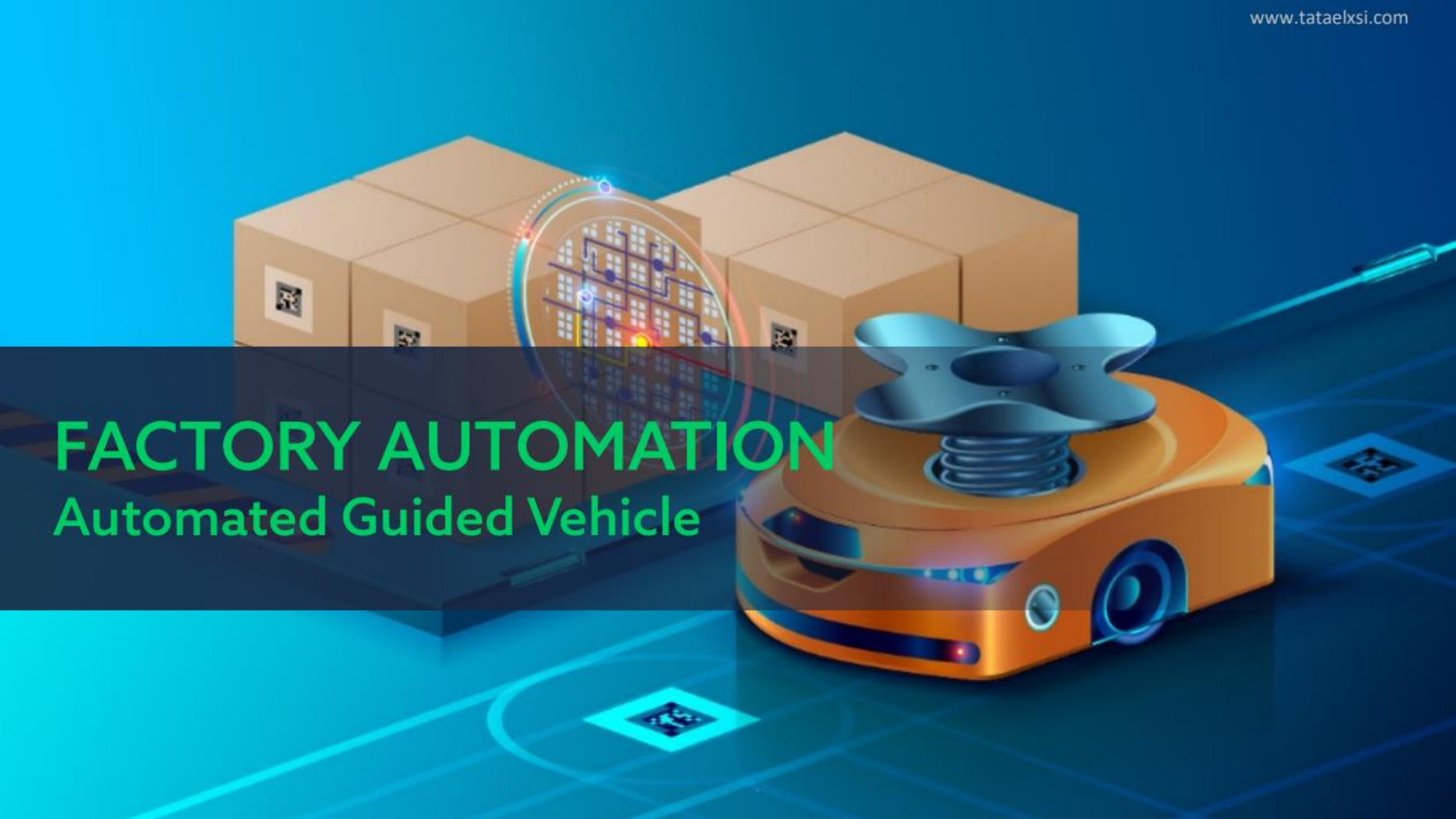

# FACTORY AUTOMATION

## Automated Guided Vehicle

TATA ELXSI

CASE STUDY

# Design of Automated Guided Vehicle

## Challenge

- To design & develop an AGV which best suits to flexible & scalable business needs.
- To deliver the final prototype in a short timeline of 5months.

## Scope

- To design and develop a compact and powerful AGV which moves front & back, turn & pivot and pulls around 150kgs.
- Docking & locking of trolley
- Other sensing – bump, proximity, crash etc.

## Solution

- A detailed research and benchmarking study was done to arrive at the desired specs for the design of the AGV
- A very flexible product was designed, which facilitates quick assembly and disassembly of panels, body split and fitment without using any fasteners.
- Optimized the space for better aesthetics

## Impact

- The AGV helps to eliminate manual operations there by improving the efficiency and cost savings