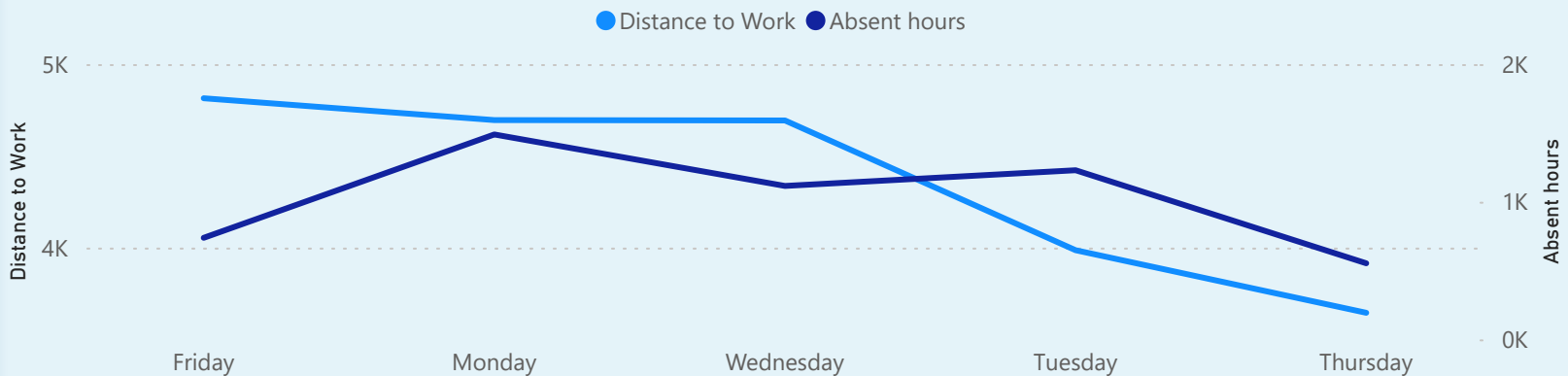
Employee ID	Reason	Absent Hours
36	Diseases of the musculoskeletal system and connective tissue	243
11	Injury, poisoning and certain other consequences of external causes	208
34	Injury, poisoning and certain other consequences of external causes	153
3	Diseases of the musculoskeletal system and connective tissue	131
9	Diseases of the nervous system	128
14	Diseases of the digestive system	120
9	Diseases of the skin and subcutaneous tissue	112

Impact of Travel and Distance on Absenteeism

Total Transportation expense and Absent hours



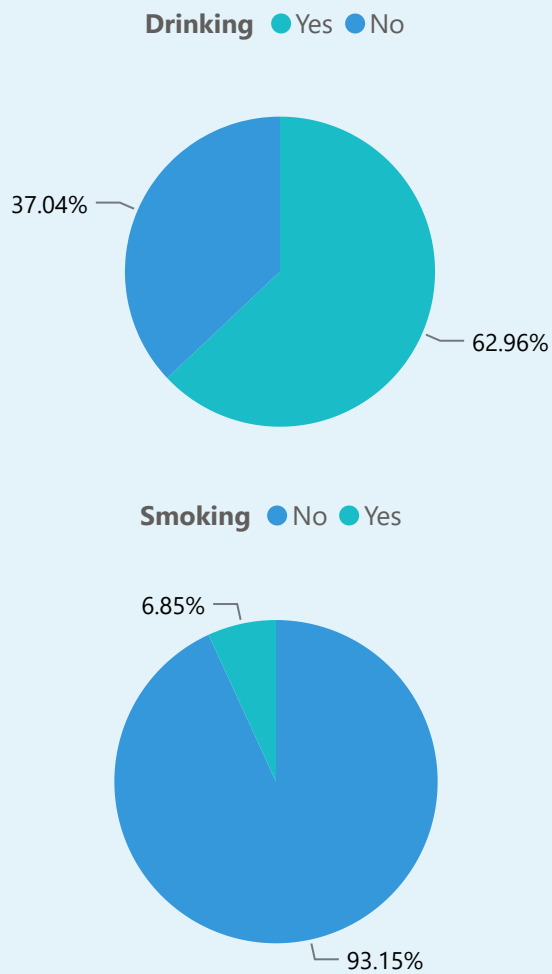
Distance to Work and Absent hours





OVERALL ABSENTEEISM ANALYSIS

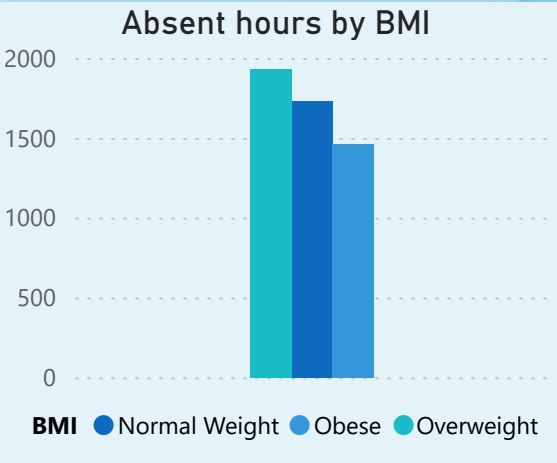
Impact of *Employee Social Habits* on Absenteeism



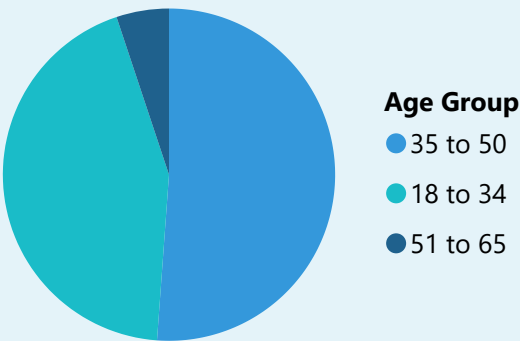
Impact of *Employee Characteristics* on Absenteeism

Absent Hours of each Employee

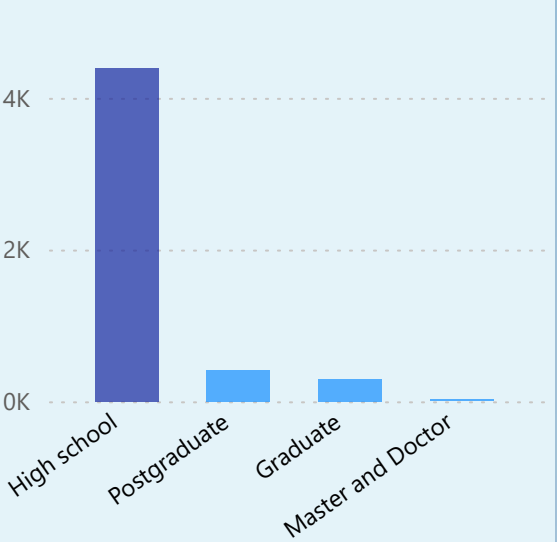
Employee ID	Total Absent hours
3	482
14	476
11	450
28	347
34	344
36	311
20	306
9	262
24	254
15	253



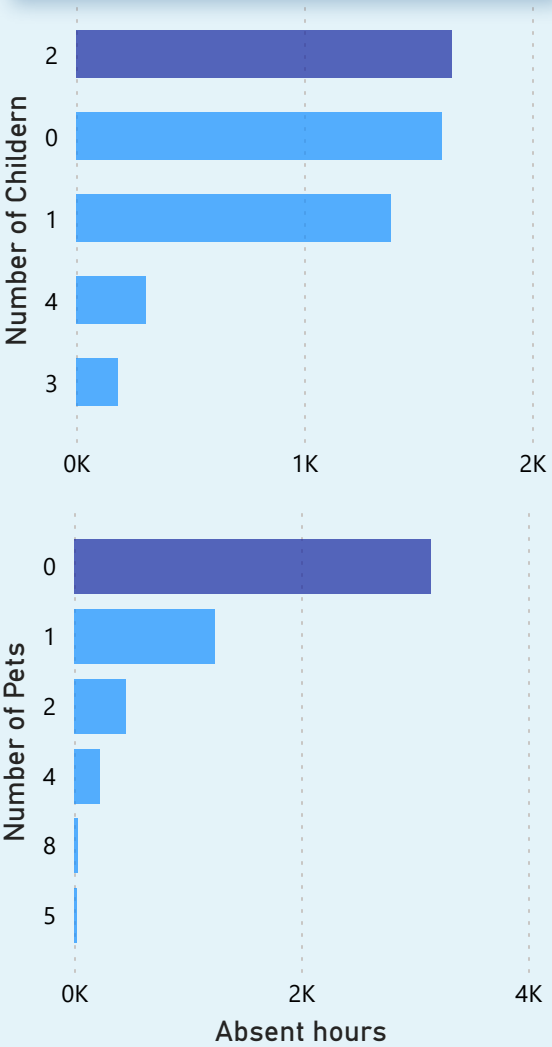
Absent hours by Age



Absent hours by Education



Impact of *Number of Dependents* on Absenteeism





EMPLOYEE DATA AND ABSENCE ANALYSIS

Select Employee ID

Select all	3	7	10	13	16
1	5	8	11	14	17
2	6	9	12	15	18

ID	Name	Email
10	Aaliyah Kumar	aaliyah.kumar@xyz.com

28 Age	27 BMI in kg/m2	0 Disciplinary failures count
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Drinker	Smoker	Level	No of Pets	No of Children
Yes	No	High school	4	1



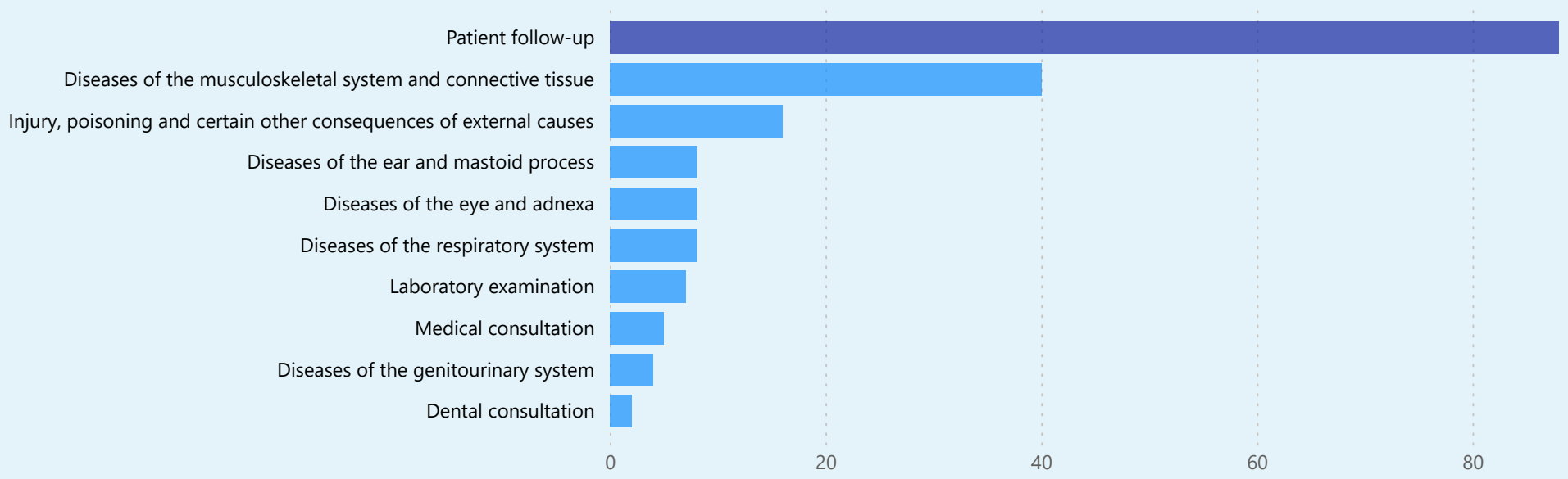
258.87K

Avg Employee Work load/day

Total Absent hours



Total Absent hours by Reason





REPORT

Description of the Report:

PACE Inc., a diversified corporation based in Canada, owns a subsidiary courier company situated in Brazil. The organization has provided the dataset on absenteeism for analysis, with the overarching objective of comprehending absenteeism and its contributing factors within their operational context.

This report analyzes absenteeism at the courier company from July 2007 to July 2010. It provides insights into various factors contributing to absenteeism, such as reasons for absence, demographic characteristics, health-related variables, and behavioral habits. It also provides a comprehensive detail of each employee in the organization.

Citation Information:

Dataset Reference:

- Martiniano, Andrea and Ferreira, Ricardo. (2018). Absenteeism at work. UCI Machine Learning Repository. <https://doi.org/10.24432/C5X882>.

Website Reference:

- Created artificial pictures using <https://thispersondoesnotexist.com/> and created URL using <https://im.ge/>.

Assumptions made:

- Reason of Absence: Reason code 0 is interpreted as an unknown reason for absence.
- Distance from Residence to Work: The assumption has been made that the work is at different locations due to variations in the distance from residence to work across weekdays.
- Assumed unit of work load per day as an internal company metric, like, total couriers/packages handled by the employee per day.

Information About the Report's Author:

The report's author, Effy Paulose, completed the analysis under the guidance of Wesley Takeo - Konrad, who serve as an instructor for the University of Winnipeg's PACE program. Effy Paulose is a student enrolled in the Post Degree Diploma in Predictive Analytics at the University of Winnipeg, undertaking this assignment as part of the academic curriculum.

Data Cleaning:

- Unused columns - Service time and Hit target have been removed.
- Weight, and Height have been removed, and BMI will be analyzed instead.
- Year column has been added to the table Absenteeism_at_work. The values are calculated as the order of the data and the month, starting from 2007 to 2010.
- A year hierarchy have been added to the table Absenteeism_at_work . Month has been added to the hierarchy.
- Age Group column added to the table Absenteeism_at_work. Employees are grouped into three categories based on age ranges (18 to 34 years, 35 to 50 years, and 51 to 65 years).
- BMI Category column added to the table Absenteeism_at_work. Employees are categorized based on their Body Mass Index into underweight ($BMI < 18.5$), normal weight ($18.5 \leq BMI < 25$), overweight ($25 \leq BMI < 30$), and obese ($BMI \geq 30$).
- New Tables have been created for Reason for Absence, Day of the Week, Month of Absence, Seasons, Disciplinary Failure, Social Drinker, Social Smoker, and Education level to facilitate analysis and interpretation of the data.
- Employee Details Table has been created with employee ID, synthetic name and email ID, and Image URL. The pictures are `not of real people and they are AI-generated.