

METRO

The future of British rail according to the women who move the country forward



Despite recent progress, the UK rail sector remains predominantly male, with women making up less than one fifth of the workforce.



If we're going to get more women into STEM, we need to get more girls reading about science »

But women are getting into the rail industry, often at the highest level, making crucial decisions about the future of rail travel.

I spoke to six inspirational female leaders in rail about their achievements, and their forecasts for the future of British rail.

In this time of expansion, strikes, Crossrall, HS2 and emerging technology, where is British rail going?

Jane Simpson, first female Chief Engineer for Network Rail



Simpson is a true trailblazer, being the first female to hold many engineering roles during her career.

She navigated her way to becoming the first and only ever female Chief Engineer at Network Rail, the most senior engineering role available in the UK's largest infrastructure company.

Simpson oversaw a portfolio of projects worth around £600M per year. Her job was to make sure money was spent in the right places to ensure safe and affordable rail infrastructure.

For Simpson, the future of rail is about blending the old with new.

'We've got an amazing Victorian infrastructure, build in the 1800's,' Simpson explains,

The challenge, and what makes the sector so interesting for Simpson, is finding ways to build on these foundations and make the systems fit for the future.

'It's easy to create something that's brand new from first principles, but it's hard to create something new with an existing asset base. It's a really challenging and creative environment.'

Simpson is now applying her experience in a new sector, heading up construction for Severn Trent Water.

Alison Munro, Chair of the National College for High Speed Rail



Munro chairs the board for the recently opened National College for High Speed Rail, set up to provide quality technical education to fill the 25,000 jobs that will be created by the construction of High Speed Two (HS2).

The college, which has campuses in Birmingham and Doncaster, is currently recruiting students.

Munro's past positions in the rail industry will ensure delivery of infrastructure needed for the country's future. She was instrumental in securing deals for High Speed One (HS1), and responsible for developing HS2.

UK job growth is predominantly in cities, and Munro believes that rail is the best way to connect them. As such, there will be a continuing growing need for good railways.

There are some exciting technologies on the horizon. Munro explains that it is possible to 'build the railway virtually and test before we actually build it in the ground."

In terms of the future workforce, Munro hopes to see more diversity.

'When you look at the skills shortage, we're only going to meet it if we get more women into the sector. The industry will look different in 20 years' time.



Dyan Crowther (Picture: Sam Lane Photography / HS1 Ltd)

Crowther has an impressive 30 years of experience in the rail industry, holding a variety of leadership positions across different organisations.

Amongst many contributions, Crowther reduced train delays by tackling one of the biggest causes: cable theft.

She worked with various Ministries and the British Transport Police to implement a national cable theft strategy that resulted in a change in law. The change made it difficult for thieves to sell on their stolen goods.

She is passionate about passing on her experience by mentoring and coaching women and men in rail.

Crowther uses her 16 year old son as a representative of the future commuter.

'He won't want to buy a ticket, he won't want a smart card in his pocket, he will want everything done on his phone, and he'll want it done automatically.'

Nisrine Chartouny, Project Manager for Bechtel



Nisrine Chartouny (Picture: Bechtel)

Daughter of a mechanical and a civil engineer, Chartouny didn't think twice about following in their footsteps.

Her interest is mega projects; she has worked on an impressive list of global highways, airports, high rise buildings and even a nuclear waste treatment plant.

One of Charouny's first tasks as the Project Manager at Farringdon Station for the Crossrail project was hosting a site visit for Prince Charles and the Duchess of Cornwall.

Despite the technical complexity of the Farringdon Station project, Chartouny feels a bigger sense of achievement from the impact she has had on getting young people, especially girls, interested in engineering and in rail.

By showing them the output of engineering, like a train station, they see why it's exciting to be an engineer.

She is motivated by a desire to make it easy for her 18-month old daughter to become an engineer, and perhaps contribute to her mother's rail sector predictions.

'With the urban population forecast to increase anywhere from 25 to 50% over the next 30 years,' she says, 'innovation in the rail industry is becoming a key factor in making people's lives easier and enabling a better quality of life.

'It's extremely rewarding and inspiring to be at the heart of change in this industry and to contribute to pioneering solutions that whole populations will benefit from.'





Magee is relatively new to British rail, with over 20 years of human resources experience from other sectors.

She is leading the charge on mental health issues with the introduction of mental health first aiders at Hitachi Rail, to help employees speak up and tackle issues.

'If we can support people with their mental health and wellbeing, then that enables them to be more resilient and to manage the stresses and challenges that they face in and out of work.

'It gives them inner strength,' says Magee.

For areas lacking electrification of trains, the only option is diesel. Hitachi Rail have plans to develop clean, battery-powered trains.

'Hitachi has a battery train in passenger service in Japan, this is technology we would like to develop further in the UK market, Magee explains.

For Magee, improving overall diversity, not just increasing numbers of women, is a key issue for ensuring a successful future in the rail sector.

Adeline Ginn, Founder of Women In Rail



Adeline Ginn (Picture: Women in Rail)

Ginn's day job is heading up the legal team at Angel Trains Ltd, one of Britain's leading train leasing companies.

Her other role is chairing the charity Women In Rail, which she founded in 2012.

Women In Rail consists of men and women from the British rail sector, working together and with government and organisations to address gender balance, diversity, and inclusion in the industry.