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## IMPLEMENTATION OF DIGITAL TECHNOLOGY IN THE FIELD OF TRANSPORTATION: *CASE STUDY OF JAKARTA MASS RAPID TRANSIT (MRT)*

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### ABSTRAK

Dunia sedang menghadapi perubahan revolusioner di berbagai sektor, komunikasi, kehidupan sosial dan budaya. Dampak dari revolusi cepat kemajuan teknologi tersebar di setiap aspek fungsional dan instrumental kehidupan manusia. Hal ini mewakili transformasi kehidupan dari manusia ke mesin, sistem berbasis digital atau komputer. Transformasi digital akan menciptakan nilai, pilar, dan kebijakan baru bagi masyarakat. Setelah era 4.0, dunia telah menuju masyarakat 5.0. Fukuyama (2018), menulis antisipasi terhadap tren global semacam itu, "Society 5.0" dipresentasikan sebagai konsep inti dalam Rencana Dasar Ilmu Pengetahuan dan Teknologi ke-5 (*5<sup>th</sup> Science and Technology Basic Plan*). Teknologi Informasi dan Komunikasi (TIK) adalah akar dari inovasi. Tujuan dari Society 5.0 adalah untuk menciptakan masyarakat yang berpusat pada manusia di mana baik pembangunan ekonomi maupun penyelesaian tantangan sosial dapat terpenuhi. Ini menyediakan kebutuhan dan layanan yang nyaman bagi masyarakat (Fukuyama, 2018). Teknologi 5.0 menghadirkan manfaat bagi negara untuk memfasilitasi, memantau, dan mengawasi masyarakat. Ini membantu meringankan beban pelaksanaan program pemerintah. Dalam konteks ini, muncullkah konsep baru muncul yang disebut Kota Pintar (*Smart City*) .dengan menggunakan teknologi atau berbasis teknologi. Tujuannya adalah untuk mengintegrasikan sistem kota ke dalam kemajuan teknologi dan memperbaiki layanan pelanggan melalui teknologi demi kehidupan masyarakat yang lebih baik. Fenomena ini telah merancang ulang semua sistem sosial dan budaya berdasarkan Teknologi Informasi dan Komunikasi/TIK(Yasuura, 2016). TIK membangun sistem transportasi umum sebagai rencana hidup kota pintar. Ini adalah kota yang terprogram dan diinformasikan. Ia menggunakan data terbuka, *Internet of Things*, dan akses data untuk mengelola transportasi umum. Pemerintah kota telah membuat rencana strategis untuk menciptakan citra positif dan menarik pengunjung melalui merek destinasi kota. Para pemasar tempat berusaha menempatkan kota sebagai merek dengan tujuan mempromosikan kepada kelompok sasaran yang ada dan potensial (Kasapi & Cela, 2017). Jakarta salah satunya. Jakarta sedang menerapkan konsep kota pintar. Salah satunya adalah dengan menggunakan transportasi umum Kereta Cepat Massal (MRT).Upaya pemerintah daerah dalam menanggapi masalah kemacetan lalu lintas pada transportasi umum di Jakarta. Semua proses dalam sistem Kereta MRT Jakarta dijalankan dan dikendalikan oleh teknologi digital. Dalam konteks mempromosikan dan mensosialisasikan MRT, pemerintah kota dan kantor MRT sering memperkenalkan MRT melalui media sosial untuk menjangkau pelanggan. Perangkat digital yang terhubung melalui Internet menghasilkan jumlah data yang besar, sebuah konsep yang dikenal sebagai Big Data (González, 2015). Media lebih dari sekadar alat untuk pemasaran dan periklanan. Dipercaya dapat membangun hubungan yang lebih intim dengan pelanggan

mereka (Wright, Khanfar, Harrington, Kizer, 2010). Penelitian ini mencoba untuk mengetahui bagaimana MRT Jakarta menerapkan teknologi 5.0 dalam proses layanan transportasi publik? Bagaimana teknologi komunikasi menghubungkan konsumen MRT dalam menggunakan transportasi publik ini untuk menciptakan masyarakat berbasis teknologi komunikasi? Dan bagaimana MRT berkontribusi terhadap pencitraan Jakarta sebagai kota pintar? Penelitian ini dilakukan dalam paradigma post-positivis, dengan menggabungkan pendekatan kuantitatif dan kualitatif. Data dikumpulkan melalui wawancara dengan perwakilan Pemerintah Jakarta (PR Officer) dan Manajemen MRT. Selain itu, peneliti juga melakukan survei kepada pengguna MRT untuk pengumpulan data. Temuan menunjukkan bahwa MRT Jakarta adalah program transportasi yang menerapkan konsep kota pintar. MRT memiliki lebih dari satu elemen dari teknologi 5.0 sebagaimana dikatakan Fukuyama sebagai pilar kebijakan industri. Hal ini meningkatkan partisipasi publik dalam pengembangan perkotaan. Keterlibatan MRT di media sosial telah menciptakan kesadaran dan pendidikan bagi warga Jakarta tentang MRT sebagai Branding Jakarta Smart City.

***Kata Kunci : Teknologi Komunikasi, Masyarakat Berbasis Teknologi, Mass Rapid Transit (MRT), Pencitraan Merek, Kota Pintar (Smart City)***

## INTRODUCTION

The concept of using branding to promote tourism destination has only been used recently (Kasapi, Cela, 2017) with the many features of a city to highlight like the culture, heritage, art and even infrastructure destination. It is emphasized in many definitions of city branding, that city branding is a process and an applied marketing discipline, based on marketing and communication activities (Keskin, Akgun, Zehir and Ayar, 2016). In the last few years there's plenty of infrastructure built to combat one of the biggest problem a capital city have and that is traffic. With the 10.4 million people living in Jakarta (Katadata.com, 2017) and a staggering 9.9 million private vehicle cars and motorcycle combined, Jakarta Governance rise to the challenge with the many public transportation options such as the KRL commuterline (train based transportation) Transjakarta (bus based transportation) and the newest one MRT or Massive Rapid Transit (underground train based transportation). The MRT project has been going on for a few years back and started operation on March 2019. Even though we can't say for sure if the traffic level has gone down due to yearly report, the traffic seems to lessen on some parts of Jakarta. With the operating subway-like transportation, opens a new opportunity for Jakarta branding. With different city, there's a different landmarks to highlight. Makassar, a city in south Sulawesi Indonesia highlight Tanjung Bunga as part of their city branding, Jogjakarta highlights the Borobudur and so many more. The MRT consolidate the branding of Jakarta as a metropolitan city.

This research tried to find out how Jakarta MRT implemented the 5.0 technologies in the process of public transportation services? How communication technology connected MRT consumer in using this public transportation to create communication technological-based society? And how was MRT contributed to the branding of Jakarta as the smart city?.

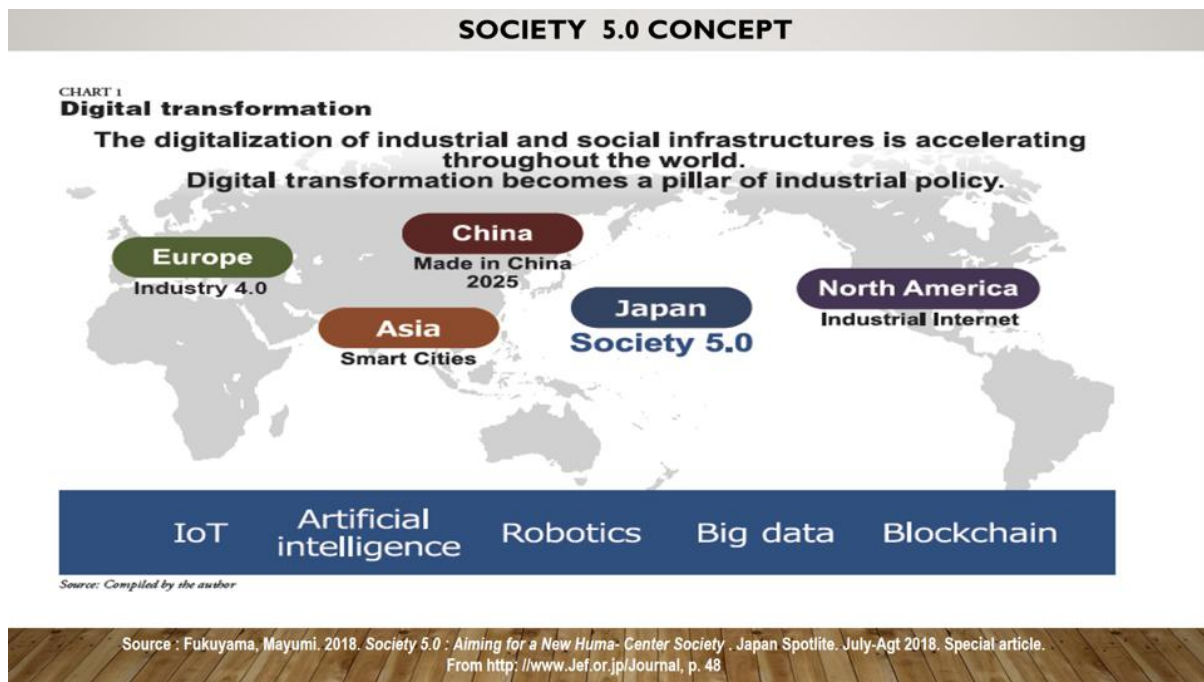
## LITERATURE REVIEW

Elihu Katz explained about how media used by audiences. Elihu Katz said that people consume the media, that is included read, understood and shared, depending on their

preference. This preference of what media and what is in them is seen to gratify needs as Elihu said. The readers or watchers are not a passive being that accept what the media is given to them just as is. They actually choose what the media is and what kind of information from the media they consume based on the beliefs, lifestyle and what they got out of it. The uses and gratification theory seeks to understand why people seek out the media and what they use it for whether for passing the time, as a companionship, an escape from day to day life and many more. This leads to a difference on how each person consumes and is affected by the media, therefore each media competes for attention and time by tailoring the content or information to the majority of preference (Griffin, Ledbetter & Sparks, 2015)

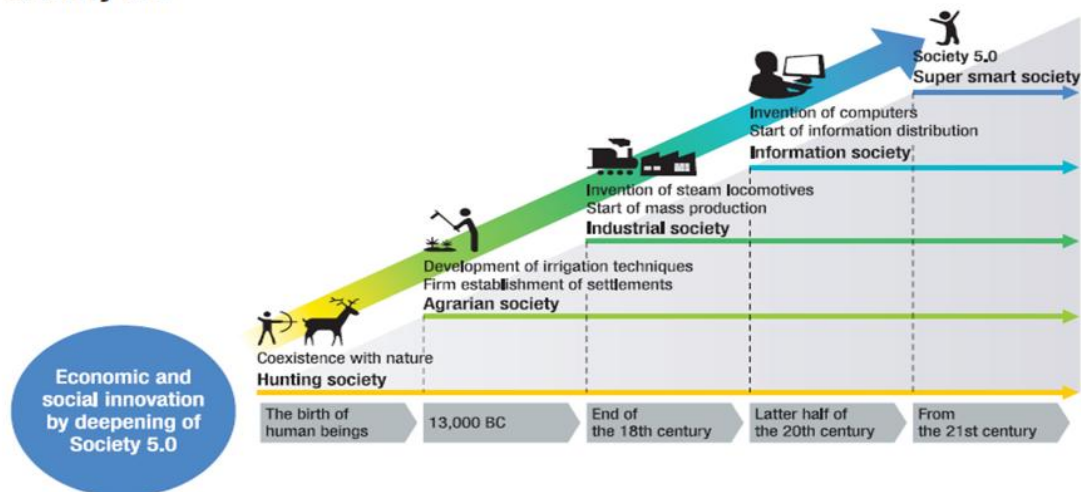
Marshall McLuhan gave rise to the field of media ecology. A moral point of view too often serves as a substitute for understanding in technological matters. (McLuhan 1964 [7], p. 216). It is essential to understand that media are technologies and technologies are media. McLuhan regards all technologies and all tools as media. The term media is most often used in common practice solely to refer to communication media. However, he also analyzed a number of technological tools that are not considered to be communication media such as the wheel, the bicycle, the motorcar, roads, houses, clothing, clocks, the airplane, and weapons. All media with the exception of the spoken word involved some human artifact or technology. For McLuhan, "technology" includes hardware, software and all forms of organization. A technology or medium is any artifact or methodology that mediates between a human user and his or her environment where the environment includes the physical, biological and social dimensions of human interactions. The fact that computers are referred to as information technology supports the notion that the distinction between media and technology is an artificial one. A computer is both a technology and a medium of communication as is the case with paper, the pen, the telephone, radio, television and computers. Every medium/technology independent of its content has its own unique effects, which is what McLuhan called its message in his most memorable one-liner of all: "the medium is the message"

The world is facing the revolutionary changes in various sectors, communication, social and cultural life. The impact of rapid revolution of technological advancement is spread out in every functional and instrumental aspect of human's life. It represented the transformational life from human to machine, digital or computer based system. Digital transformation will create new values, pillars and policy for society. After 4.0 era, the world has led up to society 5.0.



The Fukuyama (2018), wrote in anticipation of such global trends, “Society 5.0” was presented as a core concept in the 5th Science and Technology Basic Plan. Information and Communication. Technology (ICT) is the root of innovation. The goal of Society 5.0 is to create a human-centric society in which both economic development and the resolution of societal challenges. These are providing comfortable necessary items and services for society (Fukuyama, 2018). 5.0 technologies emerge benefits to the state for facilitating, monitoring and supervising people. It helps lighten the load for implementation of government programs. New concept emerges called Smart City. The purpose is to integrate the city system into technological advance and to fix customer services through technology for the better life of society. This phenomenon has redesigned all social and cultural systems based on ICT(Yasuura, 2016).

CHART 2  
Society 5.0



Source: Prepared by the author based on material from the Japan Business Federation (Keidanren) "Japan's initiatives — Society 5.0": Y. Harayama, "Society 5.0: Aiming for a New Human-centered Society", *Hitachi Review*, vol. 66, no. 6, 2017, pp. 556-557

Source : Fukuyama, Mayumi. 2018. *Society 5.0 : Aiming for a New Human- Center Society* . Japan Spotlight, July-Agt 2018. Special article. From <http://www.jef.or.jp/journal>, p. 49

Society has different definitions according to the political and sociological opinion but in conclusion society can be defined when people live at a place and connect to each other. In the world of innovation and advance technology like right now where information is a synonym to existence and evolution like it is an essential of individual and social life. Technologies and communication offer unlimited possibilities that affecting life and culture of society. This accentuated extension of information and communication has been possible because the progress of information and communication technologies that indicating the change and the transfer from modernity to postmodernity (Mioara. 2012).

Technology and human life cannot be separated because society has a cyclical co-dependence, co-influence, and co-production on technology (Puricelli. 2011). . The demand of increase in technology have not affected our relationship with the society but it is has affected the way of us being social with others. Human use technology in their every life either to help them with works to make it easier or even to socializing with other people. Technology can be used in many different field, few of them is public services, transportation and government. There is a lot of new concept that is possible because the advanced technology now like Smart City concept that basically integrating technologies with the culture of its people to help them improving the quality of their city and their live.

ICT build public transportation system as urban smart city living plan. It is programmable hub-informed city. It use open data, Internet of Things and data access for managing public transportation. City government have made strategic plan to make a positive image and to gain visitors by branding city destination. Place marketers are striving to settle the city as a brand with the purpose of promoting to existing and potential target groups (Kasapi & Cela, 2017). And this is the concept of Jakarta Smart City :



Gambar 1. Komponen Smart City di Indonesia (Sumber: Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional)

Gambar . Konsep *Smart City di Indonesia Menuju Kota Berkelanjutan*. Dikutip dari Bappenas dalam Conoras Moch El Bahar dan Hikmawati, Nina Kurnia. 2018

Digital devices connected through the internet are producing big amounts of data, a concept known as big data (gonzález, 2015). Social media also more than a tool for marketing and advertising. it is believed to establish more intimate relationship with their customers (wright, khanfar, harrington, kizer, 2010), including create the image and branding with customer. As the context of good digital public transportation, the MRT company and Jakarta local Government used the digital media to build the image and branding of Jakarta Smart City.

## RESEARCH METHOD

The study was done in post-positivist paradigm, by combining quantitative and qualitative approach. The data was collected by interview to the representation of Government of Jakarta (PR Officer) and MRT Management (Head of MRT Corporate Communication Department). Also, the researcher had done survey to the MRT user for data collection to about 100 respondents. They are MRT User or customer whom even used or frequently using the MRT Train. The survey done in Jakarta area around the MRT route 1 (Lebak Bulus- Bundaran HI)

## RESULT AND DISCUSSIONS

**The Reliability analysis**  
**Table. Reliability Analysis**  
**Case Processing Summary**

		N	%
Cases	Valid	99	99.0
	Excluded <sup>a</sup>	1	1.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

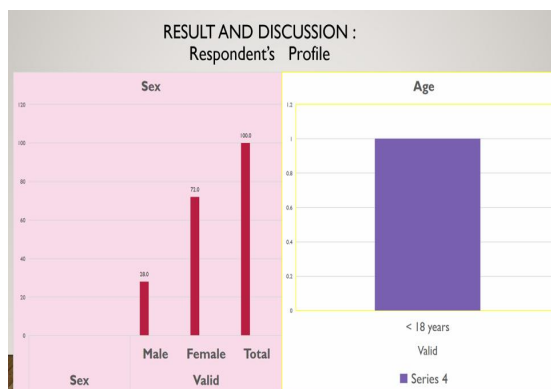
### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.961	60

This result show aloha Cronbach is .961, means that the questionnaire is reliable.

### Respondent Profile

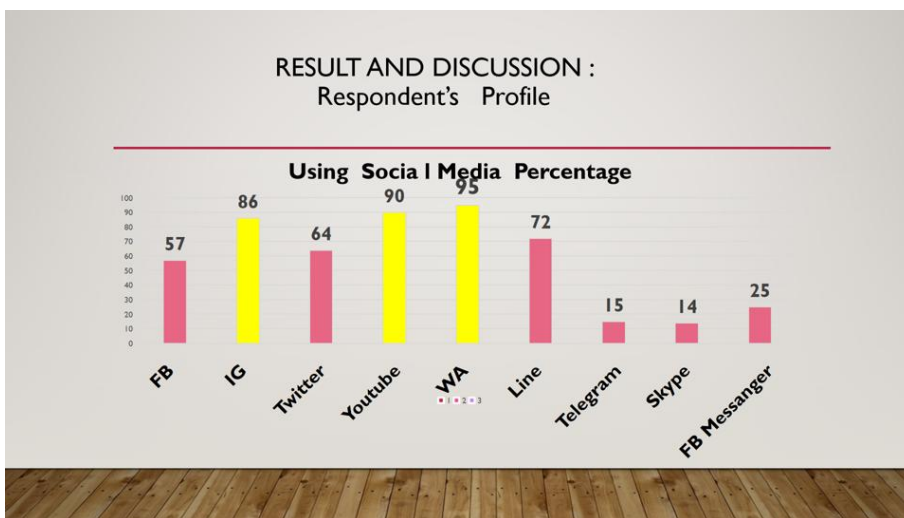
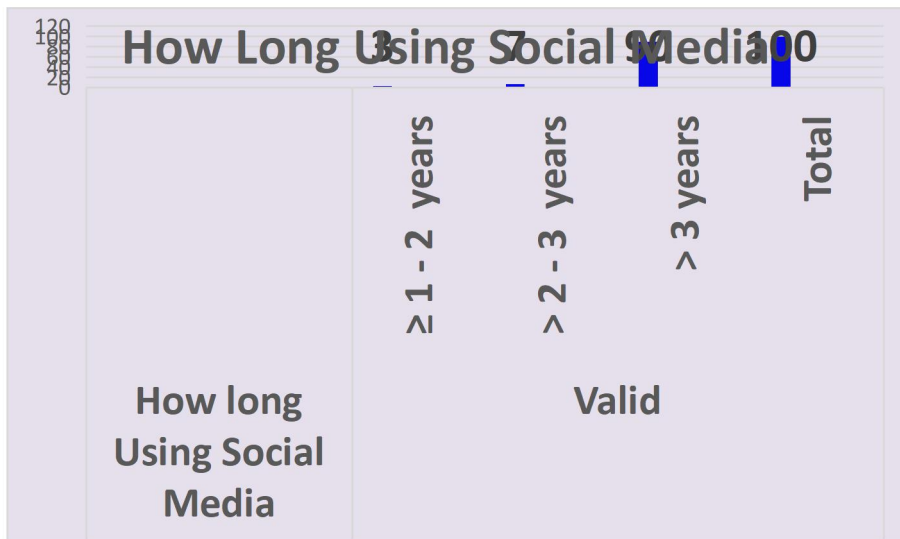
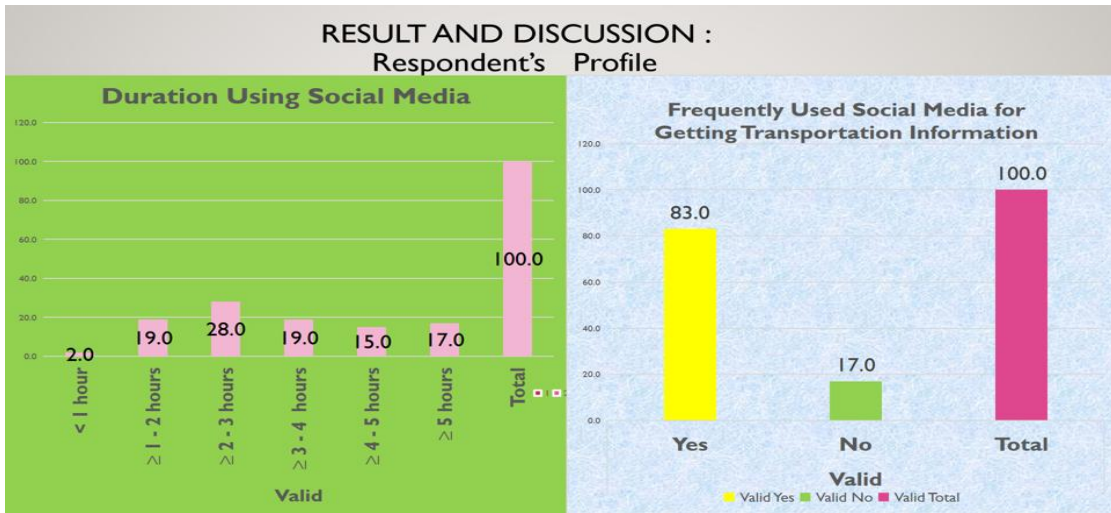
#### Sex, Age, Job



RESULT AND DISCUSSION :  
Respondent's Profile

	Work			
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Private officer	29	29.0	29.0	29.0
University student/student	63	63.0	63.0	92.0
Teacher, Lecturer	8	8.0	8.0	100.0
Total	100	100.0	100.0	

### Media Used



DKI Jakarta local/province government (Pemerintah Provinsi/ Pemprov DKI Jakarta) made policies about the Jakarta public transportation. One of that is about Jakarta train public transportation facility, MRT- Jakarta Metro Mass Rapid Transit. MRT launched at 24 March 2019. It started operation on April 2019. Based on the interview with informants, MRT serve the Jakarta public transportation at corridor one or north-south corridor, from Lebak Bulus MRT station to HI Station. The corridor one route distance is about 15,7 kilometres. Its operation schedule from 05:00 am – 24:00 pm. The passenger number average is about 90.000-100.000 for each day of 65.000 targeted at the first year. The MRT customer target is all Jakarta public transportation user, such as workers, university students and school students. Based on Jakarta MRT management observation, primary MRT user are businessman and workers whom work around Sudirman-Thamrin business area.

The Jakarta MRT company firstly or formerly was under the Indonesian Transportation Department. But now it is local state holding company (Badan Usaha Milik Daerah/BUMD), under the local/province government of DKI Jakarta. The 99,9% of Jakarta MRT company's share belong to DKI Jakarta local government (Pemprov DKI) and 0,2% belong to PD. Pasar Jaya. In other word, all stock or share is belonging to the Pemprov DKI. The Jakarta MRT company is head by a MRT director. The management of Jakarta MRT responsible to the Governor of DKI Jakarta. The management of MRT is independence unit, even though they report and responsible to the Governor.

The Jakarta MRT Company's authority based on DKI Jakarta local government regulation (Perda) No.3/2008 is: (1) to Build Jakarta MRT infrastructure; (2) to operate and maintenance the MRT infrastructure; (3) to develop business centre around Jakarta MRT location, depot or station. MRT project divided into 3 steps: (1) First step, built corridor one; (2) Second, starting new construction for corridor 2 (HI-Kota Station). Now, it has been start with special electricity supply power construction for MRT; (3) Third step, corridor 3 (Ujung menteng – Kalideres, East to West line).

The MRT operational management and technology under supervision of Japanese consultant. There are training programs for technical MRT staff and machinist in Japan for technological transfer of knowledge. MRT train used the 4,0 and 5,0 Japanese high digital technology standard. It is named artificial intelligent technology. The technology implemented for running the train and control centre operationalization. All MRT operationalization use robotic system and technology automation, with highest quality, safety and security standard. All system run by digital equipment. These are few of MRT train and operational technologies: (1) Micro site and link to register for using MRT (in prohibition period); (2) Ticketing machine; (3) Electronic gate/ Auto In-out door; (4) E-money/electronic card machine; (5) Digital (machine) facility for disable person; (6) MRT is developing the Wi-Fi facility corporate with telecommunication provider or company; (7) Building Automation System (BAS); (8) MRT control centre (Route, train headway, Programmable Route Control/drive train/machinist function); (9) Electric sensor; (10) Automatic train operation and Automatic Train Protection (To prohibit the accident). Even though, the human machinist is still needed to close the door and emergency condition. The MRT cleaning equipment also use digital technology, such as robotic cleaning service, provided by MRT cleaning partner company.

Financial or operational budgeting of Jakarta MRT was funded by Jakarta MRT company. There are few MRT income or revenue scheme. They are consisting of: (1) Ticket revenue; (2)

Non-ticket revenue, named as *non-railway business*. The non-railway business revenue sources are: a) Station retail revenue; b) Paid mobile phone telecommunication charge (taken from provider-such as Telkomsel, XL, etc.); c) Advertisement revenue (In train and out train along the station); d) Property business and central business development around the station, as *Transit Oriented Development* (TOD). Means, station play as centre of property development to give more benefit both to the Jakarta MRT company and town people. This last financial scheme still discussion with DKI Jakarta local government. In the future the Jakarta MRT plan to implement QR Code system by mobile phone for MRT ticket payment or e-wallet. The MRT Company have been make agreement to develop e-wallet payment with e-wallet provider such as *Gopay, Dana, Ovo*.

There are many departments under the Jakarta MRT company. One of them is MRT corporate communication department. MRT Corporate Communication Department is responsible for handling the internal communication (employee relations, etc.) and external communication (media relations, corporate branding, community development, government and public affairs) between Jakarta MRT company and its stakeholders. The relationship between Jakarta MRT company and Public Communication Division of Jakarta local government is coordinative one. MRT drive mobility of Jakarta people. MRT support the commute society.

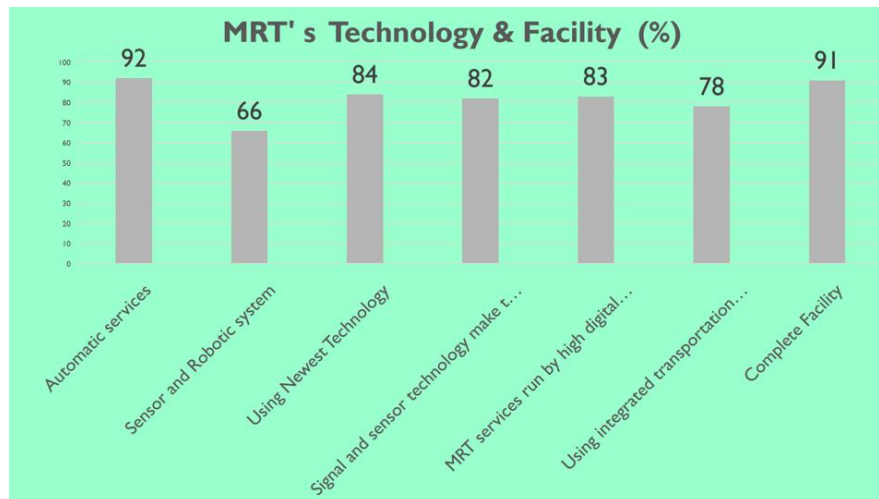
MRT train line emerge new central business and liven up the dead faint public central business and economy area in Jakarta, such as Blok M plaza and Blok M square. The MRT project is made integrated with other Jakarta public transportation modes, such as Busway/Trans Jakarta mode, Jak Lingko, Jakarta train Commuter (Commuterline/Commuter Jabodetabek), etc. This are the customer respond to the MRT Technology.

**Table. Mean of Customer Respond to MRT and Its Technology**

Question	Mean
MRT operational by automatic system or digital technology	4.10
MRT uses integrated transportation technology controlling from MRT center command	4.06
MRT technology is very high tech	4.25
MRT uses digital technological-based system	4.07
MRT uses newest train technology	4.14
Ticketing system is user friendly for customer	3.97
MRT station is facilitated by technological system	4.35
MRT Digital Technology facilitate MRT customer for using public transportation	4.26
MRT automatic customer services help and make customer easier in using MRT transportation	4.25

We describe most of question about customer respon to MRT and its technology above. The likert scale range from 1 (very disagree) -5 (Very agree). These box above shows that mean of each question is around 4.0. It means that MRT customer respond positively to the MRT presence and its technology. The MRT technology treat as high technology and integrated modern public transportation mode. It is operation by newest digital technology. The lowest mean score only happened to the question about ticketing system. Although the mean score is

more than median score (2.5), but it is lowest mean score. The fact represent that most customer still not friendly yet with MRT ticketing system. This findings give a recommendation for MRT Communication Department or DKI Jakarta local Government to socialite more about the MRT ticketing system,



Future plan lof MRT system in technological aspects: Integrated public transportation with other Jakarta public transportation modes, such as Busway/Trans Jakarta mode, Jak Lingko, Jakarta train Commuter (Commuterline/Commuter Jabodetabek), etc. Implement QR Code system by mobile phone for MRT ticket payment and ticketing. The MRT Company have been make agreement to develop e-wallet payment with e-wallet provider such as Gopay, Dana, Ovo. Develop more hotspot area around MRT station. More broaden corporation and integrated with other transportation mode.

All MRT operationalization use digital, robotic system and technology automation, with highest quality, safety and security standard. The human machinist is still needed only to close the door and emergency condition. These are few of MRT operational technologies:

Micro site and link to register for using MRT (in prohibition period);

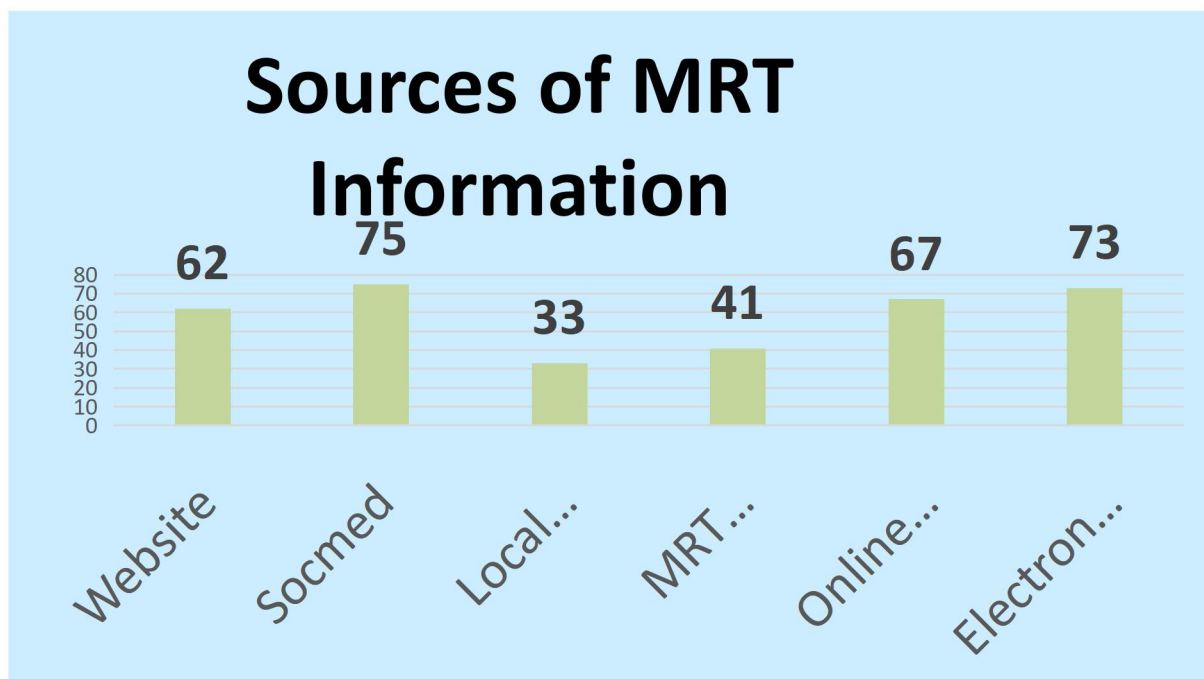
- Ticketing machine;
- Electronic gate/ Auto In-out door;
- E-money/electronic card machine;
- Digital (machine) facility for disable person;
- Wi-Fi facility
- Building Automation System (BAS);
- MRT control centre (Route, train headway, Programmable Route Control/drive train/machinist function);
- Electric sensor;
- Automatic train operation and Automatic Train Protection (To prohibit the accident)
- The MRT cleaning equipment also use digital technology, such as robotic cleaning service.

## Information and Communication Technological Based-Society

Both the DKI Jakarta local government (Pemprov) and Jakarta MRT company, treat MRT as the game changer for Jakarta society. This new transportation mode makes Jakarta public transportation behaviour one step improvement. MRT existence places Jakarta city equal in public transportation service standard as well as world modern smart cities.

Jakarta MRT and Pemprov socialize information about public transportation behaviours or cultures, such as: (1) How to use MRT train and escalator; (2) Eating behaviour in MRT station area and train; (3) MRT station not for picnic place; (4) Caring with sanitation or hygiene issues in public transportation; (5) E-Money/Electronic card used; (6) Disable rights facility; (7) 1 person 1 ticket policy, etc.

The MRT team prepare the rules, the campaign material and media. On the other side, the DKI Jakarta local government is communicating, coordinating and moderating MRT to the public. All MRT operational and information process done and support by digital devices. Few media or channel use in socializing the MRT, such as: Public Service Announcement (PSA); Social media; Special events; Car free day event; Mainstream/Conventional Media (TV, Radio); Online news portal; Advertising; Banner; Sticker; etc. Train map, line, facility, schedule, and other policies inform fast and real time by internet or other digital media or application. This shows how a technological-based society was born.



Jakarta city as well as other modern world's cities, have face the new civilization. It is entering the information society or digital era. There are big changes in society dynamic life. Few years ago, Jakarta's citizen must have filled any kind of hard copy format of documents to make public report. The opposite now, citizen able to make direct contact or communicate to the local government by any digital and social media devices. Information centre and any data have been published freely in any kind of media, including internet or digital media and social media. Now, all information is digitalized. Public able to access or download Jakarta's public data or information. The local government serve the Jakarta public needs by using big data provided by public technological system. Any kind of information from public in media and application become the input for local government and MRT in making public policies

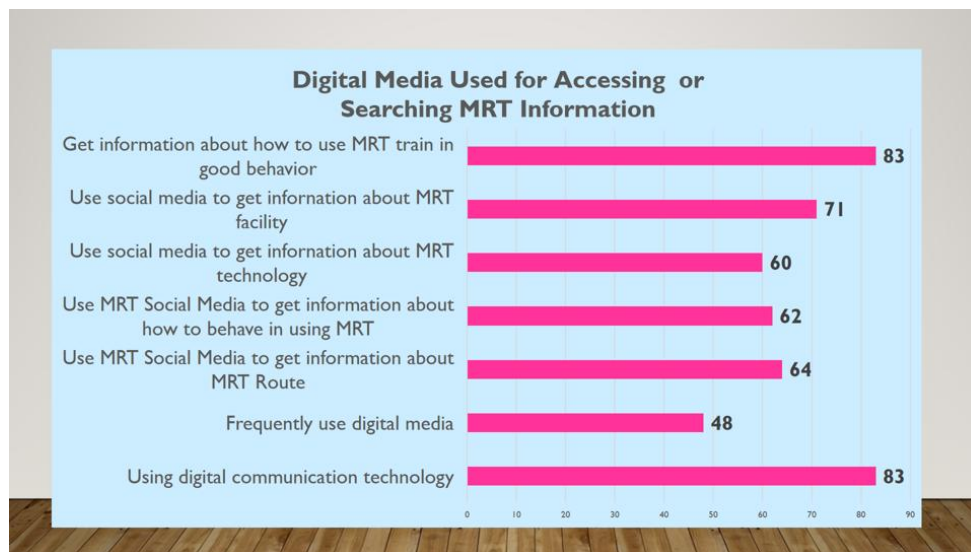
about the MRT public transportation. These box below, provide information for us about how the customer respond to the digital information and communication channel

**Table. Mean of Customer Respond to Digital Information and Communication Channel about the MRT**

Question	Mean
Use Social Media to get the MRT route	3.56
Use MRT social media to get information about MRT transportation behave	3.60
MRT provide good information about MRT operation	4.33
have information from MRT Website	3.66
have MRT information from the Social Media (Instagram, Facebook, Youtube)	3.95
<b>Get MRT information from Local Government Information system or application</b>	<b>3.02</b>
Frequently looking for MRT information from digital media	3.42
MRT provide information display system (About the train schedule, time estimation, etc.) at Peron Station for the passenger with the digital technological based system	4.05
MRT social media gives complete information about MRT Facility	3.80
<b>Get MRT information from MRT information application system</b>	<b>3.13</b>
<b>Get information about MRT from the MRT hotline center</b>	<b>2.95</b>
Digital media provide complete ticketing payment information	3.78
Digital Technology help the public or MRT user to get in touch with the MRT information	4.00

The lowest mean score happened to the question about the information source of MRT, which is hotline center got the lowest respond of customer. It means that the MRT hotline centre do not use frequently by the public. The MRT and Local government MRT information application system also get mean only 3,0 score used by the respondents. Means, little bit more than half of passenger use the application system of information. They are use the social media and information board (Information display system) at station. These give recommendations for the MRT company to provide more information by using social media and station information board.

Hotline centre got the lowest respond of customer. It means that the MRT hotline centre do not use frequently by the public. The MRT and Local government MRT information application system also get mean only 3,0 score, means, little bit more than half of passenger use the application system of information. MRT passenger use more the digital, social media and information board (Information display system) at station. So that, MRT company must provide more information by using social media and station information board. The application and robotic era has come. It represents the digital information about the transportation mode, the Jakarta map, activity and tourism spot.



Information and communication technology mediating public -Jakarta MRT company- and DKI Jakarta local government communication. It is raise participatory and collaboration of Jakarta society to respond and to evaluate the public transportation quality and services. Jakarta MRT and DKI Jakarta local government follow the public media consumption trend to choose the right communication channel to reach the Jakarta public awareness of MRT. MRT campaign and information material made in many media platforms. Such as social media Instagram, Facebook, Twitter, Youtube, etc., with many form (Audio, visual, video, graphic, written, etc.)

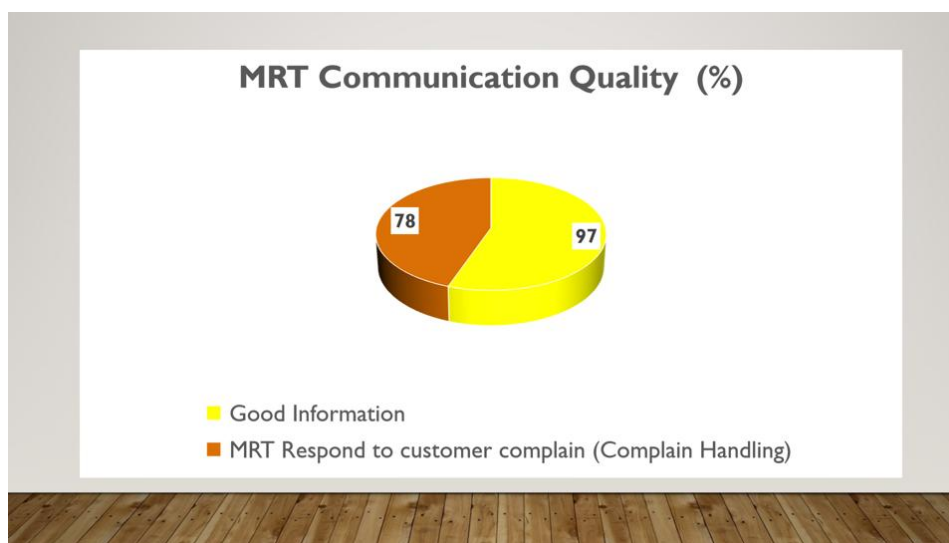
The public communication division of local government and MRT Corporate Communication/secretary unit working together hand and hand to brand, promote, educate and socialize the MRT to the public. They organize or support each other for running an event to promote the DKI Jakarta and MRT launching or branding. The communication and campaign material are synchronized by both team. Jakarta MRT corporate communication team prepare the material or editorial content plan for MRT digital media. The content contains of MRT educational information, Jakarta MRT features, public information, promo, MRT events. Additionally, there are MRT-J application for updating MRT information. These application has few features such as: Navigation to nearest MRT station; MRT route; MRT station location; train time schedule) and duration; Tour the MRT station; MRT website and social media.

MRT information process by digital devices : Digital Public Service Announcement (PSA); Social media; MRT application; Online news portal; Digital Advertising, etc. The benefit of using digital technology by MRT :

- Inform fast and real time
- Citizen able to make direct contact or communicate to the MRT
- All information is digitalized (big data).
- Data have been published and access by public
- Interaction and mediation medium MRT Company and its public (Medium for MRT campaign, education and information)
- Raise participatory and collaboration of Jakarta society

- Follow the public media consumption trend and awareness

Every Jakarta local state holding company's communication team or division must repost and connect/link their information with all Pemprov DKI Jakarta's media channel. Pemprov DKI Jakarta uses few digital media platforms, such as: @dkijakarta (Instagram account); @DKIJakarta (Twitter account); [facebook.com/DKIJakarta/](https://www.facebook.com/DKIJakarta/) (Facebook account), and [www.jakarta.go.id](http://www.jakarta.go.id) (Official website). Each local government division, department, unit, or BUMD as well as the MRT, also have their own authority in informing, creating message or communicating the message to Jakarta public, especially related to their own technical information. Those kind of information publish in their company's media, such as MRT own media. Furthermore, local government media unit or division help MRT to spread and to link the information to the public.



The Jakarta MRT and Pemprov DKI Jakarta use communication strategies involving a lot of parties for informing, persuading, socializing and grabbing public awareness of MRT to use MRT. Those parties are the endorser, celebrity, social media influencer, celebgram (celebrity Instagram), content creator, public figure, photographer and video maker community, media journalist, etc. These parties have focusing their publishing information on sharing the photo, picture, video, or written message in story telling strategy for branding the MRT as part of Jakarta new and modern public transportation. Novelty and human interest are the news values of the MRT news or storytelling. This project has been done since the beginning of MRT project and inauguration. Jakarta MRT and Pemprov DKI Jakarta had invited those influencers to join and use the MRT firstly, before this transportation mode officially launch for the public. These influencers are not paid both by Jakarta MRT company and DKI Jakarta government. It is symbiosis mutualism, since the social media content creator need content materials for their own. Disable group or communities also invited to try MRT. Their positive and happy experience or response on MRT was spread out by social media, website and other mainstream media. These all communication strategies have been made to change the public transportation culture or behaviour of Jakarta society, especially the MRT's passengers.

MRT Jakarta MRT and Pemprov DKI share information about :

- How to use MRT train, MRT facility and E-Money/Electronic card used
- Eating behaviour in MRT station area and train; Caring with sanitation or hygiene issues in public transportation;
- Disable rights facility;
- 1 person 1 ticket policy
- Navigation to nearest MRT station, route, train schedule, station,
- MRT channel or account
- The dynamic and map of Jakarta's

MRT-J application for updating MRT information. MRT information also provided by Jakarta local government communication channel as [smartcityjakarta.co.id](http://smartcityjakarta.co.id) and TRAVI application, which is connected with the Jakarta integrated public transportation information. Jakarta MRT communication channel link their media and information to Pemprov DKI Jakarta's media channel or platforms, such as: @dkijakarta (Instagram account); @DKIJakarta (Twitter account); [facebook.com/DKIJakarta/](https://facebook.com/DKIJakarta/) (Facebook account), and [www.jakarta.go.id](http://www.jakarta.go.id) (Official website)

All publishing, social media viral, media news coverage and storytelling have been influence significantly to evoke Jakarta's public curiosity for trying this transportation mode. The rise of MRT's passenger have proven this. The Jakarta MRT news have been viral in many media. It was successful to persuade and drive public curiosity into the action for using MRT. The broadcasting channel use to make review to MRT for broaden band-wagon effect to public of MRT awareness at MRT launching time and many other events.

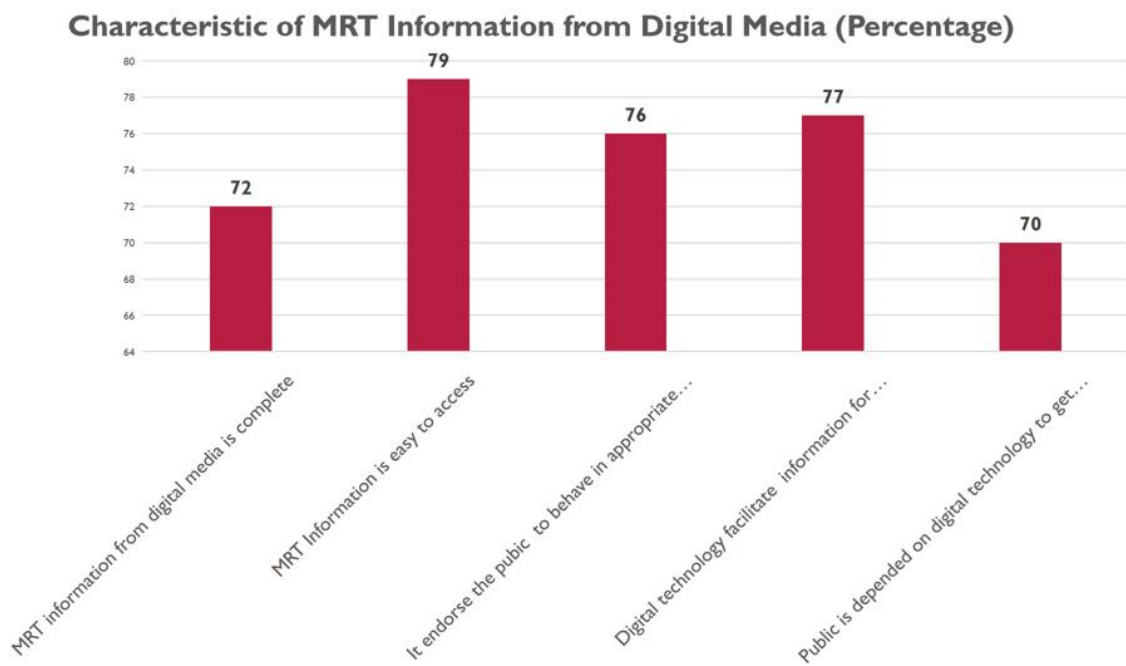
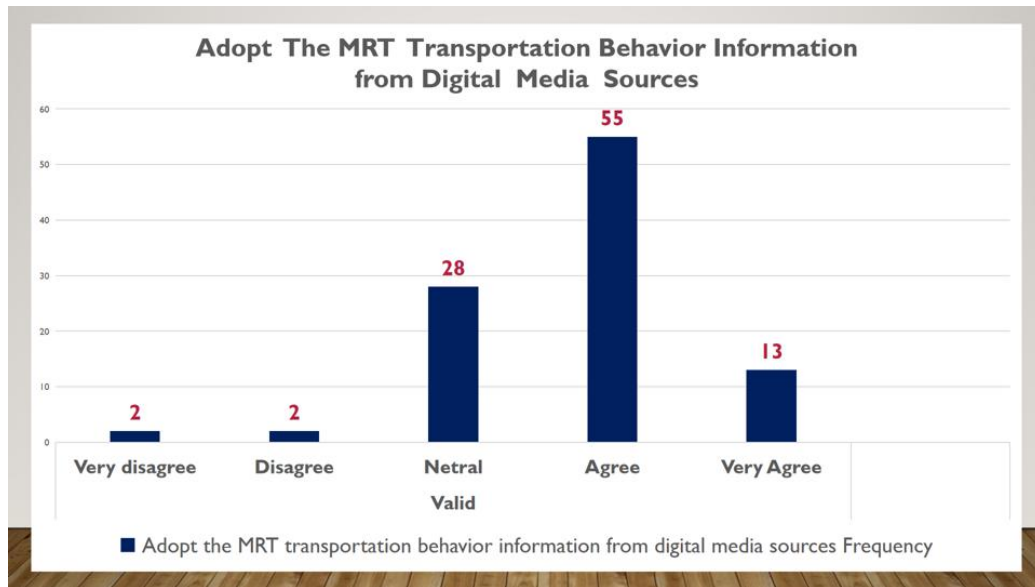
Endorser or influencer strategy by social media is targeting the millennial generation as primary group target. Meanwhile, the other traditional media (Television, Radio, and others) are targeting the adult and old group as primary target of MRT's communication strategy. Jakarta MRT has link with domestic and foreign journalist group (TV, Radio and Online media) for routine session. In this moment, the Jakarta MRT made the press gathering and release about the newest issues of Jakarta MRT. Advertorial strategy is used for special events only. Jakarta MRT company and DKI Jakarta local government also use other digital media, such as LED (Electronic board system), working with private LED supplier company for broadcasting MRT information in Jakarta area. Jakarta MRT company also use email and call centre to interact with their stakeholders, such as passengers. Since September 2019, the Jakarta MRT company present the Customer Engagement Division under the Customer Care Department to serve MRT customers for building the customer engagement. This division will handle the social media traffic, include customer responds and complains

The Jakarta MRT news have been viral in many media. There are few communication strategic methods by Jakarta MRT :

- Using endorser or influencer, such as : celebrity, social media influencer, celebgram, hobbies communities, disable group, content creator, public figure, photographer and video maker community, media journalist, etc.
- Focusing in social media for sharing the photo, picture, video, or written message
- Using storytelling strategy for MRT Branding
- Using any kind broadcasting channels to make review to MRT for broaden band wagon effect to public of MRT. Each media has its own target audience.
- Advertorial strategy is used for special events only.

- Use other digital media, such as public LED (Electronic board system)

MRT operation and information run in digital high technology system. It makes the Jakarta as the technological-based society.



MRT information also provided by Jakarta local government communication channel as [smartcityjakarta.co.id](http://smartcityjakarta.co.id) and TRAVI application. TRAVI is digital application which is connected with the Jakarta integrated public transportation information. TRAVI company made official corporation with DKI Jakarta local government. Public have an access to

monitor the transportation mode mobility, route, schedule and waiting time period by using TRAVI application.

### **The Communication Process for Implementation Jakarta MRT as Part of Jakarta Smart City Branding**

DKI Jakarta Local Government (Pemprov DKI Jakarta), have authority to make a corporation and partnership with all partners, citizen and stakeholders in DKI Jakarta, both internally and externally. Jakarta MRT is part of the stakeholders of DKI Jakarta Province Government. Jakarta MRT make partnership, cooperation and coordination with the DKI Jakarta Province Government Public Communication division. This division is under of Statistic, Informatics and Communication Department of DKI Jakarta Province/local Government. This division responsible for public communication handling, as well as media relations services.

The public communication division of Jakarta local government plays roles in public communication, include support the Jakarta MRT Corporate Communication division to inform public about MRT public transportation. The local government running social media and others public communication medium to inform the Jakarta's people about the public transportation and others related issues. They share information, respond comments and complain about any kind public issues or interest in Jakarta, so that the MRT as main of public transportation in central Jakarta business district line.

The local government of DKI Jakarta tried to maximize and to amplify the information effect to the public. Jakarta MRT management and Pemprov DKI Jakarta persuade public to practice and implemented the new transportation culture and behaviour of Jakarta modern life. The campaign objective to increase the quality level of Jakarta society. The campaigns are transforming to the public. Those explain about how should public or passengers act or behave (*do and don't do*) to MRT as public transportation.

**RESULT AND DISCUSSION :**  
**Jakarta MRT As Part Of Jakarta Smart City Branding**

Table. Mean of Customer Respond to MRT as Jakarta Smart City Branding

Question	Mean
MRT experience make a travelling sensation as the foreign modern country	4.27
MRT transportation technology educate the passenger to become smart mobility citizen	4.25
MRT present Jakarta new image as convenient public transportation city	4.33
MRT become Jakarta new icon as technological based society and city	4.27
Communication and information technology in MRT operation which is used by Jakarta citizen demonstrate that Jakarta is technological based society	4.13
MRT Communication and information system made Jakarta as the Jakarta smart city	4.19

DKI Jakarta program is #UbahJakarta. One of the point of the program how the public using integrated public transportation is. Public must educate with modern public transportation

culture and behaviour. MRT have obligation to serve passengers excellently and to educate and socialize public with that new public transportation culture. Jakarta MRT company commitment make the MRT as public transportation learning facility for Jakarta people as they live in developed country. Jakarta MRT hope that someday MRT will become Jakarta people's lifestyle as part of new civilization. This is a challenging for Jakarta MRT company and DKI Jakarta local government.

There is service, channel, and standard operational procedure for customer service and complain handling. The DKI Jakarta local government has around 12 information canal for public communication channel, dominantly by social media. Jakarta MRT working together with DKI Jakarta local government in responding the public report or complain. Technical information from public or passengers about MRT will directly respond by Jakarta MRT itself. Mostly it is present in MRT social media. The MRT customer service objective is to make service excellent to the passengers. So far, the public responses are positive to MRT. Jakarta MRT support the local government mission or project to make new Jakarta. "Change Jakarta" is the tagline. This project objective is to make Jakarta better with modern and integrated public transportation. Finally, the objective is to make convenience and happiness for Jakarta society in using the public transportation. This also part of Jakarta program to create comfort zone or the third sphere for Jakarta society beside home and office. This is the respondent respond about MRT as the Jakarta new city branding :

**Table. Mean of Customer Respond to MRT as Jakarta Smart City Branding**

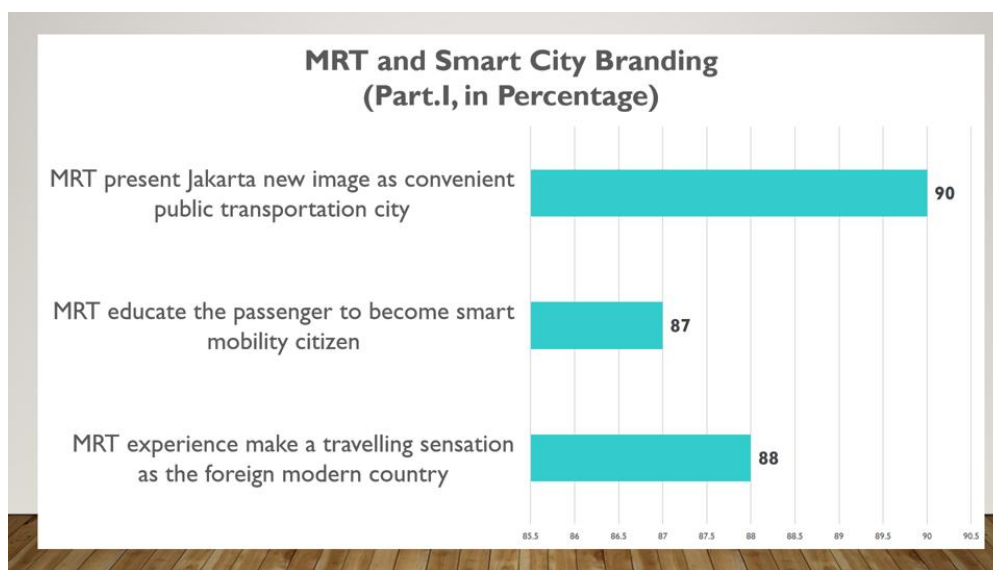
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This box above shows that the respondent respond to MRT as Jakarta Smart City Branding. The MRT represent Jakarta with new image as convenient city, especially in the issue of public transportation. It also shows that Jakarta have been transform to the modern live city, smart city. MRT operation and information run in digital high technology system. Now, It makes the Jakarta as the technological-based society.

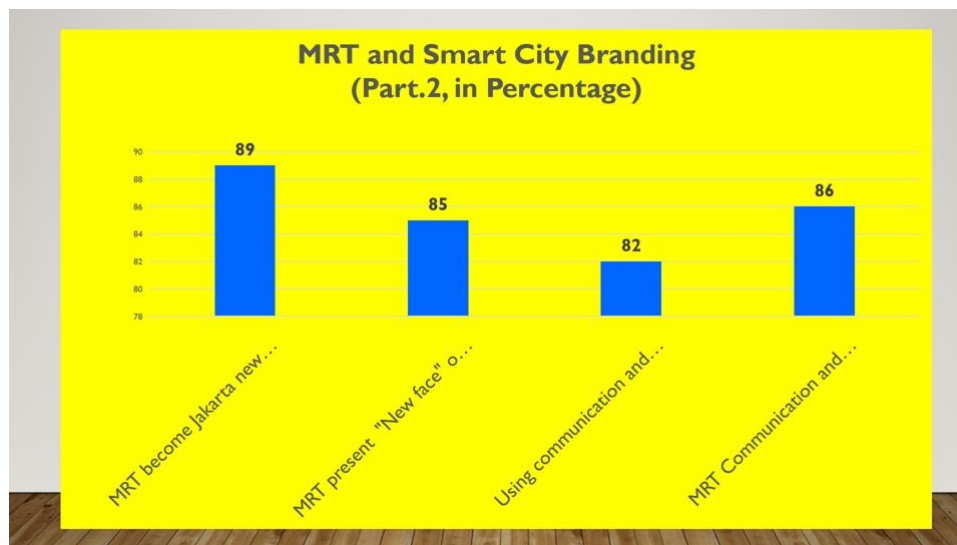
MRT influence the Jakarta tourism image. MRT information be the one of new message about Jakarta transportation and tourism. The expatriate group, investor, domestic foreign tourist and visitor was respond positively by using the public transportation MRT at MRT launching and continue now. They use MRT to reach their office or tourism spot in Jakarta faster. It cut economic cost because of avoiding the Jakarta traffic jam. Public enjoy the new face of Jakarta as modern and digital city. They able to commute in lunch time from and to their office and entertainment spot (such as mall, etc) in Jakarta efficiently. This is become

the added value of Jakarta smart city branding. This is the new Jakarta and modern Jakarta. MRT highlight high-tech system novelty and convenience as part of MRT new experience. Then, the MRT user or customer broadcast their good and nice experience in using MRT Train in their own social media or MRT's social media.

DKI Jakarta local government and MRT company try to change Jakarta's image as traffic jam city. Now, Jakarta present MRT integrated public transportation as unique selling point of Jakarta as tourism area. MRT branding Jakarta as convenience place for activity and for tourism area. One of the programs is video #JelajahiJakarta. This video will launch at October 2019. People do sight seeing by this digital public transportation. So that, the transportation application is not only about the train route or transportation only, but also about the dynamic and map of Jakarta's information.



All of these are part of communication process for implementation Jakarta MRT as part of Jakarta smart city branding. Suhono Harso Supangkat, Head of Smart Indonesia Initiative Association/APIC (2017), noted that smart city has 3 concepts: *Smart economy*, *smart environment* and *smart system platform*. The enhancement of quality of life is the smart city orientation by managing city effectively, efficiently, innovative and integrated. Technology innovation (Internet, big data or artificial intelligent, etc.) is only one element of smart city concept. Public participation and transparency, good public transportation, technology data and information management also part of smart city concept.



The survey research as in this box above shows that MRT represent Jakarta with new image as convenient city, in transportation issue . MRT drive mobility of Jakarta people and support the commute society (Smart mobility). It also shows that Jakarta citizen is transformed into the modern live city, smart city. Jakarta MRT implemented the new transportation culture and behaviour of Jakarta modern life. Those explain about how should public or passengers act or behave (do and don't do). MRT as public transportation learning facility for Jakarta people. It is a catalyst for transportation cultural transformation

In the future plan, MRT will broaden corporation with many stakeholders and other transportation mode. Such as Online Transportation industry for developing and using the application for public transportation information. Now, the public transportation information and process run by digitalization. The application and robotic era has come. It represents the digital information about the transportation mode, the Jakarta map, the locality map, the Jakarta people activity and tourism spot.

## CONCLUSIONS

The MRT characterized more than one element of 5.0 technologies as Fukuyama said to be as the pillar of the industrial policy. It increases public participation in urban development. Smart city is needed to be the problem solution of many cities problems. *Smart mobility, smart education, smart people, smart economic, smart energy, smart health* are part of Jakarta smart city platform in three domains: Economic, social and environment. The local government must provide the people of the city with basic infrastructure and technology. It also serves public in secure environment and good corporate governance framework to reach the sustainable development goal. MRT as one of the high-tech integration public transportation service. MRT are part of Jakarta's face and image. MRT is a catalyst for transportation cultural transformation. So that, in the future, Jakarta people will not avoid to use the public transportation. MRT will become Jakarta people's lifestyle as part of new civilization. People use MRT to reach their office or tourism spot in Jakarta faster. It cut economic cost because of avoiding the Jakarta traffic jam. MRT make new public experience. Public enjoy the new face of Jakarta as modern and digital city. They able to commute in

lunch time from and to their office and entertainment spot (such as mall, etc.) efficiently. This is become the added value of Jakarta smart city branding. Smart city is a city where provide its people by facility, infrastructure, and technology to improve and ease the people's life. MRT is one of smart mobility platform of Jakarta smart city project. MRT make the Jakarta's people mobility life more convenience, safer, faster and efficient. MRT build 'new hope' of better Jakarta as developed, happy and convenience city. By using the public transportation, the Jakarta people hope to get the better air of city. The MRT's social media engagements have created awareness and education for citizen in Jakarta about MRT as Jakarta Smart City Branding. The findings indicated that MRT Jakarta is the transportation program which is implementing the smart city concept. MRT influence the Jakarta tourism image. MRT is unique selling point for Jakarta Branding. MRT branding Jakarta as convenience place for tourism activity. One of the programs is video #JelajahiJakarta. Jakarta MRT support the local government mission to make 'New face' of Jakarta. "Change Jakarta" is the tagline. It is the game changer for Jakarta society, place Jakarta equal as well as world modern smart cities standard. This project objective is to make Jakarta better, convenience, modern and integrated public transportation. Smart city is needed to be the problem solution of many cities problems. Smart mobility, smart education, smart people, smart economic, smart energy, smart health are part of Jakarta smart city platform in three domains: Economic, social and environment. MRT is one of smart mobility platform of Jakarta smart city project. MRT build new hope to get the better air of city and make the Jakarta's people mobility life more convenience, safer, faster, efficient and happy.

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