

Unlocking the rehabilitate–operate–transfer model in public–private partnerships

The public–private partnership (PPP) framework has long been instrumental in addressing infrastructure gaps worldwide, including Malaysia. Among its models, the rehabilitate–operate–transfer (ROT) model is gaining popularity, as demonstrated by a recent request for proposal for a PPP project to be delivered using the ROT model. It is particularly renowned for its adaptability and efficiency in emerging economies. As Malaysia advances its PPP Master Plan (PIKAS) 2030 action plan — a comprehensive strategy to enhance public service delivery and drive economic growth — the ROT model is poised to play a pivotal role in revitalising critical infrastructure.

Understanding the ROT model

The ROT model involves private entities rehabilitating existing infrastructure, operating it for a defined period to recover costs and generate profit, and eventually transferring ownership back to the public sector. Unlike the more common build–operate–transfer (BOT) model, ROT focuses on optimising and modernising existing assets rather than creating new ones.

Advantages of the ROT model

- Cost-effectiveness:** Since ROT involves rehabilitating existing structures, the initial capital investment is typically lower compared with building new facilities. This is crucial for governments with limited budgets.
- Reduced environmental impact:** The model leverages existing assets, minimising environmental degradation associated with new construction.

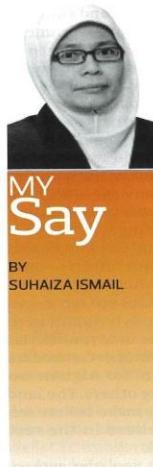
- Quick implementation:** Rehabilitating infrastructure is often faster than building from scratch, which ensures timely service delivery.
- Expertise and efficiency:** Private sector participation brings in technical expertise, advanced technologies and operational efficiencies, enhancing service quality.
- Risk sharing:** By engaging private partners, risks such as financial overruns and operational inefficiencies are distributed, reducing the burden on the public sector.

Challenges of the ROT model

- Complex negotiations:** Determining the scope of rehabilitation, operational terms and the transfer timeline can be contentious and time-consuming.
- Potential public resistance:** Users may resist higher tariffs or fees introduced during the private sector's operational phase to recover costs.
- Regulatory hurdles:** The need for robust legal frameworks to govern private sector participation often complicates the process.
- Maintenance quality:** If the private partner prioritises profit over sustainability, the rehabilitation might not be of the highest standard, leading to higher future costs.
- Limited applicability:** The ROT model is most effective for infrastructure that has significant latent value or utility, leaving out assets in dire need of complete replacement.

The ROT model in Malaysia's PIKAS 2030 strategy

Under the PIKAS 2030 vision, Malaysia envisions a dynamic collaboration between the public and private



sectors to modernise the nation's infrastructure. The ROT model has been highlighted as a cornerstone for revitalising key facilities, including healthcare centres, public housing and industrial zones.

For instance, ageing industrial parks that form the backbone of Malaysia's manufacturing sector are being considered for ROT projects. Private firms would rehabilitate these zones, implement green technologies and ensure sustainable operations while adhering to Malaysia's low-carbon agenda.

In addition, public healthcare facilities, many of which struggle with outdated equipment and overcrowded conditions, are ripe for ROT-based rejuvenation. By partnering with private entities, these facilities could undergo modernisation without substantial public expenditure, ensuring better healthcare delivery.

Conclusion

The ROT model's potential to revitalise Malaysia's infrastructure aligns seamlessly with the objectives of PIKAS 2030. However, for its successful implementation, the government must navigate challenges such as ensuring equitable access, fostering transparent agreements and maintaining high standards of rehabilitation. With meticulous planning and robust stakeholder engagement, the ROT model could emerge as a transformative tool in Malaysia's journey towards sustainable development.

As Malaysia continues to innovate in public–private partnerships, leveraging the ROT model will undoubtedly enhance its capacity to deliver high-quality infrastructure while balancing fiscal prudence — a step forward in achieving the nation's developmental aspirations. ■

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