



PROCEEDINGS OF THE ISICO 2013



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CONTENTS

COMMITTEE	v
REFACE	vii
Management, Economics and Business Track	1
<i>Building Successful Environmental Information Systems (EIS)</i>	1
Wahyudi Agustiono	
<i>Analysis and Design Application for Quantifying IT Business Value</i>	7
Stanley Karouw, Hans Wowor	
<i>Does Enterprise Architecture Give Value to e-Government in Developed Countries?</i>	13
M. Ali Hanafiah, Robert Goodwin	
<i>Usability Testing on Flight Searching Website Using Heuristic Evaluation</i>	19
Rianto, Ridi Ferdiana	
<i>Web Tags Formatting with Multilevel Numbering</i>	25
Andrea Stevens Karnyoto, Marius Limpo	
<i>Innovation Diffusion and Adoption of Wilmar's Geographic Information Systems (GIS) in Wilmar's Intra-Organization</i>	31
Kristina Gloria Simanjuntak, Danang Junaedi	
<i>E-Learning User Interface Acceptance Based on Analysis of User's Style, Usability and User Benefits</i>	37
Ramadiani, Rodziah binti Atan	
<i>The Development of KPI for Measuring ICT Support Service Quality</i>	43
Rozi Nor Haizan, N., Rose Alinda, A., Azizah, A.R.	
<i>Web Site Usability Evaluation: An Exploratory Study on the Web Site of Directorate General of Higher Education</i>	49
Imam Azhari, Agus Harjoko	
<i>Applying ITIL Based Software Inside University's ICT Centre toward Continual Service Improvement</i>	55
Tawar	
<i>Cognitive Task Analysis: A Contextual Inquiry Study on Basic Computer and Information Literacy Skills among Physicians</i>	61
Fozia Anwar, Suziah Sulaiman, P.D.D.Dominic	
<i>Measuring Quality of Asian Airline Websites Using Analytical Hierarchy Process: A Future Customer Satisfaction Approach</i>	67
Humera Khan, P.D.D.Dominic	
<i>Practitioners' Validation on Effectiveness of Mobile School Model</i>	73
Ahmad Sobri Hashim, Wan Fatimah Wan Ahmad, Azizah Jaafar, Shahrina Md Nordin	
<i>Factor Analysis: An Applied Approach towards the Adoption of Cloud Computing to Enhance the Healthcare Services in Malaysia</i>	79
P.D.D.Dominic, Kalai Anand Ratnam	
<i>A Model of Feedback Relationships between Software Maintenance and Information Systems Staff Management: A Case of an E-government System</i>	85
Gunadi, Geoffrey A. Sandy, and G. Michael McGrath	
<i>Evaluating the QOS for E-Commerce Architecture Using Proposed WQM Algorithm</i>	92
Riktesh Srivastava	

<i>Private Healthcare in Malaysia: Investigation on Technology Profiles and Technology Acceptance Factors</i>	98
Aliza Sarlan, Rohiza Ahmad, Wan Fatimah Wan Ahmad, P.D.D. Dominic	
<i>Information Technology Governance Using COBIT 4.1 Framework for Supporting Service of Information Technology (Case Study: PT. Pupuk Sriwidjaja Palembang)</i>	104
Stenly Heryudo, Angelina Prima Kurniati, Erda Guslinar Perdana	
<i>User Testing of a System Prototype for Adaptive English Learning using Perturbation Learner Model</i>	110
Nguyen Viet Dung, Suziah Sulaiman, Mohd Fadzil Hassan	
<i>An IT Infrastructure Library (ITIL) Maturity Strategy for Private Cloud Sourcing Models: A Literature Review and Research Methodology Formation</i>	116
Alma Miller, Enrique Campos-Nanez, Pavel Fomin, James Wasek	
<i>An Impact Analysis of Social Media Strategy for a Customer Engagement of an Indonesian Pop Band (ADA Band)</i>	122
Rabekha Delia Angiani, Alva Erwin, Mohammad A. Amin Soetomo, Maulahikmah Galinium	
<i>Analyzing Surabaya City Government E-Procurement Success Using Information Systems Success Model</i>	128
Mudjahidin, Rizka Marsa P, Bambang Setiawan, Hatma Suyotrisongko	
<i>The Customization of the ISACA's Framework as an Audit Model for Large Scale (Enterprise) Web Applications</i>	134
Gede Karya, Veronica S. Moertini	
<i>Comparative Study of E-Government Enterprise Architecture by Secondary Attributes of 3 Asian Countries</i>	140
Khakim Ghazali, Yudho Giri Suahyo	
<i>Internet Center (Warnet) Diffusion in Rural Villages to Sustain Economic Development or Part of Global Big Data Trend?</i>	147
Rudi Rusdiah	
<i>Analyzing the Influence of Information System's Quality, User Satisfaction and Net Benefit of E-Learning Users</i>	155
Aris Kusumawati, Apol Pribadi, Hanim Maria Astuti	
<i>Creating the Document of Software Development Quality Assurance of School Social Network (SSN) based on IEEE 730-2002 Standard</i>	161
Achmad Holil Noor Ali, Ika Nurkhasanah, Hanim Maria Astuti	
<i>Factors affecting the acceptance of Enterprise Resource Planning software: a case study in a manufacturing company</i>	167
Tony Dwi Susanto, Benediktus Kukuh Ganang Indarto, Anisah Herdiyanti	
Education and Curriculum Track	175
<i>Designing an Exciting Self-Regulated, Indigenized and Rhizomatic Courseware Environment</i>	177
Maria Victoria Pineda	
<i>Exploratory Investigation of Potential Signature Pedagogies in the Information Systems Discipline</i>	184
Yenni Merlin Djajalaksana, James A. Eison, Robert F. Dedrick	
<i>Study and Development of Learning Object Repository (LOR) Service in Rural Area Using the Perspective of Product Service System</i>	190
Andrew Fernando Pakpahan	
<i>Factors that Associate with the Selection of Instructional Strategies in Information Systems Discipline</i> .	196
Yenni Merlin Djajalaksana, Robert F. Dedrick, James A. Eison	
<i>E-Learning based on WBLP versus E-Learning Based On WBIS</i>	202
Florentina Yuni Arini, Sunarmi	

<i>Curriculum Structure of the Undergraduate Programs of Information Systems in Indonesia in the Year of 2013</i>	207
Arif Wibisono, Amna Shifia Nisafani	
<i>How to Integrate XBRL into Accounting Curriculum at Banjarmasin State Polytechnic</i>	213
Noor Romy Rahwani	
<i>Dashboard Information System for Student's Character Assessment</i>	219
Dony Saputra, Dedi Royadi, Zainul Hakim	
<i>Let's Keep on Reading: User-Centered Design of an Online Book Loan System for University Students in Bandung</i>	225
Maria Elnymesia Birgita, Johanna Renny Octavia Hariandja	
<i>Implementing Quiz Creator to Improve the Quality of Education</i>	231
Heny Pratiwi, Ekawati Yulsilviana	
<i>Minecraft: A Game as an Education and Scientific Learning Tool</i>	237
Glenn Ekaputra, Charles Lim, Kho I. Eng	
<i>A Proposed Model for Animation of Malay Folktales for Children</i>	243
Norshahila Ibrahim, Wan Fatimah Wan Ahmad, A'fza Shafie	
<i>Evaluating Educational Mobile Games for School Children</i>	249
Sarmad Soomro, Wan Fatimah Wan Ahmad, Suziah Sulaiman	
<i>E-Learning Activity based on EMM and ADKAR Change Management for Elementary Schools</i>	255
Sari Dewi Budiwati, Armein Z. Langi	
Artificial Intelligence and Enterprise Systems Track	261
<i>Design of an Intelligent Warehouse Management System</i>	263
Reza Pulungan, Simon Pulung Nugroho, Nova El Maidah, Tri Bowo Atmojo, Putut Dewanto Hardo, Panggih Pawenang	
<i>Comparison of Intelligent Water Drops and Backtrack Algorithm in Solving Travelling Salesman Problem</i>	269
Indra Maryati, Gunawan	
<i>Supply Chain Management Implementation for Food Security besides Rice (Cassava) Using ERP Software</i>	275
Erma Suryani, Retno Aulia Vinarti, Kukuh Pratama, Radityo Prasetyanto Wibowo	
<i>The Adequate LTE Downlink Scheduling Scheme for Video Streaming Services</i>	282
Ulil S. Zulpratita	
<i>Fuzzy AHP Based Decision Support System for SKTM Recipient Selection</i>	288
Cut Fiarni, Arief Gunawan, Asti Lestari	
<i>Dashboard Marketing System for Student's Enrollment. Case Study : UNIS Tangerang</i>	294
Dony Saputra, Oleh Soleh, Meta Amalya Dewi	
<i>Development of Drowsiness Detection System with Analyzing Attention and Meditation Wave Using Support Vector Machine Method</i>	300
Indoriko Shin, Bambang Setiawan, Febriliyan Samopa, Hatma Suryotrisongko, Faizal Johan Atletiko, Radityo P. Wibowo	
<i>Development of Drowsiness Detector System for Late Night Shift Worker Using Support Vector Machine Method with Neurosky Mindwave Mobile</i>	307
Izzat Aulia Akbar, Febriliyan Samopa, Bambang Setiawan, Hatma Suryotrisongko, Faizal Johan Atletiko, Radityo P Wibowo	
<i>Feature-Based Sentiment Analysis in Online Review with Semi-Supervised Support Vector Machines (S³VMs)</i>	314
Jessie Setiady, Warih Maharani, Rita Rismala	

<i>Academic Mining to Assist the Guardian Mechanism Using Naive Bayes Classifier</i>	320
Veronikha Effendy, Thee Houw Liong	
<i>Path Analysis Method for Identification Enabler of Enterprise Governance in Implementation of Vocational Higher Education Governance</i>	325
Heru Nugroho, Kridanto Surendro	
<i>Design Analysis of the Footsteps Identification through the Recognition of Home Occupant Walking Habits</i>	331
Eko Polosoro, Jazi Eko Istiyanto, Agfianto Eko Putra	
<i>Batik Image Classification Rule Extraction using Fuzzy Decision Tree</i>	337
Anita Ahmad Kasim, Retantyo Wardoyo	
<i>Analysis of Automated Scheduling System Case Study Oral Final Study Examination in Swiss German University</i>	342
James Purnama, Julius Polar, Maulahikmah Galinium	
<i>Dynamic Simulation Model to Reduce Electricity Distribution Losses in Medium and Low Voltage Networks</i>	348
Erma Suryani, Umi Salama, Rully Agus Hendrawan, Achmad Jauhari	
<i>Knowledge Sharing on Post-Harvest Product from Industrial Tree for Business</i>	355
Dian Anubhakti, Basuki Hari Prasetyo, Nazir Harjanto	
<i>A Model of Posted-Price Opaque Booking System Implemented for Indonesian-Market Online Travel Agent. Case Study: Klikhotel.com</i>	361
Niko Ibrahim, Verliyantina	
<i>Twitter Sentiment Analysis and Insight for Indonesian Mobile Operators</i>	367
Hansen Wijaya, Alva Erwin, Amin Soetomo, Maulahikmah Galinium	
<i>Can "Quality of Sleep" Be Evaluated from Hypnogram? - Estimation of Factor Score of Oguri-Shirakawa - Azumi Sleep Inventory by Artificial Neural Network-</i>	373
Tomohiko Igasaki, Yosuke Taniyama, Yudai Matsuda, Nobuki Murayama	
<i>Comparing Classification Algorithm Of Data Mining to Predict the Graduation Students on Time</i>	379
Imam Tahyudin, Ema Utami, Armadyah Ambarowati	
<i>Automatic Demographic Classification of Indonesian Twitter Users</i>	385
Hashfi Rasis, Alva Erwin, James Purnama, Maulahikmah Galinium	
<i>The Application of Extended Weighted Tree Similarity Algorithm in Online Commodity Exchange of Agro Forward Auction Market in Central Java Province</i>	390
Johan J.C. Tambotih, Wiwin Sulisty, Jasson Prestiliano	
<i>Solving University Timetabling Problem Using Harmony Search: a Case Study in STMIK Mikroskil</i>	397
Harrison, Hardy, Ng Poi Wong	
<i>Analyzing Rice Demand and Supply Behavior for Food Availability: a System Dynamics Model. Case Study: Sub-Regional Surabaya, Gresik and Sidoarjo</i>	403
Erma Suryani, Diajeng Permata I.J., Rully Agus Hendrawan, Lily Puspa Dewi	
<i>Recognition of Handwriting Based on Signature and Digit of Character Using Multiple of Artificial Neural Networks in Personality Identification</i>	410
Esmeralda C Djamal, Sheldy Nur Ramdhan, Jeri Saputra	
<i>Virtual Reality: An Alternative Tools for Knowledge Acquisition Process</i>	416
Siti Rohajawati, Dana Indra Sensuse, Astrid Sugiana	
<i>The Comparison of CBA Algorithm and CBS Algorithm for Meteorological Data Classification</i>	423
Mohammad Iqbal, Imam Mukhlash, Hanim Maria Astuti	

<i>Visualization of Intelligent System using Decision Tree and Fuzzy Clustering for Heart Disease Early Detection</i>	<i>429</i>
Wiwik Anggraeni, Achmad Pramono, Retno Aulia Vinarti	
<i>The Influence of Parameter Choice on the Performance of SVM RBF Classifiers for Argumentative Zoning</i>	<i>437</i>
Renny Pradina Kusumawardani, Bambang Riyanto Trilaksono, Masayu Leylia Khodra	
Software Engineering and Design Track	445
<i>Simulation System for Document Image Restoration Using Mean Shift Filtering and Multi Directional Wavelet Transform.....</i>	<i>447</i>
Ridha Sefina Samosir	
<i>Production and Machine Scheduling System Integrated with Materials Requirement Planning</i>	<i>453</i>
Meliana Christianti J., Yogha Satya Utama	
<i>Digital Color Image Encryption Using RC4 Stream Cipher and Chaotic Logistic Map.....</i>	<i>459</i>
Ni G. A. P. Harry Saptarini, Yosua Alberth Sir	
<i>Document Authentication Using Print-Scan Image Watermarking Based on DCT (Discrete Cosine Transform) Algorithm.....</i>	<i>465</i>
Nazori Agani, M. Iman Wahyudi, Riyanto	
<i>Embedding and Extracting Technique for Implementing Image Watermarking Based on DCT (Discrete Cosine Transform).....</i>	<i>471</i>
Irfan, Nazori Agani	
<i>Issues of the Morphological Analysis in Comparison with the Compound Noun Extraction Analysis for a Patent Document.....</i>	<i>477</i>
Kyoko Yanagihori, Kazuhiko Tsuda	
<i>Semantic Analysis of Structured High-definition MPEG-2 Soccer Video Using Bayesian Network.....</i>	<i>483</i>
Jiang Feihu, Hiroyoshi Morita, Akiko Manada	
<i>Developing Web Services for Data Integration and Distribution Presence System for Lecturer, Assistant, and Students using Agile Unified Process.....</i>	<i>491</i>
Fandy Setyo Utomo, Beriliana, Rujianto Eko Saputro	
<i>The Development of Visit Ancol Dreamland with Augmented Reality (VADAR) Mobile Application.....</i>	<i>497</i>
Hery Herawan, Lulu Chaerani Munggaran	
<i>Detection of a Person Awakening or Falling Out of Bed Using a Range Sensor</i>	<i>503</i>
Geer Cheng, Sawako Kida, Hideo Furuhashi	
<i>Implementation of Digital Signage for Digital Communication Media</i>	<i>509</i>
Awan Setiawan, Iwan Abadi, Sheilfiyanti Abdul Rahman	
<i>Metadata for Creating and Displaying Dashboard in XML Schema</i>	<i>514</i>
Rosni Lumbantoruan	
<i>Designing Portal Amazing North Sulawesi Using Pusikom Agile Unified Process Methodology</i>	<i>520</i>
Stanley Karouw, Hans Wowor, Gene Kapantow	
<i>Development System With The Attendance of Content Based Image Retrieval (CBIR)</i>	<i>526</i>
Pandapotan Siagian, Erick Fernando, Sindak Hutaaruk	
<i>Geographic Information System For Mapping Place Of Health Care Using Algorithm A*</i>	<i>532</i>
Pandapotan Siagian, Erick Fernando, Sindak Hutaaruk	
<i>An Holistic Evaluation of Federated SPARQL Query Engine.....</i>	<i>538</i>
Nur Aini Rakhmawati	
<i>Analysis of MySql Server and MySql Cluster on the Cloud Computing</i>	<i>545</i>
Zefriansyah, Fathir Wafda, Teddy Juana, Yuwaldi Away	

<i>Colorectal Cancer Classification using PCA and Fisherface Feature Extraction Data from Pathology Microscopic Image.....</i>	<i>551</i>
Fajri Rakhmat Umbara, Adiyasa Nurfalah, The Houw Liong	
<i>Dashboard for Monitoring Network Operations</i>	<i>557</i>
Eka Stephani Sinambela	
<i>Review on Data Mining Methods for Tuberculosis Diagnosis</i>	<i>563</i>
Rusdah, Edi Winarko	
<i>GPU-Based Parallel Programming for Digital Document Image Classification</i>	<i>569</i>
Refi Sencia Dity, James Purnama, Reggio N. Hartono, Maulahikmah Galinium	
<i>An Interface Model for Information Visualization of Multiple Electronic Health Records.....</i>	<i>575</i>
Muhammad Sheraz Arshad Malik , Suziah Sulaiman	
<i>A Preliminary Study on The Impact of Knowledge Collection Behavior and Creative Intention on Programmer's Creativity.....</i>	<i>581</i>
Aamir Amin, Shuib Basri, Mohd Fadzil B Hassan, Mobashar Rehman	
<i>Campus of Del Polytechnic of Informatics in Geographic Information System Representation</i>	<i>586</i>
Humasak T.A. Simanjuntak	
<i>A Parallel Architecture for Multiple-Face Detection Technique Using AdaBoost Algorithm and Haar Cascade</i>	<i>592</i>
Hadi Santoso, Reza Pulungan	
<i>A Web-Based Tool Support for Automating Software Effort Estimation.....</i>	<i>598</i>
Zhamri Che Ani, Shuib Basri	
<i>Integrating IQ Engines Smartcamera and Google API for Android to Find Books through Google Books</i>	<i>605</i>
Stefanus, James Purnama, Maulahikmah Galinium	
<i>Integrated Application Agent-Based Services.....</i>	<i>611</i>
Susmini Indriani Lestariningati	
<i>Intensive/High Care Unit System for Long-Term Monitoring of Heart Rate Variability</i>	<i>618</i>
Faizal Mahananto, Shugo Kurose, Tomohiko Igasaki, Nobuki Murayama, Jun'ichi Maehara	
<i>Developing Android-Based Personal Emergency Notification System with Global Positioning System as an Alternative Handling for Public Safety.....</i>	<i>624</i>
Widiassa Wijaya, Bambang Setiawan, Hatma Suryotrisongko, Febriliyan Samopa, Nisfu Asrul Sani	
<i>Assessment of Color Levels in Leaf Color Chart Using Smartphone Camera with Relative Calibration</i>	<i>631</i>
Yuita Arum Sari, R V Hari Ginardi, Riyanarto Sarno	
<i>Metrics and Attributes for Assessing the Stability of Handheld Application Usage</i>	<i>637</i>
Amalina Farhi Ahmad Fadzliah	
<i>Privacy and Security in Cloud Environment: A Survey of Recent Development</i>	<i>643</i>
Amal Alsubaih, Alaaeldin Hafez, Khaled Alghathbar	
<i>Developing Independent Data Mart and Analysis Tools as Standalone Application</i>	<i>650</i>
Rully Agus Hendrawan	
Information, Network and Computer Track	625
<i>Secure and Private Content Distribution in the DRM Environment</i>	<i>659</i>
Antonius Cahya Prihandoko, Hossein Ghodosi, Bruce Litow	
<i>Diffusion Analysis of F-function on KASUMI Algorithm</i>	<i>665</i>
Rizki Yugitama, Bety Hayat Susanti, Magfirawaty	
<i>Utilizing Instant Messaging for Real-Time Notification and Information Retrieval of Snort Intrusion Detection System.....</i>	<i>671</i>
Hargyo Tri Nugroho, Bagas Adi Wicaksono	

<i>Online Privacy Awareness using Social Media: A Case Study of Malaysian Youth</i>	676
Kamarul F. Hashim, Ammar Rashid, Shafiz Affendi Mohd Yusof	
<i>Malware Attacks Intelligence in Higher Education Networks</i>	681
Charles Lim, Louis Lukito	
<i>Holistic Approach for Memory Analysis in Windows System</i>	687
K. A. Z. Ariffin, A.K Mahmood, J. Jaafar, S. Shamsuddin	
<i>Implementation Analysis of Simplified AES (S-AES) Algorithm on Matyas-Meyer-Oseas (MMO), Davies-Meyer (DM), and Miyaguchi-Preneel (MP) Schemes using Yuval's Birthday Attack</i>	694
Elena Sabarina, Bety Hayat Susanti, Agus Winarno	
<i>Analysis of the Use of Whirlpool's S-box, S1 and S2 SEED's S-box in AES Algorithm with SAC Test</i>	700
Novita Angraini, Bety Hayat Susanti, Magfirawaty	
<i>Improving TCP Fairness Flows in Wireless Ad Hoc Networks</i>	706
Hatim Mohamad Tahir, Abbas Md Said, Alex W.M. Tan	
General Topics in Information Systems Track	711
<i>Twitter Used by Indonesian President: An Sentiment Analysis of Timeline</i>	713
Paulina Aliandu	
<i>Failure to Launch: Scope Creep and Other Causes of Failure</i>	718
Samiaji Sarosa	
<i>A Theoretical Knowledge Transfer Model in Disaster Management in Malaysia</i>	724
Kamarul F Hashim, Mazida Ahmad	
<i>Optimum Sizing of Photovoltaic-Wind Power Hybrid System For Small Information System Center in Perlis, Malaysia</i>	730
M. Irwanto, Y.M. Irwan, N. Gomesh, S. P. Hadi	
<i>Social Evolution in Human Relations Behavior of Utilizing Facebook</i>	735
Syahida Mohd Nazri, Zulkifli Abd. Latiff	
Appendix: Poster Abstracts	A-1
<i>Ekispedia Series, the Innovative Islamic Economics Learning Media Software-Based Mobile Phones</i>	A-3
Robi Awaluddin, Nisa Rahmah Suci, Tia Meida Sopian	
<i>The Implementation of Information Security Management System (ISMS) ISO 27001:2005 on Perbanas University</i>	A-5
IGN Mantra	

A Model of Posted-Price Opaque Booking System Implemented for Indonesian-Market Online Travel Agent. Case Study: Klikhotel.com

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E-commerce

ABSTRACT

The subject of this research is to find out the most suitable of opaque selling strategy without diluting hotel brand and pricing policy to be implemented in Klikhotel.com, an Indonesian-based online travel agent (OTA).

The starting point of the research is a literature study in opaque selling theory, roles of OTA, and behavior study of Indonesian online market. It is followed by choosing a potential opaque selling mechanism and analyzing OTAs which have applied this mechanism. After analyzing similar systems, an adapted system is created for the current system of Klikhotel.com. It is used as a simple test market to measure the feasibility of a new product from customer's perspective.

We design a system that is less opaque to adjust the Indonesian market that still require photos and reviews in decision making prior to booking a hotel. Our design results in an additional tool in the Klikhotel.com extranet system which called 'mystery hotel' promotion, whereas for the customer module, we design that the opaque hotels displayed in a higher position than the non-opaque one to increase conversion rates. The opaque selling mechanism using this posted price strategy has been tested to Klikhotel.com current customers and has shown a positive result.

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1. INTRODUCTION

As a local online travel agent in Indonesia, Klikhotel.com strives to give the best service to its customers. One factor that has proven time to time that could bring customer satisfaction for an online travel agent is pricing competitiveness. Another five factors that are examined to measure customer satisfactions, including: ease of booking, usefulness of the information on the web site, availability of booking options/travel packages, appearance/design of web site, and ease of navigation [1].

Price as a big factor that influence on hotel purchases is also convinced by a polling that was held by Travelocity in 2008 [2]. Overall respondents report room rate having an average influence of 48% when selecting a hotel. About 21% respondents said best locations was the main criterion when choosing a hotel, while 14% of them mentioned the need of customer reviews. Preferred hotel chain is also important to 11% of respondents.

Moreover, because Klikhotel.com target market is Indonesian, price factor is even more important compared to a more developed country. Based on an Accenture research [3], the majority of Indonesian's consumers tend to be middle-income earners. Indonesian consumer behavior may differ from those in developed markets, since most shoppers are both highly price conscious and exhibit strong brand loyalties.

In order to get the best room rate, Klikhotel.com always looks for a creative way to negotiate a big discount from its hotel suppliers. One possible way to get it is a strategy of selling hotel's distressed inventory, defined as rooms remaining in inventory very close to the day of arrival with limited options to sell [4] and have a big chance to be unoccupied for a night so it may lose all its value for that night [5].

However, selling hotel rooms using a big discount scheme needs a well planned strategy. Hotels need a mechanism to sell hotel rooms at a discount price without destroying their own pricing structure. Fortunately, technology advancement brought by electronic commerce has enabled hotels to employ creative selling strategies called as an opaque selling. Opaque selling is the practice of offering travel inventory such as hotel rooms, airline, tickets, or car rentals at discounted prices while hiding the identity of the supplier

until after the purchase has been completed [6]. Hotwire.com and Priceline.com are the most important companies having successfully developed this strategy in the US market. They have developed opaque selling, in which the services' characteristics are concealed (hotel or airlines brands, exacts hotels' location or travel schedule) until the payment is completed [7].

However, the opaque strategies adopted by both companies are not necessarily suited to the characteristics of the customer in Indonesia. Therefore, the goal of this research is to find out the best practice of opaque selling strategy for Indonesian market without jeopardizing hotel's brand and pricing policy. The strategy is modeled to be implemented as an additional promotion tool in Klikhotel.com. This model is basically a proposed user interface for both Klikhotel.com supplier and customer modules that can be well integrated into the current transparent booking system.

2. RELATED WORKS

a. Opaque selling strategy

Opaque selling helps getting rid in the last minute of distressed inventories without exposing the brand as would be the case under discounted transparent rates. It is also used to target price sensitive consumers who are not too concerned about the specifics of their travel plans [8].

Two different selling mechanisms are utilized by opaque channels: Posted Price (PP), where the sales channel sets a policy take-it-or-leave-it retail price, and Name-Your-Own-Price (NYOP), where the sales channel accepts or rejects customers' bids and profits from the difference between the bids and the wholesale prices [14].

Opaque products typically go on sale only very close to the last minute time, i.e., after consumers have bought in the non-opaque channel but the hotel still have some unsold inventory. The hotels can accomplish opaque selling through an intermediary that obtain products from hotels and sell them to maximize their own profits. Thus, the opaque selling strategy is an essential tool for unsold room clearance [9]. Moreover this strategy benefits to get rid of rate wars amongst competition, and protects rate integrity. Based on best rate guaranteed policy, hotels match any rate for the same room and conditions a guest finds on a different distribution channel. However, that term does not apply to opaque rates [2].

The level of opacity varies across different opaque channels as some choose to offer cancellation opportunities (Lastminute.com), provide user generated feedback (Hotwire.com), or list some of the amenities offered by the service provider. Similarly the degree of opacity may also be impacted by the market, as markets with fewer similar competitors tend to have decreased opacity over markets with a larger number of service providers [10].

Although there are many researchers conducted in the last several years, there is still much disagreement regarding the economic benefits of opaque selling. This is because introducing opaque offerings benefits a hotel only if the incremental revenue from opaque sales exceeds the revenue loss from the cannibalization of customers who are willing to pay for a non-opaque product, but end up purchasing an opaque one. This is particularly relevant in the online retailer, where they only need a little effort to search for opaque offerings [11].

b. The role of online travel agent (OTA) in opaque selling

Opaque online channel offer hotels a convenient way to segment customers and distribute discounted products without cannibalizing full priced products. The opaque channels segment customers because regular full price paying customers desiring to stay at the hotel of their choice with full cancellation flexibility are different from those willing to purchase the discounted, non-refundable opaque product at the unknown hotel [1]. Opaque online channel can profit from such differences despite the fact that the opaque feature virtually erases product differentiation and thus intensifies competition in price sensitive market. It can help hotels reach new price sensitive consumers who otherwise remain outside their market. The low price of opaque services enables hotels to attract low value customers who are sensitive to price but less sensitive to service characteristics. On the other hand, the opaque feature prevents regular customers from switching to opaque channels because they would prefer to know hotel details [12].

Hotels can use OTA as revenue management tools. The OTA can be utilized in 3-ways: by selling the room-only rates, package (for example: flight + hotel) and distressed rates with or without opaque strategy. For example, hotels can take the room-only rates and use them as a standard occupancy that can be open and closed at anytime. They take the package rates (flight + hotel) for business customers in which the booking window is further out because they included a flight. Lastly, the distressed rates (the highest discounted rates) can be used as desperation rates for when they have weak occupancy, a group cancellation or room block drop-offs. The distressed rates selling may be combined with the opaque strategy if they prefer

to protect their brand. Having the ability to run all of these rates puts the hotel in front of the customer with any trip situation (business, vacation or last minute) [2].

c. Indonesian online consumer shopping behaviour for hotel booking

According to a survey research conducted to 470 respondents in Indonesia, hotel was one of the most products bought online, along with travel arrangement, transportation ticket and service banking [13]. Based on survey's result analysis, demographic factors that have influence in hotel's online purchase are age and expenses. Most hotel purchases was done by customers aged 30-39 or having expenses per month more than IDR 5,000,000.

The survey also studied customer motivations that affect online purchase. This motivation was grouped into 3 parts: satisfaction, review and leisure. Factors that contribute to each motivation could be seen in detail in table 1. It is shown that dominant motivations in frequent online purchase are DECM7, DECM8, DECM9, DECM10, DECM11 and DECM13. The strongest motivations found between them are DECM9 and DECM13, which are online reviews for a product and the quality of product's images.

Table 1. Factor of motivation in online shopping

Factors	Motivation in online shopping	
Motivation Satisfy	DECM1	Try to find a specific product
	DECM3	Choose an online shop that I have been experienced before
	DECM4	Often do online shop if the website is easily to use
	DECM5	Often do online shop if the website is attractive
	DECM6	Often do online shop if there is an adequate information about the product
	DECM7	Often do online shop if the website give useful additional information
	DECM12	Often do online shop if the website is secured
	DECM13	Often do online shop if product's photos are vivid, interesting, good quality
	DECM14	Often do online shop the website has a good customer service
Motivation Review	DECM8	Don't do online shop before reading online review
	DECM9	Online review helps for searching a proper product
	DECM10	Online review helps for buying decision
Motivation Leisure	DECM2	Impulsive shopping in online shop
	DECM11	Use a social media website to help a decision making

3. RESEARCH METHOD

In this research we conduct 5 steps as following:

1. The starting point of the research is a literature study in opaque selling theory, the role of OTA, and behavior study of Indonesian online market.
2. Choosing an opaque selling strategy that will be implemented: Posted Price or Name Your Own Price.
3. Finding, choosing and studying the chosen online travel agent which has an opaque selling system, i.e. Hotwire, Lastminutetravel and Wotif. The study give us a better understanding about how to display an opaque product-which hotel's attributes are hidden, as well as to find out the opaque product's selling procedure.
4. After analyzing similar systems, an adapted system is created to the current system of Klikhotel.com. The adapted system is used as a simple test market to measure the feasibility of a new product from customer's perspective.
5. Analyzing and designing a proposed system that suitable for Indonesian market. The main concerns are displaying an opaque product to the customers and propose a business process to guarantee the quality of opaque products. We also design a promotion tool to enable hotel suppliers submitting opaque pricing, and propose an adjustment to integrate opaque booking system to Klikhotel.com current system.

4. RESULTS AND ANALYSIS

In this section, we explain the results of research that comprises two parts: analysis and design. The analysis part consists of analysis of a similar and a proposed system. The design part consists of user interface design for the front end (customer module) and the back end (supplier module).

We choose the posted price mechanism because the way it works does not require a lot of changes to current Klikhotel.com business process. The opaque product will be displayed in the same way as the regular one with several omitted attributes such as hotel address, descriptions, and exterior photos.

a. Analysis of similar systems

We compare three opaque travel sites in this research: Lastminutetravel, Hotwire and Wotif. The goal is to find out how to display the opaque products and how rules and restrictions apply to them.

Table 2. Comparison of opaque booking system

	Hotwire	Wotif	Lastminutetravel
Data displayed	The hotel star rating General area Hotel map area(region)	Hotel star rating General area Hotel amenities Hotel amenities Hotel general description	Hotel star rating General area Hotel map area (region) Hotel amenities Hotel general description Room pictures only Limited information of review
Data hidden	Hotel brand Hotel specific address Hotel picture Hotel amenities Hotel general description Room pictures only Guest review	Hotel map Hotel brand Hotel specific address Hotel picture	Hotel brand Hotel's specific address Hotel's picture (front building, facilities, etc)
Rules and restriction	All bookings are final and cannot be changed, refunded, exchanged, cancelled, or transferred to another party	No Cancellations or Changes	Cancellation policy applies

Table 2 shows that the most opaque product is provided by Hotwire, while Lastminutetravel provides the less opaque one. In general, they hide all attributes that can directly identify the hotel such as exact location/map, hotel brand/name, and specific address.

b. Testing of opaque selling and market survey

The opaque booking interface that can be easily adapted to current Klikhotel.com system is the one provided by Wotif. Thus, we create several opaque products in the current Klikhotel.com manually based on Wotif. These opaque products are generated as new hotels with a unique hotel ID, and they are considered as a different hotel and do not have any relations to the transparent hotel (the real hotel). The lack of such system is that the voucher cannot be generated automatically when the customer books the hotel. The voucher must be created manually using a special procedure where the admin has to manually match the opaque hotel with the transparent one, and as a consequence, instant bookings are not possible.

Nevertheless, after few trials of selling opaque products in about 2 months, the result is considerably positive. There are 25 paid orders in total sales for about IDR 27 Million. It shows a good sign that this kind of promotion is accepted by Klikhotel.com customers.

c. Analysis of a proposed system

Based on Table 1, we formulize for our system that DECM7 (product information) will be represented as hotel profile, hotel facilities and room amenities, and hotel map, whereas DECM8, DECM9 and DECM10 (product review) will be represented as review rating and selected reviews with limited contents than can give tolerable information to customers during searching and decision making process. In addition, we also use DECM13 (product image) to be implemented as a very limited room images.

Table 3 shows the data displayed, data hidden, as well as the cancellation policy of the proposed opaque system in Klikhotel.com

Table 3. Comparison of opaque booking system

Data displayed	The hotel star rating, general area, hotel map area, room amenities, hotel general description, room pictures, and limited information of review
Data hidden	Hotel brand name, specific address, exterior pictures (front building, facilities, etc)
Reservation boundaries	All bookings are final and cannot be changed, refunded, exchanged, cancelled, or transferred to another party

d. System Design and business process

Figure 1 shows the promotion tool provided for Klikhotel.com supplier in which they can submit their opaque pricing strategy. After a successful submission, the system will generate a new property "Mystery Hotel" for its counterpart transparent hotel that has a relation in the database. To ensure the quality of the submitted hotel, Klikhotel.com has an acceptance policy based on several factors such as average review rating, best available rates (discount price), and the proximity to places of interest.

1. Travelling Period : until
Valid for next : days

2. Do you want to put black-out period?
☐ No
☐ Yes

3. Is this promotion applicable to any days of the week?
☐ Yes
☐ No

4. Please choose applicable room type for this promotion:

Choose	Room Type	Current Average Price
<input type="checkbox"/>	Superior	500.000
<input type="checkbox"/>	Deluxe	750.000
<input type="checkbox"/>	Executive	900.000
<input type="checkbox"/>	President	1.500.000

5. Room Inclusions

Room Type	Room Inclusions
Superior	include breakfast for 2 persons
Deluxe	include breakfast for 2 persons
Executive	include breakfast for 4 persons
President	include breakfast for 6 persons

6. Discount Scheme

0 by Percentage Discount 0 by Amount Discount (per night)

Room Type	Discount Rate at U-Day after the following hour				D+1 to D+14	D+15 to D+27
	22:00	20:00	18:00	16:00		
Superior	60%	50%	40%	20%	20%	10%
Deluxe	60%	50%	40%	20%	25%	10%
Executive	60%	50%	40%	20%	25%	20%
President	70%	60%	40%	40%	25%	20%

Figure 1. Promotion Tool for Submitting Opaque Pricing

For each booking of a mystery hotel (i.e. Mystery Hotel A) will be processed automatically as its original property (i.e. Hotel A) at the back end system without the need of manual processes or procedures. To maximize the sales, Klikhotel.com system will generate many auto-schedulers in the application server to maintain the discount schemes of each hotel. As for the database [15], there will be a slight change in the structure where we need to add a new "Mystery Hotel" table that has a one-to-one relation to the "property" table and also add an additional promotion type.

Figure 2 shows the design of opaque hotel in customer module. As we can see that the hotel name is hidden with a limited room pictures while still give access to a limited hotel map and guest reviews. For customer perspective, there are no major changes in the booking/business process to make sure they will not experience any difficulties when browsing the website

The screenshot shows the Klikhotel.com interface. At the top, there's a navigation bar with links like Home, Booking, Check-in, and others. Below that, a search bar and a summary of the booking are visible. The main section is a table listing different room types and their corresponding prices. The table has columns for Room Type, Price, and a 'Book' button. The room types listed are Superior, Deluxe, Executive, and President. The prices are shown in a grid format. At the bottom, there's a map and some guest reviews.

Figure 2. Opaque hotel display in customer module

5. CONCLUSION

This research has produced an analysis and design of opaque pricing mechanism for Klikhotel.com which hides hotel brand name, specific address, and exterior picture. Adapted to Indonesian market, we deliberately design the system that the opacity level is not too high or too low because of the trust of Indonesian consumers are still influenced strongly by hotel room photos and reviews. These photos and reviews are selected manually to retain a degree of confidentiality, but still give a sense of trust to the customers. Our design results in an additional promotion tool in the Klikhotel.com supplier extranet system



which called 'mystery hotel' promotion, whereas for the customer module, we design that the opaque hotels will be displayed in a higher ranking/position of the non-opaque hotel to increase conversion rates.

For further development, we suggest automatic filtering/acceptance for opaque submission in the next research as well as another way of opaque mechanism such as online bargaining booking that intentionally hide the room rates rather than the hotel information.

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