

THE EFFECTS OF VALUE INNOVATION ON
COMPANIES' PERFORMANCE IN YEMEN
TELECOMMUNICATIONS INDUSTRY

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DOCTOR OF PHILOSOPHY

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I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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ABSTRAK

Inovasi dikenal pasti sebagai kunci kepada perkembangan dan kelangsungan industri telekomunikasi. Globalisasi, liberalisasi, dan penswastaan adalah terma yang paling berkait rapat dengan sektor ini. Hal ini seterusnya menyebabkan persaingan yang sengit dan mencabar bagi firma telekomunikasi dalam meluaskan nilai pegangan saham mereka, menambahkan jumlah pelanggan, jualan, dan nilai keuntungan. Strategi baharu untuk berjaya adalah dengan memperkenalkan inovasi yang berbeza bagi memecah persaingan dan mencipta pasaran baru tanpa persaingan. Perkara ini dapat dilaksanakan melalui peruntukan dalam pelbagai perkhidmatan inovatif yang bernilai tinggi di mana ianya dapat diterjemahkan kepada kepuasan pelanggan dan peningkatan kesetiaan pelanggan. Kajian ini bertujuan untuk mencadangkan model teoretis baharu bagi memperkasakan amalan nilai inovasi. Kajian ini meneliti sumbangan nilai inovasi dalam industri telekomunikasi di Yaman dan kesannya ke atas kepuasan pelanggan, kesetiaan pelanggan, prestasi firma yang terlibat, dan pertumbuhan mampan firma yang terlibat. Reka bentuk kajian ini ialah gabungan di antara kaedah penyelidikan kuantitatif dan kualitatif. Pertama, borang kaji selidik digunakan untuk mengumpul data daripada 304 responden yang terdiri daripada penyedia perkhidmatan mudah alih di Yaman bagi mengkaji kesan inovasi nilai terhadap kepuasan pelanggan, kesetiaan pelanggan, prestasi firma terlibat, dan pertumbuhan mampan firma terlibat. Data yang diperolehi dan model cadangan diukur dan dianalisis menggunakan perisian *Statistical Package for the Social Sciences* (SPSS) dan *SmartPLS*. Hasilnya, dapatan kajian ini berjaya membuktikan model penyelidikan teoretis secara empirikal dan ini mengesahkan kepentingan nilai inovasi untuk meningkatkan prestasi syarikat dan pertumbuhan secara mampan, iaitu dengan menggalakkan kepuasan dan kesetiaan pelanggan. Kedua, sepuluh temubual separa berstruktur dengan eksekutif kanan syarikat telekomunikasi dan pakar telah dijalankan untuk meneroka dengan lebih lanjut isu berkaitan telekomunikasi di Yaman dan mengetahui dengan lebih mendalam masalah serta kesulitan berkaitan inovasi di dalam industri telekomunikasi di negara tersebut. Data yang diperolehi telah dianalisis menggunakan analisis diskriptif, pengkodan, dan analisis kandungan untuk mendapatkan hasil temubual yang dijalankan dan ianya juga berperanan sebagai asas penyediaan yang kukuh kepada maklumat serta medium mendapatkan fakta tentang keadaan pengurusan inovasi dalam industri telekomunikasi di Yaman. Seterusnya, 19 tema sampingan telah dibincangkan dan disintesis kepada empat kategori iaitu amalan pengurusan inovasi dan cabaran serta kesukaran yang dihadapi organisasi; pertambahan dan liberalisasi pasaran Pertubuhan Perdagangan Dunia (WTO); penerimaan nilai inovasi; serta aspirasi dan jangkaan masa hadapan berkaitan dengan inovasi. Akhir sekali, hasil dan dapatan kajian ini akan digunakan bagi mencadangkan satu pelan tindakan secara efisien yang dapat meningkatkan aktiviti dan nilai inovasi, menggalakkan kepuasan dan kesetiaan pelanggan, menambah baik prestasi syarikat, dan memupuk pertumbuhan industri yang mampan.

ABSTRACT

Innovation has been recognized to be the key to growth and survival for the telecommunications industry. Globalization, liberalization, and privatization, which are the most associated terms with this sector, resulted in fierce competition and make it more challenging for telecommunications firms to expand their market share, and hence, increase customer base, sales volume, and ultimately profit. The new strategy to succeed is innovation differentiation which leads to break out of the competition and create an uncontested market. That can be done by the provision of high-value innovative services which translate into consumer satisfaction and promote customer loyalty. This study aims to propose a new theoretical model to enhance the value innovation practices. It studies the contribution of value innovation in the telecommunications industry in Yemen and its effects on customer satisfaction, customer loyalty, firm's performance, and firm's sustainable growth. Accordingly, the study adopts a combination of quantitative and qualitative research design. Firstly, a questionnaire survey was conducted and data collected for 304 respondents of mobile service providers in Yemen to examine the effects of value innovation on customer satisfaction, customer loyalty, firm's performance, and firm's sustainable growth. Besides that, the generated data and proposed model were measured and analyzed by using the Statistical Package for Social Science (SPSS) and SmartPLS software. In consequence, the results empirically validated the theoretical research model confirming the significance of value innovation approach to achieve company's performance and sustainable growth through promoting customer satisfaction and loyalty. Secondly, 10 semi-structured interviews for telecommunications senior executives and experts were conducted to deep dive into Yemen telecommunications issues and underlying problems and difficulties regarding innovation in the Yemen telecommunications industry. The generated data were analyzed using descriptive analysis, coding, and content analysis to report the outcomes of conducted interviews and provide a concrete foundation of information and facts of the nature of innovation management in the Yemen telecommunications industry. Thus, 19 sub-themes were synthesized and discussed with relevant to four main categorized themes including *innovation management practices and organizational difficulties and challenges*; *World Trade Organization (WTO) accession and market liberalization*; *value innovation adoption*; and *future aspirations and expectations with regards to innovation*. Finally, the integrated results and outcomes were employed to propose a roadmap that could efficiently enhance value innovation activities, promote customer satisfaction and loyalty, improve companies' performance, and foster sustainable growth.

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LIST OF ABBREVIATIONS

4G	Fourth Generation of Broadband Cellular Network Technology
5G	Fifth Generation of Broadband Cellular Network Technology
ARPU	Average Revenue Per User
AVE	Average Variance Extracted
B2B	Business-to-Business
BUC	Business Uniqueness for Customer
BUF	Business Uniqueness for Firm
CDMA	Code-Division Multiple Access
CFA	Confirmatory Factor Analysis
CL	Customer Loyalty
CP	Company's Performance
CRM	Customer Relationship Management
CS	Customer Satisfaction
CV	Customer Value
DV	Dependent Variable
GTI	General Telecommunications Institute
IV	Independent Variable
KPI	Key Performance Indicator
LTE	Long-Term Evolution
MTIT	Ministry of Telecommunications and Information Technology
MVAS	Mobile Value-Added Service
OTT	Over-The-Top
PLS	Partial Least Squares
PSTN	Public Switched Telephone Network
PTC	Public Telecommunications Corporation
R&D	Research and Development
RBV	Resource-Based View
SEM	Structural Equation Modelling
SG	Sustainable Growth
SPSS	Statistical Package for Social Science
SV	Shareholder Value

TQM	Total Quality Management
UMTS	Universal Mobile Telecommunications Service
VAS	Value-Added Services
VI	Value Innovation
VIF	Variance Inflation Factor
VOIP	Voice Over Internet Protocol
WTO	World Trade Organization

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