



SHYENA  
TECH YARNS

A Data Science Company

AI

## Case Study

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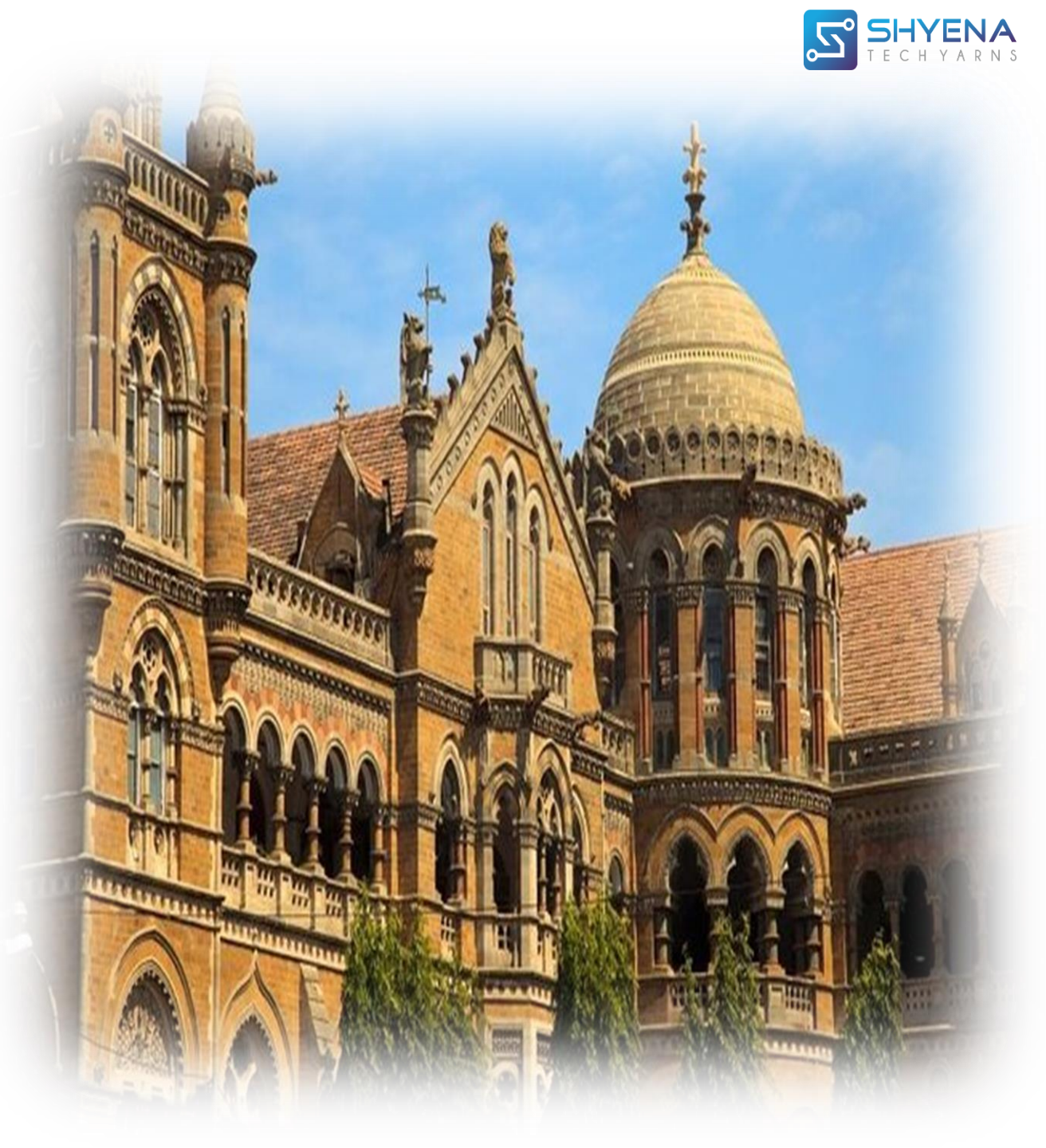
# An AI Powered Complaint Management Platform

# About the Client

The end Client is a Municipal Corporation in Europe.

Solid Waste management is one of their important job function.

Collecting the solid waste lying on the City streets, and keeping the city clean would ensure a good service rating to the Municipal corporation from the citizens.





# Business Problem

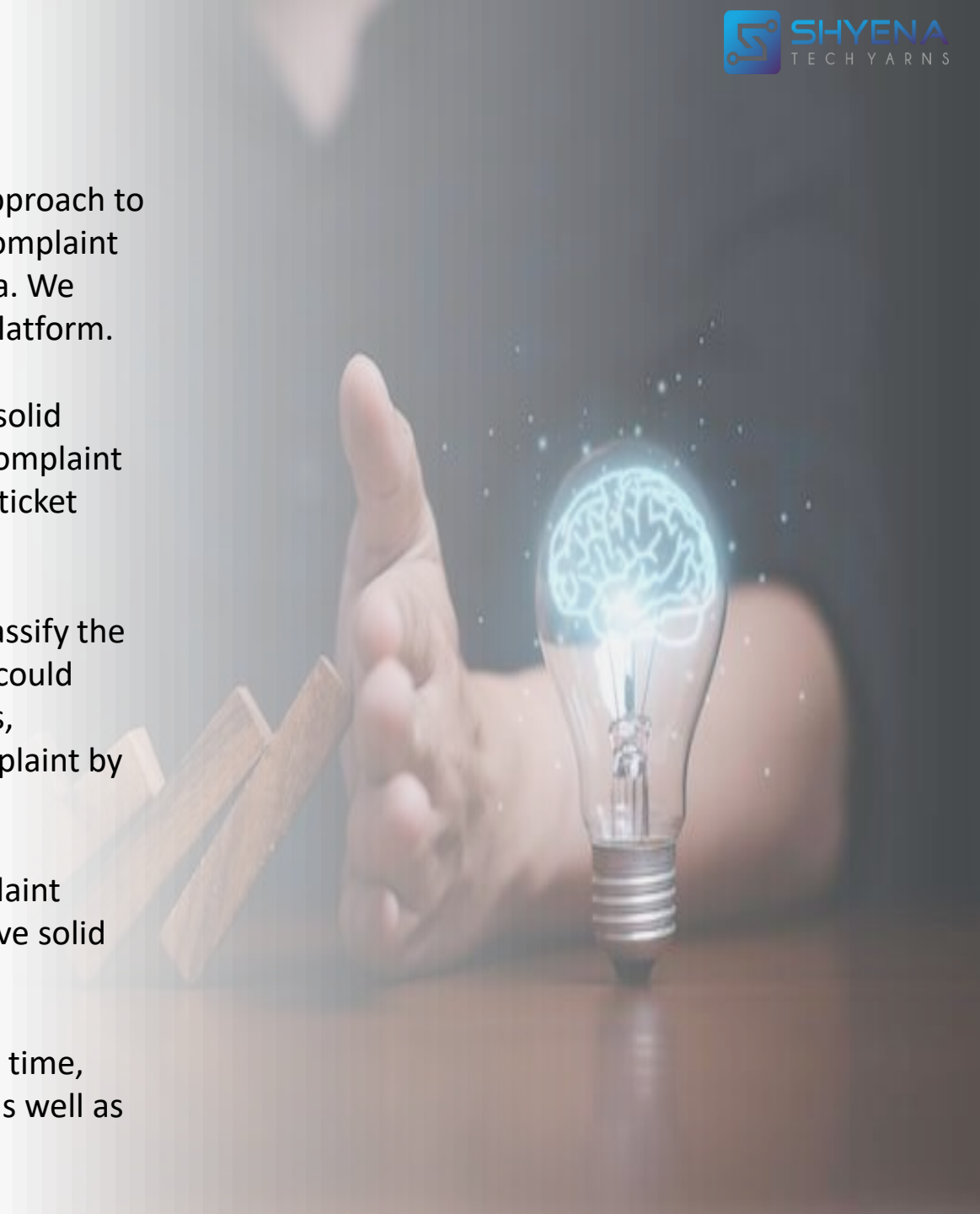
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- The Municipal corporation had this burning issue of cleaning up the solid waste lying on the street. The solid waste included Car Tyres, Bicycles, Glass Bottles, Textiles, Tree Branches, household items etc.
- Multiple agencies are responsible to collect the solid waste from the street. However, the agency which collects rubber tyres, would not collect the glass bottles.
- In order to clear all the solid waste, a ticket must be created for all the agency simultaneously. However, due to human dependency, ticket creation was taking time.
- This was resulting in delay to collect all the solid waste and clear the streets. These delays irked the citizens and it was impacting the service rating for the Municipal corporation.
- The Client was hence looking for a solution which will enable them to quickly collect the solid waste lying on the streets.

# Solution

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- After understanding the Client's problem, we thought of an innovative approach to solve this solid waste management issue. We proposed an AI Powered Complaint Management portal for the Citizens to the client. The Client liked our idea. We then designed and developed an AI Powered Complaint Management platform.
- The citizens could use this platform to register the complaints about the solid waste lying on the street. They could upload the picture along with the complaint on the portal. With the power of AI, the platform could now process the ticket quickly.
- Using Computer Vision and Deep Learning models, the platform could classify the category of the solid waste from the uploaded picture e.g., the platform could classify the solid waste into different categories like rubber tyres, bicycles, furniture etc. The platform could also understand the context of the complaint by processing the text in the complaint.
- Based on these insights generated by the power of AI, the Solid Waste Complaint Management platform could automatically create a ticket to the respective solid waste collection agencies.
- As a result, the solid waste lying on the street could now get collected on time, resulting in garbage-free and cleaner streets. This delighted the Citizens as well as the end Client.





## Outcome

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- With the AI Powered Complaint Management platform, the delays in solid waste collection is eliminated completely.
- The citizens are happy and the performance rating of the municipal corporation improved significantly.





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