

## SNS COLLEGE OF TECHNOLOGY



Coimbatore - 35

23BAT613 - Artificial Intelligence for Managers

Unit II - Unboxing ML & Its Applications



Presented by

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Design Thinker

#### **Redesigning Common Mind & Business Towards Excellence**







Build an Entrepreneurial Mindset through our Design Thinking FrameWork





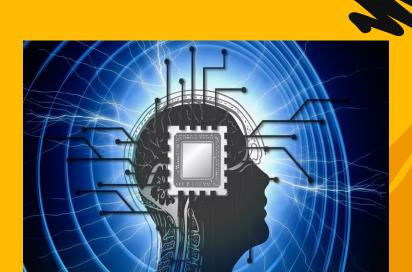
## **Guess the Topic!!!**

Application of Machine Learning in Business





- Reason to study Reinforcement Learning
- > Reinforcement Learning
- > Reinforcement Learning in ML
- Model-based and Model-freeReinforcement Learning
- Example for Reinforcement Learning







SIS

- Reason to study Application of ML in Business
- Top 9 applications of ML
- Machine Learning Algorithms for Business Applications
- How Machine Learning can help your Business Application to grow?
- > Machine Learning across Industries









### The machine learning process

In machine learning applications, a data scientist or other analyst:



## Top 9 Applications of ML







Recommending Products



O3

Customer

Segmentation



Image and Video Recognition



Fraudulent
Transactions



Demand Forecasting





Sentiment Analysis

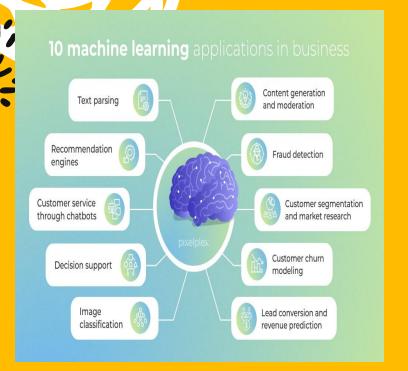


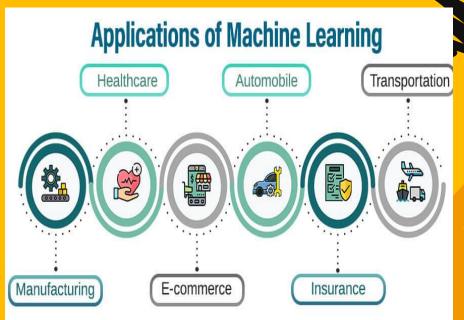
Customer Service Automation



# Application of Machine Learning



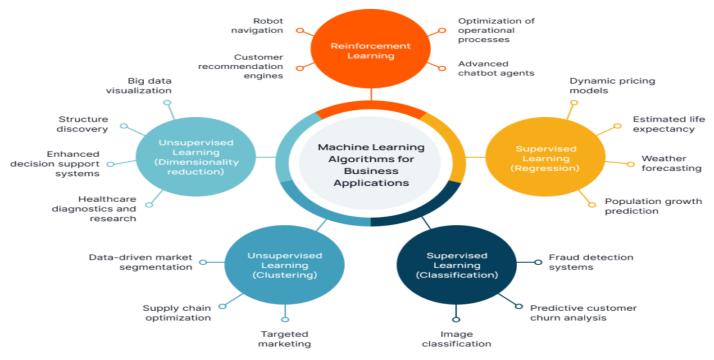






### Machine Learning Algorithms for Business Applications





## Ho Ap

# How Machine Learning can help your Business Application to grow?



#### Creating wireframes for apps

ML helps to develop wireframes for apps.

#### Customer segmentation

ML provides a growing deep knowledge of customer behavior, which is essential for strategy formulation and feedback.







#### Fraud control

ML techniques in mobile applications, a developer creates apps with crucial security features.

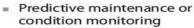
#### **Effective app testing**

ML allows developers to build a customized module for testing their ML apps or use a general AI testing module



### Machine Learning across Industries





- Warranty reserve estimation
- Propensity to buy
- Demand forecasting
- Process optimization
- Telematics

- Predictive inventory planning
- Recommendation engines
- Upsell and cross-channel marketing
- Market segmentation and targeting
- Customer ROI and lifetime value

- Alerts and diagnostics from real-time patient data
- Disease identification and risk stratification
- Patient triage optimization
- Proactive health management
- Healthcare provider sentiment analysis

Manufacturing



Retail



Healthcare and Life Sciences



- Aircraft scheduling
- Dynamic pricing
- Social media consumer feedback and interaction analysis
- Customer complaint resolution
- Traffic patterns and congestion management

Travel and Hospitality



- Risk analytics and regulation
- Customer Segmentation
- Cross-selling and up-selling
- Sales and marketing campaign management
- Credit worthiness evaluation

Power usage analytics

- Seismic data processing
- Carbon emissions and trading
- Customer-specific pricing
- Smart grid management
- Energy demand and supply optimization

**Financial Services** 



Energy, Feedstock, and Utilities





In which of the following scenarios can Machine Learning (ML) be applied to improve business operations?

- A) Predicting customer churn based on historical data.
- X B) Designing company logos for branding purposes.
- X C) Calculating quarterly financial reports manually.
- X D) Creating employee schedules using pen-and-paper methods.
- X Answer: A) Predicting customer churn based on historical data.





# Summary

Reason to study unsupervised Learning

- Unsupervised Learning types
- Unsupervised Learning -Clustering
- >Unsupervised Learning Dimensionality Reduction
- ➤ Unsupervised Learning Association Rule
- Supervised Learning vs Unsupervised Learning







https://onlinedegrees.scu.edu/media/blog/applications-of-machine-learning-and-ai-in-business





### **REACH US**



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# Thanks!

