PACT Analysis for a Virtual Car Showroom

A touchless interactive system using **gesture recognition**, **object rotation (TUIO)**, and **360° car videos**. It allows users to explore cars in a virtual space without needing direct physical touch. Ideal for enhancing user experience and reducing pressure from sales interactions.

People	Activity	Context	Technology
- Age : 21–45 years old Customer : - Explore car models on his own - Confirm interest via gestures - Get a 360° visual feel without a test drive - a seamless showroom experience, responsiveness, modern design, no clunky buttons. Sales consultant : - Allow customers to interact with the system independently, without needing constant guidance - Use the system to improve the sales pitch	-Browse cars by rotating a tagged object. Make "OK" gesture to confirm interest. View 360° video of the car. - Quick,smooth through cars. Exploration-driven interaction. View detailed videos .	-indoors, moderate light, quiet background. Fixed table and camera setup - Interaction time: 3–10 minutes per customer, low learning curve.	- MediaPipe + OpenCV: Real-time hand tracking and "OK" gesture recognition - Python Sockets: Communicates gesture actions to the C# front-end - WinForms + LibVLCSharp Plays 360° videos for selected cars - Camera: Captures hand gestures and object positions -Smartphone

- Should be able to reset or restart system quickly. - Wants minimal training to use the system.			
Customer : - Comfortable with gestures -Not disabled - Understands visual-based interactions Sales consultant : Knows the car models Needs intuitive user flow, even for non-techy customers			