



TO KUTAI

6th UNDERGRADUATE SEMINAR ON BUILT ENVIRONMENT AND TECHNOLOGY (USBET) 2023 SUSTAINABLE BUILT

GRESAFE CITIES

SUSTAINABLE BUILT ENVIRONMENT

A SEPTE 25 - 27 SEPTEMBER 2023





Published by,

Department Of Built Environment Studies And Technology Faculty Of Architecture, Planning & Surveying Universiti Teknologi MARA Perak Branch, Seri Iskandar Campus usbet.fspuperak@gmail.com

Copyright @ 202**3** 

Department Of Built Environment Studies And Technology Faculty Of Architecture, Planning & Surveying Universiti Teknologi MARA Perak Branch, Seri Iskandar Campus

This work is subject to copyright. All rights are reserved by the Publisher. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system without permission in writing from the copyright owners.



02 October 2023 | Perak, Malaysia Universiti Teknologi MARA, Perak Branch, Seri Iskandar Campus

#### **EDITORIAL BOARD**

**Editors-in-Chief** 

SR. NORAZURA MIZAL AZZMI (BS) NADIRA AHZAHAR (BS)

Editors TS. ZURAIHANA AHMAD ZAWAWI (BS) SR. NAZHATULZALKIS JAMALUDIN (BS) SR. SITI ZUBAIDAH HASHIM (BS) NURHIDAYAH SAMSUL RIZAL (BS) SR DR. NURUL FADZILA ZAHARI (BS) NUR FADHILAH BAHARDIN (BS) SR TS. DR. ALIA ABDULLAH SALLEH (BS) SR TS. DR. SURIANI NGAH WAHAB (BS) SR TS. DR. HASNAN HASHIM (BS) SR NOORAZLINA KAMARUZZAMAN (BS) SR MARIATY MOHD BAHARI (BS) SR AIDA AFFINA ABDUL GHANI (BS) DR. NOR DIANA AZIZ (BS) SR AMIR FASHA MAT ISA (BS) SR DR. NOR AMIN MOHD RADZUAN (BS) PROF. MADYA SR DR. MOHD FADZIL YASSIN (BS) SR TS. KHAIRUL AMRI RAMLY (BS) SR. MOHD ASRUL HASIN (BS) SR TS. MOHD KHAZLI ASWAD KHALID (BS) SR MOHD DZULKARNAEN SUDIRMAN (BS) SR DR. IRWAN MOHAMAD ALI (BS) SR DR. MOHAMMAD HASZIRUL MOHD HASHIM (BS) DR NURHASYIMAH BT AHMAD ZAMRI (BCT) DR. PUTERI YULIANA SAMSUDIN (TP)

Editors-in-Chief

6th Undergraduate Seminar on Built Environment and Technology 2023

# - E- Proceedings-

Organized by,

College of Built Environment (KAB) UiTM Perak Branch



## A MENTAL MODEL OF RESIDENTS' SATISFACTION WITH SPECTRUM TO GATED COMMUNITY SECURITY AND MANAGEMENT IN MALAYSIA

Farah Husna Zainol<sup>1</sup>, Siti Nadiah Mohd Ali<sup>1\*</sup>

<sup>1</sup>Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA, Perak Branch, Seri Iskandar Campus, 32610, Seri Iskandar, Perak, Malaysia

2021606736@student.uitm.edu.my, \*sitin190@uitm.edu.my

#### ABSTRACT

The mental model of the study regarding residents' satisfaction with security and management in gated communities in Malaysia is an important point that needs to be noted. The increase in gated and guarded communities presents complex urban planning challenges in modern society. The problem revolves around finding a balance between the perceived benefits of a gated community, such as reduced crime rates and increased property values, and the potential disadvantages it may create. These disadvantages include fragmented urban development, increased traffic congestion in neighbouring areas, and reduced social cohesion within the larger community. In order to form the mental model of this study, a desktop search was done to see how far the narrative of the study could be strengthened. Therefore, to provide a new perspective, this study proposes a mental model that understands the implications of gated and guarded communities and should consider urban planning and multi-racial communities holistically. This is important to create an urban space that prioritises safety and inclusion without jeopardising the overall well-being of the city or maintaining community divisions.

Keywords: mental model, residents' satisfaction, spectrum security

© 2023 USBET, JABT, UiTM Perak Branch, All rights reserved

#### INTRODUCTION

In Malaysia, there are three varieties of residential development: open neighbourhoods, gated neighbourhoods, and gated communities (Tan, 2016). Open neighbourhood is a residential area established in the old and traditional manner that lacks street barriers (Kalfaoglu Hatipoglu and Okkali Alsavada, 2022). Governed neighbourhoods are formerly open neighbourhoods in which residents erect barriers such as manual boom fences and safety signs and employ security guards to control access by closing minor public roads leading to the residential area (Padovani, 2022). Due to the desire for exclusivity among homebuyers, Malaysian housing developers are beginning to construct walled, gated communities with an interesting sharing facility.

#### Statement of the Problem

The primary objective of the gated community is to provide residents with peace and safety. However, the rapidly expanding awareness of security can present obstacles to the effectiveness of security systems (Alqahtany, 2022). Though gated communities are physically enclosed by walls and gates(Zainudin and Hussin, 2015), the security aspect of the community is still highly subjective(Saravanamuthu, 2017), according to the study's findings. Although good social relations have been established among the population, such communities are somewhat isolated, and residents may take the provided security measures for granted, resulting in lax compliance with security procedures.

#### **Research Objective**

This study aims to provide a mental model of how residents of gated communities maintain safety and security in their residential areas.

## LITERATURE REVIEW

In recent years, gated communities in Malaysia have become an increasingly popular residential option. The controlled access and comprehensive security measures of these communities give their residents a sense of safety and exclusivity. As the number of gated communities continues to rise, it becomes increasingly important to gauge residents' satisfaction with the spectrum of security and management to ensure their well-being and overall quality of life (Kumar et al., 2021). The purpose of this literature review is to examine existing research on resident satisfaction with spectrum to gated community security and management in Malaysia critically. This review seeks to shed light on the factors influencing residents' happiness, the efficacy

of security measures, and the impact of community management on their overall quality of life by synthesising findings from multiple research efforts.

#### Evolution of Gated Communities in Malaysia

In recent decades, Malaysia has witnessed the emergence of gated communities as a distinct urban housing phenomenon (Hedayati-Marzbali et al., 2017). These exclusive residential enclaves , which are characterised by restricted access, increased security measures, and a variety of communal amenities, have experienced significant growth and popularity across the nation(Klingmann, 2023). Understanding the evolution of gated communities in Malaysia is of the utmost importance (Schmidt et al., 2023), as they continue to shape the landscape of urban living and influence the lifestyles and perceptions of security and management among residents (Chen et al., 2021).

#### Perception of Security and Safety

This theme will explore Malaysian residents' perceptions of safety and security in gated communities. It includes a study of residents' safety perceptions, risk perceptions, and overall satisfaction with the community management's safety measures (Adabre and Chan, 2020). This includes how safe they feel when walking in residential areas, interacting with neighbours, and performing daily tasks outside the home(Bond, 2015). Residents may feel safer if they perceive that their environment is safe and free of security threats (Jiménez et al., 2021).

#### **Effectiveness of Security Measures**

Evaluating the efficacy of different security measures one of the primary focuses of this section will be on determining how effective different security measures are that are utilised in gated communities(Shi and Ling, 2023). These security measures include things like physical infrastructure (like walls and fences), security personnel, surveillance systems, and access control(Badiora et al., 2020). It will evaluate the extent to which these precautions contribute to the residents' sense of safety satisfaction (Keskin et al., 2023).

## **Resident Satisfaction**

Understanding residents' satisfaction with their homes is crucial for planners, architects, developers, and policymakers. Home satisfaction is a feeling of satisfaction when a household provides desired amenities, such as a pleasant place and a safe neighbourhood (Gruber & Shelton, 1987). It is used to assess overall quality of life, evaluate public and private housing projects, and gather information about the housing situation. Residential satisfaction is correlated with residents'

motivation to engage in certain behaviours, making it essential to define the concept first(Dinç et al., 2014).

Residential satisfaction is influenced by a building's occupants' needs, aiming to improve happiness and quality of life. It is crucial to consider residents' desires and needs to ensure a happy and well-lived environment. Resident satisfaction in housing refers to the satisfaction and happiness experienced by residents, affecting their overall quality of life and serving as an evaluative measure for successful residential developments (Biswas et al., 2021).

## **Demand for Gated and Guarded Housing**

The demand for housing on the market is a reflection of consumer preferences across the economy (Shamsudin et al., 2017). There will always be a market for new homes built by construction companies, as there are always families who want to start fresh with a different house, neighbourhood, and way of life (Razak et al., 2019). The status and sense of safety afforded by gated and guarded communities have contributed Toa rise in demand for such dwellings in recent years across Malaysia (Alqahtany, 2022). Decisions made by parties involved in urban development such as planners, architects, and developers when designing residential neighbourhoods are made with the intention of enhancing the quality of life in residential communities that do not have fences. These decisions are particularly focused on enhancing the living conditions of the more difficult local community. The significance of this finding lies in the fact that the majority of studies concentrate on the analysis of gated communities in nations that are still in the process of industrialization (Khaled et al., 2020).

#### Importance of Safety in Housing Communities

Residents of residential areas reported a relatively high level of social cohesion, but they reported only a moderate level of safety, according to a significant relationship model between social cohesion and the perception of safety in residential areas (Hedayati-Marzbali et al., 2017). The role that design plays in the provision of defensible neighbourhoods within the context of cities reveals aspects that will guide the design of urban forms and housing in terms of the relationships between security and the surrounding environment (Kalfaoglu Hatipoglu & Okkali Alsavada, 2022). A hierarchical relationship between elements is expressed by the gated community typology. Supply and demand are considered high-level elements, whereas gated housing characteristics and housing stock characteristics are considered low-level elements (Grange, 2017). Beyond the common interests of the gated community, community leaders will prioritise intercommunity safety by maximising the interests of all (Shi & Ling, 2023).

#### Elements of security provided in Gated and Guarded Scheme

Gated communities are popular among those seeking security and privacy, as they provide a quiet, peaceful environment with restricted traffic (Sarpong, 2016). Smart Living gated communities feature fences, walls, alarms, security officers, and CCTV (Yang et al., 2022). These measures are not limited to these dwellings, as others install them to improve security management. Remote monitoring technology eliminates the need for frequent patrols, allowing a smaller security force to monitor the area (Walls et al., 2019). CCTV cameras are often placed near the entrance to record photos, making real-time effectiveness and efficiency crucial (Hagen et al., 2017).

#### METHODOLOGY

Managing the mental model in a literature review entail developing a clear and consistent model for organising and analysing the relevant literature to support your research. Table 1 shows some appropriate techniques for managing the mental model.

Methodology	Description
Define the Research Questions	Clearly articulate the research questions or objectives that your literature review aims to address.
Identify Key Concepts and Variables	Determine the main concepts and variables that are central to your research.
Conduct Systematic Literature Search	Employ systematic methods to search for relevant literature, including academic databases, journals, books, conference papers, and other reputable sources.
Screen and Select Relevant Literature	Review the retrieved literature and screen them based on their relevance to your research questions.
Categorize and Synthesize Literature	Organize the selected literature based on the key concepts and variables you identified earlier.
Analyze and Compare Findings	Analyze the literature within each category or theme to identify trends, patterns, and gaps in the existing knowledge.
Establish Theoretical Foundations	Draw connections between the literature and established theories or models in your field of study.
Identify Research Gaps	In your analysis, identify any gaps or limitations in the existing literature.
Develop the Conceptual Framework	Based on the insights gained from the literature review, construct your conceptual framework.
Revise and refine	Continuously review and refine your conceptual framework as you progress with your research.

Table 1: Appropriate Techniques for Managing the Mental Model

# A MENTAL MODEL OF RESIDENTS' SATISFACTION WITH SPECTRUM TO GATED COMMUNITY SECURITY

A mental model of residents' satisfaction with spectrum to gated community security is the cognitive representation or perception that residents hold regarding the security measures implemented by a gated community, specifically regarding the use of spectrum technology. In this instance, "spectrum" most likely refers to the electromagnetic spectrum, which includes a range of frequencies used for communication and data transmission, such as radio waves, microwaves, and infrared. Spectrum technology may be one of the security measures employed by gated communities to safeguard their residents and property.

The mental model includes the residents' beliefs, expectations, and comprehension of how spectrum technology contributes to the overall safety of their gated community. It includes their opinions regarding the effectiveness, dependability, and advantages of spectrum-based security systems. To determine whether residents are satisfied with spectrum-based security, researchers or community managers may conduct questionnaires, interviews, or focus group discussions to collect resident feedback.

The mental model can help identify factors that influence residents' perceptions and feelings of security, such as the presence of surveillance cameras, access control systems, or spectrum-based communication networks. By investigating and comprehending this mental model, community administrators can make informed decisions regarding how to enhance security measures, increase resident satisfaction, and customise security systems to meet their expectations and needs. A positive mental model of spectrum-based security may also contribute to increased resident confidence and well-being, thereby enhancing the gated community's reputation as a safe and secure living environment.



Figure 1: A Mental Model of Residents' Satisfaction with Spectrum to Gated Community Security

#### Security: Residents' Satisfaction

In the context of a gated community, residents' satisfaction with spectrum to gated community security is conceptualised as a sense of being protected and shielded from potential threats. Spectrum technologies, such as surveillance cameras, motion sensors, and communication networks, contribute to the community's sense of safety by enhancing the security infrastructure.

Residents view spectrum-based security systems as a preventative measure against criminal activity and unauthorised entry. The presence of high-tech surveillance cameras at the community's entrances and other strategic locations instils a sense of vigilance, thereby discouraging potential wrongdoers from entering the community.

In addition, the effective application of spectrum technology enables a timely response to security incidents. Residents are reassured that any unusual activity detected by motion sensors or intrusion alarms will immediately alert the security staff or community management. This rapid response capability enhances the residents' sense of safety, as they know that assistance is always within reach.

The mental model also incorporates the confidence of residents in the dependability of spectrum-based security systems. They value the reliability and precision of the technology, which minimises false alarms and expedites the response to genuine threats. The residents' confidence in the technology promotes a sense of calm, as they are aware that their safety is being actively monitored and protected.

#### Safety: Residents' Satisfaction

Residents' satisfaction with gated community security is based on a sense of safety and protection. Spectrum technology—surveillance cameras, motion sensors, and Residents' satisfaction with spectrum to gated community security focuses on wellbeing and peace. Spectrum technology creates a safe living environment by providing a strong infrastructure to prevent and respond to hazards.

Spectrum-based security systems deter criminals and prevent unauthorised entry, making residents feel safe. Residents feel safe in a controlled, monitored environment. Residents' mental model also includes a responsive safety system. Spectrum technology helps security personnel communicate and coordinate to quickly address emergencies and safety concerns. The quick response shows residents that community management prioritises their safety.

Spectrum technology protects community amenities and recreational areas, boosting safety. Security cameras and prompt response to suspicious activity make residents feel safe using shared spaces. Residents' satisfaction with spectrum to gated community security centres on security and safety. Spectrum technology in the community's security infrastructure strikes a balance between proactive crime

prevention and quick response to safety concerns, creating a safe and secure home for residents.

#### CONCLUSION

In conclusion, the mental model of residents' satisfaction with spectrum to gated community security shows how spectrum technology affects residents' perceptions of community security and safety. Spectrum-based security systems like surveillance cameras, motion sensors, and communication networks help residents feel safe. Spectrum technology deters threats and unauthorised access, according to the mental model. Advanced surveillance and communication systems instill vigilance and trust in the community's safety.

The mental model emphasises spectrum-based security systems' rapid response. The community's quick and coordinated response to security incidents reassures residents. The mental model reflects gated community residents' safety and wellbeing. Spectrum technology improves safety, giving residents a controlled and monitored living environment.

Spectrum technology protects community amenities and shared spaces, reassuring residents who use them. The mental model shows that spectrum improves gated community security by increasing resident satisfaction, creating a harmonious living environment, and establishing the community's reputation as safe and secure. Community administrators can improve security, safety, and residents' sense of belonging and well-being in their gated community by understanding and addressing the factors that affect residents' satisfaction with spectrum-based security systems.

## ACKNOWLEDGEMENT

Praise Allah for the opportunity, good health, and enough time. Dr. Siti Nadiah binti Mohd Ali, the supervisor, is thanked for her guidance and support. I'm grateful to my parents and friends for improving the project. I am grateful to the Real Estate Management Programme and the Department of Built Environment for giving me the resources, facilities, and opportunities to complete this project. The academic environment and university library and research databases helped with literature review and data analysis. This project's survey participant generously gave their time and knowledge. Their insights and experiences greatly enriched this research. My family and friends deserve thanks for their unwavering support, understanding, and encouragement. Their confidence and encouragement have kept me going. Finally, I thank all the researchers and scholars whose work and publications were referenced in this project. They established this research's direction and analysis. Again, I thank everyone who helped finish this final year project. Thank you for sharing this amazing journey and learning so much.

#### REFERENCES

- Adabre, M. A., & Chan, A. P. C. (2020). Towards a sustainability assessment model for affordable housing projects: the perspective of professionals in Ghana. 27(9), 2523–2551. https://doi.org/10.1108/ECAM-08-2019-0432
- Alqahtany, A. (2022). Evaluating the demographic scenario of gated communities in Dammam metropolitan area, kingdom of Saudi Arabia. 25(1), 13–30. https://doi.org/10.1108/HCS-04-2021-0014
- Badiora, A. I., Wojuade, C. A., & Adeyemi, A. S. (2020). Personal safety and improvements concerns in public places: An exploration of rail transport users' perception. *Journal of Place Management and Development*, 13(3), 319–346. https://doi.org/10.1108/JPMD-03-2019-0013
- Biswas, B., Sultana, Z., Priovashini, C., Ahsan, M. N., & Mallick, B. (2021). The emergence of residential satisfaction studies in social research: A bibliometric analysis. *Habitat International*, 109, 102336. https://doi.org/10.1016/J.HABITATINT.2021.102336
- Bond, S. (2015). Residents' perceptions of risk towards residential property in Canterbury NZ subsequent to the earthquakes. International Journal of Disaster Resilience in the Built Environment, 6(3), 234–267. https://doi.org/10.1108/IJDRBE-03-2013-0008
- Chen, G., Yang, Q., Chen, X., Huang, K., Zeng, T., & Yuan, Z. (2021). Methodology of urban safety and security assessment based on the overall risk management perspective. *Sustainability* (*Switzerland*), 13(12). https://doi.org/10.3390/su13126560
- Dinç, P., Özbilen, E., & Bilir, M. B. (2014). A multi-dimensional scale for measuring residential satisfaction (rs) in mass housing projects. *Indoor and Built Environment*, 23(6), 864–880. https://doi.org/10.1177/1420326X13484619
- Grange, A. La. (2017). Classifying elements of a typology of gated communities. International Journal of Housing Markets and Analysis, 11(3), 1–21. https://doi.org/10.1108/IJHMA-07-2017-0065
- Gruber, K. J., & Shelton, G. G. (1987). Assessment of Neighborhood Satisfaction by Residents of Three Housing Types. *Social Indicators Research*, 1–5. https://www.jstor.org/stable/27520701
- Hagen, C. S., Bighash, L., Hollingshead, A. B., Shaikh, S. J., & Alexander, K. S. (2017). Why are you watching? Video surveillance in organizations. *Corporate Communications: An International Journal*, 23(2), 274–291.

https://doi.org/10.1108/CCIJ-04-2017-0043

- Hedayati-Marzbali, M., Tilaki, M. J. M., & Abdullah, A. (2017). Assessing the effect of neighbourhood structure on residents' perceptions of safety in gated communities: A case study of Iran. *Safer Communities*, 16(1), 3–19. https://doi.org/10.1108/SC-09-2016-0019
- Jiménez, F. R., Ramirez, E., & Diaz, A. (2021). Caught in the crossfire: reactions to persistent mortality salience. *European Journal of Marketing*, 55(3), 700–725. https://doi.org/10.1108/EJM-03-2019-0242
- Kalfaoglu Hatipoglu, H., & Okkali Alsavada, M. (2022). The reflection of Newman's defensible space theory on Turkey's neighbourhoods: typomorphological analysis of safe-space within an analytical framework. *Open House International*. https://doi.org/10.1108/OHI-03-2022-0064
- Keskin, E., Yang, E., Tanrıvermiş, H., & Erdogmus, E. (2023). Facility management perspective in urban transformation projects: the opportunities and challenges in Turkey. *Facilities*, *41*(3–4), 248–264. https://doi.org/10.1108/F-04-2022-0062
- Khaled, R., Shawabkeh, A., & Alzouby, A. M. (2020). Evaluating the satisfaction rate for affordable housing in non- gated residential area (NGR): the case of Al-Sharq housing project in Zarqa-Jordan. https://doi.org/10.1108/IJHMA-10-2019-0105
- Klingmann, A. (2023). Rescripting Riyadh: how the capital of Saudi Arabia employs urban megaprojects as catalysts to enhance the quality of life within the city 's neighborhoods. 16(1), 45–72. https://doi.org/10.1108/JPMD-06-2021-0062
- Kumar, P., Kumar, P., Garg, R. K., & Garg, R. (2021). Urban housing: a study on housing environment, residents' satisfaction and happiness. *Open House International*, 46(4), 528–547. https://doi.org/10.1108/OHI-12-2020-0179
- Padovani, F. (2022). The transformation of interpersonal neighbour relations at high speed: The changing neighbourhood of Tianzifang in Downtown Shanghai. *Neighbours around the World: An International Look at the People Next Door*, 55–71. https://doi.org/10.1108/978-1-83909-476-720221004
- Razak, A., Management, C., Community, G., & Height, K. C. (2019). *Development* Of Mobile Application For Gated And Guarded. XLII(October), 1–3.
- Saravanamuthu, K. (2017). How safe is safe enough?" using beck's risk society constructs to facilitate changes to unsustainable notions of accountability. *Advances in Public Interest Accounting*, 20, 167–219. https://doi.org/10.1108/S1041-706020170000020009
- Sarpong, S. (2016). Building bridges or gates? Gated communities' escape from reality. https://doi.org/10.1108/IJSE-03-2016-0103
- Schmidt, D. H., van Dierendonck, D., & Weber, U. (2023). The data-driven leader: developing a big data analytics leadership competency framework. *Journal of Management Development*, 42(4), 297–326. https://doi.org/10.1108/JMD-12-2022-0306

- Shamsudin, Z., Tun, U., Onn, H., Omar, A. J., Tun, U., & Onn, H. (2017). *The Safety Level Satisfaction towards Gated and Guarded Community in Malaysia. August 2016.*
- Shi, X., & Ling, G. H. T. (2023). Factors influencing collective action of gated communities: a systematic review using an SES framework. *Open House International*, 48(2), 325–355. https://doi.org/10.1108/OHI-01-2022-0010
- Tan, T. H. (2016). Residential satisfaction in gated communities: Case study of Desa Park City, Kuala Lumpur, Malaysia. *Property Management*, 34(2), 84–99. https://doi.org/10.1108/PM-02-2015-0009
- Walls, R. S., Eksteen, R., Kahanji, C., & Cicione, A. (2019). Appraisal of fire safety interventions and strategies for informal settlements in South Africa. *Disaster Prevention and Management*, 28(3), 343–358. https://doi.org/10.1108/DPM-10-2018-0350
- Yang, Y., Liller, K., Tyson, D. M., & Coulter, M. (2022). "I don't feel any danger because I am in my own community": a photovoice study on adolescents ' perceived community safety. *Safer Communities*, 21(1), 45–58. https://doi.org/10.1108/SC-07-2021-0025
- Zainudin, A. Z., & Hussin, K. (2015). The cooperative-collective sharing arrangement of gated communities in malaysia. *Property Management*, *33*(4), 330–347. https://doi.org/10.1108/PM-01-2014-0002

Pejabat Perpustakaan Librarian Office

Universiti Teknologi MARA Cawangan Perak Kampus Seri Iskandar 32610 Bandar Baru Seri Iskandar, Perak Darul Ridzuan, MALAYSIA Tel: (+605) 374 2093/2453 Faks: (+605) 374 2299





Prof. Madya Dr. Nur Hisham Ibrahim Rektor Universiti Teknologi MARA Cawangan Perak

Tuan,

#### PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UITM CAWANGAN PERAK MELALUI REPOSITORI INSTITUSI UITM (IR)

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

#### **"BERKHIDMAT UNTUK NEGARA"**

Saya yang menjalankan amanah,

Setuju.

PROF. MADYA DR. NUR HISHAM IBRAHIM REKTOR UNIVERSITI TEKNOLOGI MARA CAWANGAN PERAK KAMPUS SERI ISKANDAR

SITI BASRIYAH SHAIK BAHARUDIN Timbalah Ketua Pustakawan

nar