

The 12th Asia-Pacific ITS Forum & Exhibition, 2012

"Powering Transformation in Transportation"

16 - 18 April 2012, Kuala Lumpur, Malaysia

Integrated Public Transport Ticketing System in Yogyakarta, Indonesia



Ahmad Munawar Sri Suning Kusumawardani Rizki Budi Utomo Syafri Yuzal



Gadjah Mada University



Bus Reform in Yogyakarta

- It started in February, 2008, called TRANS JOGJA
- it reforms the existing regulatory policies and operational practices.
- New bus management system: buy the service system.
- The existing bus operators is included in the new system, but they have to improve the service and also bus quality according to the minimum standard.
- The cost of the improvement is subsidized by the government.
- New fare management system: using smart card

New bus management system

• Old system:

- No ticket to be given to the passengers.
- The driver will give an amount of money, which is targeted by the bus owner, daily.
- No minimum bus quality standard.
- Every bus owner is a member of one of the five cooperatives in Yogyakarta

• New system:

- New fifty four buses are in operation to serve six routes.
- The management is organized by a joint organization among the government, cooperatives and bus operators.
- The existing bus operators is included in the new system, but they have to improve the service and also bus quality according to the minimum standard.
- The cost of the improvement is subsidized by the government.

New fare management system

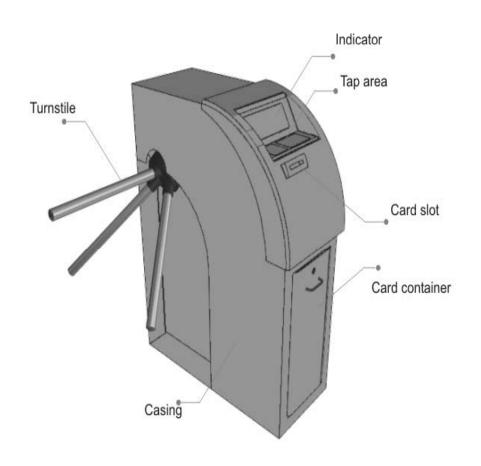
Old system

- No ticket: pay directly to the driver or bus conductor
- Flat fare

New system

- Using smart card
- Ticketing system:
 - Single Trip Ticket
 - Multi Entry Ticket
 - Monthly ticket (started in December 2011 for Gadjah Mada University students)
- Developed by local company: Gama Techno Ltd.
- Empirical comparison:
 - investment cost based on a similar electronic ticketing system
 - from overseas vendor would require a minimum of US \$ 1 million,
 - local company: only US \$ 0.3 million
- Easy to control revenue

Ticketing machine (placed in shelter)

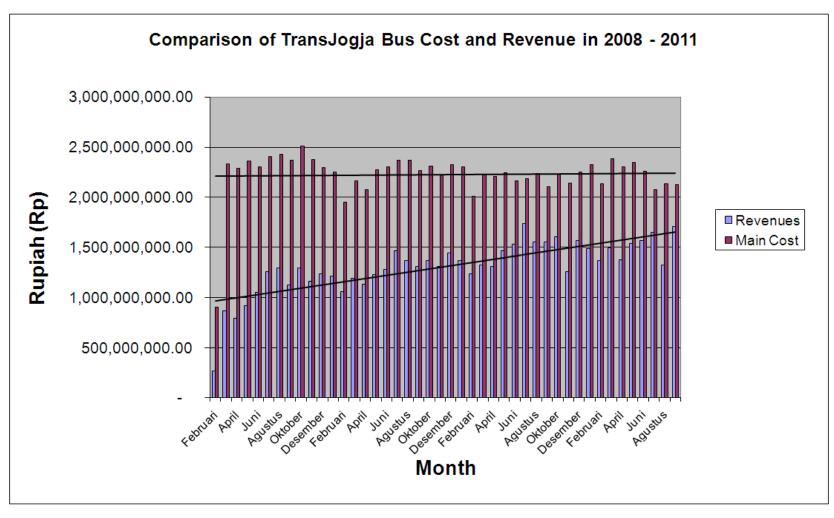




Ticketing processing system



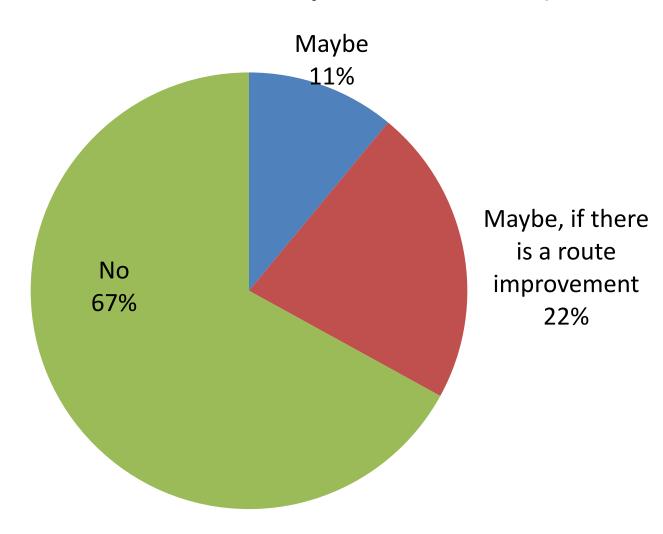
Cost and Revenue for Trans Jogja Bus Company



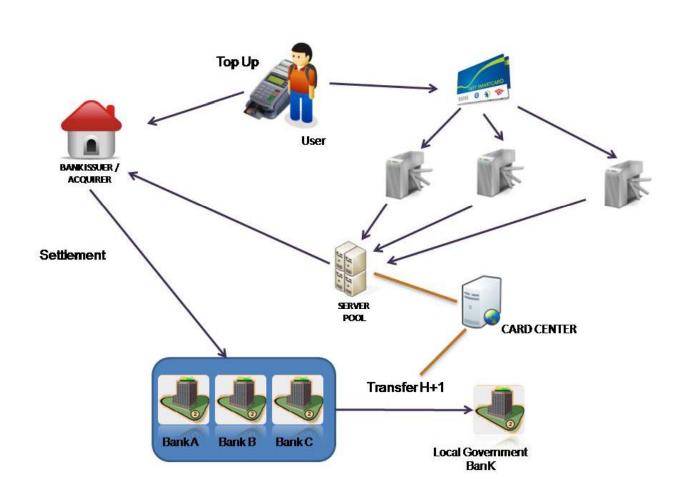
Integration with Gadjah Mada University Student Card

- Gadjah Mada University card and Trans Jogja ticket have the same smart card system developed by Gama Techno Ltd.
- Monthly ticketing system for Gadjah Mada stdents
- Fare: Rp. 100,000 per month, compared to single ticket Rp. 3000
- Started in December 2011

Gadjah Mada University Students Possibly using Trans Jogja Bus (results of the survey in Mid 2011)



Procedure to activate Gadjah Mada Student Card as Trans Jogja Ticket



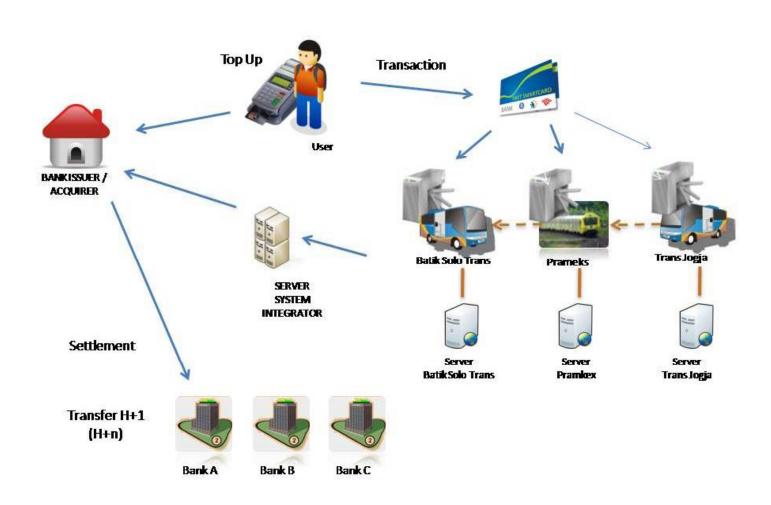
Machine to activate Gadjah Mada Student Card as Trans Jogja Ticket



Integration with Pramex Train and Surakarta City Bus (Batik Solo Trans)

- Surakarta: a city 60 km to the East of Yogyakarta
- These two cities are connected with Pramex Train
- In Surakarta:
 - Bus reform: Batik Solo Trans.
 - A new smart card ticketing system was developed in 2010.
- An integrated ticketing system for Trans
 Jogja, Pramex Train and Batik Solo Trans is being developed
- Hopefully it will be in operation this year.

Proposed Integrated Ticketing System with Pramex and Batik Solo Trans



Conclusions

- Bus reform has improved the performance of public transport in Yogyakarta.
- New bus and fare management systems have improved the realibility and created a much accountable, accurate and transparent record-keeping for revenue generation from the public transport sector.
- The integration with Gadjah Mada Student Card has increased the demand of public transport.
- The next integration, i.e. with Pramex Train and Trans Batik Solo (city bus in Sorakarta) will also give the better and cheaper ticketing system and therefore, will also increase the demand of public transport.