

WELCOME



Two Weeeek FDP **on** **Emerging Trends in Deep Learning & its** **Applications**

ORGANISED BY

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DPU





Case Study - Banking

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Data?



Case Study Objective

- Role of AI, ML and DL in banking sector.
- To determine reason of various types of frauds in Banking.
- To check different forms of fraud and their impact on different stakeholders.
- To find out various measures to stop these fraud by applying Latest trends.

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.



Challenges

- With millions of customers accessing the bank systems daily at ATMs, branches, online, and through multiple call centers, any downtime or service disruptions are practically unacceptable to the bank. With a growing portion of customers relying on online and mobile banking, 24/7 service reliability has become more critical than ever.
- Increasing Competition.
- Regulatory Compliance.
- Rising Expectations.
- Security Breaches-->>Challenging task.



Digital Transformation

- The internet revolution is said to foster integration of the market for financial services, since consumers are able to shop around at all companies worldwide and firms can easily offer their services on the internet at a minimum of distribution cost.



12hrs Vs 24hrs Banking Services

The following banking services are comming Deep Learning and AI

- ATM
- UPI
- NEFT----->24hrs-->RBI
- **RTGS---->>24hrs-->>RBI**
- IMPS



RISK FACTORS IN BANKING SECTOR?

- **Cybercrime-** Almost all banks, offer online and mobile banking services. Debit card, credit cards and other payment methods are used for banking transactions.
- ATM's machines and other electronic channels used for these payments is the main target of cyber attacks.
- **Black Money-** Cyber crime and financial frauds lead to financial instability in the country. India is one of the top positions in the world for increasing Black money.
- **Loan loss-** The risk of increasing NPA and Bad debts in India is increased manifold, due to lack of appropriate methods of monitoring of loans and not by proper due diligence.

No. of cases (Cyber Crime)	No. of Cases (ATM, Debit Card	Year
9622	1159	2015-16
11522	1372	2016-17
12317	2059	2018-18

Role of ML, AI and DL 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
- Deep learning models is the key for finance and banking domains to provide a systematic evaluation of the model preprocessing, input data, and model evaluation.



BENEFITS AT A GLANCE

- 70% reduction in downtime and data loss risks.
- 50% decrease in time spent on resolving emergency issues.
- Shorter and more successful DR tests.
- Tighter collaboration across IT domains and teams.

Problem Statement... Hands On

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.

Hands on:

*Thank
you*



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