

Building Malaysia's first MRT underground stations

Malaysian engineers behind the important milestone in the nation's infrastructure development

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ABOUT five years ago, Ruslan Mohamed's career path took a turn for the better when he decided to chart a new course in the nation's infrastructure development.

At 43, while most people would be dreaming about early retirement, Ruslan is more enthusiastic than ever in expanding his learning curve in the mechanical and electrical field.

Exploring a sector that is entirely new to most Malaysians, the Kelantanese was one of the first few sent by MMC Gamuda to Schwanau, Germany to learn all about the Tunnel Boring Machine (TBM) that would be used in the MRT tunnelling process.

HIGHWAY TO RAILWAY

Seeing that the nation was heading towards a more railway-oriented infrastructure, Ruslan thought it was time for him to divert his attention from building highways.

"I didn't think we were going to build more highways in the near future at that time and with the rail projects that were coming up, I thought it was a good time to transition to learning about rail technology with a project (MRT) that was about to change the infrastructure landscape of the country.

"I was the first batch of staff who was sent to Germany to be introduced to the TBM machine.

"I didn't know what to expect but I am a person who is constantly looking for new challenges.

"For me, it is a learning process and we never stop learning. Although I had some doubts initially, I never regretted taking up the offer to be part of the MRT project," he said.

As a Section Head (Mechanical and Electrical) for the MRT Line 1, Ruslan's role is to follow through from the design and technical team, focusing on handling operations as well as coordinating with suppliers and contractors.

"My job is to ensure that work is done within the set time frame and budget," said Ruslan.

"Each process must be accurately done as if a mistake occurs, it incurs additional cost.

"Although I have been working for more than 20 years in the mechanical and electrical sector, working on the MRT project is nothing like what I have experienced when I was working on the highways."



“They call me ‘minah api’ and sometimes ‘tulang dawai’, because I am one of those who seldom gets scalded. I think I have my ruggedness and love for the outdoors to thank for that.

ARZIAH MOHD AHSIM
Fire specialist instructor

He then explained that working with rails is very different as it is a contrasting work nature.

"With highways, we are always above ground. Being underground has different risks and we have to understand what kinds of risks we need to anticipate in a confined space. We need to be extra careful especially with the space constraints and making sure all works are coordinated properly to avoid clashes," he said.

Ruslan is currently involved in testing and commissioning works for Line 1, which will be handed over in a few weeks' time.

"We are already working on Line 2 and I'm looking forward to making things better now that I have first-hand knowledge and experience from working with Line 1," he said.



The MRT Cochrane station with close connection to IKEA Cheras and MyTown Cochrane.

PUBLIC TRANSPORT ADVOCATE

When Ahmad Faizuddin Abu Bakar took up the offer to join MMC Gamuda upon graduating from Imperial College London; he did not think he would end up being part of such a massive project.

All he had in mind was to be an advocate to encourage the public to trust in the Malaysian public transportation system.

Little did he know his decision to go down this route meant he would be assisting MMC Gamuda in perfecting the MRT line.

Ahmad Faizuddin, although only 29, is already a senior engineer working on the MRT project and handles a very crucial part of ensuring the station's electrical services design and building process is done smoothly.

"The amount of time I spent in London allowed me to fall in love with the convenience of their public transportation system.

"Then, I wished and hoped to see Malaysia's public transportation system transform into something similar to what London had.

"Although we are nowhere near London (because they are much older), I can say that we are definitely on the right track," he said.

Hailing from Besut, Terengganu, Ahmad Faizuddin's job scope includes reviewing technical drawings and ensuring that construction works are carried out according to stated specifications.

"It was tough when I first took up the job. I had to learn everything from scratch and it was not easy.

"It has been a challenging but rewarding experience. I can

now say I love my job because I have successfully grasped the technicalities of the project.

"There is still much to learn and I am looking forward to contributing more to this project," he said.

It still feels rather surreal for Ahmad Faizuddin, the fact that he is working for the biggest public transportation project in the country.

"I still marvel at how I became part of this massive transformation but at the same time, I am glad I made this decision," he said.

BEING A FIRE SPECIALIST INSTRUCTOR

It was not so much of earning a living for Arziah Mohd Ahsim, 30, but rather job satisfaction that gave a completely new meaning to her taking up the role of specialist instructor.

When she first started out, she did not see herself ending up as an instructor.

"It was compulsory for all of us in the Safety Department to attend Underground Fire training and it was then that one of the supervisors saw how I stood out among the rest.

"I had a high tolerance for heat, which I didn't even realise myself.

"I was then sent for training to try out as a specialist instructor and now here I am," she said.

Arziah's job as a specialist instructor involves conducting training for all site employees working underground on the MRT Line 1.

"There are two stages to the training. The first involves flashover firefighting, where everything burns in a confined space. The training

focuses on providing realistic firefighting environments from which we can visualise fire growth from early ignition stages through to flashover and full development in addition to experiencing the signs, symptoms and backdraft phenomena.

"The second stage involves a tunnel fire scenario. Combined with our compartment-based tactical firefighting unit, replicating tunnel fire conditions, complete with passage entry points, this training is advantageous in terms of learning and education as well as providing the skills necessary to protect our emergency firefighting and rescue teams in underground environments.

"We often provide these training educational programmes to higher education students and other professional bodies to include the Fire & Rescue Department whereby we mutually benefit through our collaboration," she said.

She added that this training is very important for all MMC Gamuda staff as it teaches them how to study and understand the behaviour of smoke, how to prevent fire and how to prepare themselves during an emergency.

"I really never expected to love my job this much.

"They call me 'minah api' and sometimes 'tulang dawai', because I am one of those who seldom gets scalded. I think I have my ruggedness and love for the outdoors to thank for that," said Arziah who is from Mukah, Sarawak.

Arziah is also looking forward to furthering her studies in Fire Engineering to enhance her skills in the profession.



Ruslan, Arziah and Ahmad standing proud in the Cochrane MRT station as SBK Line 1 Phase 2 opens for operation in July 2017.