

# **Two Week Online FDP** **on** **Emerging Trends in Deep Learning & its** **Applications**

**ORGANISED BY**

Dr. D.Y.Patil Institute of Technology,  
Department of Computer Engineering,  
Pimpri, Pune-411018



# Data?





# Case Study- Banking

28<sup>th</sup> Nov. 2020.

Mr. Dnyandeo Lavhkare

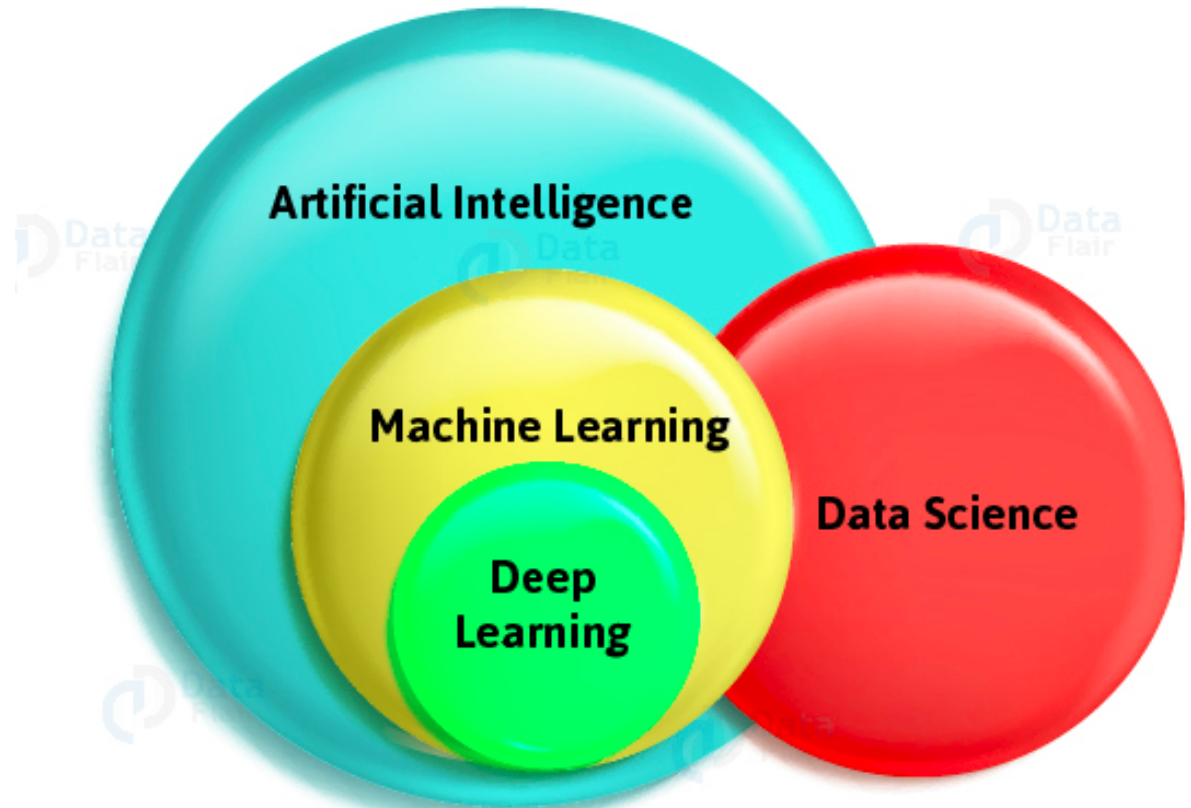
Associate, System Analyst

(C-edge Technologies Ltd.(TCS-SBI))

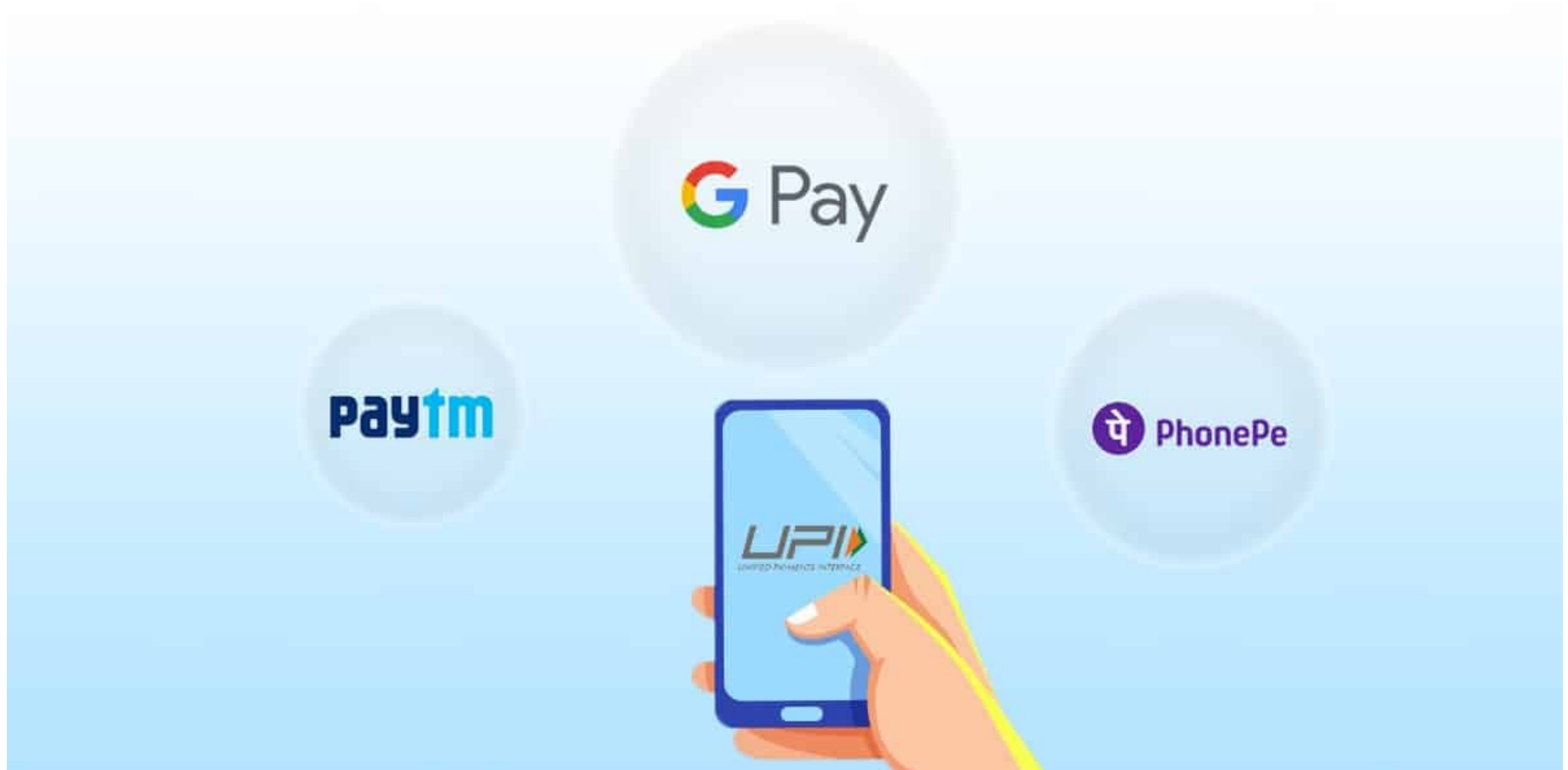
[dnyaneshlavhkare@gmail.com](mailto:dnyaneshlavhkare@gmail.com)

# Case Study Objective?

- Foundation of Data Science with Python programming language.
- Introduction of Machine Learning.
- Role of Artificial Intelligence.
- Deep Learning Application



# Digital Transformation?



# 12hrs Vs 24hrs Banking Services

The following banking services are comming Deep Learning and AI

- ATM
- UPI
- NEFT
- RTGS
- IMPS



# Role of data Science in banking ?

The implementation of Data Science in banking is changing the face of the banking industry rapidly. Each and every bank is searching for better ways. That will help them to understand the customers for increasing customer loyalty by providing more efficient operational efficiency.

- Identify patterns
- Customer Lifetime Value Prediction

# Role of Machine Learning in banking ?

Artificial Intelligence (AI) and Machine Learning (ML) has evolved as the crucial enabler in conducting hassle- and risk-free digital transformation. An AI and ML-led approach to system modernisation will allow businesses to collaborate with other fintech services into adapting modern demands and regulations while increasing safety and enabling security.

- Algorithm-based marketing





# Role of Deep Learning in banking ?

- Deep learning has been widely applied in computer vision, natural language processing, and audio-visual recognition. The overwhelming success of deep learning as a data processing technique has sparked the interest of the research community.
- The use of deep learning in finance and banking services has become prevalent.
- Deep learning models in the key finance and banking domains to provide a systematic evaluation of the model preprocessing, input data, and model evaluation.

# Banking Information/Data

Information is the 21st Century gold, and financial institutions are aware of this. Armed with Machine Learning and Artificial Intelligence technologies, they have the opportunity to analyze data that originates beyond the bank office. Financial companies collect and store more and more user data in order to revise their strategies, improve the user experience, prevent fraud, and mitigate risks.



# Banking Operation

The implementation of Data Science in **banking** is changing the face of the banking,



# Problem Statement

## About Company

Dream Housing Finance company deals in all home loans. They have presence across all urban, semi urban and rural areas. Customer first apply for home loan after that company validates the customer eligibility for loan.

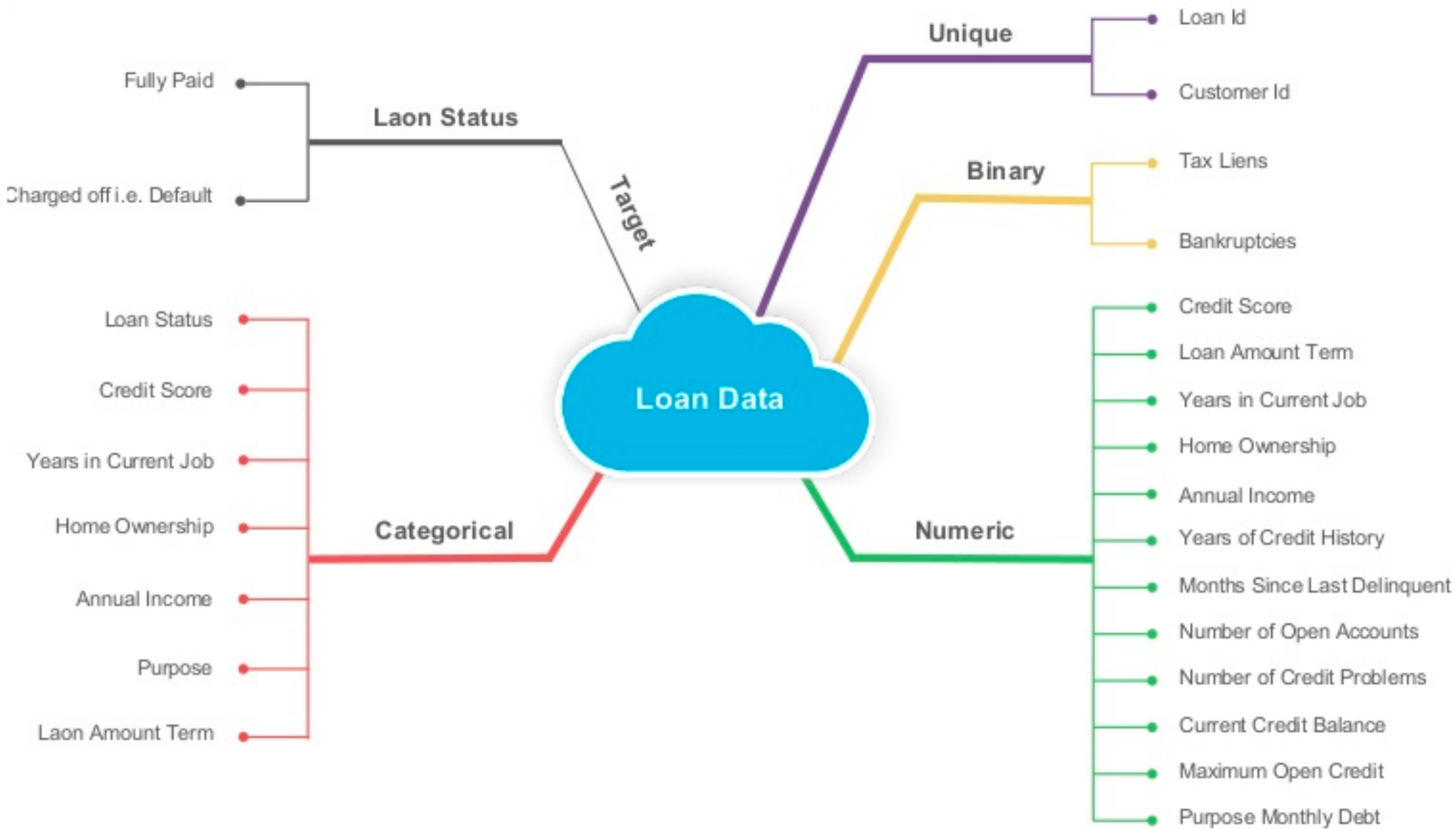
# Problem Statement

## Problem

Company wants to automate the loan eligibility process (real time) based on customer detail provided while filling online application form. These details are **Gender, Marital Status, Education, Number of Dependents, Income, Loan Amount, Credit History and others**. To automate this process, they have given a problem to identify the customers segments, those are eligible for loan amount so that they can specifically target these customers. Here they have provided a partial data set.

# Dataset Description

Variable	Description
Loan_ID	Unique Loan ID
Gender	Male/ Female
Married	Applicant married (Y/N)
Dependents	Number of dependents
Education	Applicant Education (Graduate/ Under Graduate)
Self_Employed	Self employed (Y/N)
ApplicantIncome	Applicant income
CoapplicantIncome	Coapplicant income
LoanAmount	Loan amount in thousands
Loan_Amount_Term	Term of loan in months
Credit_History	credit history meets guidelines
Property_Area	Urban/ Semi Urban/ Rural
Loan_Status	Loan approved (Y/N)





**Cell:9607589982,  
mail: [dnyaneshlavhkare@gmail.com](mailto:dnyaneshlavhkare@gmail.com)**