

# Select Aspects Of Strategies In Telecom Industry Of South & South East Asia – A Diagnostic Study

By

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Submitted

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

to the

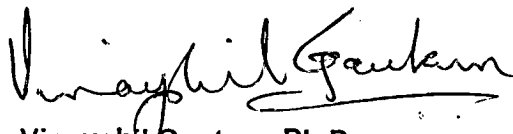


Indian Institute of Technology, Delhi  
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## Certificate

This is to certify that the thesis titled " **Select Aspects of Strategies in Telecom Industry of South & South East Asia – A Diagnostic Study** " being submitted by **Sanjay Sinha** to the Indian Institute of Technology, Delhi for the award of the degree of **Doctor of Philosophy**, is a record of bonafide research carried out by him. He has worked under my guidance and supervision and has fulfilled the requirements for 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.

October 25, 2002



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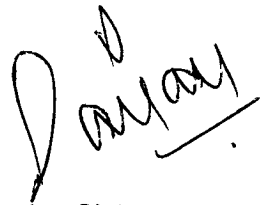
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October 25, 2002.

A handwritten signature in black ink, appearing to read "Sanjay Sinha". The signature is written in a cursive style with a large initial 'S' and a horizontal line underlining the name.

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## Abstract

According to Peter Drucker, every few hundred years, there occurs a sharp transformation in history (Peter Drucker, 1989) and a society undergoes major changes and rearranges itself with respect to its views and values along with its social, political, industrial and institutional structure. Proving the theory right, the telecom industry has not only changed the landscape of the society but also itself. The industry is practically unrecognizable from what it was a decade back. However, this changing landscape is far from even. Asia, in general, is clearly lagging behind the West and Japan, which have witnessed unforeseen growth in the industry in just a few years. One is thus faced with the pertinent question that, why do some countries lead others in mobile markets and what are the key drivers and hindering factors behind this growth and what strategies should the industry adopt to achieve optimal growth ?

This study deals with the "select aspects of strategy for the telecom industry", though telecom like most other infrastructure industries, had little to do with "strategy" just a decade back. However in the highly uncertain & dynamic mobile environment as today's (after the transition from traditional monopolies to open competition), the industry is forced to look into strategies for competing into the future. With lack of proprietary data about future, businesses need to look outside their markets for learnings. This study is an attempt in direction of cross-market learning to understand and influence future competition. Most studies till date have been limited to specific markets and the body of knowledge lacks comparative information from a cross –market perspective across geographical boundaries. Mobile markets in Asia Pacific are at various stages of development & maturity and study of markets at different stages of the development curve provides the much-needed insight for an effective strategy.

The study's objective is to study in a comparative management framework, the three key aspects of strategy for the industry, namely "M-R-O" (Market-Regulator-Operator) in South & South East Asia (Singapore, Malaysia, India and Indonesia) and to derive messages for strategy towards industry growth.

The study starts with exploring the key trends in mobile industry. The major mobile markets of Asia Pacific are classified based on their key mobile market characteristics into the categories of Developed, Developing & Underdeveloped Markets. Four markets from these three categories in South & South East Asia are chosen for detailed research (namely Singapore, Malaysia, India & Indonesia) and a detailed study is undertaken using in-depth interviews (based on both unstructured and structured questionnaires) with industry experts using the Delphi technique.

The broad concerns, which the study attempts to address, are

- identification of factors driving market growth
- identification of factors which have hindered market growth
- learnings for formulation of strategies for market growth
- understanding the key trends of regulation in the region
- understanding whether, how & how much should the industry be regulated
- finding key attributes to measure the regulator
- learnings for strategies for the regulatory regimes
- understanding the strengths, weaknesses, opportunities & threats before the operators
- formulation of operator strategies for growth
- challenge of making the data services revenues a reality

These broad concerns formed the basis of identification of the key aspects of strategy, namely

- Market Drivers
- Regulatory Regimes &
- Operator Outlook,

Under Market Drivers, the study analyses the key trends in the mobile industry especially with reference to Asia Pacific and correlation analysis between the GDP per capita and mobile penetration to determine the positioning of the mobile services. It is found that mobile services are still premium service in Asia Pacific (strong correlation) and not a mass commodity. A detailed study of the market drivers and hindering factors is undertaken for the markets in South & South East Asia to determine the most important market drivers. The analysis revealed a total of 35 factors (both + & -) in Singapore (9+ and 4-), Malaysia (5+, 2), India (6+, 3-) and Indonesia (3+, 3-) representing 23 positive and 12 negative factors. The three most powerful factors influencing markets (1. Prepaid Engine, 2. Open Competition & 3. SMS Revolution) are further analyzed in a broader perspective to draw out their strategic implications.

As telecom economies ride on the regulatory regimes, the regulators of the four markets, Singapore (IDA), Malaysia (CMC), India (TRAI) and Indonesia (DGPT) are studied to draw out the key learnings. The trends, answers to whether, how & how much to regulate, regulatory attributes to measure the regulator and the learnings for a responsible regulatory strategy are studied for the above markets. The study elicits the effect of uncertainty, piece-meal regulation, unfair license conditions, separation of regulator & operator, number and methods of licensing and spectrum management in the industry.

A SWOT analysis of the major operators in South & South East Asia in Singapore (SingTel, M1 & StarHub), Malaysia (Telekom Malaysia, Maxis, ADAM, Celcom & DiGi), India (Bharti, Hutchison & Batata) and Indonesia (Tekomsel, Indosat & Excelcom) is undertaken to bring out the key learnings. The study reveals the need for an effective prepaid strategy, continuous service differentiation, strong distribution network and customer care. It also discusses issue of pricing as a competitive advantage and explores answers to the biggest challenge faced by the operators today, the data revenue challenge. The new value chain with the advent of data is discussed along with what should the operators do to make revenues from data networks a success.

Though learnings and strategies have to be customized to every market case, the essential pointers from such a comparative study can be used by the industry to obtain a perspective on the market drivers, learn from the pitfalls and to gain insight for future strategies. This study hopes that with this knowledge the industry players (operators and regulators) will be better strategically placed to take advantage of the emerging competition.

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**Resume of Author**