Smart Care Through Digital Transformation

IMT 598

Group 5 - Healthcare

OUR TEAM

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AGENDA

01
INTRODUCTION

02
DIGITAL TRANSFORMATION
STRATEGY & PHASES

03
SOLUTION & MACHINE LEARNING
METHODOLOGY

04
DEMO & LIMITATIONS

US HEALTHCARE INDUSTRY -
HIGHEST SPENDING, WORST OUTCOME

Highest spending on healthcare sector than any other country

Lowest life expectancy

Highest chronic disese %

CUSTOMER SATISFACTION

84%

of customer say the experience a company provides is as important as its products & services

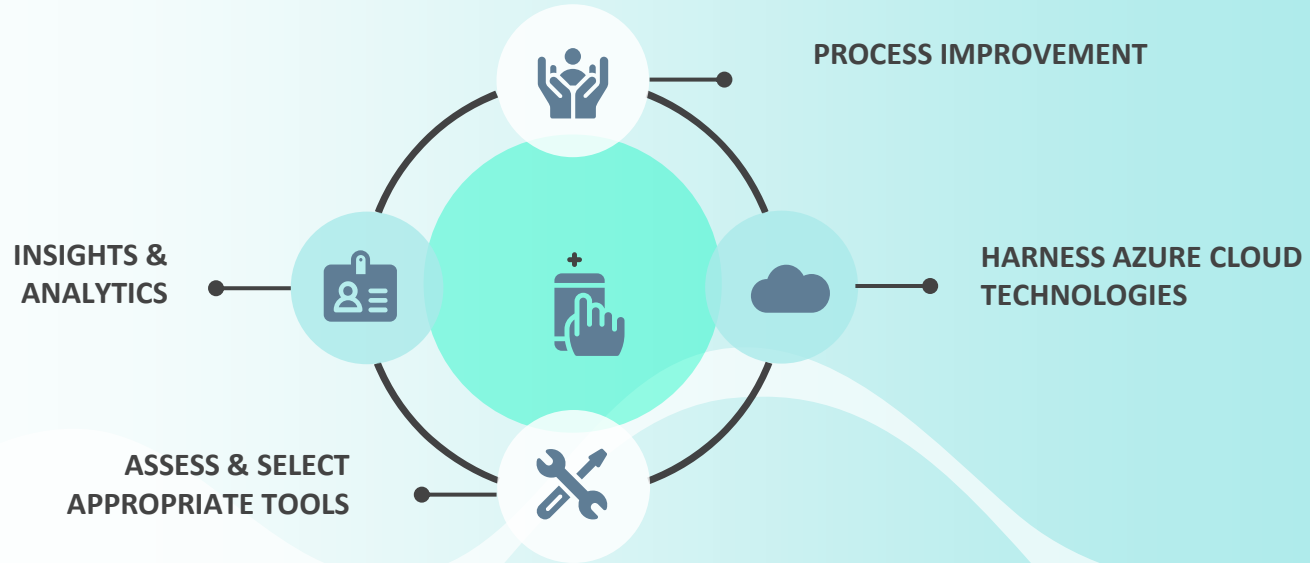# BUSINESS MODEL ANALYSIS

Move to personalised predictions

ML model scales well to large data corpus

Screening tool to cut down operational time

DIGITAL TRANSFORMATION STRATEGY

PROCESS IMPROVEMENT

INSIGHTS & ANALYTICS

HARNESS AZURE CLOUD TECHNOLOGIES

ASSESS & SELECT APPROPRIATE TOOLS

PHASES OF DIGITAL TRANSFORMATION

ASSESSMENT

EXPERIMENTATION

IMPLEMENTATION

SOLUTION DESIGN

Azure Machine Learning Environment

Data Set

Machine Learning Studio

Web Services deploying ML solution

Website

Mobile

Excel or others
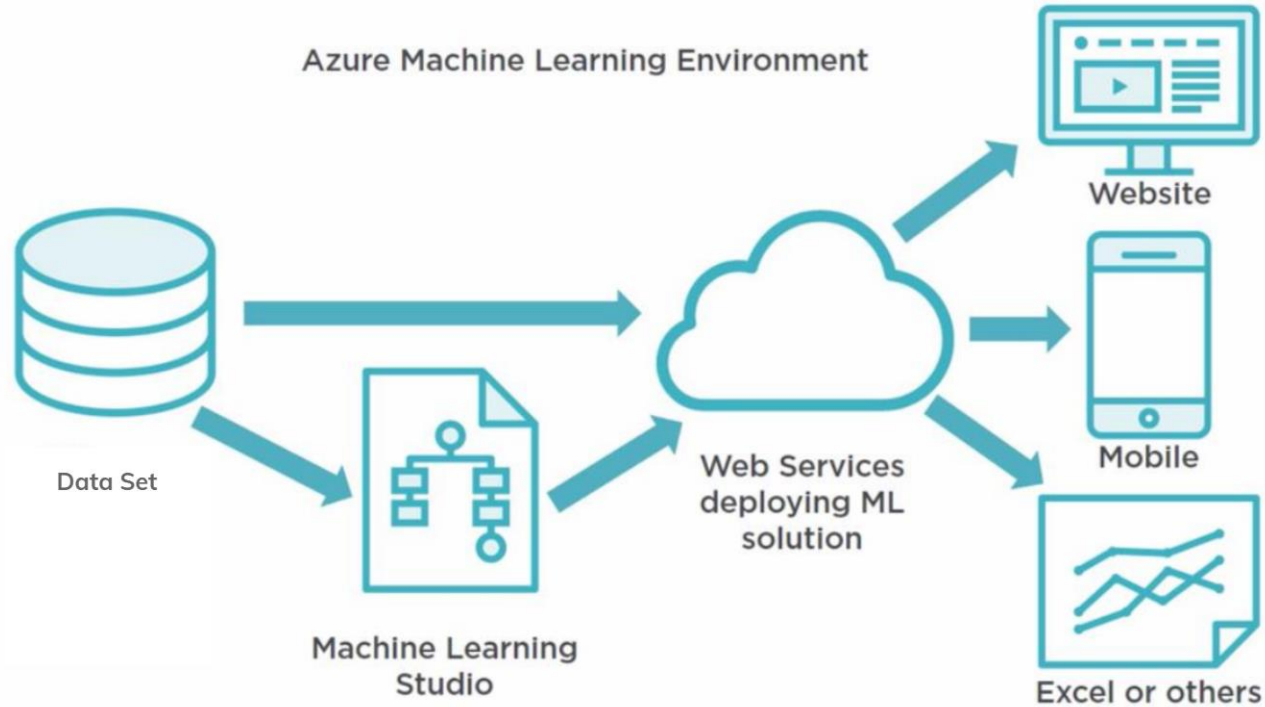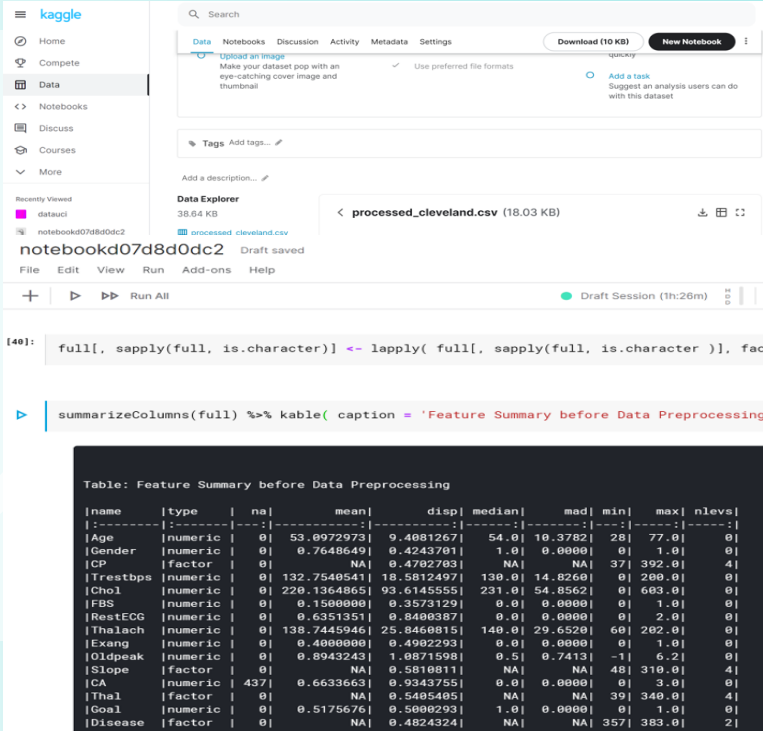
METHODOLOGY - PART 1

Data Manipulation in Kaggle notebook using R language

The raw dataset contains 76 attributes, but we will be using a subset of 14 of them.

Finalized the parameters that needs to be trained

METHODOLOGY - PART 2

Building the Machine Learning model

Deploy it as a web service
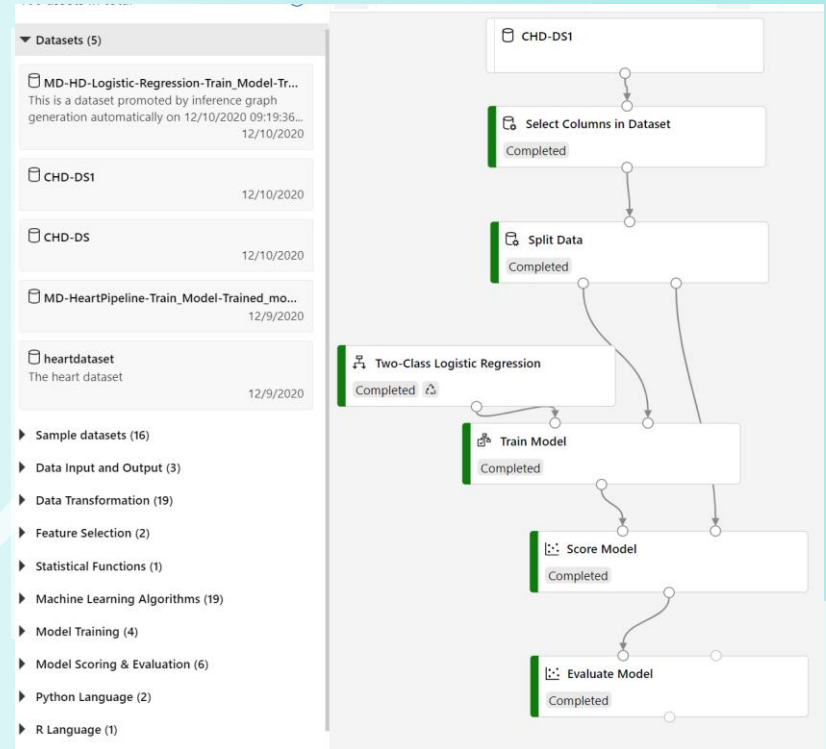
METHODOLOGY - PART 3 Final Web Output

Input a patient's information

Output indicates if the patient is at a higher risk for heart disease

DEMO

https://demoscoreapp.azurewebsites.net

Click - Recorded Demo Video

LIMITATIONS AND CONSTRAINTS

❖ Training model built on a limited size dataset

❖ Making sure HIPAA regulations are followed and data remains secure

❖ Potential resistance from internal stakeholders

❖ Buy in from patients

THANKS
&
QUESTIONS