Keeping Pace with Changing Requirements for Human Capital at Malaysian Railways (KTMB)

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Introduction

Railway services are no longer seen just as a means of transport within nations. With new plans to bridge the gaps in the ASEAN railway network as well as between Europe and Asia, such as the Singapore–Kunming Railway Link and the Trans-Asia Rail Link, railways are becoming global providers serving international transport needs.

Like all fast moving industries, many railway operators face challenges presented by rapid changes in technology and competitive markets. These operators must take the initiative in positioning the required infrastructure, systems and right people in place to further enhance railway services and regional links. To develop international railway services spanning the globe, railway operators need a 'highperformance' corporate vision with all employees from top to bottom fully committed to the organization.

McKinsey Research reports that 'high-performing' organizations have the following attributes:

- Driven by leaders
- Built by relentless pursuit of strategies/vision
- Energized by extraordinarily intense, performance-driven
 environment
- Aligned by simple structures and process
- Based on world-class skills
- Rejuvenated by well-developed people systems

Human Capital— A Common Understanding

To become a 'high-performing' railway, it is vital to ensure that all employees are competent at all times; in other words, there must be a sufficient level of human capital. So what is human capital? There are various definitions. InvestorWords.com defines human capital as the set of skills that an employee acquires on the job through training and experience, and which increase that employee's value in the market place. Another definition is the combined ability, knowledge, skills, expertise, competencies, know-how, and innovativeness of an organization's members to conduct a specific activity, operation, project, or task. It also includes that organization's values, culture, and philosophy.

Addressing Human Capital Gap

At KTMB, we strongly believe that every aspect of human capital is vital, so all our training programmes are designed to upgrade skills and knowledge gaps, including aspects of attitudes and values. To achieve these goals, KTMB plans and conducts annual training programmes each and every year in track maintenance and management, signalling and communications maintenance, overhead catenary maintenance, rolling-stock maintenance, train operation, occupational safety and health, customer service, management, supervisory skills and personal development.

Every new employee entering KTMB must attend a 14-day induction programme, which will be followed up subsequently by various training programmes closely related to job requirements. The training duration varies for different job types and ranges from 3 months to 2 years. The programmes include classroom sessions, practical sessions, observations, field trips, and on-the job-training (OJT) too. Most programmes include written examinations to assess the trainees' level of knowledge. The following jobs also have practical assessments to complement their competency level:

- Assistant Locomotive Drivers
- Locomotive/EMU Drivers
- Traffic Assistants



Maintenance of overhead catenary requires skilled employees (KTMB)



Practical training session for train drivers

(KTMB)



Team building through trust training

(MyRA)

Figure 1 KTMB Network and International Connections





Class 24 locomotive and commuter train at Seremban Station

(KTMB)

- Station Managers
- Counter Staff
- Technicians

Apart from the operations and technical training programmes, KTMB also invests in personal development and motivation or team-building programmes held annually to create awareness of the importance of team work, communications, positive values and to nurture and improve confidence and self-reliance. Subjects are designed to develop self-awareness in improving work productivity and to attain results-oriented objectives.

Human capital for KTMB employees is not only acquired by internal training but also by external training locally and overseas. As examples, employees from Permanent Way, Fleet Engineering, Signalling, Communication and Electrification, and Operations have attended overseas training in India, Poland, Sweden, South Africa, Korea, Hungary, Canada, Australia, and Japan such as:

- Tenth Training Course for Railway Personnel under the Regional Cooperation Programme, India
- Railway Safety, Sweden
- EMU Maintenance and Operation, South Africa and Korea
- JR East Fellowship Programme, JR East International Railway Course, Zero Accident Training (KYT), Japan

Human Capital Requirement for Double-Tracking Project

Prior to 1993, all training and development programmes were based on the skills and knowledge required to operate and maintain single-track railways. However, with the 1991 start of the double-tracking project from Seremban to Rawang and Sentul to Port Klang, technical and operations employees needed to acquire new sets of skills and knowledge. While the new rules and regulations for operating trains on double-track sections are compulsory for all technical and operations staff, drivers of intercity and freight trains also had to learn how to operate the first 18 sets of EMUs delivered from Jenbacher, Austria, in 1994 to 1995. The next phase of training continued with the arrival of the second and third sets of 22 EMUs from Marubeni, Korea, and 22 EMUs from UCW, South Africa, in 1996 and 1997, respectively.

When KTMB started the second double-track project from Rawang to lpoh, employees were trained in maintenance and operation of the new ILTIS signalling system. Most programmes in relation to this double-track project were conducted by the respective suppliers and manufacturers. For example, Queensland Rail (QR), Australia, provided various specialist training programmes to selected track employees. Areas covered included maintenance of highspeed lines, track welding, rail turnouts, etc.



(MyRA) approved KTMB's relocation Rail Development Project. The Project is divided into Package 1 (Workshop and Depot) and Package 2 (Training School and Quarters). Package 1 will be completed in December 2009 and Package 2 was completed in December 2008. The new complex stands in a 400-acre green reserve with lakes in Batu Gajah, Perak, 195 km north of Kuala Lumpur. 32

New Training Facilities

Before 2009, major training activities were conducted at the KTMB Training School in Sentul, Kuala Lumpur. However, the Training School, Central Store and Rolling Stock Maintenance Workshop in Sentul had to be relocated to make way for new business expansion and the federal government finally

'Dewan Bunga Raya' theatre for lectures and other company events

	Table 1 Total Am	ount Contributed to HRDI
Y	Year	Amount
	2007	RM 79,517.21
	2008	RM 1,143,285.48

2009





Panorama of Malaysian Railway Academy

(MyRA)

(MyRA)

RM 709,109.30

RM1 = US\$0.293



Considering future requirements for training, as well as education and development of other regional railways, the new training facility is called the Malaysian Railway Academy (MyRA). Operations started in December 2008 to offer major training, education and development activities for KTMB. Up to 360 residential participants and 200 non-residential participants can be accommodated by the facilities which include:

- Training and Administration Block (including general offices, lecture rooms, computer labs, small seminar rooms)
- Theatre (for 300 participants)
- Resource Centre
- Train Simulator Block
- Accommodation Block
- Dining Hall
- Outdoor Recreational Area (tennis, takraw, volleyball, hockey, football)

In addition to the mechanical and electrical engineering systems, MyRA also has state-of-the-art AV facilities to enhance learning. Selected employees are trained in operation and maintenance of electrical power, air-conditioning, fire alarm and other systems. Similar training will be offered in the Rolling Stock Maintenance Workshop and Depot after installation of new equipment and machinery is completed in October and November 2009. Some of the installed machines and equipment are:

- Under Floor Wheel Lathe
- Portal Wheel Lathe
- Surface Wheel Lathe
- Lifting Jack
- Drilling Machine
- Grinding Machine
- Hydraulic Shear
- EMU/ETS Car Body Wash

Human Capital Requirement for Future Projects

KTMB will soon be starting rapid services between Kuala Lumpur and Ipoh using new electric train sets (ETS) from Korea. The first set is scheduled for delivery in late 2009 with the remaining four in 2010. Experienced KTMB employees have been attending training courses in Korea in 2009 and, upon returning, they will be developing training modules and training the ETS drivers.

KTMB has also started a double-tracking project in the northern sector from Ipoh to Padang Besar and in the southern sector from Seremban to Gemas, necessitating training at MyRA on the rules and regulations for train operations in double-track sections and other relevant subjects.

Financing Human Capital Development

Since 1 December 2007, KTMB has been required to allocate 1% of the total salary and fixed allowances paid to employees to the Human Resources Development Fund (HRDF) for training, education, and development programmes. However, the funds must be spent within 5 years from the date of payment into the fund. Table 1 shows the total funds contributed to the HRDF from 2007.

Other Challenges to Human Capital Requirements

Due to the frequent changes in technology and processes, it is sometimes difficult to meet new training requirements in a short period. In addition, training attendance can be affected by the ability to release employees for training when there are staff shortages.

Another constraint is the shortage of Subject Method Experts (SME) from within KTMB and the company is currently identifying experienced employees from various departments who will be trained as SMEs. The training will be organized at MyRA using internal trainers and also external trainers from private training providers. With more SMEs, more training and development programmes can be conducted for both KTMB and employees of other organizations.

Conclusion

Despite making good progress in developing human capital, KTMB still faces problems. With on-going future infrastructure development projects, plans to purchase new rolling stock, and new funding procedures since 2007, KTMB's human capital development is a continually improving process.



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