

**INFORMATION TECHNOLOGY ISSUES  
AND APPLICATIONS IN MALAYSIA**  
A COLLECTION OF ARTICLES

Chief Editor  
Assoc. Prof. Dr. Husnayati Hussin

Editors  
Professor Dr. Abu Osman Md Tap  
Professor Dr. Mohd Adam Suhaimi  
Assistant Professor Dr Mira Kartiwi

**IIUM PRESS**  
**INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA**



**INFORMATION TECHNOLOGY ISSUES  
AND APPLICATIONS IN MALAYSIA  
A COLLECTION OF ARTICLES**

**Chief Editor:**

Assoc. Prof. Dr. Husnayati Hussin

**Editors:**

Professor Dr. Abu Osman Md Tap

Professor Dr. Mohd Adam Suhaimi

Assistant Professor Dr Mira Kartiwi



**IIUM Press**

Published by:  
IIUM Press  
International Islamic University Malaysia

First Edition, 2011  
©IIUM Press, IIUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Assoc. Prof. Dr. Husnayati Hussin, Prof. Dr. Abu Osman Md Tap, Prof. Dr. Mohd Adam Suhaimi, Assistant Prof. Dr. Mira Kartiwi  
Information Technology Issues And Applications In Malaysia: A Collection Of Articles

Assoc. Prof. Dr. Husnayati Hussin, Prof. Dr. Abu Osman Md Tap, Prof. Dr. Mohd Adam Suhaimi, Assistant Prof. Dr. Mira Kartiwi  
Include index

Bibliography: p. 149

ISBN 978-967-418-003-4

ISBN: 978-967-418-003-4

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM  
(Malaysian Scholarly Publishing Council)

Cover Design by Abdullah Al Mamun Sarwar

**MIY IDEAL RESOURCES**

116-1B, Jalan 3

Batu Caves Centre Point

68100 Batu Caves

Selangor Darul Ehsan

## CONTENTS

	page
<b>Preface</b>	viii
<b>Acknowledgments</b>	xi
<b>E-Government Strategies and Implementation</b>	
<b>Understanding fit between technology, organization and people (F-TOP) factors in e-government: the case of judicial information systems</b> <i>Muhd Rosydi bin Muhammad</i>	1
<b>Interaction Design of the Malaysian e-Government Portal</b> <i>Murni Mahmud</i>	23
<b>An Empirical Study on Strategic Information Systems Planning Practices on Malaysian Government Agencies</b> <i>Mohd Adam Suhaimi, Husnayati Hussain and Fazidah Abu Bakar</i>	49
<b>ICT Application, Issues &amp; Challenges in Malaysia Higher Education Institutions</b>	
<b>Enterprise Security Policy: Challenges and Issues for Malaysian Universities</b> <i>Jamaludin Ibrahim</i>	77
<b>Supporting Student Participation and Interactivity in the Classroom Using Mobile Phones</b> <i>Media A. Ayu</i>	93

**Learning by Doing: Potential Use of E-Commerce in Entrepreneurship Education in Higher Education Institutions** 119  
*Mira Kartiwi*

## **Information Technology Outsourcing Practices**

**IT Outsourcing Practices among Malaysia SMEs: Some Empirical Evidence** 139  
*Husnayati Hussin and Nurulnuha Abd Molok*

**Applying Multiple Case Studies Research to Investigate IT Development Outsourcing Project Risks** 163  
*Lili Marziana Abdullah*

## **Collaborative Information System & Quality Assurance**

**The dimension of Collaboration: Communities, well-being and Information Systems** 187  
*Abdul Rahman bin Ahmad Dahlan*

**Improving the Quality of User Experience by Deploying an open access network framework in a fiber-to-the-home environment in Malaysia** 211  
*Zahid Ismail*

**The potential of Fuzzy Evaluation Approach in Information Systems** 239  
*Abu Osman Md Tap*

## **ICT and Islamic Values**

**Foundations of Islamic Values for ICT Development** 257  
*Aznan Zuhid bin Saidin*

**Justification of Voice Recognition System: Case Study of the Quran** 287  
*Akram M. Zeki, Jalel Chebil, Abd Wahab Ishari and Ahmed M. Zeki*

# **Improving the Deployment of Broadband Content Delivery Using an Open Access Approach in a High Speed Broadband Environment in the Klang Valley**

**Zahid Ismail**

Center for IT Advancement (CITA)  
Kulliyyah of Information and Communication  
Technology  
International Islamic University Malaysia  
[zahid@kict.iium.edu.my](mailto:zahid@kict.iium.edu.my)

## **Abstract:**

Content delivery via High-Speed Broadband Fiber-to-the-Home Services in Malaysia has yet to improve the Quality of Experience of the average subscribers as static contents, program menus, and channel packages delivered cannot address relevant and personalized contents to diversified subscribers in their needs and goals. Furthermore, there is no common open service platform to integrate contents from licensed service providers and independent content providers alike. The objective of this research is to examine an open access network strategy that can improve the Quality of Service delivered and increase the level of Quality of Experience of the subscribers. The Open Access Network strategy will allow subscribers the freedom to select any service provider on the