



Photo courtesy of MRT Jakarta

Building self-sustaining public transport:

An interview with William Sabandar, president director of MRT Jakarta

Jakarta's flagship rapid-transit project has proven successful within its first year. MRT's director envisions a total of 230 kilometers of railway alleviating some of the world's worst congestion.



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As the largest economy in Southeast Asia, Indonesia has seen robust economic growth over the past decade, and one impact of this growth has been an increased number of private vehicles on the road. Congestion in the capital city of Jakarta is particularly bad, resulting in some of the world's worst traffic.

Mass Rapid Transit (MRT) Jakarta was established in 2008 with plans to invest 600 trillion rupiah (\$43 billion) in a train line that connects the corners of the city to its center.¹ In March 2019, the first transit line of Jakarta MRT, which covers 16 kilometers from Lebak Bulus to Bundaran Hotel Indonesia, opened to the public. Subsequent phases are planned in the coming years.

In this interview, William Sabandar, president director of MRT Jakarta, talks with associate partner Rajat Agarwal about the early stages of the project; the company's approach to financing and nonfare revenue; the importance of integrated cashless systems; and the vision for public transit in Jakarta.

McKinsey: *How did MRT Jakarta get the project off the ground?*

William Sabandar: MRT Jakarta was founded in 2008, and we broke ground five years later. In the interim, we faced the challenge of building confidence among people—residents, investors, stakeholders—that the project would even happen. We had to work hard to convince people that public transport in Jakarta can be reliable and that it can help develop a new landscape for the city. The company's vision is not just about infrastructure or building railways; it's about promoting public mobility and, by doing so, improving quality of life.

That's why MRT Jakarta is focused on three missions: promoting urban renewal, achieving operational excellence, and building a world-class company. We're already seeing the areas along the first MRT line changing, demonstrating excellence

during both construction and operation. During the first month, for example, the reliability of the train operations was 99.82 percent. And we did it all with accountability, good governance, and great people.

Now that people have seen this first line, the confidence is quite high. MRT is seen as something that's for everybody—not just for people who normally use public transport, but also for people who normally use personal cars. We're developing momentum to move to the next level.

McKinsey: *How did you finance the project?*

Sabandar: For the first phase of 16 kilometers, we secured a loan from the Japan International Cooperation Agency (JICA) of 17 trillion rupiah. So it's a long-term commitment between the government of Indonesia and the government of Japan. The second phase, which we hope to complete in 2024, will continue 8.2 kilometers north from Bundaran Hotel Indonesia to Kota Tua—that is also financed through JICA. We will likely need 22.5 trillion rupiah to finance phase two.

The third phase is the east–west rail, which will be 31 kilometers, from Kalideres to Ujung Menteng. We may work with JICA again but we're also looking into other innovative financing mechanisms, such as public–private partnerships. If those are successful, they could form a model for future phases.

McKinsey: *How has the public responded to the first line?*

Sabandar: It's gone very well. Before opening, we set a target of 65,000 passengers per day. On the first day, we got 72,000 passengers. In April, the average ridership was 82,500 passengers per day. The current vision is to exceed 100,000 per day on the first line by the end of 2019.

To ensure we priced rides correctly, we did a consumer preferences survey and found that less

than 10 percent of customers are price-sensitive; the rest are more concerned with reliability, convenience, and connectivity. Still, we offered a 50 percent discount for the first six weeks, which was a period of learning for our passengers. The queues were long at first, as people learned to use the ticket vending machines. We stationed additional staff and volunteers to help teach people how to use the system. It evened out after about a month. Now, we see the types of ridership behaviors you see in, for example, Japan or Singapore—being on time, standing in the queue, and demonstrating proper etiquette inside the cars.

McKinsey: *Will MRT Jakarta ever be economically self-sustaining?*

Sabandar: We want to become the model for building transport systems as well as operating them—including commercializing them. If you only rely on ticket revenues, it's difficult to turn a profit because the tickets will always be subsidized. It's not healthy for a company to continue to be subsidized.

That's where nonfare revenue—the money we can make from advertising, retail, telecommunication, and naming rights—comes in. Initially, our target might be for 30 percent of our total revenue to be nonfare. But it's already gone beyond our expectation, and nonfare revenue is on track to beat our farebox revenue this year. I'm confident that, by the second or third year of operation, we'll cover our operations budget with the combination of farebox and nonfare revenue.

McKinsey: *What kind of technology solutions have you deployed for the MRT?*

Sabandar: In construction, we used a tunneling technology that's more commonly used in mining. Nobody had used it for transportation in Indonesia before. For the surface, we installed platform screen doors in the stations that block

heat from the rail, so it's more energy efficient. These doors improve safety as well.

We also installed an automated train system, which helps the reliability of the system as well as safety, as the train will always be controlled by an operation command center. If a train ever goes too fast, for example, an automatic train protection mechanism will slow it down.

McKinsey: *How do you see the mobility landscape in Jakarta evolving?*

Sabandar: The first line—these 16 kilometers—is the beginning of realizing our vision for the future of mobility in Jakarta. Our goal is to build 230 kilometers by 2030. That includes the second-phase north line, the third-phase east-west line, and then the inner- and outer-loop lines. We're also working to expand station access. Some of the elevated stations are in buildings that the public can't easily access, so we're discussing a skybridge with the developer. And in future phases we'll build these interconnections from day one.

To encourage increased ridership across all modes of public transit, we also want to integrate the various systems. We've already seen ridership on TransJakarta, our bus rapid transit system, increase from 700,000 to 800,000 people per day. Next, we want to integrate the ticketing systems and issue multimodal tickets. We're currently working with Kereta Api Indonesia, which serves more than one million passengers per day, to issue a ticket that works on both Kereta Commuter Indonesia and MRT Jakarta. That will form the backbone of the ticketing system, which can eventually serve the bus rapid transit, the light-rail train (under construction), and other transport modes.

The second-most important objective is to distribute Jakarta's urban growth by building reliable public transit. MRT will help create new urban centers, distributing not just the community but also the traffic patterns, and that

will create more opportunity for development in Jakarta's suburbs. People can live near a station and work in the city center without having to commute by road.

Today, only 20 percent of the total travel in Jakarta is on public transport. Our vision is to see that share increase to 80 percent.

McKinsey: *What is your vision for MRT Jakarta as an organization?*

Sabandar: The company has a lot of potential to support the development of public transport systems in other cities and countries. We want to be like the mass rapid transit organizations in Hong Kong or Japan, providing consultancy for development of MRT systems. I've already been approached by leaders of other Indonesian cities, and we are actively working with them and drawing on what we've learned from our journey in Jakarta. Together we will continue to develop world-class infrastructure throughout the region. ■

¹ Viriya Singgih and Arys Aditya, "The \$43 Billion Race to Fix Jakarta's Choking Traffic," *Bloomberg*, February 26, 2019, bloomberg.com.