ANALYSING CONSUMER BEHAVIOUR ON DEVELOPMENT OF DIGITAL WATER METER (DDWM) IN MARKET PLACE: MALACCA

NURASHIKIN BINTI MUHAMMAD YUSOF

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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SUPERVISOR APPROVAL

'I acknowledge that have read this research project and in my opinion this research project is sufficient in terms of scope and quality for the award of Bachelor of Technology Management (Marketing)'

Signature :

First Supervisors' Name : MADAM NOR RATNA BINTI MASROM

Date : 28 JUNE 2013

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ANALYSING CONSUMER BEHAVIOUR ON DEVELOPMENT OF DIGITAL WATER METER (DDWM) IN MARKET PLACE: MALACCA

NURASHIKIN BINTI MOHAMMAD YUSOF

Report submitted in partial fulfillment for the
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DECLARATION

"I declare that all parts of this report are the result of my own work except for the quotations and references, the sources of which have been acknowledged in the bibliography."

Signature: _____

Name: Nurashikin Binti Mohammad Yusof

Date: 28 June 2013

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DEDICATION

Dedicated to my beloved father, mother and brother

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In The Name Of Allah the Most Merciful and Compassionate

Alhamdulillah. First and foremost, my gratitude goes to the Allah Al-Mighty for giving me the strength and patience to complete this study as to meet the requirement of BPTU 4072 and BPTU 4084 subject to obtaining Bachelor of Technology Management (High-Technology Marketing). My appreciation also goes to lectures in UTeM especially my responsible advisor Mrs. Nor Ratna Binti Masrom for giving me the most beneficial assistance and offered many comments and suggestion throughout the development of this study. I would also like to acknowledge to Syarikat Air Melaka Berhad (SAMB) and Mr. R. Sundram who gave me the cooperation in relation to the relevant information gathered for this study. Last but not least, I would like to express my deepest gratitude to my beloved family, as well as my friends for their moral support and understanding.

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ABSTRACT

Recently, Ministry of Energy, Green Technology and Water (KeTTHA), want to increase national capability and capacity for innovation in Green Technology development and enhance Malaysia's competitiveness in Green Technology in the global arena. Due to this statement, the researcher has done a market research focused on analysing consumer behaviour on new product, Development of Digital Water Meter (DDWM). DDWM is made to improvise the present analog water meter towards intelligent digital water meter. DDWM is a green-clean product which beneficial for consumer. Theses research findings was answered the research questions. This research is using quantitative and qualitative as a method to collect data. A series of survey was conducted in order to take data on customer behaviour towards DDWM and the total of respondent is 1043 persons. This result was interpreted as quantitative data. To support this data, an in-depth interview method was also conducted to investigate the potential commercialization of DDWM based on Syarikat Air Melaka Berhad (SAMB) perception and the results was interpreted as qualitative data. The result is to see the influence of consumer behavior towards DDWM and to share opinion of SAMB regarding the potential commercialization of DDWM in context of Malacca. As a conclusion, DDWM has marketability in the current market because DDWM can obtaining precise and accurate readings of the water usage by consumer, send the water reading wirelessly and display unit in Ringgit Malaysia (RM) and measure flow in Cubic meters (m^3) as well as it fulfill government green technology aspiration.

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ABSTRAK

Kebelakangan ini, Kementerian Tenaga, Teknologi Hijau dan Air (KeTTHA), mahu meningkatkan keupayaan dan kapasiti negara dalam pembangunan inovasi Teknologi Hijau dan meningkatkan daya saing Malaysia di arena global. Oleh itu, penyelidik telah melakukan penyelidikan pasaran yang tertumpu kepada menganalisis tingkah laku pengguna mengenai produk baru, Development of Digital Water Meter (DDWM). DDWM dicipta untuk menambah baik meter air analog sekarang dan ke arah penggunaan meter air digital. DDWM adalah produk teknologi hijau yang memberi manfaat kepada pengguna. Hasil penyelidikan yang dilakukan akan menjawab permasalahan kajian yang dinyatakan oleh penyelidik. Kajian ini menggunakan kuantitatif dan kualitatif sebagai kaedah mengumpul data. Satu siri dapatan kajian akan dijalankan untuk mengambil data tingkah laku pelanggan terhadap DDWM dan jumlah responden seramai 1043 orang. Hasil dapatan kajian ini akan ditafsirkan sebagai data kuantitatif. Bagi menyokong data ini, kaedah temubual juga dijalankan untuk menyiasat pengkomersialan potensi DDWM berdasarkan persepsi Syarikat Air Melaka Berhad (SAMB) dan hasil dapatan kajian akan ditafsirkan sebagai data kualitatif. Hasil kajian yang dijangka adalah untuk mengetahui pengaruh tingkah laku pengguna terhadap DDWM dan berkongsi pendapat SAMB tentang potensi pengkomersialan DDWM dalam konteks kajian kes di Melaka. Kesimpulannya, DDWM mempunyai nilai kebolehpasaran dan dapat diterima dalam pasaran kerana DDWM boleh memberikan bacaan penggunaan air yang tepat kepada pengguna, menghantar bacaan air tanpa wayar dan memaparkan unit dalam Ringgit Malaysia (RM) dan nilai ukuran bacaan dalam meter padu (m^3) serta memenuhi aspirasi kerajaan yang menggalakkan teknologi hijau.

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LIST OF NOMENCLATURE

AMA	American Marketing Association
DDWM	Development of Digital Water Meter
FKE	Faculty of Electrical Engineering Electrical
KYM	Kolej Yayasan Melaka
MARA	Majlis Amanah Rakyat
KeTTHA	Ministry of Energy, Green Technology and Water
NRW	Non-Revenue Water
RM	Ringgit Malaysia
SAMB	Syarikat Air Melaka Berhad

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SPSS	Statistical Package of Social Science
UiTM	Universiti Teknologi Malaysia
UTeM	Universiti Teknikal Malaysia Melaka

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LIST OF SYMBOL

(m^3)	Cubic Meters
Ho	Hypothesis Null
H1	Hypothesis Alternative
N	Number
ρ	Population
r	Sample
$\leq$	Not more than
$\geq$	More than
%	Percentage

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