

Crew Manager

Job description: The Crew Manager manages the daily operations and duties of Train Captains through preparation of duty rosters, deploying resources, ensuring discipline, well-being and performance standards of Train Captains. The manager is well-versed with train service operations and service standards, an is required to execute crew reformation and deployment plans to maintain train service standards and reliability, as well as safety standards of train operations.

Current Job Tasks	Future view of job tasks	Impact at task-level
1. Prepare duty rosters and ensure deployment of Train Captains	<ul style="list-style-type: none"> Roster scheduling solutions will automate the allocation of Train Captains using optimization algorithms to save deployment time. The role of the Crew Manager will shift from rostering works to utilizing data to enhance performance of Train Captains and further reduce costs. 	
2. Oversee the performance and well-being of Train Captains	<ul style="list-style-type: none"> The tasks performed of Train Captains will be largely automated and may lead to Crew Managers managing a smaller pool of Train Captains in areas of performance assessment and service feedback. IoT sensors onboard trains will gather data and feedback on performance of Train Captains and stored in a central database for processing and analysis by the Crew Manager. 	
3. Execute crew reformation and deployment plans to comply with train service and safety standards	<ul style="list-style-type: none"> Duties and rosters of Train Captains will be pushed automatically to mobile devices maintained by each Train Captain without the need for intervention by Crew Managers. Crew Managers will focus on onboarding activities of Train Captains, staff motivation and analysis of data collected to ensure no scheduling exceptions are found. 	
4. Conduct corrective actions on performance of Train Captains	<ul style="list-style-type: none"> The focus of the Crew Manager will be on understanding the situation and conduct corrective actions with the Train Captains Data collected on performance of Train Captains by sensors onboard trains are summarized and analysed by the Crew Manager. 	



A SIGNIFICANT proportion of job tasks will be automated by key technologies, tasks performed will have a

HIGH degree of change



Within the next **10 – 20 years**, the job role(s) could potentially change

DISPLACEMENT



Reskilling is required

To take on adjacent job role(s) the skills below will become critical:

- Inventory Management
- Report Writing
- Rail Regulatory Compliance
- Rail Incident Management
- Rail Emergency Response Management
- Workplace Facilities Safety Management
- WSH Incident and Accident Investigation
- WSH Culture Development
- Health and Fatigue Risk Management
- Data Usage and Implementation
- Sensor Monitoring Management
- Innovation Management



Job Adjacency

The job holder could potentially take on adjacent job roles as:

- Bus Operations Control Centre Controller
- Company Secretaries
- Customer Service Manager

Legend for job tasks & skills

- High impact
- Medium impact
- Low impact
- Declining skills
- Adjacent skills
- Emerging skills

Legend for job adjacency

Pivot score shows job fit between current to future job role derived from Faethm. The higher the score, the easier the transition. A pivot score of >75 is deemed as a good fit for the future role.

10-year skills impact analysis for rail operations (at-risk roles)


















Job tasks today	Job tasks in 10 years	Job skills in 10 years	Job task impact	Job role impact	Job role transition
1. Implement and execute service recovery measures during rail emergencies and incidents	 Continue to act under pressure in instances of crisis but digital communication tools and virtual signages would supplement service recovery activities	 Rail Incident Management  Rail Emergency Response Management  Data Usage and Implementation	 High degree of impact	 Displacement	1. Company Secretaries 2. Customer Service Manager 3. Station manager 4. Bus Operations Control Centre Controller 5. Rail operations control management
2. Conduct recovery of train and station equipment in malfunction (For Customer Service Officer/ Rover)	 IoT devices and sensors will perform remote diagnostics of train and station system malfunctions and report incidences, shifting focus towards monitoring of sensor data and interpreting signals before site mobilization for first-line recovery and close-up inspections	 Train Station Operations Management  Data Usage and Implementation  Sensor Monitoring Management			
3. Operate passenger trains and meet overall train service standards (For Train Captain)	 Modern trains are highly automated, operate in confined environment and equipped robust signalling systems, shifting focus towards monitoring technology solutions and interpreting train dashboard data to manage exceptions	 Passenger Train Operations  Data Usage and Implementation  Sensor Monitoring Management			
4. Oversee the performance and well-being of Train Captains (For Crew Manager)	 Train Captain tasks being largely automated may lead a smaller pool being managed, while IoT sensors onboard trains will gather and centrally store performance data of Train Captains for processing and analysis	 Data Usage and Implementation  Sensor Monitoring Management			
Declining Functions	Train, station and depot operations that requires manual intervention such as onboard operating of trains and station patrolling				
Emerging Functions	Use of data and interpretation of outputs from automated systems				

Table 18: 10-year skills impact for rail operations (at-risk roles)

20-year skills impact analysis for rail operations (at-risk roles)


















Job tasks today	Job tasks in 20 years	Job skills in 20 years	Job task impact	Job role impact	Job role transition
1. Implement and execute service recovery measures during rail emergencies and incidents	 Continue to act under pressure in instances of crisis but digital communication tools and virtual signages would supplement service recovery activities	 Rail Incident Management  Rail Emergency Response Management  Data Usage and Implementation	 High degree of impact	 Displacement	1. Company Secretaries 2. Customer Service Manager 3. Station manager 4. Bus Operations Control Centre Controller 5. Rail operations control management
2. Conduct recovery of train and station equipment in malfunction (For Customer Service Officer/ Rover)	 IoT devices and sensors will perform remote diagnostics of train and station system malfunctions and report incidences, shifting focus towards monitoring of sensor data and interpreting signals before site mobilization for first-line recovery and close-up inspections	 Train Station Operations Management  Data Usage and Implementation  Sensor Monitoring Management			
3. Operate passenger trains and meet overall train service standards (For Train Captain)	 Modern trains are highly automated, operate in confined environment and equipped robust signalling systems, shifting focus towards monitoring technology solutions and interpreting train dashboard data to manage exceptions	 Passenger Train Operations  Data Usage and Implementation  Sensor Monitoring Management			
4. Oversee the performance and well-being of Train Captains (For Crew Manager)	 Train Captain tasks being largely automated may lead a smaller pool being managed, while IoT sensors onboard trains will gather and centrally store performance data of Train Captains for processing and analysis	 Data Usage and Implementation  Sensor Monitoring Management			
Declining Functions	Train, station and depot operations that requires manual intervention such as onboard operating of trains and station patrolling				
Emerging Functions	Use of data and interpretation of outputs from automated systems				

Table 20: 20-year skills impact for rail operations (at-risk roles)