

**A MARKET STUDY OF RESIDENTIAL LED LIGHTING:
ANALYSIS OF PERCEIVED CHARACTERISTICS OF INNOVATIONS (PCI)
INFLUENCE ON INTENTION TO USE LED LIGHTNING IN RESIDENTIAL
MARKET**

By

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

A Market Study of Residential LED Lighting: The Perceived Characteristics of Innovations (PCI) Influenced on Intention to Use Home LED Lightning.

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The purpose of this research is to investigate the residential-market's awareness level towards LED lights and to identify which innovation-characteristics (PCI) that has significant influences over the potential adopters' intention to use (adopt). The data collection, involved the distribution of 300 questionnaires to people with interest to purchase light bulbs for their home; out of the 300 questionnaires, only 103 data can be processed using SPSS ver.16 for both descriptive and statistical analysis. The result shows that the awareness level for household LED lights innovation is very low (34%), comparing to the awareness level of LED light technology (94%). All the observed PCIs (relative advantage, compatibility, image and cost) have significant direct influence to attitude and indirect influence towards the intention to use. Amongst the variable, Compatibility has the strongest influence followed by Cost and latter Relative Advantages and last Image. PCIs can be predictors for the intention to use the innovation.

Keyword: *Diffusion of Innovation, LED Lights, Energy-efficiency, PCI, Marketing Mix, Lauterborn 4Cs.*

DEDICATION

I dedicate this thesis to my beloved parents and brother whose love and support never fails to encourage me pursue the best of myself. I am deeply grateful for their patience in giving me the unbreakable support and to never stop believing in me.

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