



EXPENSIGHT

TRAVEL AUDITOR

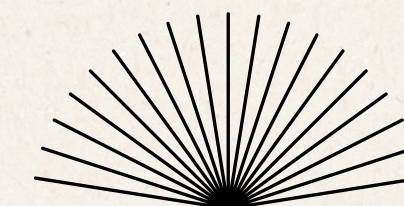
Providing insight on your travel expenses.

NAME OF TEAM:

Cliff.j5on

MEMBERS OF TEAM:

Joseline, Justin, Jose, Jacob, JP, Cliff



Agenda

03

Problem Statement

04

Brainstorm Process

05

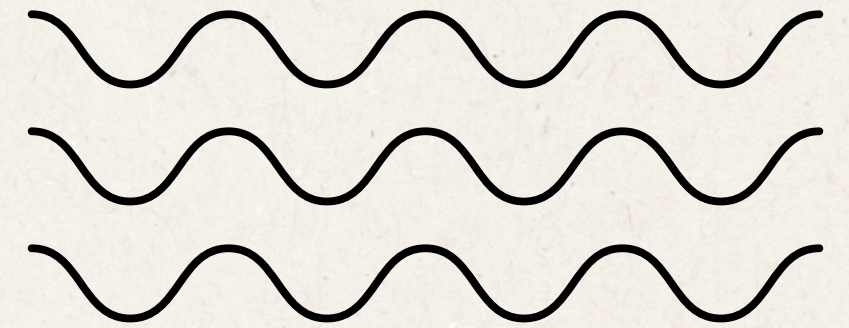
Data Pipeline

06

Demo

07

Features/Improvements



Problem Statement

- Mitigate financial risk by:
 - Automating ingestion.
 - Identifying policy violations.
 - Track spending patterns.
 - Create reports.



01 Understand User Problem

02 Develop Solutions

03 Build with AWS

04 Test

05 Debugging

06 Iterate



04/16

Process

How did we come up with
this solution?

Data Pipeline



User Files

.pdf
.csv
.xlsx



S3 Bucket

Use Lambda function
to filter & clean data.
Provide clean data to
new S3 bucket.



DynamoDB

Cleaned .json data is
formatted into tables
that clearly provide
extracted values.



Website

Friendly user interface
with interactive
dashboards providing
insight.

Analysis of Structure

Welcome

Upload File

Overview

DEPARTMENTS

DPTID1

DPTID2

DPTID3

DPTID4

DPTID5

DPTID6

DPTID7

Transform weeks of work into **5 min**



Start New Audit →



Welcome

Upload File

Overview

DEPARTMENTS

DPTID1

DPTID2

DPTID3

DPTID4

DPTID5

DPTID6

DPTID7

Travel Audit Dashboard



08/16

Upload Travel Expense Files

Upload CSV, Excel, or PDF files for audit processing

File Upload Center

Drag and drop files or click to browse



Drop files here or click to upload

Supports CSV, XLSX, XLS, PDF files up to 10MB

Choose Files

Upload Status



No files uploaded yet

Process Files

Please select CSV or Excel files to process.

Expected File Format

Your Excel/CSV file should contain these columns:

Required Columns:

- **Employee Name** - Full name of employee
- **Department** - DPTID1, DPTID2, etc.
- **Category** - Hotel, Airfare, Car Rental, Meals, etc.
- **Amount** - Expense amount in dollars

Optional Columns:

- **Violation** - Yes/No or True/False
- **Date** - Expense date
- **Description** - Additional details

Note: The system will automatically organize data by department. When you click on a department (DPTID1-7), you'll see only the data from your Excel file that belongs to that specific department.



Welcome

Upload File

Overview

DEPARTMENTS

DPTID1

DPTID2

DPTID3

DPTID4

DPTID5

DPTID6

DPTID7

Travel Audit Dashboard



09/16

Upload Travel Expense Files

Upload CSV, Excel, or PDF files for audit processing

File Upload Center

Drag and drop files or click to browse



Drop files here or click to upload

Supports CSV, XLSX, XLS, PDF files up to 10MB

Choose Files

Upload Status

combined_cleaned_data.csv

Clear All

Process Files

Expected File Format

Your Excel/CSV file should contain these columns:

Required Columns:

- **Employee Name** - Full name of employee
- **Department** - DPTID1, DPTID2, etc.
- **Category** - Hotel, Airfare, Car Rental, Meals, etc.
- **Amount** - Expense amount in dollars

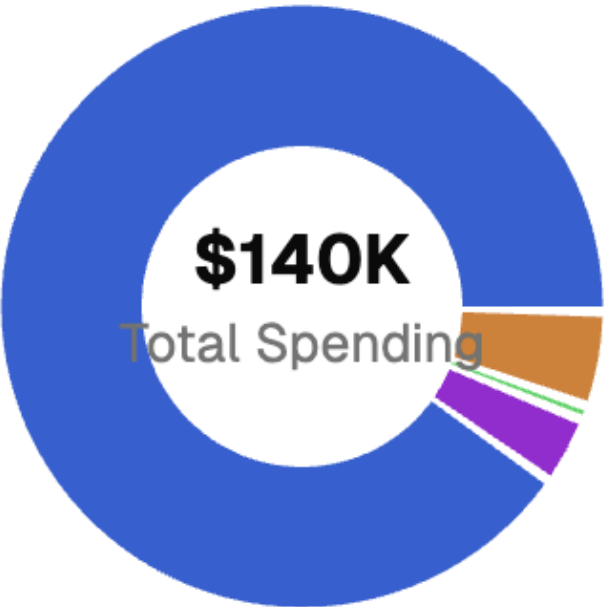
Optional Columns:

- **Violation** - Yes/No or True/False
- **Date** - Expense date
- **Description** - Additional details

Note: The system will automatically organize data by department. When you click on a department (DPTID1-7), you'll see only the data from your Excel file that belongs to that specific department.



Total Travel Spending



<div></div> HOTEL	\$129,100.87	<div></div> AIRFARE	\$4,424.08
<div></div> CAR RENTAL	\$327.88	<div></div> MEALS	\$6,484.03
<div></div> EXCEPTIONS	\$0	<div></div> PAST DUE	\$0

Violation People

Employees with violations

<div></div>	<div>Team/Group Meals</div> <div>Team/Group Meals</div> <div>Hotel/Lodging (Combined with Tax)</div> <div>Team/Group Meals</div> <div>Team/Group Meals</div>	
<div>EN9</div>	<div>Employee Name 99</div> <div>EID: EID 99 • Deptid 1</div> <div>9 violations</div> <div>Team/Group Meals</div> <div>Team/Group Meals</div> <div>Team/Group Meals</div> <div>Hotel/Lodging (Combined with Tax)</div> <div>Hotel/Lodging (Combined with Tax)</div>	\$3,733.48



Violation Ranking

Top departments by violation count

1	<div>Deptid 3</div> <div>106 violations</div>	<div></div>
2	<div>Deptid 1</div> <div>79 violations</div>	<div></div>
3	<div>Deptid 4</div> <div>76 violations</div>	<div></div>
4	<div>Deptid 5</div> <div>75 violations</div>	<div></div>
5	<div>Deptid 7</div> <div>70 violations</div>	<div></div>
6	<div>Deptid 6</div> <div>68 violations</div>	<div></div>
7	<div>Deptid 2</div> <div>57 violations</div>	<div></div>

Passed Audit

Employees with clean records

<div>EE</div>	<div>Employee EMP987654</div> <div>EID: EMP987654</div>
<div>EE</div>	<div>Employee EMP98765432</div> <div>EID: EMP98765432</div>

Upload File

Overview

DEPARTMENTS

DPTID1

DPTID2

DPTID3

DPTID4

DPTID5

DPTID6

DPTID7

DPTID1 Dashboard

Department-specific data from uploaded Excel/CSV files

0

Employees with Violations

125

Clean Records

\$268,051

Total Spending

125

Total Employees

HOTEL VIOLATIONS

0

\$0

Total

AIRFARE VIOLATIONS

0

\$0

Total

CAR RENTAL VIOLATIONS

0

\$0

Total

MEALS VIOLATIONS

0

\$0

Total

EXCEPTIONS

0

\$0

Total

PAST DUE

0

\$0

Total

DPTID1 Travel Spending

Data from uploaded file

HOTEL

\$10,488.51

CAR RENTAL

\$6,717.42

EXCEPTIONS

\$222,060.27

AIRFARE

\$0

MEALS

\$28,784.87

PAST DUE

\$0

DPTID1 Violations

Department employees with violations from Excel data

No violations found for this department in the uploaded data

Passed Audit

Employees with clean records

Employee Name 171

EID: E4500

DPTID1

Employee Name 220

EID: E9088

DPTID1

Employee Name 31

EID: E3006

DPTID1

Employee Name 605

EID: E6611

DPTID1

Employee Name 437

EID: E2242

DPTID1

Employee Name 325

EID: E3641

DPTID1

charge went through on 10/14. - Abernethy

EID: E2950

DPTID1

Employee Name 3

11/16

DPTID1 Travel Spending

Data from uploaded file

Category	Amount
EXCEPTIONS	\$222,060.27
MEALS	\$28,784.87
HOTEL	\$10,488.51
CAR RENTAL	\$6,717.42
AIRFARE	\$0

HOTEL	\$10,488.51	AIRFARE	\$0
CAR RENTAL	\$6,717.42	MEALS	\$28,784.87
EXCEPTIONS	\$222,060.27	PAST DUE	\$0

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Overview

DEPARTMENTS

DPTID1

DPTID2

DPTID3

DPTID4

DPTID5

DPTID6

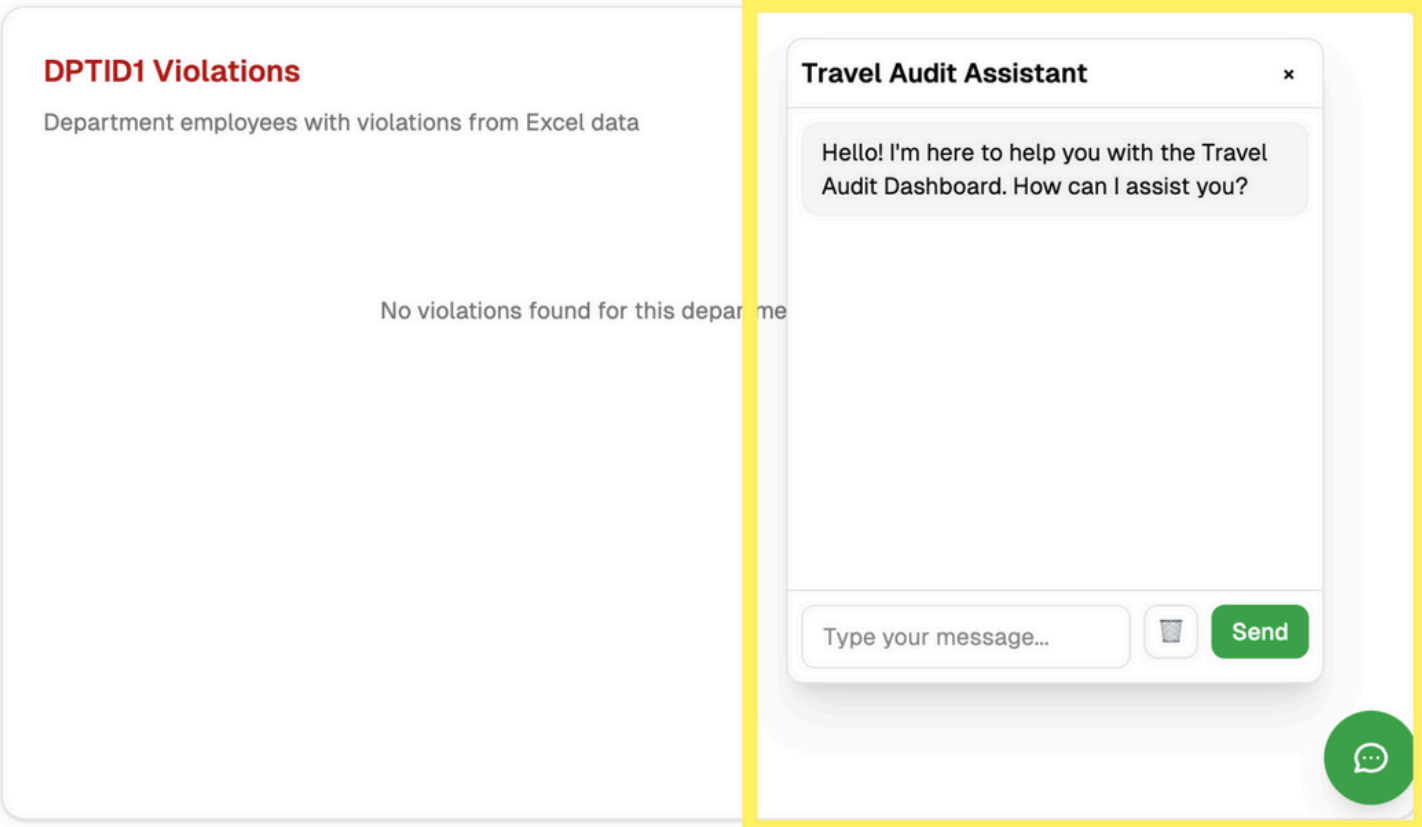
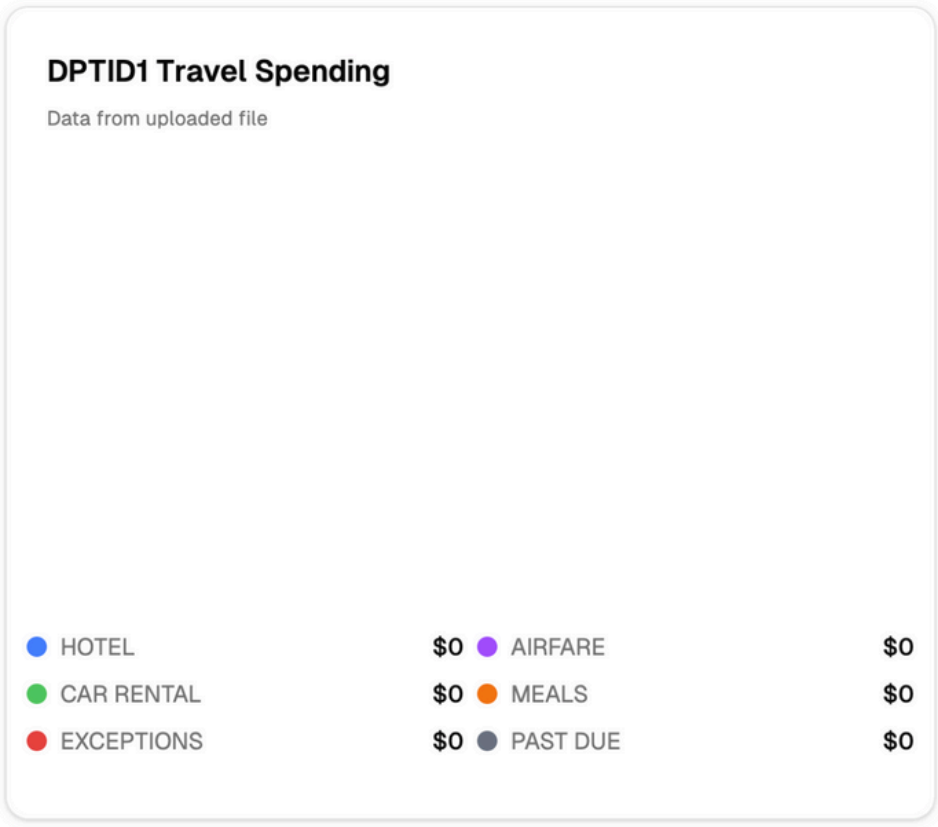
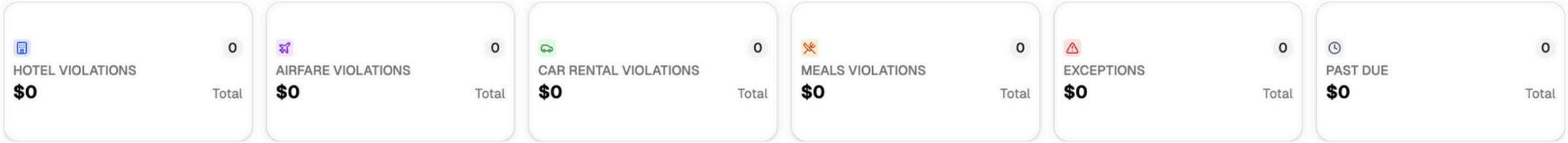
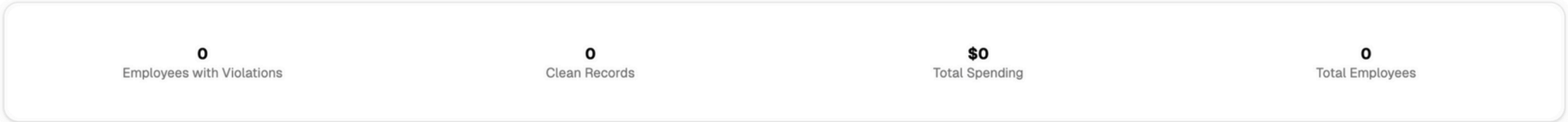
DPTID7

Travel Audit Dashboard



DPTID1 Dashboard

Department-specific data from uploaded Excel/CSV files



Demo

Future Features

What else can we do with this creation?



SPECIAL THANKS TO:



NICK OSTERBUR
DARREN KRAKER
RYAN MATTESON



TRINITY KEY AND OUR MENTORS!

FROM CLIFF.J5ON

Thank you!

