Benchmarking Automotive UI/UX
Establishing best practices for HMI design to improve overall User Experience

BACKGROUND AND CHALLENGE

• The objective of the project was to conduct benchmarking of car cockpit User Interface of premium automotive brands.

• The benchmarking would establish the overall User experience comprising key aspects such as Visual design, aesthetics, Functional Layouts, workflows, transitions, and animations.

SCOPE OF WORK

The project scope involved collecting information on 16 selected car models, from brand magazines, catalogues, user manuals, websites, reviews, third-party platforms, and user forums. Individual models were scrutinized for all its cabin elements and the screen UI to arrive at the pros and cons of each feature. A comparative analysis for each model to compare HMI components intra-category and inter-category was conducted.
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SOLUTION
After a careful study of the Instrument Cluster, Central Console/Infotainment Screen, Heads-Up Display (HUD), and Connected Ecosystems (Mobile Apps), top infotainment trends and takeaways were documented. Each model’s user experience was mapped against models within inter-category and intra-category to arrive at high-level observations pertaining to HMI.

IMPACT
The benchmarking established best practices in Human Machine Interaction design. Five most crucial points of consideration for future HMI were detailed and delivered.

The project also aided in forming a resource bank where the latest manuals, demonstration links and customer reviews were recorded.