

A Conceptual Framework on Redefine Transit-Oriented Development Station to Improve Work-Life Balance Among Young Urbanites

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In Malaysia, most are the user using public transport is working adult especially young urbanites. Young urbanites are fresh to employment and majority of them are renting room near to Transit-Oriented Development (TOD) station and riding public transport to work. Young Urbanites work over time until late 8 or 9 pm and they missed out the time for after work activities. This affected young urbanite work-life balance. However, the current TOD station only designed to connect with surrounding development. The Surrounding development may not provide the needs or facilities of young urbanites enjoy after their overtime working. Therefore, this study aim to redefine the concept and typology of TOD station to improve young urbanites work life balance. This study is to support a study on the future design of TOD station on providing additional function, facilities and amenities to improve quality of life of the TOD community and determine the needs and lifestyle among young urbanite and proposed series of facilities and amenities on TOD station to improve their work-life balance. This research will contribute a design guideline on TOD station in the future that can emerge with surrounding neighbourhood context and improve the engagement with the surrounding community. This research also help on designing TOD master planning in the future city. Therefore, this research giving a new reference or new model to TOD station with other function and activities to be a new node to the community surrounding.

Keywords: Transit-Oriented Development; Work-Life; Conceptual Framework

1. INTRODUCTION

1.1 Background Study

Transit-oriented development (TOD) has been developed in the early of 1990's by Peter Calthorpe. The concept of TOD is a mixed used development and the community are well connected to public transport. TOD has design to encourage community walk, cycle or using public transport to their destination, minimising the

vehicular access and create more open space and sense of community.

TOD is one of the solutions to optimise land use, and solve the traffic congestion issue in a city. According to National Physical Plan (2005 & 2010), TOD shall be promoted as the basis for urban land use planning to ensure viability of public transport. Federal Department of Town and Country Planning (FDTCP), states "TOD is designed to optimize utilization of land and natural resources for sustainable development and biodiversity conservation". According to FDTCP,

TOD is a method that places a mix of high intensity uses within 400m radius of rail or bus-based transit station. Walking, cycling and riding are the main modes in TOD development. KL Sentral is the first TOD in Malaysia. Its TOD development consists of residence, office blocks, hotels, shopping malls, international exhibition and entertainment outlet.

1.2 Problem Statement

In Malaysia, most are the user using public transport is working adult especially young urbanites. Young urbanites are in the age between 21 to 35 years old. They are fresh to employment in between higher B40 and lower M40 income group. Majority they are renting house or room near to TOD station and riding public transport to work.

The Star (2020) mention that Malaysian workers are overworked and have the worst work-life balance in the world, 29% of Malaysians suffered anxiety and depression due to stress. In fact, according to a recent survey by (Monster.com, 2019), 39 per cent of Malaysian employees say uncooperative bosses are a barrier to achieving work-life balance. Employees across Malaysia don't have a great experience with their attempts to balance time in the office with time at home, as nearly half of them said they can "only sometimes" manage (HR Asia, 2019).

Young Urbanites work over time until late 8 or 9 pm. They are looking on food, grocery, sport and leisure activities after their work. Most of the retail outlet in Malaysia close on 10pm and young urbanite missed out the time for after work activities. This affected young urbanite work-life balance. Many railways now's day are designed as TOD. A lot of TOD station are occupied huge land area and build a big station. Empty space at TOD station being wasted and only few amenities can be found at the station. The huge amount invested by government needed to serve more than transit in a TOD station.

According to He (2021), the current TOD station only serves for transit purpose only, it lacks of sense of community. Cervero, R. (2005) said TOD should breathe new life and vitality into areas of need. According to Arina Rahmat (2016) current TOD station couldn't improved the quality of life for future generations. Minelgaite A. (2020) said that TOD station is a transit node towards surrounding community and it should serve more than transit to make user more convenient on daily life. Chen P.N & Karimi K. (2019) mention that current TOD station couldn't

emerge within urban fabric to support socio-economic activities surround the station

The current TOD station are designed to connect with surrounding development. The surrounding development are beyond the control by the government and it would not help to improve human work-life balance and quality of life. The TOD station needed to provide amenities and facilities to support surrounding community to improve work-life balance and quality of life.

2. LITERATURE REVIEW

2.1 Transit-Oriented Development

Transit-Oriented Development is one of the solutions to optimise land use, and solve the traffic congestion issue in a city. According to National Physical Plan (2005 & 2010), TOD shall be promoted as the basis for urban land use planning to ensure viability of public transport. Federal Department of Town and Country Planning (FDTCP), states "TOD is designed to optimize utilization of land and natural resources for sustainable development and biodiversity conservation".

According to Ribeiro (2021), smart system and artificial intelligence needed to include into public transport system to improve user experience and make more convenient to the user. Therefore, Chen (2019) mention that public transport station needed to map with surrounding urban context to support surrounding community on social and economic aspect. Public transport needed to facilitate more direct travel to reduce proximity to daily needs, said Sarker (2019). He (2021) analysed that public transport station needed implement more sense of community, create more facilities to support the surrounding community and enhance the user experience. According to Minelgaite (2020), Allocate more amenities and facilities at public transport station make user more convenient on daily life, user can access to facilities and amenities within a minute while arrive the station. Karimi (2019) mention that public transport station needed to be a node to support surrounding community. Public transport station is a transit node, other than that it would be serve more than transit purpose. It would be a node for gathering purpose towards community daily activities. Runjie Huang (2018) said public transport station should have a better networking connect with surrounding urban fabric. Accessibility towards community is important to make user easily access to public transport station. Wei Lang (2020) mention public

transport station should merge with facilities, services, and individual social activities. All daily activities can be easily done at one point to reduce the user travel distance from place to place. The number of shared-bicycle stations and bus stops, and commercial floor area, around a transit station improves the efficiency of public transport station, said Tamakloe (2021). According to Semiha Yilmazer and Zeynep Bora (2017), user unable to determine the function and spaces in TOD station, the spaces being wasted due to the user not using. Dana Jeffrey et al (2019) said the cities needed to locating a variety of services, destinations, residences and place of employments at TOD station to create healthy, liveable and sustainable cities. TOD station as a public space for citizen travel from place to place, it is one of the nodes at the city or town, it should serve more than transit purpose, said Yamini Jain Singh et al (2017). Long Chen et al (2022) mention that urban function and street intersection are high lightly improve TOD station and the social context surround the station. Cong Liao & Bronte Scheuer (2022) said TOD Station should design based on morphology and demand factors, to provide more comprehensive characteristic in improve user experience. Dea van Lierop et al analysed that a successful TOD station design should integrate land used and public transport project based on planning for flexibility, accessibility and collaboration.

The Current TOD station study only limited on to provide facilities and amenities on the station to shorten the user proximity on their daily activities. The current TOD station studies more towards support the surrounding community. The TOD station study lack of the type of user on TOD station and the facilities needed for the TOD station user. This study will be focusing on analyse the type of user, user needs and user daily activities on TOD station.

2.2 Work-Life Balance

Work-life balance is a lifestyle that had balance between working and private time. It involves the minimization of work-related stress, and the establishing of a stable and sustainable way to work while maintaining health and general well-being Sarah Fisher (2019). According to The Star (2020), Malaysian workers are overworked and have the worst work-life balance in the world, 29% of Malaysians suffered anxiety and depression due to stress. In fact, according to a recent survey by (Monster.com, 2019), 39 per

cent of Malaysian employees say uncooperative bosses are a barrier to achieving work-life balance.

According to Kanthi Sree (2013) off-work facilities are needed to support employee to increase work-life balance. Employee needed to work overtime or in the weekend, facilities for off-work are needed. Therefore, Tewathia (2014) mention that part time work and work support facilities that need to be introduced to increase work-life balance. Accessibility to work place and overtime working impact work-life balance, said Chaitra R (2015). Proximity to work place take away employee private time. Sheena (2019) analysed that overtime and weekend working perform remotely helps on work-life balance. Work place not necessary in the office, it can be performed anywhere that more comfortable to the employee. According to Peter (2009) social life and individual needs improve work-life balance. Social activities are important to balance human stress level. Sylvia Y (2020) mention that accessibility to work place and flexible or remote working helps to improve work-life balance. Flexible work schedules, location, and household responsibilities can significantly influence how people arrange their work and nonwork activities, said Greenhaus (2003). Oyedele (2019) analysed that transportation, workplace facilities, afterwork facilities helps to improve work-life balance.

The current work-life balance study only limited on the ways of better working style such as remote working, reduce overtime working and weekend working. The current work-life balance studies more towards on self-management or employee management to improve work-life balance. The work-life balance study lack of the working environment, accessibility to work place, employee social activities and daily needs to improve work-life balance. This study will be focusing on how architecture improve work-life balance.

2.3 Young Urbanite Needs

Young urbanites are in the age between 21 to 40 years old. They are fresh to employment in between higher B40 and lower M40 income group. Majority they are renting house or room near to TOD station and riding public transport to work. Young Urbanites work over time until late 8 or 9 pm. They are looking on food, grocery, sport and leisure activities after their work. Most of the retail outlet in Malaysia close on 10pm and young urbanite missed out the time for after work

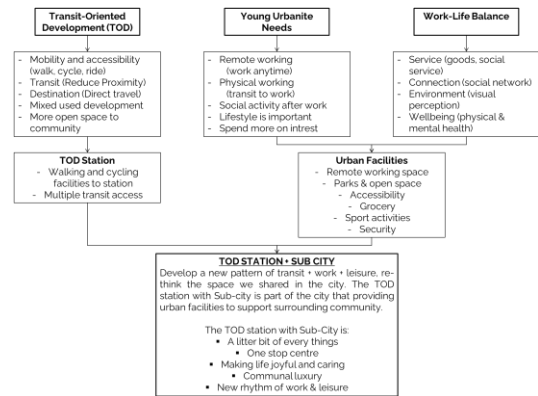
activities. This affected young urbanite work-life balance.

According to Leslie (2004) young urbanite lifestyle is more important than other. They tend to spend more on leisure and entertainment. Therefore, Martin (2004) mention that young urbanite tends to spend on their interest service, goods and experiences. Most of them choose work in the city, stay in the city and feel the city. They using public transport or walking throughout the city and experience it. Young urbanite preferred flexibility and freedom working mode, said Hossain (2018). They preferred complete their working task anywhere and gain more time on their life time. Myers (2010) analysed that young urbanite skilful with technology and internet of things. Young urbanite using internet of things to done their working task remotely. They also like to use internet of things on their daily life such as buying goods, ordering food, grab a car, etc. Internet of things help to make young urbanite life more efficiently and easily. Deirdre Pfeiffer (2019) mention that young urbanite needs of authentic, flexible, socially conscious, and provides a constantly connected lifestyle.

The current young urbanite needs study conclude that lifestyle is more important than other. There was no study on what facilities and amenities they need to support they preferred lifestyle to improve their work life balance. My study will be looking on the lifestyle needed on young urbanite and suggest the preferred facilities and amenities to support their daily life in order to improve their work-life balance.

3. CONCEPTUAL FRAMEWORK

TOD station not only for transit purpose, it also a node with infrastructure and facilities as a sub-city to support surrounding community. It should provide facilities for walking and cycling to public transport station. Provide and facilitate more direct travel to shorten the travel distance. The huge empty space on ground floor and first floor converted into third space or shared space for surrounding community. The new model of TOD station will create a carless or car free community. It will become a one stop centre to improve work-life balance and quality of life.



4. CONCLUSION

This study is to support a study on the future design of TOD station on providing additional function, facilities and amenities to improve quality of life of the TOD community. Therefore, this study is expected to determine the needs and lifestyle among young urbanite and proposed series of facilities and amenities on TOD station to improve young urbanites work-life balance.

5. CONTRIBUTION AND BENEFIT OF RESEARCH

This research will contribute a design guideline on TOD station in the future that can emerge with surrounding neighbourhood context and improve the engagement with the surrounding community. This research also help on designing TOD master planning in the future city. Therefore, this research giving a new reference or new model to TOD station with other function and activities to be a new node to the community surrounding.

This research contribute towards building work-life balance to young urbanite. This research providing a model on designing community facilities towards improve work-life balance and better lifestyle among young urbanite.

6. FUTURE RECOMMENDATIONS

This study limited on optimise the usage on TOD station and providing sense of community into TOD station towards increase socio economy to surrounding community. This study also limited on providing facilities and amenities to increase work-life balance among young urbanite and providing a better lifestyle to young urbanite.

Future research can explore more on

improving work-life balance of working adult with family. Working adult have kids and parents stay with them. They need more travel to sending kids and parents from place to place. The TOD station can be a nodes providing facilities and amenities to serve a family daily activities. It can improve working adult work-life balance and quality of life.

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