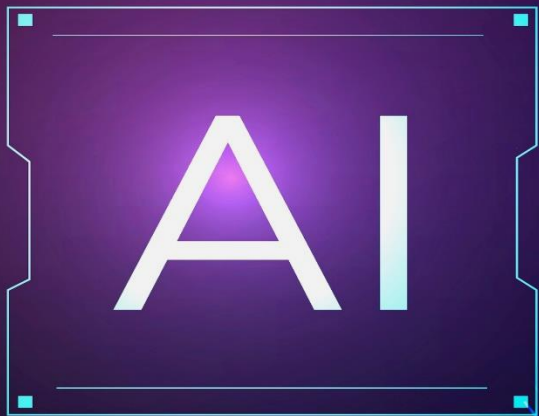




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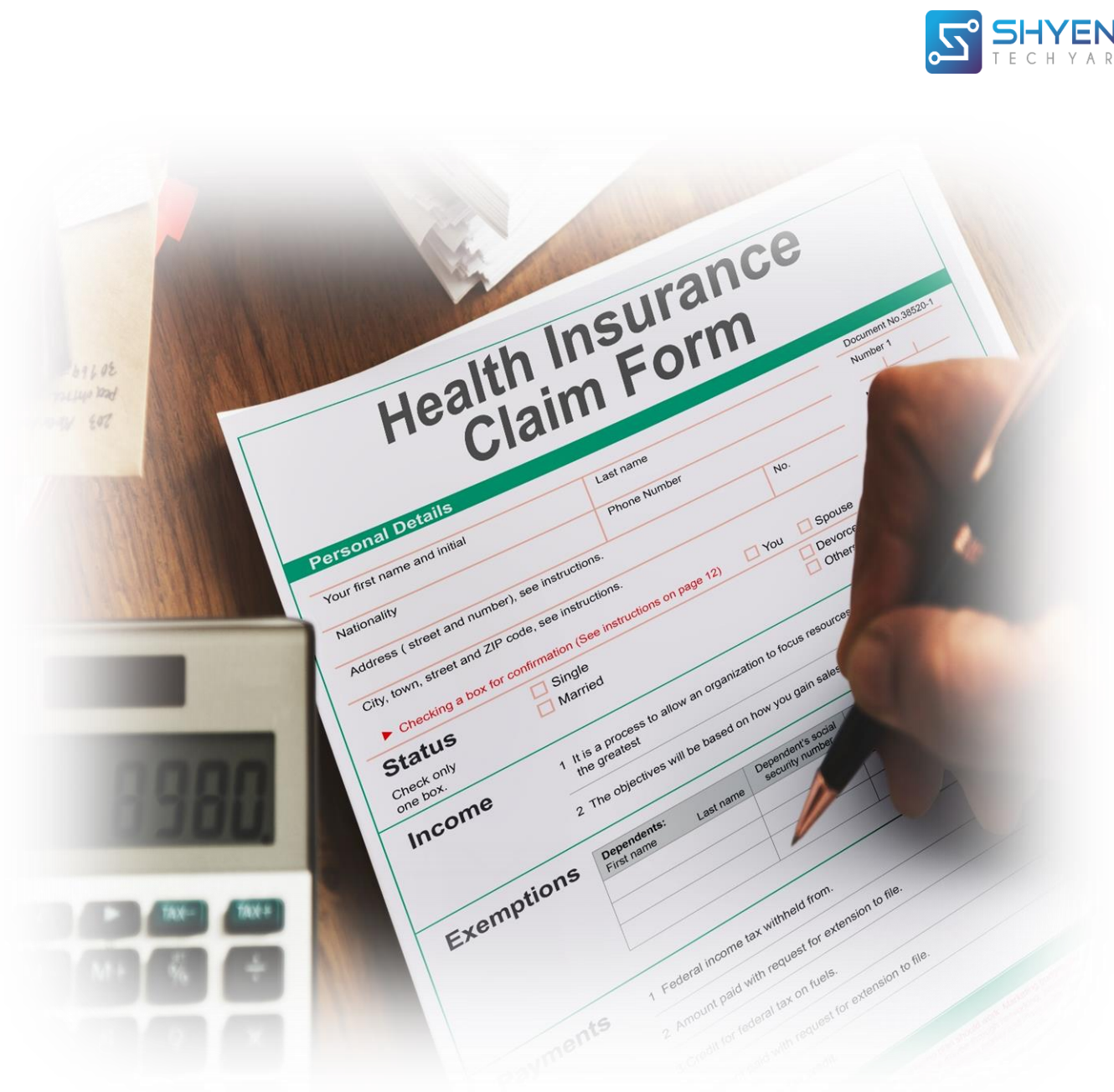
## Case Study

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# An AI Powered Intrusion Detection Platform

# About the Client

- The Client is a KPO based in India
- They do back office work for many international clients, especially in the BFSI & Taxation domain
- They perform back office activities like Insurance Claim documents verification, Tax Refund Claims etc



# Business Problem

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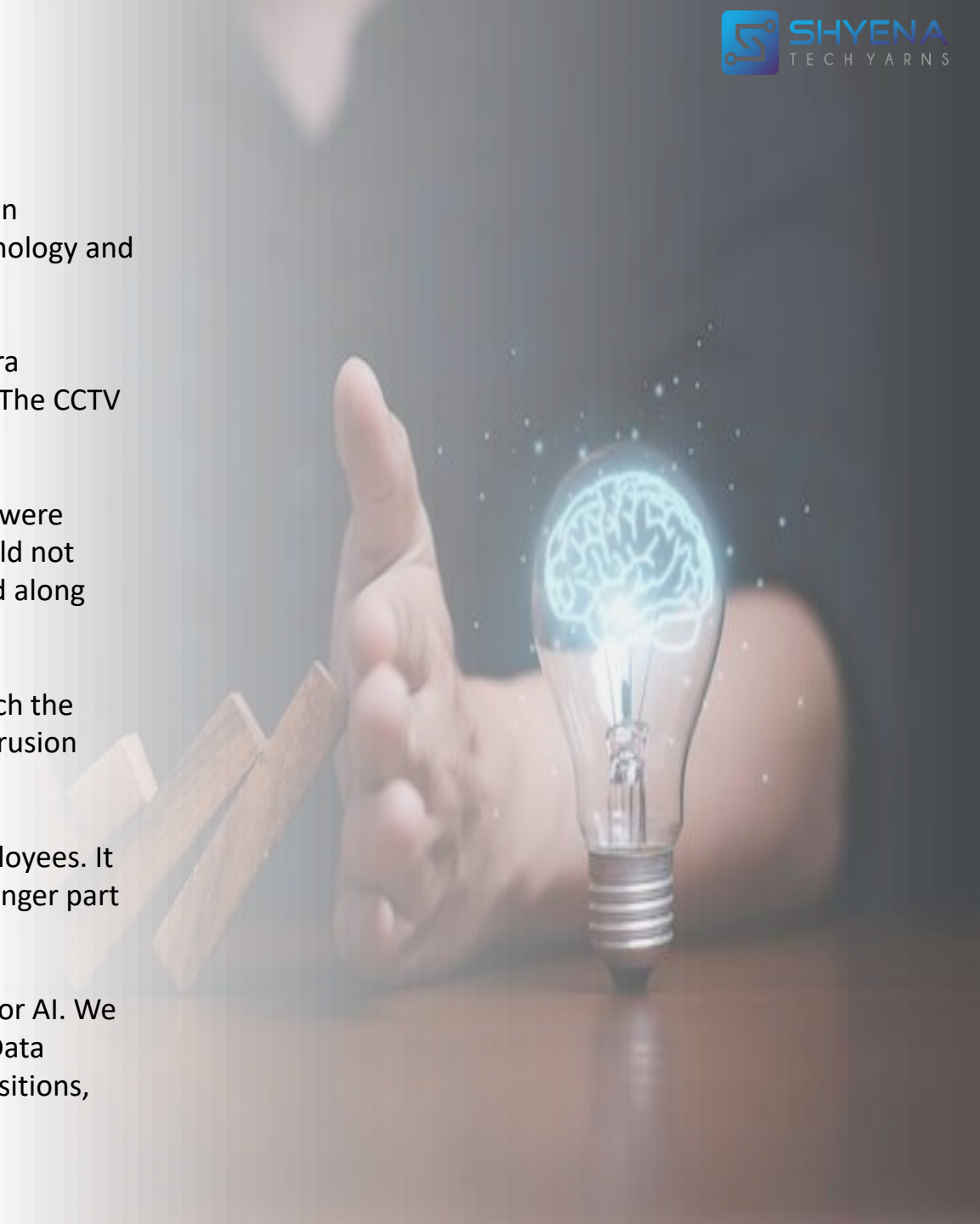
- As the Client works with some of the leading international BFSI companies, they have secured zones for each of their customers
- The access to these secured zones are restricted by a strong security mechanism like Access Card, Face Recognition and Biometrics
- However, the Client wanted an additional security mechanism to disallow tailgating to avoid possible security breach
- They wanted a system where if an unauthorized person enters the secured zone, the system must treat it as intrusion and raise an alert to the security team to take immediate action



# Solution

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- After understanding the Client's problem we proposed them an AI Powered Intrusion detection platform. It would be based on Computer Vision & Face Recognition technology and would work on a live CCTV camera feed
- We suggested changes to the CCTV camera positions, lighting arrangement & camera resolution after doing the initial study of the CCTV footage. The Client obliged to it. The CCTV camera was installed at the door of each secured zone
- We custom trained the Face Recognition model on the faces of the employees who were authorized to enter the secured zone. The model would throw an exception if it could not recognize a person. The picture of this unauthorized person would also get captured along with a 10 seconds video footage as an evidence
- The intrusion alert along with the evidences were rendered on the platform to which the security personal had access. We also built a manual mechanism to override the intrusion alerts. This was needed during end Client visits or to handle false positives.
- The Platform also had a mechanism to train the model periodically to add new employees. It also had a mechanism to remove the embeddings of the employees who were no longer part of the team
- The Platform worked with an accuracy of more than 98% which is a great accuracy for AI. We could achieve this accuracy due to our experience in AI, Deep Learning, Streaming Data Pipelines and of-course understanding camera feeds, lighting conditions, camera positions, optimum frame rates etc.



## Outcome

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- With the AI Powered Intrusion detection platform, the Client now have an intrusion free secured zones
- The Client is extremely happy as the intrusion incidents reduced almost by 99%
- The Client could meet all the security compliance needs and could avoid possible the penalties from their end Customers





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