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College of
Built Environment

Poster Book

IIIDBEE X 2023
20 JANUARY 2023
*International Invention, Innovation & Design Exposition
for Built Environment and Engineering 2023*

**College of Built Environment
UiTM Puncak Alam**
20 January 2023 | Friday

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**Unleashing Potentials
Shaping the Future**

CONTENTS

01 Contents

02 Preface

03 Welcome remarks

04 Exhibition layout

05 Event programme

06 List of entries

**07 Poster category: Academician &
Professionals**

08 Poster category: Postgraduate

09 Poster category: Undergraduate

10 Appreciation

THE IMPLEMENTATION OF SMART CITY CONCEPTS IN THE AREA OF GREATER KUCHING, SARAWAK

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INTRODUCTION

Smart City implementation in Greater Kuching, Sarawak, is the subject of this study. According to United Nations Economic Commission for Europe (UNECE) smart city defines:

- utilizes ICTs to improve quality of life
 - productivity
 - services
 - competitiveness

In general, a smart city is an urban region that relies on technology and electronics to collect data, which is then utilised to efficiently manage assets, resources, and services, resulting in improved operations for the entire city.

ISSUES/ PROBLEM STATEMENT

- The number of developers and innovators tackling Smart City projects is growing but there are still a number of challenges that all developers face.
- There are issues on capacity and coverage challenges as well as security issues in digital world.
- As city populations increase and urban sprawl grows, economic and social issues are usually worsened.
- A city's quality of life is affected, but traditional infrastructure is also put under more strain.
- A case study in Greater Kuching, Sarawak is investigating public's acceptance on the implementation of a Smart City.
- Have the local authorities put in place the relevant structures for adapting ICT related to smart city under their jurisdiction based on the Sustainable Development Goals and New Urban Agenda?

OBJECTIVES

- To identify public perception on the idea of implementing Smart City concept in Greater Kuching.
- To assess the readiness of Local Authorities in Kuching in implementing the initiatives of Smart City in Greater Kuching.
- To identify Smart City applications around Greater Kuching's urban public space.

METHODOLOGY

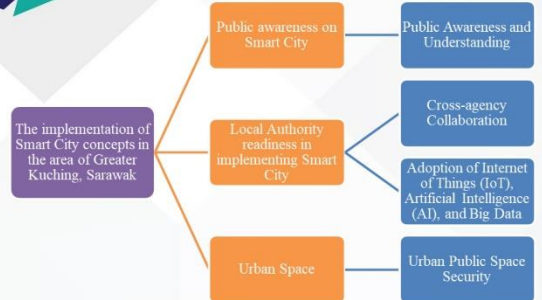


This study is conducted in an area designated as Greater Kuching zone. The area is administered by two local authorities namely:

- Dewan Bandaraya Kuching Utara (DBKU)
- Majlis Bandaraya Kuching Selatan (MBKS).

- This study employs a descriptive research design using a combination of both qualitative and quantitative methodology.
- For qualitative design, the researcher carried out an elite interview with selected respondents who are officers in charge in Smart City implementation in the local authorities and stakeholders who are directly involved with the Smart City programme.
- Whereas to execute the quantitative design, the study utilized the survey method to collect quantitative data from the respondents residing in the marked area.

FINDINGS



NOVELTY

PUBLIC AWARENESS

Residents and stakeholders of Greater Kuching in Sarawak are aware of the implementation of the Smart City initiatives and accepts it positively.

There is a need for the government to provide sufficient sophisticated and user-friendly infrastructure facilities to realize this initiative. Community needs to be educated in terms of the use of information technology.

Local Authority Readiness

Those in authority should learn more about new technologies and collaborate with other stakeholders and the general public in exchanging technological information and ideas.

Urban Space

Greater Kuching is capable of becoming a gateway to other cities in Sarawak as per its physical and indescribable history.

The OKSHe initiative is aimed to emphasise Smart City element which aims to encourage smart heritage development, empowering communities, and delivering high impact outcomes.

Urban Public Space Security

The State Government make a great decision by implementing CCTV cameras across various places in Greater Kuching Smart City.

This will help in reducing crime, disaster management and other purposes as the footage and data are centralised under the SIOC.

CONCLUSION

- Residents of Greater Kuching in Sarawak welcome the implementation of Smart City.
- At the local government level, local authorities are aware of the importance of public participation in improving the development of Smart City in Greater Kuching.
- Greater Kuching is a potential to become a good model of the implementation of Smart City as this city owns it remarkable physical and indescribable history.
- The OKSHe initiative is a kickstart in developing smart heritage, smart community which will lead to high impact outcomes.
- Sarawak Government leads a good decision by initiate the Sarawak Integrated Operation Centre (SIOC) intended to reducing delinquency activities, risk management and other purposes.
- The researcher wants to recommend Sarawak Government to create a master plan in regarding of Smart City as it is only limited to Greater Kuching.
- The researcher suggested that the research should examine more precisely about the effectiveness of smart city initiative in terms of urban connectivity in Greater Kuching, Sarawak.

ACKNOWLEDGEMENT

The author would like to thank the members of public in Kuching city for their voluntary participation in answering questionnaire surveys provided to them and it was a very tough process as it was conducted during the COVID-19 Pandemic. They have answered the questionnaire based on their experience and opinions towards the implementation of Smart City initiatives in Kuching, Sarawak. Their feedback provided by the respondents are very much helpful during the data analysis as well as for the future research in regards of technological advancement in managing cities.