

**AN EXPLORATORY STUDY OF MARKETING FLEXIBILITY  
IN INDIAN TELECOMMUNICATION INDUSTRY**

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**BHARTI SCHOOL OF TELECOM TECHNOLOGY AND  
MANAGEMENT**

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**AN EXPLORATORY STUDY OF MARKETING FLEXIBILITY  
IN INDIAN TELECOMMUNICATION INDUSTRY**

by

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**Submitted**

**in fulfillment of the requirements of the degree of Doctor of Philosophy**

**to the**

**Department**



**BHARTI SCHOOL OF TELECOMMUNICATION  
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**(July 2019)**

## CERTIFICATE

This is to certify that the thesis entitled “**An Exploratory Study of Marketing Flexibility in Indian Telecommunication Industry**” being submitted by **Mr. Anshul Yadav** to the Indian Institute of Technology Delhi for the award of the degree of Doctor of Philosophy (Ph.D.) is a record of bona fide original research work carried out by him. He has worked under my guidance and supervision and has fulfilled the requirements for the submission of the thesis, which has attained the standard required for a Ph.D. degree of the Institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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# To Beloved Guruji

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**(Anshul Yadav)**

## **ABSTRACT**

The anticipated convergence of advanced communications technologies like 5G, (M2M) Machine to Machine, AI (Artificial Intelligence) and Robotics have sown the seed for new use cases across industries. This coupled with changing customer preferences, competition, and saturated markets, makes the telecommunications business more complex in times to come. The consolidation in the telecom industry has forced several service providers to merge or exit the business altogether. Agility concerns of organizations in high growth telecommunications industry provide the relevance for this study. This study finds its objective in developing Marketing Flexibility framework for Indian telecommunications service providers contributing to enhanced marketing performance.

The extensive literature review of the last two decades reveals that flexibility concepts have been widely researched and practiced in the area of manufacturing significantly explored in business management areas except in the marketing domain. Flexibility in marketing is scanty explored, and in the telecommunications industry, it is just a beginning. The recent studies in the area of marketing flexibility are limited to exploring the applicability of marketing concepts in various sectors, out of which automobile has got the initial attention of researchers. The significant contribution of contemporary researchers in the area of marketing flexibility has been towards developing the scale for measuring flexibility and developing marketing flexibility matrices.

This study is conducted in four phases. In the first phase, the literature review, the context-specific issues, and the objective of the research study were delineated. As stated above the purpose of the study is to develop a Marketing Flexibility framework for Indian telecommunications service providers. The second phase constitutes the exploratory study. A qualitative approach has been selected for the investigation to explore nuances and more in-

depth understanding of the marketing flexibility concept. The grounded theory methodology in-depth interviews and semi-structured interviews were used to explore the factors for marketing flexibility. Total interpretive structural modeling (TISM) and Modified TISM is executed to develop a hierarchical relationship between the identified factors. The MICMAC analysis was done to ascertain the driver power and driving power of the factors identified for developing marketing flexibility. In the third phase, cases studies on Indian telecom service providers are prepared to validate the research findings and bring in the research rigor. Finally, discussion and conclusion constitute the fourth phase of the study. The method triangulation is used to carry out synthesis and findings and results.

Ten factors were identified for developing Marketing Flexibility framework for Indian telecommunications service providers. The factor marketing intelligence has emerged as the most critical factor to develop marketing flexibility. The other elements are customer contextual usage pattern, emerging segments, process automation, availability of access network, tariff and differentiated offering, flexible promotions, customer satisfaction, increase in customer acquisition and increase in ARPU (Average Revenue Per User). The factor marketing intelligence, customer contextual usage pattern, emerging segments, process automation and availability of access network are the driver factors while flexible promotion, customer satisfaction, increase in customer acquisition and increase in ARPU are dependent factors. Tariff and differentiated offerings are identified as the linkage factor. The flexibility interventions in marketing operations of the Indian telecom service providers can be planned using these marketing flexibility factors.

The study has contributed to the body of knowledge and as well as for the practitioners in the telecommunications industry. These are highlighted in the last phase of the research. To conclude, this study can be considered as the bedrock for developing Marketing Flexibility framework and research in the Indian context.

## सार

5G, (M2M) मशीन मशीन, एअर इंडिया (कृत्रिम खुफिया) और रोबोटिक्स जैसी उन्नत संचार प्रौद्योगिकियों के प्रत्याशित अभिसरण ने उद्योगों में नए उपयोग के मामलों के लिए बीज बोया है। यह ग्राहक वरीयताओं, प्रतिस्पर्धा, और संतृप्त बाजारों को बदलने के साथ मिलकर, आने वाले समय में दूरसंचार व्यवसाय को और अधिक जटिल बनाता है। दूरसंचार उद्योग में मजबूती ने कई सेवा प्रदाताओं को व्यवसाय को पूरी तरह विलय या बाहर निकलने के लिए मजबूर कर दिया है। उच्च विकास दूरसंचार उद्योग में संगठनों की चपलता चिंताओं इस अध्ययन के लिए प्रासंगिकता प्रदान करते हैं। यह अध्ययन भारतीय दूरसंचार सेवा प्रदाताओं के लिए विपणन लचीलापन ढांचा विकसित करने का अपना उद्देश्य पाता है जो विपणन निष्पादन में योगदान दे रहा है।

पिछले दो दशकों की व्यापक साहित्य समीक्षा से पता चलता है कि लचीलापन अवधारणाओं व्यापक रूप से शोध किया गया है और विनिर्माण के क्षेत्र में काफी विपणन डोमेन को छोड़कर व्यापार प्रबंधन क्षेत्रों में पता लगाया अभ्यास। विपणन में लचीलापन अल्प रूप से पता लगाया है, और दूरसंचार उद्योग में, यह सिर्फ एक शुरुआत है। विपणन लचीलापन के क्षेत्र में हाल के अध्ययन विभिन्न क्षेत्रों में विपणन अवधारणाओं की प्रयोज्यता की खोज करने के लिए सीमित हैं, जिनमें से ऑटोमोबाइल शोधकर्ताओं के प्रारंभिक ध्यान मिल गया है। विपणन लचीलेपन के क्षेत्र में समकालीन शोधकर्ताओं का महत्वपूर्ण योगदान लचीलापन को मापने और विपणन लचीलापन matrices के विकास के लिए पैमाने के विकास की दिशा में किया गया है।

यह अध्ययन चार चरणों में किया जाता है। पहले चरण में, साहित्य समीक्षा, संदर्भ-विशिष्ट मुद्दे और शोध अध्ययन के उद्देश्य को रेखांकित किया गया। जैसा कि अध्ययन के उद्देश्य से ऊपर बताया गया है, भारतीय दूरसंचार सेवा प्रदाताओं के लिए विपणन लचीलापन ढांचा विकसित करना है। दूसरे चरण में अन्वेषणात्मक अध्ययन का गठन किया गया है। बारीकियों और अधिक इन-viii का पता लगाने के लिए जांच के लिए एक गुणात्मक दृष्टिकोण का चयन किया गया है

विपणन लचीलापन अवधारणा की गहराई से समझ। आधारित सिद्धांत पद्धति में गहराई से साक्षात्कार और अर्द्ध संरचित साक्षात्कार विपणन लचीलापन के लिए कारकों का पता लगाने के लिए इस्तेमाल किया गया। अभिज्ञात कारकों के बीच पदानुक्रमिक संबंध विकसित करने के लिए कुल व्याख्यात्मक संरचनात्मक मॉडलिंग (टीआईएसएम) और संशोधित TISM निष्पादित किया जाता है। MICMAC विश्लेषण विपणन लचीलापन विकसित करने के लिए पहचान की कारकों की चालक शक्ति और ड्राइविंग शक्ति का पता लगाने के लिए किया गया था। तीसरे चरण में, भारतीय दूरसंचार सेवा प्रदाताओं पर मामले अध्ययन अनुसंधान निष्कर्षों को मान्य करने और

अनुसंधान कठोरता लाने के लिए तैयार हैं। अंत में, चर्चा और निष्कर्ष अध्ययन के चौथे चरण का गठन. विधि त्रिकोणीय संश्लेषण और निष्कर्षों और परिणामों को बाहर ले जाने के लिए प्रयोग किया जाता है।

भारतीय दूरसंचार सेवा प्रदाताओं के लिए विपणन लचीलापन ढांचा विकसित करने के लिए दस कारकों की पहचान की गई थी। कारक विपणन आसूचना विपणन लचीलापन विकसित करने के लिए सबसे महत्वपूर्ण कारक के रूप में उभरा है। अन्य तत्व ग्राहक प्रासंगिक उपयोग पैटर्न, उभरते क्षेत्रों, प्रक्रिया स्वचालन, अभिगम नेटवर्क की उपलब्धता, टैरिफ और विभेदित पेशकश, लचीला प्रचार, ग्राहक संतुष्टि, ग्राहक अधिग्रहण में वृद्धि और वृद्धि कर रहे हैं ARPU में (औसत आय प्रति उपयोगकर्ता). कारक विपणन खुफिया, ग्राहक प्रासंगिक उपयोग पैटर्न, उभरते क्षेत्रों, प्रक्रिया स्वचालन और पहुँच नेटवर्क की उपलब्धता चालक कारक हैं, जबकि लचीला संवर्धन, ग्राहक संतुष्टि, ग्राहक अधिग्रहण में वृद्धि और ARPU में वृद्धि निर्भर कारक हैं. टैरिफ और विभेदित प्रसाद को लिंकेज फैक्टर के रूप में पहचाना जाता है। इन विपणन लचीलापन कारकों का उपयोग करते हुए भारतीय दूरसंचार सेवा प्रदाताओं के विपणन प्रचालनों में लचीलेपन के हस्तक्षेप की योजना बनाई जा सकती है।

अध्ययन ज्ञान के शरीर के लिए योगदान दिया है और साथ ही दूरसंचार उद्योग में चिकित्सकों के लिए. इनपर शोध के अंतिम चरण में प्रकाश डाला गया है। निष्कर्ष निकालना, इस अध्ययन को भारतीय संदर्भ में विपणन लचीलापन ढांचे और अनुसंधान के विकास के लिए आधार के रूप में माना जा सकता है।

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## NOMENCLATURE

AI	Artificial Intelligence
AGR	Adjusted Gross Revenue
ARPU	Average Revenue Per User
CMO	Chief Marketing Officer
CDMA	Code Division Multiple Access
COO	Chief Operating Officer
CSD	Customer Service Delivery
GDP	Gross Domestic Product
DOT	Department of Telecommunication
EBIDTA	Earnings Before Interest Depreciation Tax and Amortization
FWA	Fixed Wireless Terminal
GR	Gross Revenue
GSM	Global System for Mobile Communications
HRM	Human Resource Management
ILD	International Long Distance
IoT	Internet of Things
ISM	Interpretive Structural Modeling
ISP	Internet Service Provider
ITU	International Telecommunications Union
LCO	Local Cable Operator
LF	License Fee
LTE	Long Term Evolution
M2M	Machine to Machine

MNP	Mobile Number Portability
MoU	Minutes of Usage
MVNOs	Mobile Virtual Network Operators
NLD	National Long Distance
PBT	Profit Before Tax
QoQ	Quarter on Quarter
SCM	Supply Chain Management
TISM	Total Interpretive Structural Modeling
TRAI	Telecom Regulatory Authority of India
TTO	Telecom Tariff Order
VoIP	Voice over Internet Protocol
VoLTE	Voice over Long Term Evolution
WLL	Wireless in Local Loop
USA	United States of America
VAS	Value Added Services
VSAT	Very Small Aperture Terminal
Y-o-Y	Year-on-Year
3G	Third Generation
4G	Fourth Generation
5G	Fifth Generation