

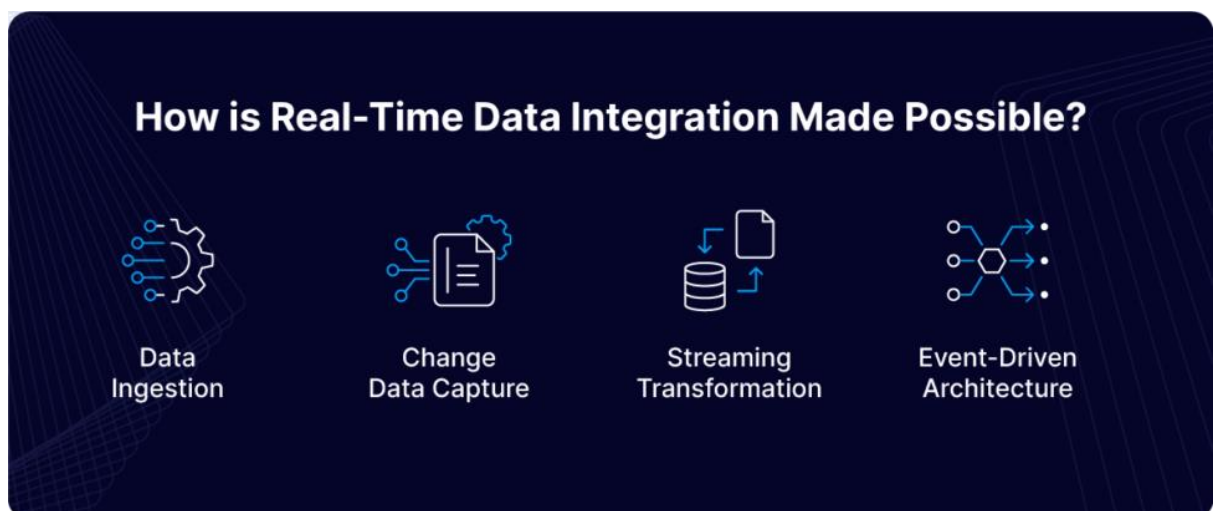
10. Future Scope – TrafficTelligence

Date	23 june 2025
Team ID	LTVIP2025TMID41942
Project Name	Traffic telligence : advanced traffic volume estimation with machine learning
Maximum Marks	4 Marks

The **TrafficTelligence** system lays a strong foundation for intelligent traffic prediction, and it can be further expanded in multiple ways to enhance accuracy, usability, and impact:

1. Real-Time Data Integration

- Connect with **live weather APIs** (e.g., OpenWeather) and **traffic data APIs** to automate inputs and improve relevance.

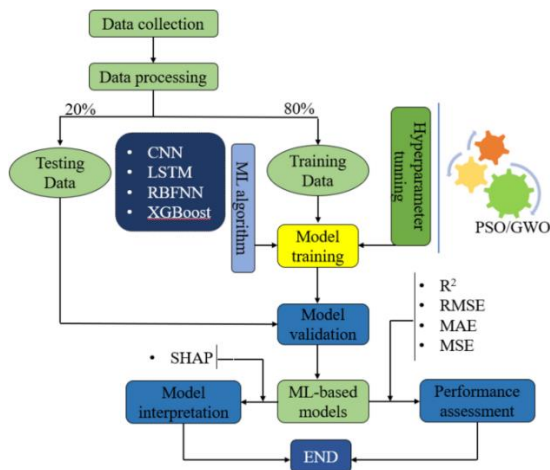


2. User Authentication & Profiles

- Implement login systems to allow users to **save prediction history**, track usage, or access advanced features.

3. Advanced Machine Learning Models

- Upgrade to models like **XGBoost**, **LSTM**, or **Neural Networks** to improve prediction performance, especially for time-series data.



4. Database Integration

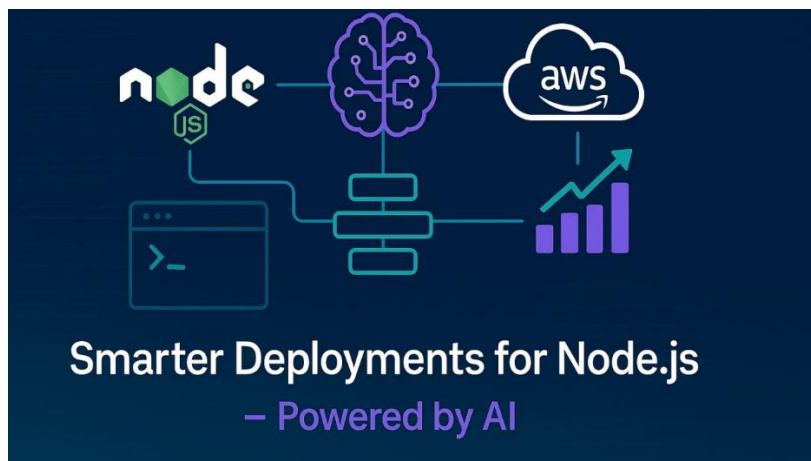
- Use **MongoDB** or **MySQL** to store user inputs, results, and analytics for later visualization or reporting.

5. Mobile and Responsive Design

- Enhance frontend using **React** or **Tailwind CSS** for mobile-friendly access and improved user experience.

6. Cloud Deployment

- Deploy the full application on platforms like **Render**, **Heroku**, or **AWS** to make it publicly accessible.



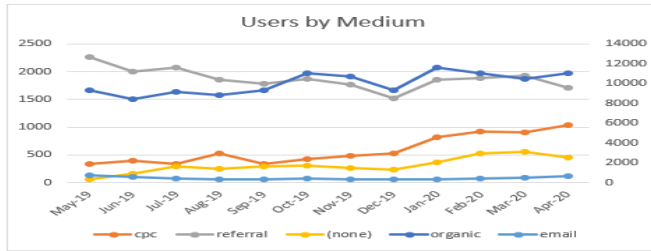
7. Analytics Dashboard

- Create an admin dashboard to show traffic trends, weather correlations, and prediction statistics over time.



Google Analytics Traffic Dashboard

Report for April 2020



Metrics				
Users		12826		13%
Pageviews		19759		9%
Bounce Rate		83%		0%
% New Sessions		80%		4%
Session Dur. (mm:ss)		15:42		-6%
Transactions		75		14%
Revenue		40596		14%
Segments				
Mobile		1968		66%
Converters		532		-15%
Purchasers		64		12%
Tablet		78		7%

Source	Users	12 Month Trend	Landing Page	% New Visitors	Bounce Rate
google	10850		/howto/calculating-the-average-of-averages/	85%	88%
facebook.com	1715		/article/definitive-guide-to-removing-google-analytics-spam/	85%	91%
t.co	842		/article/misunderstood-metrics-time-on-page-session-duration/	94%	77%
(direct)	610		/article/misunderstood-metrics-new-vs-returning-visitors/	73%	71%
bing	358		/article/misunderstood-metrics-next-page-path/	17%	63%
baidu.com	210		/article/misunderstood-metrics-users/	19%	20%