

# Future of Healthcare by Datavant

## 2022

I-CARE-U BY TWILIGHT CLOUD CODERZ



TEAM-RAPTORZ

KAVYA

# Major challenges Healthcare industry

- Opioid Crisis –Over dosage of drugs increase in death rate
- Irrelevant Information and Integrated Health Services
- No Advanced Health Technology
- Cybersecurity–Data breach
- Rising Healthcare Costs
- Payment Processing and Invoicing –Insurance claim
- Regulatory Changes
- External Market Disruption

# Our Solution Outcome



## Advanced Technology

Integrating to advanced technology for data analytics and also to improve customer patient care through best CRM software.

## Cybersecurity

Data security in place firewall and authorization should improve which takes care of patient data in a highly secured way

## AI-BOT

AI-bot which solves major problems and solving queries which is highly available 24/7 also acts as a patient care by analysis the patient health data and suggest health precautions

## Customer Insights

Analysis patient data and taking action before the crisis. shift from a traditional clinical interview with a focus on acute illness to involving patients and better staff communication

## Opioid Crisis

Misuse of prescription drugs is gradually gaining recognition in many country. It is important that healthcare enterprises and pharmaceutical companies come together to propagate tighter laws

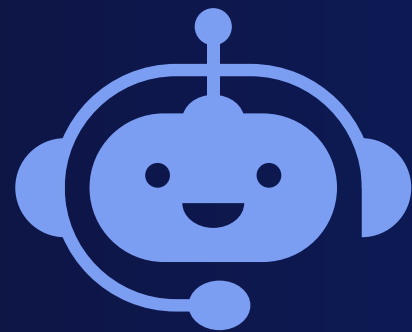
## Insurance Claim

Healthcare companies can break the whole payment into small chunks to help patients/payers better plan their finances and mode of payment through Automation.

# I-CARE-UBY Twilight Cloud Coderz



In our project we are providing solution for three problems which faced by major healthcare industry



## Schedule Appointment

I-CARE-YOU Ai Bot schedule medical appointment as per doctor availability and to customer need without reaching service desk and confirmation mail of the appointment sent to mail address



## Automate Insurance Claim

I-CARE-YOU Ai Bot checks Patient Insurance policy number in the data record which is stored in Cosmodb and post validation shares the document for claiming insurance which includes all mandatory like bill invoice upload option and share the document to admin for validation post patient document submission everything carried through automation



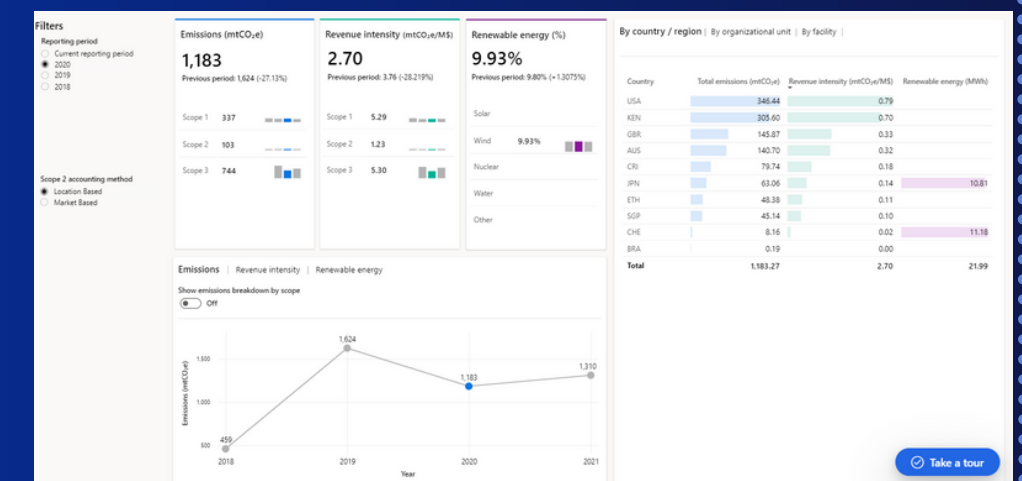
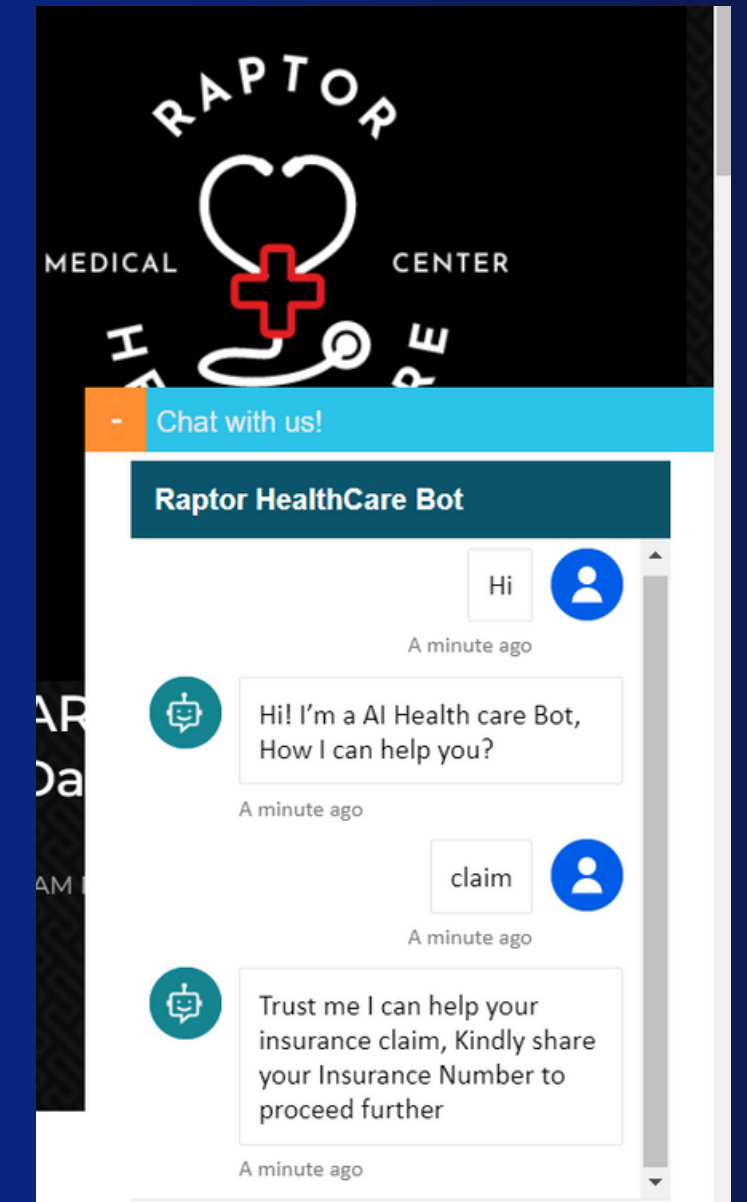
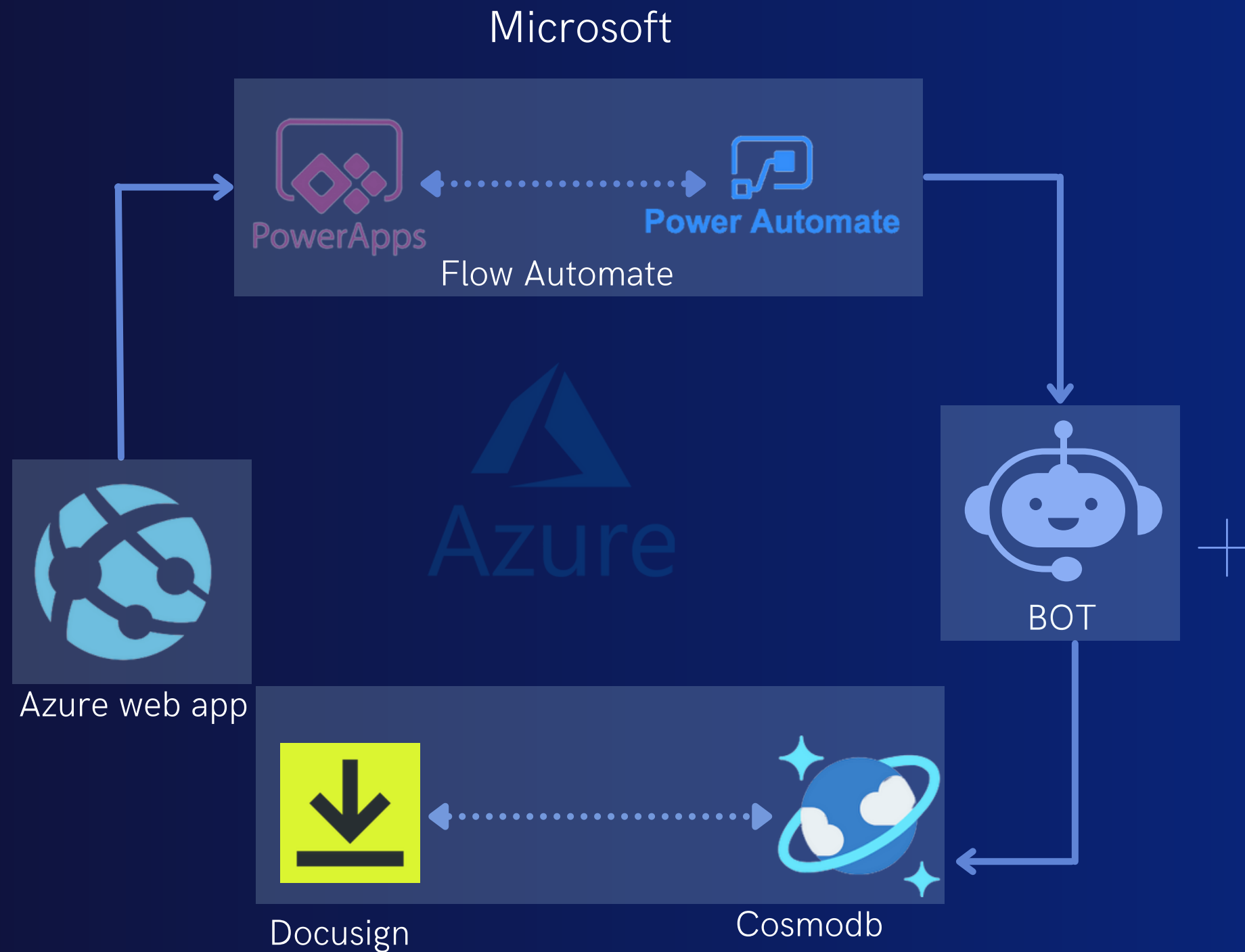
## Medicare Data Analytics

Big data analytics - Data of the patient unstructured record and insurance claim data analyzed through azure data factory and segregated into a structured data later stored into Azure blob container at the end visualized for better understanding which solves repeated calculation works.

# AI bot Architecture Diagram



I-CARE-U BY Twilight cloud coderz



# MICROSOFT POWERAPPS



Trigger Phrases (3)

insurance claim  
Claim  
INSURANCE

Question

Ask a question

Trust me I can help your insurance claim queries.  
May I know your good name please

Identify

Multiple choice options

Options for user

New option

Save response as

(x) Name (text)

Question

Ask a question

Hi {x} Name ,  
Kindly share your Insurance policy Number to proceed further...

Identify

Multiple choice options

Options for user



Create Envelope

accountId 449962ce-9230-410a-88b2-b700c4f4e649

emailSubject Medical Insurance Claim - Insurance Num... x

templateId d67257ac-fd9e-4b60-8b78-61510345bd68

templateRoles

roleName\_1 Client

templateRoles name - 1 Name x

templateRoles email - 1 Email x

templateRoles

roleName\_2 Admin

templateRoles name - 2 Twilight

templateRoles email - 2 mailreytest@gmail.com

templateRoles

roleName\_3 Manager

templateRoles name - 3 Kavya

templateRoles email - 3 deepanrey777@outlook.com

+ Add new item

status status

Return value(s) to Power Virtual Agents



RAPTOR MEDICAL CENTER

Chat with us!

Raptor HealthCare Bot

Hi

A minute ago

Hi! I'm a AI Health care Bot, How I can help you?

A minute ago

claim

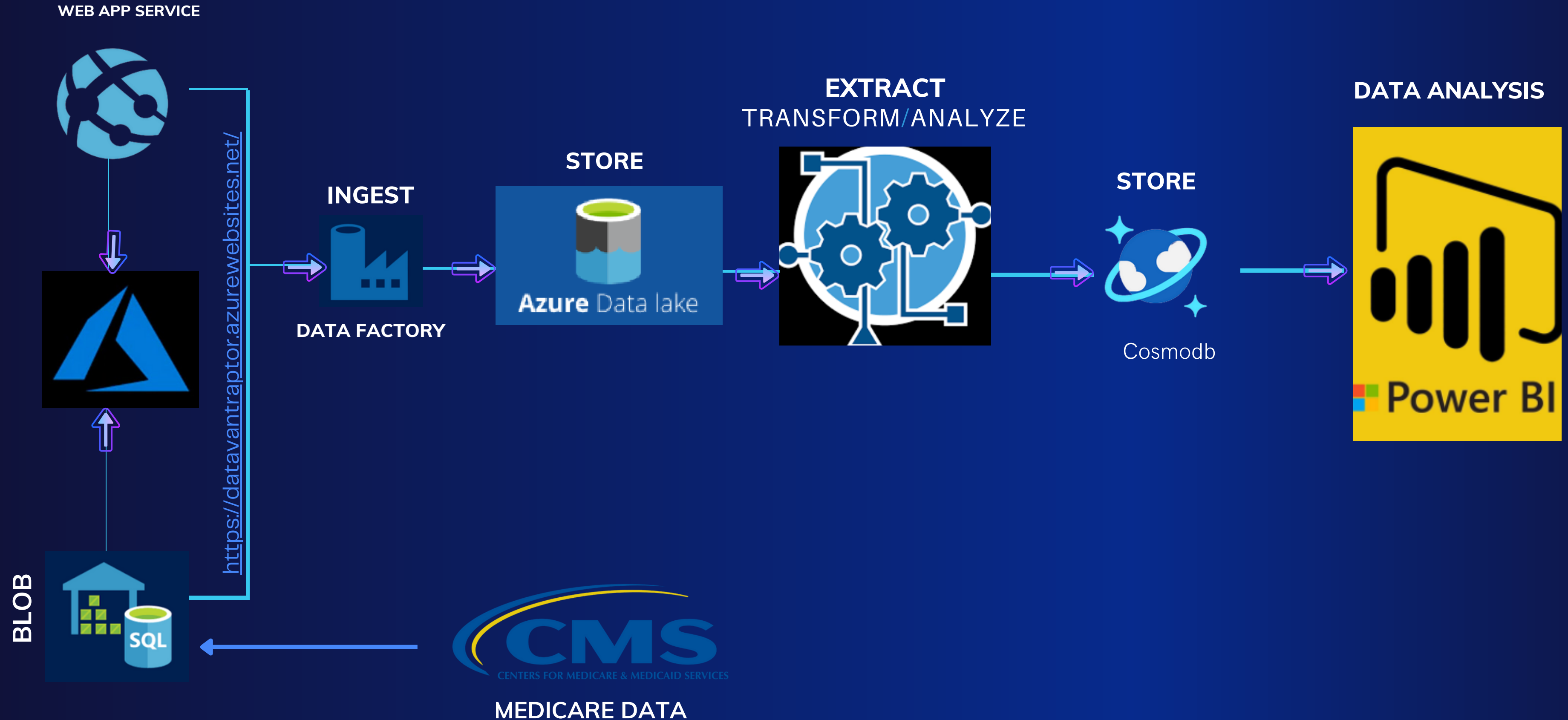
A minute ago

Trust me I can help your insurance claim, Kindly share your Insurance Number to proceed further

A minute ago



# Data visualize Architecture Diagram



# ADF Extract/Load/Transfer



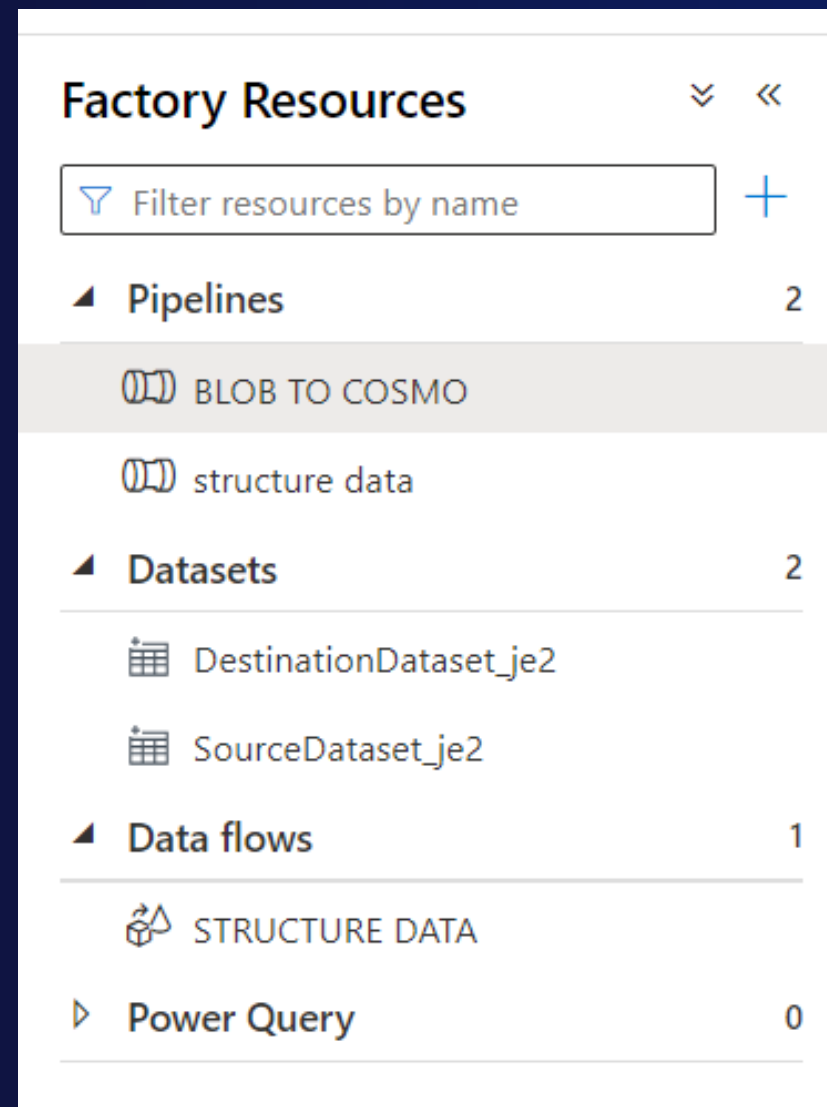
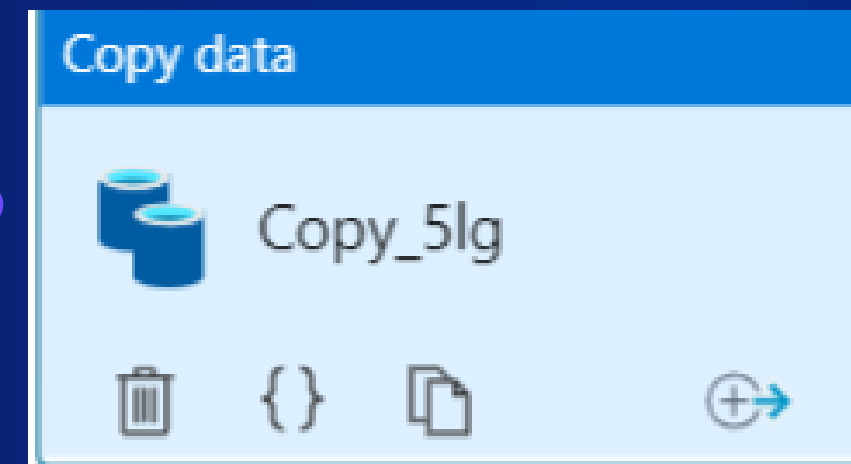
BLOB

COSMODB

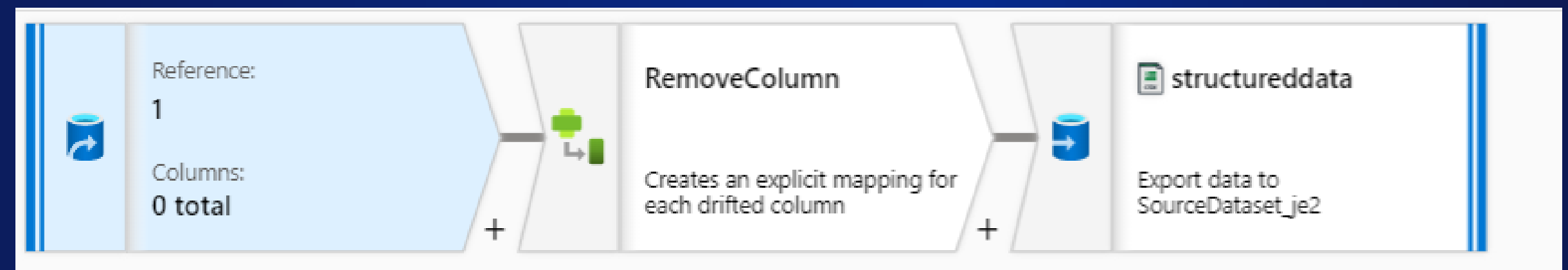
SOURCE DATASET - SOURCEDATASET\_5LG

DESTINATION DATASET - DESTINATION\_5LG

SQL TO DATALAKESTORAGE



MAP DRIF REMOVE UNWANTED COLUMN





# Data visualize



<https://POWERBI.COM/DATAVANT/RAPTOR-TCC>



196.33K

Count of Provider Id

Datavant Hackathon - Medicare Hospital Charge by team Raptor-TCC

12.0...

Average Covered Charges

2.32bn

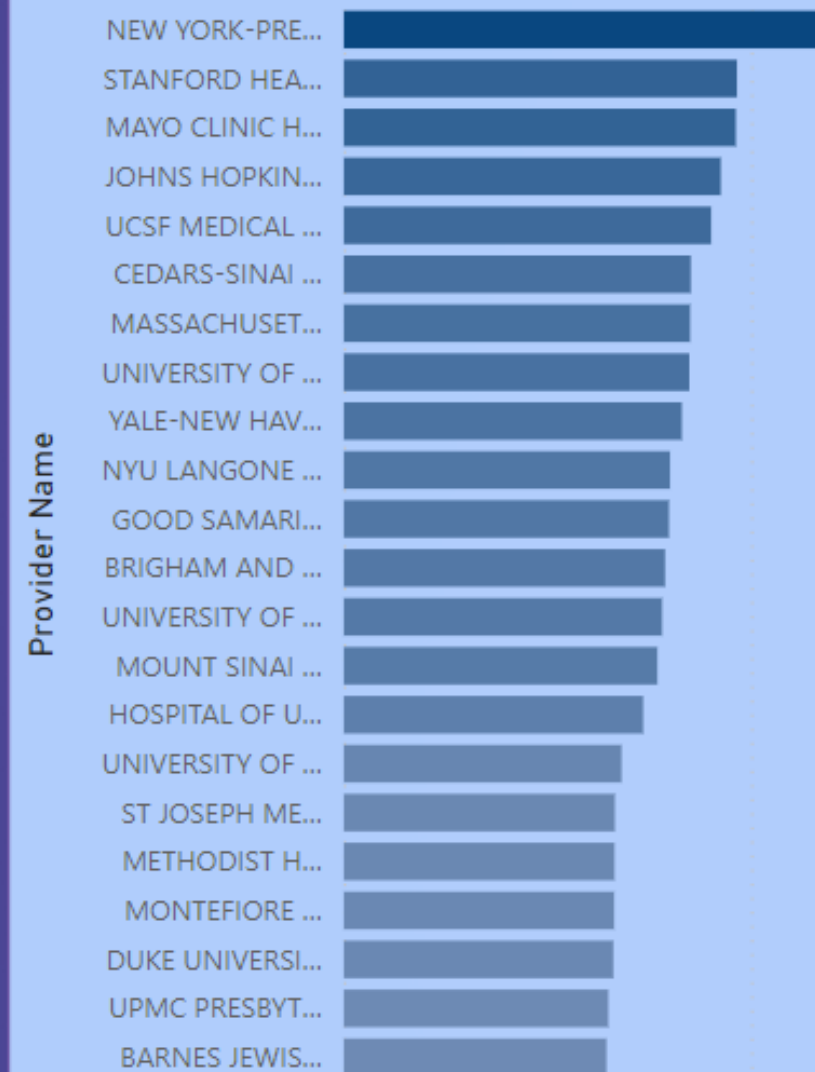
Average Medicare Pavm...

2.74bn

Average Total Payments

## Average Hospital Payment

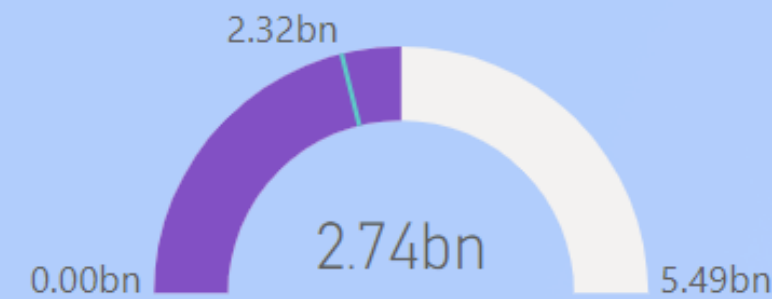
Average Total Payments 0.00M 11.83M



0M 10M

Average Total Payments

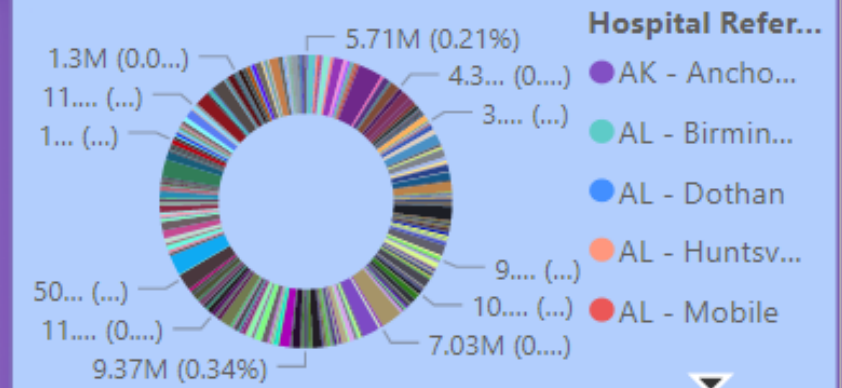
## Total Payment by Medicare



## Payment State wise



## AVG PAYMENT HOSPITAL



## STATEWISE PAYMENT

AK	CT	IA	LA	MO	NH
AL	DC	ID	MA	MS	NJ
AR	DE	IL	MD	MT	NM
AZ	FL	IN	ME	NC	NV
CA	GA	KS	MI	ND	NY
CO	HI	KY	MN	NE	OH



# Demonstration

Git hub link

<https://github.com/TWILIGHTCLOUDCODERZ/Datavant.git>

Video Link

<https://youtu.be/o8mxVLT-JU0>

WebApp

<https://datavantraptor.azurewebsites.net/>

PowerBI

<https://POWERBI.COM/DATAVANT/RAPTOR-TCC>

# Future road map

**ENTIRE WORK FUNCTION CAN BE OPTIMIZED IN A SINGLE WORK FLOW WILL LEARN AND EXECUTE.  
ML/AI ARE FUTURE TECHNOLOGY WILL BE ADOPTED AND EXECUTE IN REAL TIME ENVIRONMENT.**

Thanks for the opportunity to learn and explore new technology



TEAM-RAPTORZ

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