ANIL SONDUR

Tata Elxsi's vice-president, Industrial Design and Transportation Electronics Business Unit, on the trends in in-vehicle infotainment systems in India and overseas, the next wave of products in India, and what OEMs want. An email interview by Shobha Mathur

What kind of in-vehicle infotainment design and development is Tata Elxsi currently undertaking for the auto sector in India and what are the OEMs asking for?

Infotainment systems are one of the big growth areas in passenger cars with the integration of information, connectivity and entertainment.

At Tata Elxsi, we provide the entire spectrum of application development as well as automation by bringing in the latest connectivity technologies ranging from phone connectivity to connectivity with the internet network. We design and develop infotainment systems for major OEMs locally and globally, where we offer support in defining and verifying the feature list and specifications.

We also deliver support in the selection and sourcing of infotainment systems from various suppliers. Our work in in-vehicle infotainment (IVI) also involves defining the processes for infotainment suppliers where we jointly work with them for the design and development of systems.

Well, depending on the segments, OEMs ask for systems ranging from a simple audio system with a dot matrix display, to a complete head unit with an LCD display and all the features including Bluetooth and internet connectivity.

Are IVI devices filtering down from expensive to cheaper cars?

In-vehicle infotainment devices can be fitted into all segments of cars. Given the current market scenario, consumer expectations for in-car technologies are no longer restricted to luxury vehicles alone. Even the consumers who drive medium or low-cost vehicles are interested in possessing the latest features such as internet connectivity and General Packet Radio Service facility in the vehicles they buy. IVI systems are, therefore, increasingly becoming a part of the middle-small car segment purchases.

However, with the growing popularity of Intelligent Vehicle Initiative technology, leading automotive companies are in the process of developing cost-effective systems that will not only offer limited features but also provide a whole new level of experience to consumers who commute via or own small or medium cars.

How has the IVI industry evolved in India and what is its scope compared to China and developed markets of the US and Europe?

Though the IVI industry in India is still at a nascent stage, the market is set to get a boost from the flourishing automobile sector where a large number of organised players are entering this segment with technology-oriented products and accessories. These players have been bringing together a blend of entertainment, interactivity and information that helps customers with the right access to infotainment on the move.

Moreover, the growing urban population in the country has been presenting huge opportunities for players to launch customised and more innovative products. The enormous potential of IVI in India has attracted a large number of players who have made enormous investments in the infotainment sector. Having said that, reports indicate that the growth for IVI telematics system in developed markets such as the US and Europe is projected to reach $36 billion (Rs 216,448 crore) and $26 billion (Rs 148,996 crore) respectively this year.

In your opinion, what will be the next wave of IVI products in India?

Wireless connectivity is seen as a huge area of focus and development. This is set to become the mainstay of any IVI system and smartphones, in particular, will become the future of in-vehicle infotainment. We are expecting to see more standardisation on head unit hardware and operating systems and we anticipate open-source to gain more market share. There will be plenty of innovations in developing applications that use vehicle and environmental data as well - innovative human machine interface, reliable voice-recognition systems and personalisation of in-vehicle environment will be the driving growth for the segment. Also, dashboards that integrate with iPhone applications, in-car consoles built on Google Android and the ability to remotely regulate the cabin air-conditioning with the help of smartphones are all features that will be built into cars of the future. The era of the connected car is dawning.

In-car health and wellness monitoring can be the next wave. In India, we are currently witnessing advancements through Bluetooth connectivity (Ford) and double din HU system and in-built navigation systems (Volkswagen) for better user-interface and experience.

What are the trends in the IVI segment?

The three main areas that can directly contribute to the growth of in-car infotainment's eco-system are safety, security and comfort with services such as remote diagnostics, vehicle relationship management and fleet management marking its milestones in this segment globally.

Currently, the penetration of IVI applications in areas like safety, commerce, communication and entertainment are mostly focused on high-end models but this is expected to pick up in the medium and low price points by almost 100 percent. Rich graphic user-interface, 3D graphics, voice recognition capability, faster response time, minimum driver distraction and eCall (a service that is aimed at providing rapid assistance to drivers involved in an accident) are some of the trends that can drive the future of infotainment.

What is the future of smartphones as in-car entertainment in India?

Mobile phones have been influencing the automotive industry across several levels and will offer greater opportunity for car manufacturers to improve the customer's driving experience. OEMs are closely working with mobile phone manufacturers to develop interfaces that allow drivers to use new features in the car. Smartphones will soon be replacing expensive navigation systems with numerous applications such as locating parked vehicles, tracking traffic conditions and fuel costs, offering breakdown assistance, reading emails aloud while driving. These will be advantageous in India, as we have a large smartphone penetration that could boost growth of in-car entertainment.