Passenger Experience Shapes Future Design

The best of today's modern railways give passengers a glimpse of the ultra-hi-speed, energy-efficient train travel to come. But will train design alone be enough to propel the industry into the future? Experts claim that tomorrow's rail travel will be less about boarding the train, and more about enjoying the station.

As architects and engineers take train design towards fresh horizons, a whole new set of parameters is reshaping the destinations they travel between. Many newly-built or refurbished stations have been conceived as local landmarks, and make short-distance, intercity journeys quicker and easier than airplane travel. Architects see the potential to reinvent train stations as multi-use urban developments and connect them to the mobile lifestyles passengers' lead today. Although new trains are designed to become autonomous, modern transport hubs will continue to depend on the passengers they serve. Tomorrow's railways will bring people together in new ways, and make passenger satisfaction more of a priority than it is today.

New station architecture will heighten passenger satisfaction by improving access to the platforms and making shopping and everyday services available along the way. Commercial centres, F&B emporiums and recreational facilities will replace waiting areas and create new hangouts for the locals. Ticketing will be controlled by smart systems that differentiate passengers from local consumers, providing access to platforms, recharging points, secure storage and shower facilities. Loyalty schemes will identify individual preferences and make them a seamless part of passenger experience.

Although digital technologies can heighten individual satisfaction today, many travellers still struggle to find personal comforts in busy stations. 'Smart systems keep things moving, but passengers still want to sit down and take in the surroundings,' says designer Johan Berhin, who has created seating areas in railway stations in France, Sweden and other European destinations. 'State-of-the-art railways work very well until something breaks down, and then passengers are literally left standing,' he says. 'I design the seating areas in scale with the architecture to maximise the number of seats available for individual passengers, groups of travellers and consumers coming into the stations to shop.'

Berhin claims that seating design is already reflecting the future to come, providing planners and architects with new ways to shape passenger experience. 'Stations are going to be very different in 10 to 20 years, and seating will play key roles,' says Berhin. 'Seating will be designed to create unique "sense of place" areas in the station where passengers and

commuters can relax. The seating areas will keep passengers happy while they wait, and be installed in proximity to retail and F&B zones. As stations provide better amenities, passengers and everyday consumers will make eating, shopping and entertainment a natural part of the experience.'

'Passenger experience can be boosted by seating design,' explains Johan Berhin. 'It's the environmental factors that make individuals enjoy the space inside the station.'

As rail stations provide more services, industry stakeholders will need to reinvent them as branded spaces capable of competing with local shopping centres and other forms of travel. 'Seating can give the station a stronger brand identity through choice of colours, materials and shapes,' Berhin says. 'Seating design can make a mainline station stand out, or be applied throughout the entire rail network to give every station a consistent brand identity. Why not highlight the use of natural materials in ways that give the station a stronger sustainable profile? Airports often choose natural materials for that reason, and now national railways and public transport operators are thinking the same way.'

Berhin and his Green Furniture colleagues are pioneering a new 'seamless' approach to seating density by creating designs that increase the ratio of individual seats to floor space. 'Our seating designs eliminate the unused space between chairs and dramatically reduce the overall footprint,' Berhin says. 'Rail passengers don't actually need bulky, padded seating to sink down into, and prefer to sit on smooth, natural materials such as wood. Because we can seat more individuals within a smaller surface area, there is always seating available, even when stations get crowded.'

Finding the right density ratio also makes commercial sense, as the seating can be installed to direct passengers into commercial areas. When seating is available near F&B services, passengers are more likely to work up an appetite and buy something to eat. 'In one mainline station, we added tabletops to seating units installed around the F&B area,' Berhin says. 'Passengers could use them when the cafes were full, increasing take-away food sales by 7% as a result. It also enabled passengers to sit where the departure boards are in view and spot the location of their platform when it was announced.'

While many planners are already using seating to manage passenger flow, few realise that seating design can also determine what passengers look at. 'In a recent project, our seating faced directly towards the retail units to encourage sales, and it reduced shoplifting because thieves could see

passengers looking into the shops,' Berhin says. 'Not only can seating boost business, it can direct the passengers' vision towards anything that will make their experience better.'

Boosting Passenger Experience

- Keep passengers comfortable during train delays by providing enough seating. Passengers will feel more content and be more tolerant of disruptions.
- Soften the surroundings with flowing lines, subtle curves and seamless shapes. Use soft structures to create a unique sense of place in the station.
- Wood grain creates more ambience than synthetic materials. Natural textures in the station make passengers feel more at home.

Johan Berhin

Designer Johan Berhin is founder of award-winning manufacturer Green Furniture Concept. Based in Malmö, Sweden, Berhin and his team design sustainable solutions for railway stations, airports and shopping centres around the world.

www.greenfc.com