

TOP 3 IDEAS FOR SMART SOLUTIONS FOR RAILWAYS :

Mobile applications in rail logistic operations:

When the railroad company is a participant of the supply chain, it can also suffer from the typical logistic issues such as cargo delay and loss of the visibility. If the company doesn't want to pay damages, it must solve emerging issues immediately. Fortunately, modern technologies like mobile allow us to minimize these risks. The company can get the most tangible benefits when implementing mobile applications to operate the IoT ecosystem on the railroad. When the train and rail infrastructure objects have sensors, the operator can easily monitor their status and train location more accurately. When this report-based info is sent to the mobile app, the responsible person can solve the issue immediately, while the client can monitor the situation online. As a result, you can avoid unfounded accusations from the client and reduce the risk of cargo delays.

Maintenance & Signaling system operations:

The fundamental point here is to introduce mobile applications into the workflow of technical staff, meaning to transfer the work of particular employees into digital. These applications would give employees deeper insights into equipment status and provide new data in real-time. The ultimate goal is to provide a better level of safety on the railroad. Although railway accidents happen rarely, their consequences sometimes are catastrophic. The reason for many cases is often human error caused by maintenance of the train, railroad equipment, and infrastructure, as well as an abundance of paperwork that the railway staff handles daily.

The main advantage of the mobile applications for engineers and technicians on the railroad is a real-time connection between the control center and maintenance staff. It significantly simplifies and improves the maintenance of the railroad, offering the staff not to wait for scheduled maintenance, but to fix the issue if it is needed. It allows maintenance staff to receive, review, and action faults as they occur, decreasing response and repair time and increasing network performance, the efficiency of resource usage, and uptime. However, this is also possible if the train has the Internet of Things sensors.

Apps for passengers:

Although US rail passenger transportation is not as widespread, mobile apps could attract people to travel by train. Since people like to choose their method of transportation based on the most comfortable option, mobile applications can facilitate buying tickets and simultaneously collect information about the trip to be used later.

With smartphone usage on the rise, travelers' reliance on mobile apps to simplify their journey has naturally increased. According to [TravelPerk](#), 57% of business travelers want a single app for all their travel planning and booking needs, including ticket purchases, passes, and packaged trips with their mobile devices. With this in mind, it's no surprise that more travel-related apps continue to appear. The most popular applications enable rail passengers to quickly plan their travel by booking and purchasing train tickets, boarding via m-ticket, checking schedules and train status, getting destination updates, requesting and managing onboard services, and viewing personalized offers and recommendations. In other words, these apps free passengers from long lines and hassle, thus making the travel process a pleasure.