

Phase 3: **SUBMISSION DOCUMENT**

Project Title: **CUSTOMER CHURN PREDICTION**

Phase 3: **DEVELOPMENT**

Topic: Customer churn prediction is a vital component of customer's management and business strategy.



INTRODUCTION:

Customer churn prediction is a vital component of customer relationship management and business strategy. It involves the use of data and predictive analytics to identify and forecast the likelihood of customers discontinuing their relationship with a company or business.

Churn, often referred to as customer attrition or customer turnover, is a significant concern for businesses across various industries, as retaining existing customers is generally more cost-effective than acquiring new ones.

Big Data and Cloud Computing:

The ability to process and analyse large volumes of data in real-time or near real-time using big data technologies and cloud computing has enhanced the effectiveness of churn prediction models.

- Big data refers to extremely large and complex datasets that traditional data processing tools and methods struggle to handle.
- Cloud computing is a technology that provides on-demand access to computing resources, such as servers, storage, databases, networking, software, and analytics, over the internet.

Improved Data Quality:

- Ensuring data accuracy, completeness, and consistency is crucial. Data cleansing and data integration techniques have improved data quality for churn prediction models.
- Improved data quality refers to the enhancement of the accuracy, completeness, consistency, and reliability of data.
 - **Data Cleaning:** Remove duplicate records.
 - **Data Governance:** Establish data governance policies and procedures.

Real-time Predictions:

- Many businesses now aim to make churn predictions in real-time, allowing for immediate response and intervention to prevent customers from leaving.
- Use Cases:
 - Financial Services
 - E-commerce
 - Internet of Things
 - Healthcare

Personalization:

- Churn prediction models now focus on personalization, understanding that each customer is unique.

- This involves tailoring retention strategies to individual customers based on their preferences and behaviour.

CONCLUSION:

Developing a customer churn prediction model is a critical endeavour for businesses looking to retain their customers and improve customer satisfaction.

Customer churn prediction is essential for businesses to proactively address customer attrition, minimize revenue loss, and improve customer loyalty.

