

MARKETING STRATEGIES FOR CONSUMER TELEPHONE SERVICES  
IN HONG KONG

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MBA PROJECT REPORT

Presented to

The Graduate School

In Partial Fulfilment

of the Requirements for the Degree of

MASTER OF BUSINESS ADMINISTRATION

THREE-YEAR MBA PROGRAMME

THE CHINESE UNIVERSITY OF HONG KONG

May 1993



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## ABSTRACT

Hong Kong telephone services business is undergoing a fundamental change. In two years time, it will be changed from a monopoly-operated business to an open-competition business. This project is significant for two reasons. First, it analyses the whole business environment of consumer telephone services in the area of telecommunications business macroenvironment, market and product profile, customers profile, competitors profile and company profile for Hong Kong Telecom. Second, it touches the key strategic issues and fundamental marketing strategies for Hong Kong Telecom to do a successful business in the coming competitive consumer market.

The objective of this project is to devise moves and united strategies for Hong Kong Telecom to compete successfully and to sustain its competitive advantages in the consumer telephone services market. The strategy formulation is developed by using the strategic planning model of Arthur A. Thompson and A.J. Strickland III. Basically, it starts with industry, competitive and company situation analysis; and through identifying and evaluating the company's key issues and strategy options it crafts the strategies.

This paper presents the key findings of the analysis. First, the consumer telephone services market is still a growing and attractive business even in an open competition environment. Second, international telephone services is a major revenue generator and Hong Kong Telecom should revise its pricing and promotion strategy to stimulate IDD traffic. Third, Hong Kong Telecom should continue to adopt a growth strategy to maintain its leading position in consumer telephone services market. Lastly, Hong Kong Telecom should

initiate strategic actions in the area of 'Market Positioning', 'Customer Services', 'Quality Image' and 'People' to prepare itself to meet the challenge in the competitive environment.

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## CHAPTER I

### INTRODUCTION

Telecommunications has become an indispensable element in the development of a rapidly growing cosmopolitan city such as Hong Kong. With a well-developed network infrastructure, people can transfer vast amounts of information from speech and facsimile messages to computer data and high quality video pictures.

Because of the vast amount of money investment in building the network infrastructure and economy of scale, Hong Kong Government has granted franchised monopoly to the telephone carrier company -Hong Kong Telecom.

Hong Kong Telecom enjoys the exclusive rights to provide domestic and international telephone services in Hong Kong until 1995 and 2006 respectively. The company reported earnings of HK\$5.6 billion for the year ended 31 March, 1992 and is Hong Kong's largest private sector employer.

#### **Consumer Market of Telecommunication Services**

Hong Kong Telecom has three sales branches to serve the telecommunication services needs of different segments of customer. They are Consumer Sales, Business Sales and Managed Account Group.

Consumer Sales is the prime interface between Hong Kong Telecom and general consumers. It serves all residential customers and small-sized business



customers in Hong Kong. This customer segment requires telecommunication services mainly on a single line basis which can be differentiated from other business customers using Keylines, PABX, Datapak and Global Virtual Private Network. The latter customer segments are served by Business Sales and Managed Account Group.

The "consumer market" refers those residential and small-sized business customers served by Consumer Sales. These customers require relatively simple and basic telecommunication services as compared with the large business customers.

The existing customer base in the consumer market of telephone services involves 1.7 million residential telephone lines, 30,000 residential Faxlines, 400,000 single business telephone lines and 150,000 business Faxlines. The annual revenue generated in this consumer market is over HK\$4 billion.

The consumer telecommunication services market can be broken down mainly into local telephone services and international telephone services market. Local telephone services enable consumer to communicate domestically. The service charges involve basic telephone line rental plus other line-related premium service charge such as shanges of Starline services. The charges are on flat-rate rental basis and there is no additional message-related charges. International telephone services enable consumer to communicate with people outside Hong kong and the service charges are on message-rate basis.

The revenue growth rate of local telephone services is around 8-15% per year while the growth rate of international telephone services is over 20% per year. In terms of penetration of basic telephone line per household, it seems that nearly every household has already installed a telephone line and the local telephone services should step into mature stage. However, when one views the market that eventually

each adult should have his/her own personal telephone line, even the local telephone market has ample room to grow.

### **Advent of Competition**

The competitive environment in the local telephone market is likely to change when the Government is intending to licence more local telephone operators, and to open parts of the international telephone business to competitors. In fact, the recent tendering of fixed-line network in Hong Kong has attracted seven consortiums to bid for the tender award. It is sure that when the franchise of local telephone services expires by 1995, Hong Kong Telecom will be doing business in a completely different business environment. The amount of competition will be increased.

In fact, head-on competition has already started when City Telecom - a Canada-based telephone company offered international telephone services in Hong Kong by using Hong Kong - Canada toll-free service in Sept 92. The international telephone charge for a telephone call from Hong Kong to Canada could be 25% less as compared with the tariff charged by Hong Kong Telecom.

Hong Kong Telecom recently has reached agreement with the Government on the general policy for the regulation of Hong Kong Telecom. The new price control scheme will adopt an inflation-index-minus-four formula to govern the future tariff increase in local telephone services. At the same time, Hong Kong Telecom is required to reduce IDD tariff by 8 percent this year, followed by another 4% in the subsequent two years. While the new agreement enables the company to have more control over the way they can conduct the business, the impact of the agreement on the company's long term profit will be tremendous.

### Scope of Report

This report is a strategic paper for Hong Kong Telecom in sustaining consumer telephone services market share in the coming competitive environment. The telephone services mentioned throughout this paper is confined to the network telephone services offered by Hong Kong Telecom. Although it is no intention to address the Customer Premises Equipment (CPE) market such as feature phone, wireless phone and Fax machine as offered by Hong Kong Telecom's subsidiary, Hong Kong Telecom CSL, some strategies crafted may involve cross-selling of CPE for implementing one-stop shopping under Hong Kong Telecom umbrella.

This strategic paper will address the whole product lines of Hong Kong Telephone. However, this paper will craft strategy on a macro-basis and not on individual product.

The strategic paper will address the needs of general consumer which is the target customers served by Consumer Sales of Hong Kong Telecom. These customers have different needs of telephone services as compared with large business customers but the customer base is relatively much larger. Because of their relatively simple and standardized telephone service requirements, they are usually managed in mass marketing and not on account-management basis.

The strategy level developed in this project is mainly on Business unit level. Consumer Sales is here treated as a Strategic Business Unit (SBU). Thus, the strategy-making functions and areas of focus in this project will be :

1. Devising moves and approaches to compete successfully and to sustain the competitive advantage

2. Uniting the strategic initiatives of key functional departments such as Engineering, Product Marketing, Service Provision, External Plant and Customer Account
3. Taking action to address company-specific issues and operating problems such as Quality-delivery issues.

The control thrust of the strategies is how to sustain and strengthen the company's long-term competitive position in the market place.

### **Organisation of this Paper**

The next chapter, Methodology describes the approach of the strategic planning and why, what and how data are collected in building up the business strategy.

Chapter 3 defines the business definition and corporate goals of the company so as to set the boundary of business expansion and the ultimate objectives to be achieved.

Chapter 4 evaluates the company's external situation in the area of macro-environment, market/industry served, competitive analysis and company situation analysis such that the Strengths, Weaknesses, Opportunities and Threats of the company are drawn.

Chapter 5 addresses and describes the Key Strategic issues that the business unit is facing. It develops the concept of the business and forms a vision of where the company needs to be headed.

In the last chapter, recommendations are developed to craft the grand and functional strategies for achieving targeted performance.

## CHAPTER II

### METHODOLOGY

This paper has a marketing orientation in that it attempts to contribute to the effort in maintaining and sharpening Hong Kong Telecom's competitive edge in consumer market. It involves a strategic planning process. In crafting the strategy, the model of Arthur A. Thompson and A.J. Strickland III is adopted<sup>1</sup>. The following chart depicts the model :

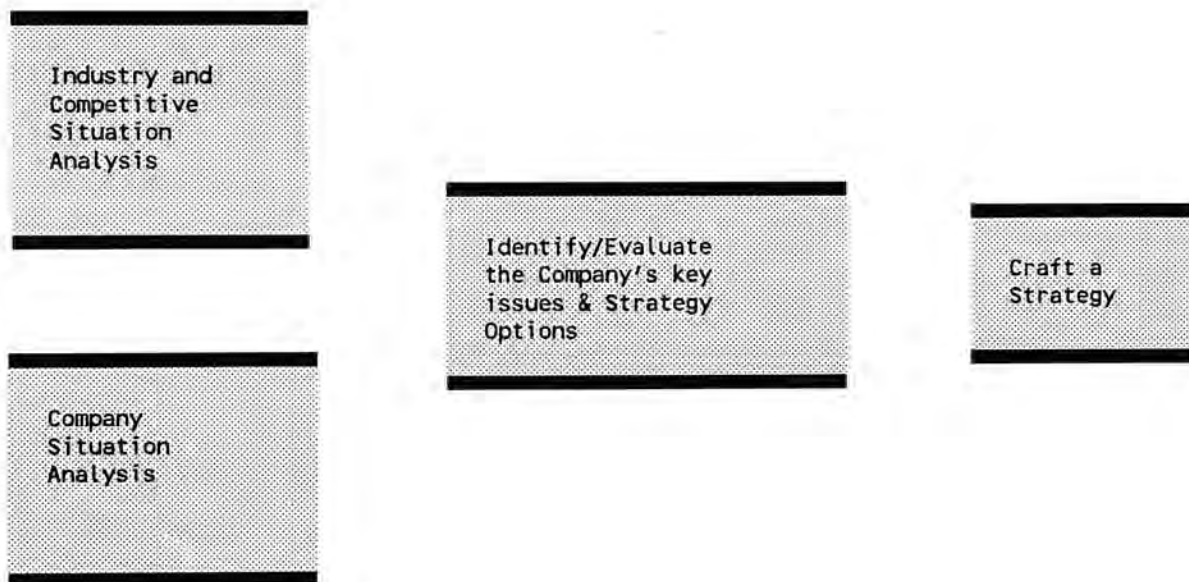


Fig. 1 : Strategic planning model

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<sup>1</sup>Thompson, Strickland, Strategy Formulation and Implementation 5th edition, IRWIN 1992, p.58

In industry and competitive situation analysis, the following analytical steps are taken :

- Evaluate the overall macroenvironment in the area of political/regulatory, economic, technological and societal
- Identify the chief economic characteristics of the consumer telephone services market
- Evaluate the strength of competition
- Predict who will likely make what competitive moves next

In company situation analysis, the following analytical steps are taken :

- Determine how well the present strategy is working (is current performance good ?)
- Do a SWOT analysis
- Identify the sustainable competitive advantage

To identify / evaluate the company strategy options, the following steps are taken :

- What are the key success factors in the industry ?
- What are the strategic key issues that the company is facing with ?
- What realistic choices does the company have ?

In crafting the strategy, the decision criteria are :

- has good fit with the overall situation
- helps building competitive advantage

- contributes to higher company performance

Clearly, business strategy encompasses whatever moves and new approaches in light of competitive forces, economic trends and market developments, buyer demographics, new legislation and regulatory requirements, and other broad external factors. In the analysis of the external environment, competitive situation and customer requirements, secondary data are collected through newspapers, journals, Company's Annual Report, internal and external customer surveys conducted for Hong Kong Telecom.

In understanding the customer's attitude and behavior, three telephone surveys were conducted in this project. The first survey was conducted to the residential customers who only subscribed a single Call-Waiting feature - the most common subscribed Starline feature. The second survey was conducted to the residential customers who have digital telephone lines but did not subscribe any Starline service. The last one was to all residential customers investigating the current market situation about IDD services. The survey calling list was randomly selected from the residential customers databases. A hundred users were selected in each survey. Telephone interview was conducted and all the phone calls were made by this project group. One complete telephone attempt (complete attempt means that the line was connected but it may or may not be answered by somebody) was given for each telephone number. All of the respondents were asked to answer a set of well-structured questionnaires on phone.

## **CHAPTER III**

### **BUSINESS DEFINITION**

To establish the initial scope of the planning process, it is necessary to define clearly what is the business and develop the mission for the company to be headed.

#### **Business Definition**

The following business definition of the company provides Consumer Sales a sense of purpose, long-term direction and mission :

"The telecom supplier of choice offering good value for money with courteous, caring and efficient service. Innovative and responsive. Committed to Hong Kong and China."

The business definition implies the following :

1. The company offers telecommunication services to customers.
2. The company is no longer a Engineering-oriented organisation. Instead, it is service-oriented and it cares about customer needs.
3. The company serves the customers through constant innovation, market requirements and customer responsiveness.
4. The company has full confidence of Hong Kong's future after 1997 and is committed to grow into the future.



### **Corporate Goals**

The goals pursued by Consumer Sales should align with the following corporate goal of the company :

"To achieve for the shareholders better than average results compared to local and regional competitors."

Consumer Sales is one of the major revenue generator for the company. Therefore, the strategic plan developed in this paper aims to help the company to achieve the corporate goal.

## CHAPTER IV

### SITUATION ANALYSIS

The purpose of 'Situation Analysis' is best described by Arthur Thompson and A.J. Strickland<sup>1</sup> :

"The purpose of situation analysis is to determine the features in a company's internal/external environment that will most directly affect its strategic options and opportunities. The effort concentrates on generating solid answers to a well-defined set of strategic questions, then using these answers first to form an understandable picture of the company's strategic situation and second to identify what its realistic strategic options are."

We are going to examine the situation from the company's macroenvironment, market/industry situation, customer and competitor profile to company's micro-environment.

#### Macro-environment

Many external factors enter into the forming of a company's strategy. In macro-environment, factors such as political/regulatory, economic, technological and societal limit what the company can and cannot do. Let's examine them one by one.

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<sup>1</sup>Arthur A. Thompson, A. J. Strickland III, Strategy Formulation and Implementation 5th edition, IRWIN 1992, p.56

## Political/Regulatory

### Political Issue

The political environment of Hong Kong has long been affected by the 1997 issue. With the constitutional reform proposal of Hong Kong Governor, Mr. Chris Patten, the relation between PRC and UK is becoming tensed again. However, most political critics still hold an optimistic view that the dispute could be ultimately resolved based on the ground that both countries still wish to maintain the prosperity and stability of Hong Kong for their own economic interests.

In a survey conducted by Asian Sources' Traveller magazine and Sunday Monday (Jan 1993), the confidence index of the respondents who are senior executives in Hong Kong manufacturing industry on Hong Kong political situation in 1993 were 65 out of 100. The results indicated that people are still optimistic in Hong Kong political environment.

Hong Kong Telecom well positioned itself in dealing with PRC. It has sold 20% of Hong Kong Telecom ownership to CITIC, the investment arm of PRC Government in Hong Kong. Also, Hong Kong Telecom is having a very favourable accounting rate arrangement with the MPT of PRC. Since almost 40% of IDD traffic from Hong Kong destined to China, the economic benefit of PRC from Hong Kong Telecom is enormous. All in all, the relationship between Hong Kong Telecom and PRC is fine.

### Regulatory Issue

Hong Kong Telecom is granted franchise rights to operate local telephone services and international telephone services in Hong Kong. Being a monopoly, the company is regulated by Post Master General of Hong Kong Government and the

regulation is gazetted in the Telephone Ordinance Chapter 269. Before March 1991, the company enjoyed Scheme of Control in which the company got a guaranteed profit of not less than 16% of the shareholders fund. Under this regulatory environment, the new services developed by Hong Kong Telecom which required Legco approval always took a long time, from several months to over one year for commercial launch.

With the global trend of liberalization of telecom industry, Hong Kong Government has also decided to liberalize the local telephone business by introducing competition into the market. There will be no restrictions on foreign ownership of companies applying for licence applications. Hong Kong Telecom and related companies are restricted to a 15 percent share of any company applying for the second fixed-line network licence. The number of licences issued will be unlimited as long as the bidders could show a viable financial plan.

While it is a decided policy to deregulate local telephone services, Hong Kong Government also restated that there is room for further liberalisation within the framework of the exclusive international franchise held by Hong Kong Telecom, particularly in regard to the resale of international circuits.

Even without the resale policy, local competitors can also share the international telephone services revenue. In a recent announcement, Government said that competitors to the Hong Kong Telecom local network will connect their networks directly to Hong Kong Telecom's international gateway and will receive an average of about \$1.05 for every minute on international traffic that a competitor delivers between Hong Kong Telecom and the customer. The figure is calculated based on the fact that 40 percent cross-subsidy enjoyed by Hong Kong Telephone for delivering

calls on the local network averages about \$1.50. The Government then calculated an Access Deficit Contribution (ADC) figure of 45 cents to cover Hong Kong Telephone's additional universal service charge obligations in Hong Kong.

With the expiry of Scheme of Control, Hong Kong Telecom had reached agreement with the Government to reduce international direct dialling (IDD) charges by 12 percent over three years (i.e. 8% in first year, 2% in the second year and 2% in the third year) and a new inflation-minus-four percent price control mechanism to govern local tariffs increase. The new agreement gave Hong Kong Telecom flexibility that the company could apply differential IDD tariff reduction in different routes. That means, while the company could reduce the IDD tariff for an international call from Hong Kong to Canada for 20 percent, it could keep the tariff unchanged for the route from Hong Kong to China provided that the total international revenue is reduced by 8% in the first year. Also, for local tariff review, the company could increase the residential line rental by inflation-minus-zero provided that the overall tariff increase of all local telephone services is below inflation-minus-four. The proposed legislation is currently with the Legco bills committee and is unlikely to get back to the full council before May 1993.

The Government has decided to set up an independent Office of the Telecommunication Authority (OFTA) to cope with the additional complexities that will come with fixed-line competition. The Government had appointed Mr. Alexandra Arena as the director general-designate and it is expected that the office could be set up in the second quarter of 1993. While Mr. Alex Arena is experienced in establishing deregulation policy of telecommunication in Australia, the capability of OFTA to act as well-functioned regulator will largely depend on whether the new

regulatory body could get the adequate specialist resources.

In the new regulatory environment, network competitors are encouraged to negotiate their own technical and commercial inter-connecting arrangements within broad requirements, but point to the OFTA with "substantially enhanced powers" that will arbitrate in circumstances where agreement cannot be reached between carriers. Complaints will be heard and arbitrated on by OFTA.

### Economics

According to 1993 fiscal report, the local GDP growth rate was 5.5% which was one of the best in Asia Pacific. In the near future, the economic growth is also expected to be strong under the Ports and Airport Developments and the Rose Garden Development Plan. With growing economy, companies would spend more on updating their existing telecommunication facilities. As a result, demand on telecommunication services will be increased.

The trend of Hong Kong companies to move upward to PRC also favours a better telecommunication development. With a more open PRC market, most of the local manufacturers have shifted their production base to China, especially in the Guangdong Province, due to cheap labour cost, rental charges and all the other miscellaneous expenses. As a matter of fact, moving the production base to China has already become the way to go if the company want to maintain competitiveness. Yet, most of the headquarters still base in Hong Kong. Therefore, if the management want to have better control on the remote production centre, installation of some advanced telecommunication facilities is necessary. Furthermore, this economic trend will also stimulate the usage of existing telecommunication services such as IDD and Auto Hong Kong Direct International Services. In the past, communications between

departments may only through intercom, or just walking up and down within one building. But now, interdepartmental communications would at least need a facsimile machine.

### Technological

Hong Kong Telecom has implemented a network modernization programme since 1984. In the modernization programme, the older-type analogue telephone exchanges were gradually replaced by digital telephone exchanges. Also, the copper-wire connection between exchanges was replaced by fibre optic cables which largely increased the transmission capacity between the exchanges. By June 1993, a fully digital telephone exchange network will be available in Hong Kong to offer enhanced new services to all of Hong Kong residents.

With a digital telephone network, the telephone connection time could be improved by several times even for local call. The connection time improvement is even much drastic for making an international call. With the digital telephone exchange, people change the telephone set from a rotary-type to a push button type for faster call connection and better telephone style.

Digital exchange offers a completely new set of advanced telephone services on top of the traditional Plain-Old-Telephone-Service (POTS). In the older days, you would encounter busy tone when you called somebody who was using telephone. Nowadays digital exchange offers the service, Call Waiting which enables people to be alert of a third party's call even though he/she is on the phone. That means, people would seldom miss a call if he/she has this new feature. New services bring convenience to people and make them more accessible by others.

The software development in digital exchange is very fast and a number of

new features/services are being introduced annually with each software file upgrade. Fujitsu and NEC are the two suppliers of digital exchanges to Hong Kong Telecom.

The new technology not only facilitates the local communications, but also improves the efficiency and convenience of international communications. People can make International Direct Dialling (IDD) calls to more than 250 countries/cities by-passing telephone operators in the Telephone companies. With the help of a Calling Card, people could also make IDD calls anywhere in Hong Kong and calls back to Hong Kong from almost everywhere in the world. The Calling Card technology makes it possible for other foreign telecommunication companies such as AT&T, MCI, Sprint and City Telecom to offer international telephone services in Hong Kong.

The technology in mobile communications also increases the variety of choices to the busy Hong Kong people. If people require instant communications on the move, a cellular mobile telephone must satisfy his/her need. If people only require making outgoing telephone calls on the street, a CT-2 cordless phone may suit his purpose because a CT-2 is much cheaper than a mobile phone. While the analogue technology makes the capacity of mobile telephone channels almost saturated, the advent of GSM, a fully digital mobile communication network will largely increase the capacity of subscribers. Subscribers who are now on the waiting list of analogue mobile phone could immediately get the mobile service. Technology triggers off new telephone requirements of modern people.

#### Societal

Geographical development is another factor stimulating telecommunication services demand. First of all, the Hong Kong Government is now very keen on



diverting the population to sub-urban area. In order to reduce the density in urban area, for example, the government has already spent billion of dollars in building up the infrastructure in places like Tuen Mun and Tin Shui Wai. Many housing units have been built and there will be more in the near future. The Government also highly recommends some private property developers to develop sub-urban area for residential use. With more families moving into these areas, the demand on telecommunication services in these developing areas will be increased.

Apart from the above, changing in family structure is another important factor in boosting the telecommunication service demand. First of all, the traditional strong family tie is vanishing. Most of the youngsters would prefer to have a private and more independent way of living. They no longer want to live with their parents and rather want to have an apartment of their own. Appendix 1 shows the trend of average family size per household over the past 10 years. The increase of living quarters in Hong Kong benefits the telecommunication industry, as telephone is the basic necessity in a modern home.

Education standard in Hong Kong is rising rapidly after the Government has implemented nine-year free education. The number of students completed tertiary education also increases sharply with the foundation of City Polytechnic and the University of Science and Technology. Moreover, when the families are becoming more well-off, more parents can afford to send their children to foreign universities. In general better educated people are more willing to accept new services but at the same time, they demand a higher quality of customer services. They demand not only a telephone, but also a full-function information exchanging and storing machine to suit the ever changing environment.

In modern society, timing is valued very high by people in general. Many people would be willing to pay more for having fast and accurate informations. Since Hong Kong is an ever changing city, people live on information. Who can grasp the first hand informations, who can profit from those information. Not mentioning the business environment in which time is money, even students require fast information. Nowadays students not only use telephone to communicate with individual classmate, but also make conference calls for group projects discussion. Many families have even installed fascimile machines besides a telephone. When voice communication is not sufficient to effectively convey a message, it is time to use Fax to convey the message in black and white on paper.

Because of the 1997 issue, more and more people have migrated overseas. Instead of writing letters four or five times a month, they would prefer to make an IDD call which is more convenient and 'Just-in-Time'. Social changes lengthen the distance among families, but telecommunications is the quickest and the most effective way to bring them closer and to make information gap closer.

Telecommunications runs in parallel with the social evolution with the aid of advanced technology. People search for new information and better way of getting them. Moreover, they are more willing to accept new technology because advanced technology enables them to have better communicating facilities and hence get information better.

## Industry Environment

### Ease of Entry

In the "network operator" industry, the entry barrier is high because a vast amount of capital expenditure is required to build a cable network and telephone exchanges. It is required to get an operation licence from the Government for a company to provide local telephone services. In the recent second network tender, Government official has claimed that licences will be issued on a case-by-case basis and their being granted will be largely depending on "bidders" convincing the Government of the financial viability of their plans. Therefore, the entry barrier for local telephone services is quite high and it is those consortiums which have strong financial background and good reputation able to enter into the industry.

In the international telephone business, the entry barrier is moderate as the investment could be much lower when the company get a telephone network and business overseas. These companies simply make use of toll-free circuit to provide international services to local Hong Kong customers. AT&T, MCI, Sprint and City Telecom are the typical example. These companies put a relatively small investment by setting up a local office and sales administration.

### Bargaining Power of Supplier

In providing telephone services to customers, Hong Kong Telecom is dealing with two types of suppliers - exchange equipment vendors and manpower labour market.

Hong Kong Telecom selected NEC and Fujitsu as the two exchange equipment vendors. Both Japanese companies view Hong Kong as a small market sector as compared with the United States market. Their product development mainly aim at

meeting America's requirements rather than Hong Kong requirements. Therefore, the portfolio of new features/services is tailor-made for America market. It is difficult to persuade the supplier to modify or develop the new features just for Hong Kong special application purpose. As a result, the network operators in Hong Kong could not easily make a quick adaptation to external market needs because of the low bargaining power.

When Hong Kong is developing into a service-oriented economy from manufacturing-oriented base, the demand of the white-collar employees are very keen. As the education level of the general population increases, the supply of the lower-level clerks and sales executives is diminishing. However, being a local telephone operators and the largest private sector employer, Hong Kong Telecom requires a pool of high-quality front line and back-office staff to maintain an acceptable customer services. While it is difficult to employ new clerical and front line sales staff, the company has to devise good personnel policy to maintain the existing staff pool. The bargaining power of this type of employees is increasing significantly. Because of manpower shortage, and the high labour cost, the company can only change the strategy by employing temporary, part-time staff and even staff in the mainland China.

#### Bargaining Power of Customer

When telephone services are offered by monopoly, the bargaining power of customer is very weak. Although a number of pressure groups were established to voice out the dissatisfaction on behalf of general public on the tariff, policy and practice of the monopoly, the bargaining power of the general public is still insignificant.

Hong Kong Government well understands the best way to regulate and monitor the public utilities is to introduce competition. In a competitive environment, the company would only win when it could satisfy the customers' expectation and market needs. In this aspect, the bargaining power of customer increases and the company must turn into a customer-oriented entity for surviving in the business.

#### Substitute Product

Telephone line is a basic communication tool in a modern society. Although people can still meet each other or write letter, it seems that nobody will live in a society without a telephone line. However, when each family has installed a telephone line, people could have substitute products against an additional line to enhance the communication link. Apart from choosing another telephone line, people could have the following choices depending on their requirements:

(a) Pager

Pager enables a person to be alert that somebody calls him/her. Although direct communication cannot be established, the pager user can get the message through a numeric or alpha-numeric pagers or through paging operators. With the paging secretary service, the pager user can always call forward the basic telephone calls to his/her pager.

In Hong Kong, there are over 30 pager licences being offered to paging companies. The major players are Hutchison Paging Co., ABC Paging Co., Star Paging Co., New World Paging and Hong Kong Telecom CSL. The existing paging customers are over 1 million. The price of a pager ranges from \$600 to \$2,200 and the rental for the paging service ranges from \$168 to \$285 depending on the type of pager and type of services required. Also, an annual licence fees of \$80 to the

Government is required for each pager.

(b) CT-2

The CT2 telepoint service has recently been launched to public by Hutchison and Chevalier under the name Tien Dey Seen ('Heaven to Earth Link') and Telepoint respectively. CT2 utilises new digital technology and offers low-cost portable voice communication to a broad market segment.

CT2 telepoint is the second generation cordless telephone. The technology enables users to make outgoing calls anywhere within 50-200 metres of a telepoint base station. Each telepoint is in turn connected to Hong Kong Telecom's local fixed-line network, enabling local as well as international voice communications. At home or in the office, a CT2 handset becomes a conventional telephone in a sense that users can make outgoing calls as well as receive incoming ones when the CT2 is connected to a home phone jack or a PABX system.

Apart from Hutchison Telecom and Chevalier, another two licences were also issued to Hong Kong Callpoint (Consortium Comprising HK Telecom CSL, SHK Industries and Star Paging) and Pacific Telelink (Consortium Comprising First Pacific Co., Vodafone, and Mr. Stanley Ho). In fact, Pacific Telelink has also launched CT2 service in March 93.

CT2 offers a lightweight and low-cost alternative to the existing cellular telephone. A CT2 handset is sold at around \$2,500 and the monthly service charge is \$300 in average. The existing customer base was over 40,000.

CT2 complements a pager such that it provides a cheaper alternative for subscribers who cannot afford a cellular mobile phone. The operation is very simple: the user uses the pager to receive message from incoming caller and he/she then uses

the CT2 to make outgoing call to the caller. The user can decide whether return call or not. In an integrated service of pager and CT2, the two equipments could be built into one. With the special connection facility of the paging-CT2 company, the caller could directly talk to pager user with the same paging call when the pager user return calls to centre by using a CT2.

### (c) Mobile Telephone

A cellular mobile phone offers mobile communications to people on the move. With a dedicated telephone number, the user can receive and make telephone calls at nearly anywhere (except inside MTR tunnels) in the territory.

There are 3 companies - Hutchison Telephone, HK Telecom CSL and Pacific Link offer analogue mobile telephone system. With over 200,000 mobile phone customers, the analogue systems are close to saturation. In 1992, the Government issued four digital cellular mobile telephone licences to the three existing operators plus the Sun Hung Kai-led Smartcom Consortium. In early 1993, the first digital GSM (Global System of Mobile Communications) system was launched to public by Smartcom so that the growth of mobile phone will not be limited by the capacity constraints of the analogue system. Capacity will be triplely expanded and the mobile phone system in Hong Kong could cater over 600,000 subscribers.

With advanced technology, the weight of a mobile telephone is lowered to 8 oz and the price of a mobile phone is between \$9,000 and \$23,000. The service charge is \$1,000 in average a month and the annual licence fee to the Government is \$75. The penetration rate of cellular telephone in Hong Kong is the second highest in the world behind Scandinavia. The affluence of the population, high population density, receptiveness of customers to innovative products and Hong Kong's position

as a financial and commercial centre all contributed to the success of cellular mobile telephone.

### Market Size & Market Growth

The annual revenues in consumer market is as follows:

Local Telephone services : HK\$1.5 billion

International Telephone services : HK\$2.5 billion

The growth rate in local telephone services is around 8-15% per annum and that in international telephone services is over 20%.

#### Basic Line Services

Having achieved substantial growth in the past decade, the basic line businesses have been growing at a slower rate. Appendix 2 & 3 shows the growth of residential and business lines in the past nine years from 1984 to 1992.

	<u>3/91</u>	<u>3/92</u>	<u>3/93</u> (Forecast)
- Residential lines ('000)	1,641	1,715	1,775
- Business lines ('000)	378	401	434
- Residential line's penetration per 100 households	95.3	95.1	95.9
- Residential line's penetration per 100 population	28.5	29.5	30.3



### Value Added Services

The customer acceptance of new services grew very fast in the past few years.

Appendix 4 and 5 shows the growth of Starline and Citinet.

	<u>3/90</u>	<u>3/91</u>	<u>3/92</u>	<u>3/93</u> (Forecast)
- No. of residential Starline	293,241	536,403	838,890	1,092,044
- Starline Penetration per 100 residential line	18.58	32.68	48.91	61.52
- Citinet (No. of lines)	-	21,196	34,391	57,000

### International Traffic

Average growth in 84/85 - 89/90 : 33.1% p.a.

Projected growth in 90/91 - 95/96 : 21.4% p.a.

Historically, customers are taking advantage of the lower tariff in Hong Kong to make more outgoing calls.

Outgoing Traffic growth rate in 90/91 - 95/96 : 22.2%

Incoming Traffic growth rate in 90/91 - 95/96 : 20.6%

Appendix 6 shows the growth of international traffic in the past 9 years.

### Product Profile

Hong Kong Telecom offers a whole range of network telephone services to customers. The following highlights the major product list offered to the consumer market.

## Existing Product

<u>Item</u>	<u>Installation</u>	<u>Monthly rental</u>
<u>Line-based services:</u>		
Business Telephone Line	\$600	\$ 78
Residential Telephone Line	\$600	\$ 56
Hunting Line	\$600	\$100
Business Datel Line	\$600	\$ 92
Residential Datel Line	\$600	\$ 70
Business Faxline	\$600	\$118
HomeFax	\$600	\$ 84
Citinet	\$600	\$118
 <u>Value-added Services:</u>		
		<u>Monthly rental</u>
Starline (S/L)		
Call Waiting		\$10 (1 S/L feature)
Call Forwarding		\$15 (2 S/L features)
Appointment Service		\$19 (3 S/L features)
Abbreviated Dialling		\$23 (4 S/L features)
Additional Abbreviated Dialling		\$26 (5 S/L features)
Call Security		\$29 (6 S/L features)
Do-Not-Disturb		\$32 (7 S/L features)
Conference Calling		\$10 (independently charged)
Duplex Ringing		\$18 (independently charged)

	<u>Monthly rental</u>
FastStar Package	
(including Call Waiting, Call Forwarding, Appointment Service and Abbreviated Dialling)	\$18
MagicStar	
(All Starline features excluding Conference Calling)	\$30
HomeFax 2	
(All Starline features excluding Conference Calling & Call Waiting)	\$28
<u>Others :</u>	
Standard Telephone Set	\$ 7
IDD	
Hong Kong Telecom Calling Card	-
C & W Calling Card	

Hong Kong Telecom and C & W Calling Card is a kind of telephone credit card, which enables people to make cashless international calls. The followings are the different ways that a subscriber could make use of his/her Calling Card :

#### IDD 200

People can make IDD calls from any phone in Hong Kong and the service charges will be charged into customer's Calling Card account.

#### Auto Hong Kong Direct

Customers can make international call back to Hong Kong without the assistance of an operator with the Calling Card and pay call charges when he/she get

back to Hong Kong, in Hong Kong dollars. Better still, the rate they pay is the equivalent rate for the same call made from Hong Kong - almost always cheaper than the other way round.

### Global Call

Customer can also use the C & W Calling card for global calling. With this service neither the place from which the call is made, nor the destination need be in Hong Kong.

### New Services

New advanced network services will be available for every software upgrade in the digital exchange. In the coming two years, a list of new services will be ready for launch which includes:

(a) EasyCall

EasyCall comprises of two new features, Auto Recall and Automatic Callback. Auto Recall enables the subscriber to connect back to the last caller, no matter the call is answered or not. That means, if the subscriber could not answer a call just because he is in the shower, he may activate Auto Recall after the shower to connect to the caller just called. Automatic Callback enables the subscriber to camp on a busy line such that when the busy line becomes free, the lines will be connected automatically. That means, the subscriber need not try on his own accord to make repeated calls when the called party's line is busy.

(b) Twin Line

When a household has two telephone lines, Twin Line enables an incoming call to be forwarded to the other line when the first line is busy. Therefore, Twin Line could optimise the telephone line answering capacity of the household.

(c) Call Waiting Enhancement

While Call Waiting is a top popular Starline feature subscribed (with over 1.1 million), the enhancement features make it more intelligent and powerful.

(i) Automatic Cancel Call Waiting for international call

The feature operates in a way that when the subscriber is on an international telephone call, Call Waiting feature will be cancelled automatically. That means, the third party will encounter 'busy tone' when the subscriber is talking an international call. In normal circumstances, subscriber will not pick up a call waiting call when he/she is on international call because the charging of the international call still continues when the subscriber intercepts a call waiting call. The new feature removes the disturbance of the Call Waiting beep tone during an international call is carrying on.

(ii) Call Waiting Suppression for one call only

The feature enables the subscriber to suppress Call Waiting for one call. After the subscriber has completed the call, Call Waiting function resumes automatically.

(iii) Call Waiting suspension for a certain time

The feature enables the subscriber to suppress Call Waiting for a certain period of time. For example, subscriber could choose to suppress Call Waiting for four hours when he/she is making some important calls in the period.

(d) Caller ID

The feature enables the subscriber to know the telephone number from where the call is made before he/she picks up the call. That means, the subscriber could select the desired calls he/she wants to pick after knowing the incoming telephone number. The new feature also prevents the nuisance calls that may be received

during day and night.

(e) Voice Mail

The feature enables the subscriber to deposit incoming messages into the telephone exchange when he/she is not ready or available to answer a telephone call. The feature functions like an automatic recorder machine but of course the subscriber need not pay a thousand dollar to install a machine at home. The subscriber could retrieve any time the messages stored in the voice mailbox.

(f) Portable Number

Telephone number is bounded by the allowable number level of particular telephone exchange in the first three digits. Therefore, when a customer moves from one district to another district which is of different serving telephone exchange, he/she is bounded to change the telephone number. However, with the intelligent network, portable number is feasible such that a customer can always keep his/her telephone number no matter which district he/she is going to move.

### **Customer Profile**

The existing customer base in the consumer market of telephone services involves 1.7 million residential telephone lines, 30,000 residential Faxlines, 400,000 single business telephone lines and 150,000 business Faxlines. We will concentrate our analysis on those 1.7 million residential telephone lines.

Among the 1.7 million residential telephone lines, some of the lines are subscribing value-added services (Starline, FastStar, MagicStar and HomeFax 2).

The following table lists out the number of customers that subscribe different types of services.

Local services	MagicStar subscribers	100,000
	HomeFax 2 subscribers	30,000
	FastStar subscribers	140,000
	Miscellaneous Starline subscribers (mainly single Call-Waiting)	830,000
	Digital non-Starline customers	500,000
	"Analogue" customers	100,000
International services	IDD subscribers	1,200,000
	Non-IDD customers	500,000
	Calling Card subscribers	500,000

In order to understand the customer's attitude, behaviour and expectation, we conducted 3 small-scale telephone surveys to the existing customers.

Survey 1 : To existing single Call Waiting customers asking opinions on local value-added services

Survey 2 : To Non-Starline customers asking opinions on local value-added services

Survey 3 : To customers asking opinions on International service

The questionnaires and the results of the surveys were tabulated and summarized in appendix 7 and 8.

#### Survey 1

The key findings from the single Call Waiting customers survey are as follows:

(a) 39% of the selected sample cannot be contacted and 5% of them rejected to

answer the questionnaire. The remaining 56% of the selected sample have completed the whole questionnaire.

- (b) Majority of the respondents got the information about Call-Waiting service from promotion letter and/or telesales staff of HK Telecom (54% and 63% respectively).
- (c) 98% of the respondents ordered the service through phone.
- (d) 88% of the respondents agreed that the Call-Waiting service is at least a pretty good idea.
- (e) 84% of the respondents use this function at least 0-3 times/day.
- (f) 91% of the respondents would probably continue to subscribe the service, even if the charge is increased to \$11/month (i.e. low price sensitivity).
- (g) 86% of respondents had heard about FastStar or MagicStar
- (h) Majority of them again heard this from promotion letter and/or telesales.
- (i) The main reasons for not subscribing are :
  - not useful (no application) 45%
  - suboptimal combination of Starline features  
in the package 55%
- (j) Most of the respondents who took suboptimal combination of Starline features preferred to have Call-Waiting, Call-Forwarding and Call-Security as the combination.
- (k) The most welcomed new features were :
  - Easy Call 55%
  - Call-Waiting Enhancement 50%
  - Caller ID 50%



- (l) Majority of the respondents have received either secondary (45%) or primary (41%) education.
- (m) Majority of the respondents have their household income lie between \$10,001-15,000/month (38%) and \$5,001-10,000/month (30%).
- (n) 92% of the respondents were between age 18 to 54.

### Survey 2

The key findings from the Non-Starline customers are as follows:

- (a) 56% of the selected samples could not be contacted, 10% of the selected samples rejected to answer the questionnaire and totally 34% succeeded in completing the survey.
- (b) 94% of the respondents have heard about the Call-Waiting function.
- (c) Majority of them got the information from promotion letter (74%) or telesales staff / HK Telecom (82%).
- (d) 65% of the respondents use telephone less than 5 times/day at home.
- (e) 91% of the respondents said that the Call-Waiting function is not useful to them.
- (f) Majority of the respondents showed minimal interests in the new features suggested by the questionnaires. The highest response rate was Caller ID (21%).
- (g) Majority of the respondents had received either primary (47%) or secondary (41%) education.
- (h) Majority of the respondents have their household income lie between \$10,001-15,000/month (38%) and \$5,001-10,000/month (44%).
- (i) 94% of the respondents were between age 18 to 54.

### Survey 3

The key findings from the International service survey are as follows :

- (a) 42% of the selected samples could not be contacted, 10% of the selected samples rejected to answer the questionnaire and totally 48% have completed the survey.
- (b) All of them had heard information about IDD.
- (c) 83% of the respondents had got the information from T.V. advertising.
- (d) 46% of the respondents have friends and/or relatives live abroad. Among these respondents, 64% of them have contacts with their friends/relatives abroad.
- (e) The major channels for the contact were listed as follows :
  - letter            100%
  - IDD                57%
  - visiting          14%
- (f) The frequency of using different channels were listed as follows :
  - letter :        for those respondents using this channel, 65% of them wrote less than 3 letters per year
  - IDD :            for those respondents using this channel, 61% of them made less than 7 IDD calls per year
  - Visiting :      for the 2 respondents using this channel, both of them visited their friends/relatives less than once per year
- (g) For those respondents using IDD service, 75% of them paid less than \$500 per month.
- (h) The main reasons for not using IDD were as follows :

- expensive (100%)
  - time difference (33%)
  - don't know the telephone number (33%)
- (i) The main reasons for those using IDD were as follows :
- convenience (100%)
  - immediate and direct (100%)
  - laziness and trouble in writing (50%)
- (j) For the two who used IDD and paid more than \$500 per month, both of them had received university education and have their income more than \$25,000/month. For the remaining six who paid less than \$500/month, nearly all of them had received secondary education and have their income more than \$10,000/month.

#### Survey on Quality of Services

Hong Kong Telecom was also very concerned with the quality of services that perceived by the customers and which standards are important from the customers' point of view. Therefore, a survey on the customer service standards has been conducted in September 1992 by Hong Kong Telecom. The key findings were summarised as follows:

## Summary of Results

(A) Hard Standard	(Remark 1) Importance	(Remark 2) Level Acceptability	Company's proposed Standard	Customer's Counter suggestion	% of Total Counter suggestion
1. Time to answer	100%	98%	within 10 sec	(i) within 5 sec	100
2. Service Provision Lead Time	100%	72%	within 5 working days unless specified by customer	(i) within 2 days (ii) within 3 days	40 60
3. Appointment Time	100%	95%	100% at appointed time	(a) not more than 1 hr late (b) not more than 2 hr late (c) not more than 4 hr late	40 40 20
4. Rate of Fault	99%	87%	2 faults per year per line	(a) zero fault (b) 1 fault per yr	70 30
5. Fault clearance	98%	87%	(a) Res:100% cleared within 24 hr	(a) within 5 hr (b) within 6 hr (c) within 8 hr (d) within 12 hr	14 28 14 44
		67%	(b) Bus:100% cleared within 4 hr	(a) ASAP (b) within 1 hr (c) within 2 hr	21 11 68
6. Shops-opening Hours	98%	76%	8am-6pm daily	(a) longer hr (b) until 7pm (c) until 8pm (d) until 9pm (v) until 10pm	14 14 43 24 5
7. Shops-Max. Waiting Time	99%	94%	(a) 3 min for general service or sales	(a) Nil	
		59%	(b) 15 min for Bill payment	(a) 10 min (b) 5 min	52 48
8. Payphone Availability	90%	85%	97%	(a) 100%	100
9. Payphone Waiting Time	99%	77%	5 min	(a) 3 min	100
10. Correspondence Response Time	99%	92%	(a) Initial response by phone/fax within same day	(a) Nil	
			(b) Detail / investigated reply within 4 working days	(a) same day (b) 2 days (c) 3 days	15 38 47

(A) Hard Standard	(Remark 1) Importance	(Remark 2) Level Acceptability	Company's proposed Standard	Customer's Counter suggestion	% of Total Counter suggestion
11. Complaints Response Time	98%	87%	(a) Initial response by phone/fax within same day	(a) Nil	
		56%	(b) Reply customer with resolution to his/her satisfaction within 10 working days	(a) 7 days (b) 5 days (c) 4 days (d) 3 days	46 29 14 11
12. Billing- Accuracy	98%	92%	100% correct	(a) Nil	
13. Billing- Response to dispute	98%	63%	Resolved within 10 working days	(a) 7 days (b) 6 days (c) 5 days (d) 4 days (e) 3 days (f) 1 day	46 8 12 12 11 11
(B) Soft Standard - Staff's attitude - Staff's competence - Staff's responsibility - Staff's knowledge - Staff's efficiency - Care about customers needs	100%	97%	90% overall satisfaction	(a) 95%	100

Remark 1 : The figure indicates the % of customers thinking that the standard is important to them.

Remark 2 : The figure indicates the % of customers accepting the company's proposed standard.

### Competitor Analysis

Although Hong Kong Telecom is granted franchise monopoly to operate local and international telephone services in Hong Kong, a competitive environment is emerging in both local and international telephone services. In local telephone services, a number of consortiums have been bidding the second fixed-line network licences. Companies which have confirmed applications include:

- Wharf Telecom, part of the Wharf group
- New World Telephone, a 51-49 percent venture between New World Development and Infa Telecom Asia
- Australian and Overseas Telecommunications Corp. (AOTC)

- Pacific Link Communications
- Champion Technology Holdings, a Hong Kong listed telecommunication firm
- Hutchison Telecommunications
- Singapore Telecom

In international telephone services, Hong Kong Telecom is facing with competition from various overseas telecommunication companies which issue calling cards in Hong Kong. These companies use toll-free service to offer international services to Hong Kong customers. The companies include:

- City Telecom
- AT&T
- MCI
- Sprint

In the following section, we will examine the competitive strength of these companies and forecast their next move in the telephone business.

### Local Telephone Services

The followings are the brief background of the seven potential competitors of Hong Kong Telecom in local telephone services.

#### Company Background

##### (a) Wharf Telecom

The principal activities of the Wharf Group are property development and investment, terminals and warehousing, public transportation, communications, hotels owning and management and investment holdings. In recent years, Wharf invests heavily in telecommunications and cable television and its mission is to become an

established network operator and service provider in the territory within several years. By Oct 93, its cable television service will be launched over a territory-wide, multi-point microwave distribution system (MMDS) to reach close to 500,000 homes. Net Assets and net profits of Wharf as at 31/12/91 were \$33 Billion and \$1.3 Billion respectively. It employs Mr. Henry Wise, the previous Deputy of Post Master General, as its telecommunication consultant.

(b) New World Telephone

The company is a 51-49 per cent venture between New World Development and Infa Telecom Asia.

The principal activities of New World Group are property investment and development, hotel investment and management, construction and engineering, television broadcasting, transport, infrastructural investment in China, insurance and telecommunication services. The turnover and operating profit of the Group as at 1992 were \$12 Billion and \$2.8 Billion respectively. In Telecommunication business, it has New World Paging Limited which is the first in the industry to introduce personalized paging services and with subscribers over 30,000.

INFA has been dedicated to product and system marketing business in the wireless telecommunications market sectors. It has been in the telecommunication field since 1969 and one of their main business philosophies is to serve their customers to their total satisfaction - by offering them the right products and the best technical support service possible.

(c) Australian and Overseas Telecommunications Corp. (AOTC)

AOTC was formed as a result of the merger on Feb 92 of Telecom Australia and OTC Limited. Results for the new company, to the end of June 1992, showed

an operating revenue of A\$5,042.6 million giving an operating profit before tax of A\$570.2 million. OTC has previously set up a small representative office in Hong Kong and involved in the CT2 Telepoint service by holding partnership with Chevalier. OTC's offshore marketing performed strongly and won a number of important export deals. These included a 10 year agreement to develop and manage Vietnam's international and domestic telecommunications networks, and a similar business agreement with Cambodia.

(d) Pacific Link Communications

The company is one of the subsidiary of First Pacific Company Limited which is an investment and management company. Principal activities of the Group are marketing and distribution, banking, real estate and communications. Turnover and operating profit as for year ended 31 December 1991 were \$2,528 million and \$88 million respectively. In March 1991, First Pacific was awarded licence to operate a CT2 network in the territory through a 64.75 percent owned consortium.

Pacific Link is one of the three licensed operators of a cellular telephone network in Hong Kong with more than 42,000 subscribers on the Pacific Link network. It is the first mobile company to offer digital cellular telephone system in Hong Kong.

(e) Champion Technology Holdings

The Group is principally engaged in the design, development, manufacture and marketing of telecommunications related products including radio paging systems and pagers and the provision of radio paging service. Turnover and the profit before tax of the company for the year ended 30 June 1992 were \$148 million and \$84 million respectively. The Group is the only radio paging operator to have developed its own



pager, software and equipment, and designed and installed its own transmission network. It owns all the intellectual property rights pertaining to its multi-lingual pager and paging systems. Since 1991, the Group has entered into co-operation agreements with various state-owned companies in China for the setting up of radio paging networks and operations in 18 cities. The paging stations sell Champion's 'Kantone' pagers which display simplified version of Chinese characters.

(f) Hutchison Telecommunications

The company belongs to Hutchison Group. The Group's activities are divided into five main divisions: property, container terminals and shipping-related services; retail and other services; telecommunications and media; energy, finance and investment. The turnover and net profit of the Group for the year 1991 were \$19 billion and \$4 billion respectively.

Hutchison Telecom was established in 1986 and was accounting for 7% of group earnings in 1991. The company is a market leader in paging, cellular telephone and mobile data transmission, commanding over 50% of these markets.

(g) Singapore Telecom

Singapore Telecom is a telecommunications and postal operating company in Singapore. The total operating income of Singapore Telecom for year ended 31 March 1992 was S\$2,480 million, a 12% growth over 1991. 50% of the income came from international telephone, 14% came from national telephone and 11% of the income came from mobile communications.

Competitor's Strength

- (a) Most of the consortiums bidding for the licences have good financial support.
- (b) The competitor, Wharf could combine cable TV with telecom network to get

synergy in communications technology.

- (c) Most of the consortiums are used to work under competitive environment. They are quick to recognise opportunities and take decisive actions promptly.
- (d) Although the fixed-line network licence is a new business to the competitors, their existing customer base in paging or mobile phone offers those competitor companies a fundamental base to develop fixed-line services.
- (e) Some consortiums, such as, Wharf, AOTC and Singapore Telecom got a strong technical expertise in building up a fixed-line network.
- (f) The competitors do not have obligation to provide territory-wide telephone services. Thus, they can be more focus to offer telecommunication services in some more profitable area.
- (g) The competitors could build a more advanced network and meet a wide variety of customer needs promptly.
- (h) The competitor, Wharf has employed Mr. Henry Wise, the Ex-Deputy Postmaster General as its telecommunication consultant. As Henry Wise was involved in Government's telecommunication policy making in the past 10 years, Wharf is in an advantageous position in understanding the overall telecommunication policy of Hong Kong Government.

#### Competitor's Weakness

- (a) Hong Kong Telecom has been operating the local telephone business for tens of years. As people have their telephone lines connected to Hong Kong Telecom network, they will not easily change to another telephone carrier when they take the services for granted. Because of that, the target market

size of the competitors may only be limited to those new customers who are either external removal customers or new household customers.

- (b) When the customer base is small and diversified, the economy of scale could not be possible to lower the cost of provision. Hence, the costing structure is highly unfavourable to compete with Hong Kong Telecom.
- (c) The investment in the network infrastructure is enormous. When the local telephone charge of Hong Kong Telecom is kept at a low level, the payback period in the investment could be pretty long.
- (d) The competitor could not easily predict the competitive situation because the Government has stated that more than one licences may be issued in the fixed-line network tender. The competitors may be in a dilemma when eventually more than one licence are granted.
- (e) Hong Kong Telecom still enjoy the franchise monopoly in international telephone business until 2006. Although the competitors' network can be connected to the international gateway of Hong Kong Telecom, their international revenue need to be shared with Hong Kong Telecom. Thus, the earning power of the competitors are still inferior to that of Hong Kong Telecom. Subsequently, Hong Kong Telecom is in a very favourable position in case of any price war.

#### Predicted Competitors Move

- (a) Hong Kong Telecom offers low monthly line rental and free local calls, therefore, the competitors are less likely to compete on the basis of revenues derived from local telephony. The commercial case for investment in a new

local network would be in concentrating on the territory's business centres that generated large volume of local calls. In fact, Pacific Link has openly stated this strategy if it is granted a local fixed-line licence.

- (b) If the competitors have connections with developers of residential estates, they will liaise and negotiate with developers such that each flat unit is pre-socketed with a telephone line that is connected to their telephone exchanges. In so doing, economy of scale could be achieved by focusing the cable resources and pre-installation work in a well-defined regions.
- (c) Even in business areas, companies would tend to retain existing Hong Kong Telecom lines for incoming calls, because they were well established with overseas business partners. Any new lines would tend to be used for outgoing calls. Hence, it is expected competitors would concentrate on the enhanced data and Fax services.
- (d) The only exception would come from Wharf. As the consortium led by Wharf Holdings and NYNEX was the only operator for the cable television licence, they will have a backbone cable network in residential area. Wharf would make use of this backbone to offer both cable TV and telecommunication services to their subscribers. Since the investment cost in setting up the fixed-line telecommunication network could be reduced by sharing the same backbone of cable TV network, the pricing of the telephone charge could be set in a competitive range. Also, with the application of using cable TV for home-shopping, customers could be motivated to instal an addition telephone line if the line could be positioned as a link to cable TV shopping purpose. In this aspect, the customer base could be very significant.

### International Telephone services

Hong Kong Telecom is facing competition in international telephone services from four foreign-based telecommunication companies. They are City Telecom, AT&T, MCI and Sprint. Except City Telecom which is a Canada-based company, the other three companies all come from US and they are the three long-distance carrier companies in US. Basically these companies offer international telephone service through Calling Cards. While City Telecom has its own billing system, the other three companies require customers to have credit card accounts, mainly the American Express.

City Telecom has an aggressive promotion campaign in Hong Kong by emphasizing its cheaper telephone charge for a call from Hong Kong to Canada and US. The following is a comparison of City Telecom Calling Card with Hong Kong Telecom Calling Card.

#### City Telecom's Strength

- (a) It is cheaper for routes to Canada, US and Continental Europe. The discounts are 20% and 15% for standard and bonus period respectively. However, the prices of the two companies on these routes would be similar when Hong Kong Telecom is going to reduce the tariff in these routes.

#### City Telecom's Weaknesses

- (a) The charge is unlikely to be cheaper than Hong Kong Telecom for calls to other areas, as all calls are routed indirectly through Canada.
- (b) Customers need to dial 20 digits before entering the country code (7 digits access no. + 10 digits PIN + 001). For Hong Kong Telecom's IDD service, customers need to dial 001 only. For IDD 200, the total no. of digits

- required are 15 (200 + 8 digits account no. + 4 digits PIN). Therefore, there's dialling inconvenience in using City Telecom's Calling Card.
- (c) There's no follow on call facility in City Telecom's Calling Card. If customers want to redial they have to key in the 20 digits again. But for IDD 200, customers just need to hook flash for follow on calls.
- (d) There is not enough circuit capacity for City Telecom. That means, their traffic will easily congest.
- (e) City Telecom do not have 24 hour customer service support as Hong Kong Telecom have through 013 card centre.
- (f) The minimum usage charge for City Telecom is 1 minute but for Hong Kong Telecom, the minimum charge is for 6 seconds and also Hong Kong Telecom would not charge for calls for shorter than 6 seconds.
- (g) City Telecom do not accept phone in application while Hong Kong Telecom do.

### Charges Comparison

The followings highlight the international telephone charges for a 10 minute calls during peak hours by using the different companies' service.

<u>Destination</u>	<u>IDD</u>	<u>HK Telecom Card</u>	<u>CTI</u>	<u>AT&amp;T</u>	<u>MCI</u>	<u>Sprint</u>
US	\$123.00	\$125.00	\$ 98.40	\$136.66	\$131.10	\$123.00
UK	\$105.00	\$107.00	\$142.00	-	\$227.72	-
Canada	\$117.00	\$119.00	\$ 93.60	\$117.00	\$227.72	\$117.00
France	\$158.00	\$160.00	\$126.40	\$251.93	\$227.72	\$158.00
Indonesia	\$105.00	\$107.00	\$185.80	\$241.96	\$227.72	\$105.00
Shenzhen	\$ 24.00	\$ 26.00	\$270.30	-	-	-

It could be seen that Hong Kong Telecom is more competitive in the routes to UK and Asia (i.e. Far East including China) but for other routes to US, Canada

and Continental Europe, City Telecom is the more competitive companies.

There is nothing astonishingly complex about how the City Telecom's system works. From a touch-tone telephone, the card-holder dials an international toll-free number in Canada, which connects to a switch (one located in Toronto, another in Vancouver). That means, a caller in Hong Kong can dial almost anywhere in the world via Canada. There is no breach of Hong Kong Telecom's international monopoly as City Telecom has no facilities in Hong Kong.

City Telecom buys the Hong Kong - Canada connection from TeleGroup Canada, the international monopoly carrier. TeleGroupe is unusual in that it sells to service companies rather than directly to end-users. City Telecom pays TeleGroupe the accounting rate cost (which goes to Hong Kong Telecom), plus an undisclosed premium.

The existence of City Telecom does not pose a threat to the profitability of Hong Kong Telecom because for every international call made by City Telecom's card holder, the equivalent accounting rate revenue goes to Hong Kong Telecom. The revenue earned is even greater than that gained in the equivalent IDD call. However, the growth of these telecommunications discounters has highlighted gross overcharging on international services by Hong Kong Telecom and this indirectly exert pressure to Hong Kong Telecom to reduce its international tariff; thus reducing the profit that the company can harvest.

### Company Situation Analysis

In this section, we discuss the company's strategic situation in the environment. We look into two areas:

- How well is the present strategy working ?
- What are the company's strengths, weaknesses, opportunities, and threats ?

#### Strategic Performance Indicators

Performance indicator	1992	1991	1990	1989	1988	1987	1986	1985
Sales Growth (%)	12.9	15.1	19.4	19.4	20.8	21.0	15.9	21.1
Net Profit Margin (%)	34.5	31.6	31.4	31.8	32.7	32.7	30.0	25.6
Earnings/share (cents)	50.9	45.4	39.1	32.7	27.1	21.4	16.9	12.3
Increase In EPS (%)	11.9	16.1	19.6	20.7	26.6	26.6	37.4	28.1

From the performance indicators, the sales grows steadily from 1985 to 1992 although it was becoming slower in 1992. However, the net profit margin grows well from 25.6% in 1985 to 34.5% in 1992 indicating a very healthy cost structure against the company growth. The "Earnings per share" grows four fold from 1985 to 1992. The strong financial performance of Hong Kong Telecom over the past 8 years provides a good foundation for the company to face the coming competition.

#### Business Strategy

To evaluate how well a company's present strategy is working, one needs to start with what the strategy is. Although the company is operating in monopoly, the top management had realised that the future for the company would be quite different



to that of its past. A series of company movement and reorganisation has been taken place to move the company in a direction that prepared it to meet the challenge of a totally different operating environment.

The company always emphasizes its lower prices in both local and international telephone services. With its retrenchment in 1992 and continuous Total Quality Management programmes, the company has adopted a stringent cost-control approach. It is apparent that the company is striving for low-cost leadership in terms of competitive approach. In the past ten years, the average tariff increase in local telephone services is less than the inflation rate minus 2.5 percent. However, the net profit margin over the past 10 years was still increasing. Hence, the operating cost of Hong Kong Telecom was virtually decreasing over the past decades. Let's look in detail what the company business strategy was when the Ex-Chief-Operating Officer Mr. Greg Crew prepared the 91/94 business plan.

### Business Objectives

The business objective was to continue growth in contribution and attributable profit, by providing high value telecommunication services within Hong Kong. The growth will be achieved by :

- a. maximising the number of telephone and data lines in use
- b. maximising the contribution per line

It was also the company's strategy to encourage maximum use of the public communications network operated by the company, and the value available to the customers from that usage. To achieve that, the company would influence the type of customer premises equipment sold and used in Hong Kong, offer a range of

interconnect options to customers and PNETS' licensees, and develop billing services to give options to customers, and support to value added service providers.

### Strategies

The following methods of increasing the number of lines in use was applied :

- a. Provision of service on demand
- b. Encourage use of separate lines for telephone, facsimile and data
- c. Promote the sale of second exchange lines to residential customers
- d. Promote the use of Citinet to business customers
- e. Provide an extensive portfolio of data communication options to meet different market requirements

The following strategy was employed to maximise contribution per line :

- a. The approach to pricing, subject to regulatory requirements, was to offer basic service at a price which achieved high levels of penetration, but achieved a positive contribution per service. Pricing of value added services would be designed to maximise contribution.
- b. Productivity gains would be made through :
  - i. Network modernisation
  - ii. Reducing network plant margins
  - iii. Introduction of the Dragon system (an automated order taking and processing system) for customer service
  - iv. Application of the TQM programme throughout the company
  - v. Seeking ways to employ contract staff, or sub-contract staff for low skilled labour intensive work

Additional revenue per line was achieved at low marginal cost by promoting growth of the following services :

- a. IDD - the customer base would be expanded, and utilization rate increased.
- b. International account based customers (Calling Card) would be expanded, and usage per customer increased by expanding the range of services and the available destinations.
- c. Faxline penetration would be grown through the personal fax (PFax) campaign, and additional fax support services developed.
- d. The portfolio of value added data communication services would be expanded.
- e. Citywide Citinet service would be introduced, to increase the penetration rate. Further features would be introduced.
- f. Starline penetration will be increased.

The range of services would be expanded. About 40 new service offerings have been identified for introduction in the course of the three year Business Plan. These were based on new features for residential line customers, business line customers, international calling, facsimile support, and data communications.

### Evaluation

- a. From the financial performance indicators, the overall company performance was quite good which indicated the overall strategy of the company was working well.
- b. From the company 1992 annual report, the growth in international telephone service turnover was over 500% as from 1984 to 1992 while the growth in local telephone services turnover in the same period was only 100%. Hence,

the maximising of contribution per line mainly came from international telephone revenue and the strategy was proven successful.

- c. The total number of telephone lines grew by 50% as from 1986 to 1992 while the population growth in the same period was only 5%. Therefore, the objective of maximizing the number of lines was achieved with flying colours.
- d. The turnover per telephone line over the period from 1984 to 1992 was as follows:

	1992	1991	1990	1989	1988	1987	1986	1985	1984
Turnover per line (\$K)	6.95	6.57	6.03	5.40	4.91	4.37	3.85	3.52	3.07

As from the figures, the turnover per telephone line increased steadily as from 1984 to 1992. The two business objectives were consistent and reinforced with each other.

- e. The objective of "maximize the number of lines" serves two purposes. The first purpose is to maximize the contribution per household family. This is true when the additional revenue brought in by the line increase could offset the cost in providing the lines. The second purpose is to "pre-empt" competitors from gaining the exchange lines base for local and international telephone services.

### Consumer Sales

The business strategy of Consumer Sales focus on :

- a. One-stop shopping
- b. Maximize value/per order & per line
- c. Enhance the presence of Hong Kong Telcom
- d. Build up Customer loyalty

It has mainly three sales channels to secure orders from customers. They are Inbound Sales, Outbound Sales and Retailing. The percentage of gross sales revenue secured through the three sales channels was shown in Appendix 9.

#### Inbound Sales Characteristics & Performance

Inbound Sales is formed by four Hotline 1000 Centres which were set up in July 1991 plus eight sales units which are responsible for processing service orders. Customers make enquiries and place order to Hong Kong Telecom by simply call 1000. Here below are the major characteristics of Inbound :

- Major customer interface for all service requests and enquiries
- The most cost-effective and convenient sales channel
- Provide all kinds of basic telephone services
- High volume of calls (over 150,000 calls/month) and service orders
- Heavy reliance on manual support because of system inadequacy

The breakdown of the major gross sales revenue for Inbound Sales was shown in Appendix 10.

The key performance indicators on Inbound in Dec 90 and Dec 92 were compared as follows.

	(Before Hotline 1000) was set up	
	Dec 1990	Dec 1992
Time-to-answer	> 200 sec	< 9 sec
Calls/month	98,000	170,000
Orders/month	85,000	100,000
Order processing time	4/5 days	2 days
Customer satisfaction		> 90%
Customer follow-up		< 3 hours
Complaints follow-up		< 3 hours

It could be seen that the performance has improved tremendously in 2 years after Hotline 1000 centre has been set up in July 1991.

#### Outbound Sales Characteristics & Performance

Outbound Sales is a Telemarketing team which mainly employs a large pool (over 1,500) of part-timers to form a proactive and cost effective direct sales channel for the mass market serving the entire Hong Kong Telecom Group. The breakdown of the major gross sales revenues for Outbound Sales was shown in Appendix 11.

There are totally 3 outbound telesales centres with total seating capacity of 260 and one Hotline 1800 centre with seating capacity of 40. The primary business focus are as follows :

- a. To sell value added services to basic telephone line

- b. To stimulate/sell international traffic usage
- c. To provide telemarketing services to the Group

The average monthly activities are as follows :

Hotline 1800 -	answers	65,000 calls
	secures	18,000 orders
Outbound Centres -	makes	550,000 calls
	reaches	265,000 customers
	secures	35,000 orders

The Key Performance Indicators were shown below :

<u>Sales Programme</u>	<u>Success Rate</u>	<u>Revenue/cost ratio</u>
Call Waiting Turnaround	40%	23
Call Waiting Free Trial	25%	15
Conference Calling	5%	4
FastStar	13%	9
MagicStar	14%	13
Citinet	2%	24
Faxline	53%	161
Total Sales Programme		13

The Call Waiting Turnaround programme is the sales programme to sell Call Waiting when the customer's telephone line exchange is 'turnaround' from analogue to digital. For those customers do not subscribe to Call Waiting, a free trial of Call Waiting is offered after 6 months of exchange turnaround. For those single Call Waiting customers; FastStar is promoted as a service upgrade. When customers has

subscribed to FastStar package, they are contacted again for MagicStar promotion after 6 months they subscribed to FastStar. This migration strategy is proven to be successful.

### Retailing Characteristics & Performance

Retailing serves as a market presence for Hong Kong Telecom. It also projects the image of the whole Group to the public and provides bill collection services for customers to settle the bills. The breakdown of the major gross sales revenues for Retailing was shown in Appendix 12.

The main characteristics of Retailing are that it offers 24-hour and year round face-to-face customer services to the public. It has 39 Telecom Service Centres and counters as well as 3 mobile vans serving the bill payment needs of customers in the remote area.

The monthly average activities of Retailing are as follows :

Customer enquiries	: over 50,000
Bill payment	: over 300,000
Sales orders	: over 80,000



## SWOT Analysis

### Company Strengths

- a. It is a franchised monopoly company with strong financial performance and support.
- b. Faith has been built up in the mind of customers.
- c. Long-established company with strong experience and expertise in telecommunication services.
- d. In possession of a well-developed digital telecommunication network which forms the backbone of an advanced and good quality services.
- e. Due to natural monopoly, Hong Kong Telecom provides inexpensive local and international telephone services. In fact, the charge is one of the cheapest in the world.
- f. It can make use of 39 well-established shop chains of Telecom CSL and Hong Kong Telecom Service Centres for market presence and product display.
- g. A well-established organization with experienced team of order processing, engineering support, after sales service and logistics support.
- h. It's international telephone service franchise extends to 2006 which makes the company always enjoy the large portion of international telephone revenue even from the new competitors.

### Company Weaknesses

- a. It is still changing from a Engineering-driven company to a market-driven company. There were still many cases that Marketing did not get the final decision-making power on customer-related issues.
- b. The Company has been operating in a monopolistic environment for a long

time, and it could not react suitably in an open competitive market.

- c. The staff morale is still plagued by the company's retrenchment in March 1991. The staff loyalty is largely affected.
- d. There's no clear strategic direction for the staff to conform. The staff face an identity crisis when the company cannot define clearly whether it's a sales-oriented or service-oriented company.
- e. The marketing expertise and skills is not adequate enough to compete with rivals.
- f. The structural change in these two years was very frequent and made the staff feel rather insecure and unstable in the job and this would downgrade the staff's dedication to the job.
- g. The company do not have a well-developed and effective sales incentive and commission scheme to motivate the staff of the company.
- h. The company do not possess a customer database to facilitate the sales and marketing programme.

#### External Opportunities

- a. In the competitive environment, the company is more efficient in launching new product/services to meet customers' needs. In present, launching of new service is subject to the approval of LEGCO; thus it takes a long time to launch a service even though the service is available.
- b. Hong Kong is a gateway to China. The international traffic between Hong Kong and China grows very fast which boosts up the revenue pie.
- c. With the emigration tide in Hong Kong, the international telephone requirements for Hong Kong residents is growing rapidly.

- d. When the local telephone franchise expires by 1995, Telecom CSL and Hong Kong Telephone & Hong Kong Telecom International could really merge into a competing and synergized enterprise in attacking the local market with a whole product ranges and sales and marketing expertise.

#### External Threats

- a. With the deregulation of local telephone services, more competitors are coming into the telephone business which will largely affect the profitability of the Company.
- b. When City Telecom offers the international telephone services to Canada & US with charge 20% less than that offered by Hong Kong Telecom, the pressure group and the public are challenging why Hong Kong Telecom charge so high but still claim that it is one of the cheapest telephone charge in the world. The grievances of the public may make them inclined to other service providers if available.
- c. The rising sales of mobile phone and CT2 may affect the second exchange line sales in residential market.
- d. The regulatory requirements for Hong Kong Telecom to reduce international telephone services tariff may largely affect the long-term financial performance of the company.
- e. The political instability due to the Sino-British negotiation deadlock may impose a threat to overall economic situation in Hong Kong. In that case, the business profitability will be affected.

### Sustainable Competitive Advantage

- a. A fully digital telecommunication network by mid 1993 provides an advanced backbone and lower operating cost infrastructure for the company to compete in the market.
- b. Being a market leader, the low cost structure due to economy of scale makes the company very strong even in a price war.
- c. The franchise in international telephone services guarantee the company to have 60 percentage revenue of the international accounting rate. This competitive advantage maintains at least up to 2006.
- d. Being a telephone companies for a long history, the numbering that offers to customers become a glue to retain the customers because customers may need to pay an extra cost in retaining the numbers for connection to other telephone companies.

## CHAPTER V

### STRATEGIC ISSUES ANALYSIS

In the previous chapter, we have gone through the situation analysis of macroenvironment, market and industry environment, competitive environment and the company itself. It could be foreseen that the key success factors for companies to compete in the telecommunication services in Hong Kong consumer market would be the followings.

#### Key Success Factors

a. Quality customer services.

It could be seen from the customer survey results on Quality standard that customers are becoming more demanding and the only way to satisfy them is to offer premium quality and service provision levels.

b. Integrated Customer Databases

When customers are showing increasing sophistication and expectation, an integrated customer database which includes marketing information, products and services, sales orders network usage, billing information and fault history could facilitate the identification of target markets for different marketing programmes.

c. Low cost provision efficiency

A full utilization of exchange capacity and concentration of lines installed could lower the provision cost to permit low service charge and ample profit margins.

d. Automated order processing system

The market sector of small business and residential customers provides high volume/low income business which, to be profitable, must be highly automated in order to keep staff activities and costs to the absolute minimum while maintaining a high quality response.

### Strategic Issues

In light of the key success factors and the company's overall situation, Hong Kong Telecom needs to address the following strategic issues.

(a) How to implement and to what extent the Quality customer service in the company?

Being a dominant market leader in the telephone service business in Hong Kong, Hong Kong Telecom is intending to build a sustainable competitive advantage by offensive strategy. The key to staying on the offensive is relentless pursuit of continuous improvement and innovation. Striving to offer better and improved customer services is no doubt a way to keep rivals on the defensive and scrambling to keep up; but how to set the standard and strike the balance between quality and cost should be carefully considered.

A number of customer surveys has been conducted in Hong Kong

Telecom to assess the service level of the company and to explore what customers expect. While it is good to ask the customers what they expect, it is required to consider whether the expectation could be met within the existing cost structure or the expectation exceed industry benchmark. For example, when the company set the Time-to-Answer standard to be 10 seconds for all calls as against the present performance of 92% of calls received in Hotline 1000 are within 9 seconds, the increase in manpower for complying with the small marginal increase in performance will be very high and not cost-effective.

It has been the management's decision to figure out the following actions in 'Customer Service'.

(i) Customer Service Standards

They are 13 hard standards and 6 satisfaction index as mentioned in the customer profile in Chapter IV.

(ii) Customer Charter

Customer Charters commit the company to levels of performance for business and residential customer

(iii) Customer Satisfaction Unit

A Customer Satisfaction Unit will be set up to monitor the achievement against the Charter and internal standards and recommend changes to internal standards and the service levels promised in the Customer Charter as appropriate.

(iv) Customer Care Unit

A Customer Care Unit will operate a first tier complaint centre and

take up the complaints on behalf of customers with the relevant line managers. The Unit will also be responsible for the analysis of complaints.

(v) Ownership

To establish ownership of the customers requirements and accept responsibility for ensuring that all action is taken to meet these requirements, there is not more than one transfer of ownership in any supply chain.

(vi) Information Technology

The company will invest in IT for improving efficiency and productivity, and the quality of service to customers as well as creating new products to improve the competitive edge. Areas highlighted for investment in addition to Dragon - an automated order processing system include:

- Customer Database Systems, which will bring together groupwide information on customers in order to look after them better and to identify new selling opportunities. Databases will be linked to achieve better coordination and improve telemarketing.
- Service Provision System linking to Dragon will automate the line testing process and schedule appointments for reducing employees costs and improving overall services.

In all these initiatives, the company should consider how to motivate the employees to achieve the Quality customer services. Apart from



throwing a list of action plan in motivation and reward, non-monetary recognition and training of employees, the management should create an environment, a stable organization structure to sustain the momentum of revolution in the company.

- (b) How do the company stimulate more international traffic to compensate lower profit margin?

Although the existence of City Telecom, MCI, AT & T and Sprint may erode the IDD revenue of Hong Kong Telecom, the revenue loss in IDD may be gained back as incoming international telephone revenue because the competitors use toll-free link and the service charges that the customers pay include the accounting rate which will be paid back to Hong Kong Telecom. The incoming international telephone revenue gained for a call is greater than the revenue gained in outgoing international telephone call for the same duration. Therefore, these competitors can be regarded as 'favourable' competitors.

However, in the new agreement with the Government, Hong Kong Telecom is required to reduce IDD tariff by eight per cent in the first year. In that case, the company's revenue may be largely affected unless the traffic volume can be increased to a point such that the revenue loss due to tariff reduction could be recovered. The company should consider how to stimulate more international traffic.

The Government allows Hong Kong Telecom to have flexibility in tariff reduction such that different route can have different tariff reduction. The company better consider the price elasticity in different route so as to

maximize the traffic volume increase effect. For business customers, the price elasticity is relatively lower as they have the business needs to make international calls. On the contrary, residential customers are more price sensitive. It is confirmed from the customer survey that 43% of residential customers do not make IDD calls and all of them do not make IDD are due to expensive charge. Therefore, the tariff reduction could be more for the routes that are more price elastic for residential customers.

The proportion of traffic to China is increasing very fast in the past 10 years. It is partly due to the business requirement and partly due to the enhanced communication between Hong Kong residents and their relatives/friends in the mainland. Since the tariff for the route from Hong Kong to Guangdong Province where most of people originated from is comparatively cheap, the price elasticity is comparatively low.

With the emigration tides to Canada, US and Australia appeared in the past 10 years, the needs for international communication to these countries was increased. However, the existing tariff to these countries is high as compared with the tariff to China. Hence, the price reduction for these routes should be more effective in stimulating traffic to those destinations. Therefore, the price reduction in these routes could be even lower than 8%. To match with the price charged by City Telecom, the price reduction could be as low as 20% as long as the profit margin allows.

Of course, it is also the company's job to negotiate with the counterpart countries to lower the accounting rate so as to maximize the profit margin after tariff reduction.

(c) Mass market strategy against segmented market strategy.

Mass market strategy is presently used in promoting telephone services to consumer market. That means, the company has designed standardized products, for example FastStar, MagicStar and promoted them to the customers. As a general strategy, FastStar is promoted to customers which have single Call-Waiting features and MagicStar is promoted to FastStar customers. From the customer surveys, it could be seen that a certain percentage of Call Waiting customers do not subscribe FastStar because the package is not optimal to them. Hence, this kind of mass marketing strategy needs to be revised at this stage.

It takes time to develop a fully integrated customer database that is useful for sales and marketing purpose. However, it is useful to review the overall product and promotion strategy such that flexibility is allowed in tailor-making effective sales and marketing strategies for different market segment.

The following basic model helps to visualize the different customer segments. A matrix of local telephone bill/household versus the international telephone bill/household is built up.

International Telephone Bill/household	H				\$1,501 & above
	M				\$501-\$1,500
	L				\$0-\$500
		L (\$168-219)	M (\$220-309)	H (\$310 & above)	
		Local Telephone Bill/household			

Fig.2 : Matrix of Customer segments in local and international telephone services

In local telephone bill, a household is classified as 'Low' when the bill is only \$168 - \$219/quarter. i.e. from a basic telephone line to a basic telephone line plus rented phone plus a Call Waiting feature. The market size of this segment is about 1.3 million. When the quarterly bill ranges from \$220 to \$309, the household is classified as 'Medium'. i.e. a basic telephone line with some packages such as FastStar, MagicStar and HomeFax 2 service. The market size of this segment is about 270,000. When the quarterly bill is over \$309, the household is classified as 'High' profile in local telephone service. i.e the customer has installed at least two telephone line. The market size of this segment is around 100,000.

In international telephone bill, the quarterly usage of international service determined whether it is Low, Medium or High profile user.

L - Quarterly bill is between \$0 & \$500.

M - Quarterly bill is between \$501 & \$1500

H - Quarterly bill is over \$1500.

A unified marketing mix will be developed to migrate the customers from the left-bottom corner to the top-right position in the matrix.

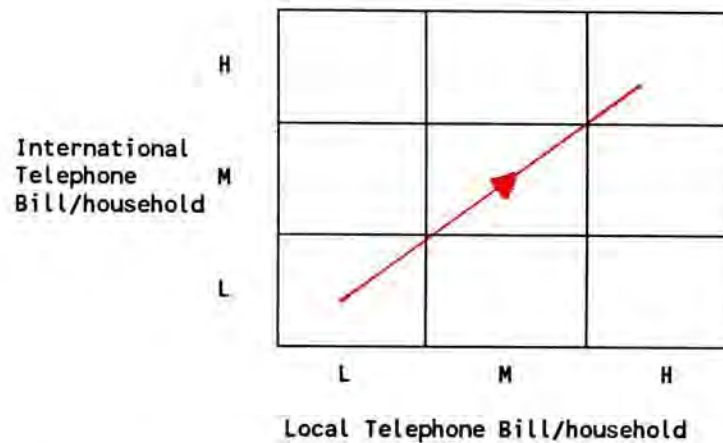


Fig. 3 : Migration path for customer segments

### Strategy Options

In reviewing the present business strategy and analysing the key strategic issues that the company is facing, the strategy options for running the company and particularly Consumer Sales for consumer market were brought out indirectly. The strategy level can be divided into GRAND and FUNCTIONAL.

In Grand Strategy, the following options are possible :

- (a) Locked into making improvements in existing GROWTH strategy i.e. continue the big investment in exchanges, system development and other resources.
- (b) Take a prudent approach in just maintaining the business i.e. no major investment in resources.

In Functional Strategy, the following options are possible :

- (a) Maintain the existing strategy in the marketing mix.
- (b) Make major strategy change by reviewing the overall strategy in the marketing mix.

In next chapter, we will craft the strategy in Grand and Functional levels.

## **CHAPTER VI**

### **RECOMMENDATIONS**

Looking back on 10 years of growth, the history of Hong Kong Telecom reflects a success story in line with the rapid development of Hong Kong.

The development of Hong Kong Telecom over the past ten years reflects its firm commitment to growth in Hong Kong, from its 10-years plan of network modernization programme, to the turnaround of order processing system. From 1988, it also started to review the business environment, the company strengths and weaknesses as well as overall strategies and objectives to prepare itself to meet the changes they are facing in the industry.

The telecommunications services business is going to change from a monopoly environment to a competitive one. In the coming 2 years, at least one more company will enter into the market to provide fixed-line telecommunications services. As a result, more effort and less margin are expected in the coming years due to the keen competition.

However, it is believed that the consumer telecommunications services market will continue to grow. The introduction of competition may erode part of market share of Hong Kong Telecom but the effect could be minimized if the company fully

prepare itself and respond faster to the changing environment.

### **Grand Strategy**

With the previous analysis, it is believed that Hong Kong Telecom needs a continued growth strategy in terms of network modernation and people investment for it to maintain its market leader position in telecommunications services industry. It is important to maintain the economy of scale and prevent major entry of competitor into the profitable market.

To achieve the growth strategy in the consumer telecommunications services market, Consumer Sales can sustain the competitive advantages in four key areas.

#### **(a) Market Positioning**

To maintain an optimum position in Hong Kong telecommunications markets through,

##### **(i) Improve coordination of customer information databases.**

Hong Kong Telecom has widespread knowledge of customers through their universal service obligations. To use this powerful marketing information successfully as a business tool, the existing databases must be improved and coordinated. As an interim marketing tool, a mini-database with 1,000 random-selected customers could be built up for sales and marketing programme analysis purpose. For example, their monthly international bill will be tracked in details for analysing the effectiveness of some international services promotion programme.



(ii) Develop customer incentive programme

As a way to reward the customers for loyalty and increased use of the comprehensive range of services, some customer incentive scheme can be developed. This is similar to reward frequent flyer in the airline industry. One of the way to implement the rewarding programme to frequent international services users is to set up a IDD Caller's Club. The target customers is the active international call users with average quarterly spending over \$1,500 i.e. the high profile user in our customer segment matrix. These eligible customers could be extracted from the billing file and a database with required demographic information and billing history on these club members could be built up. Membership benefits may include phone cards bonus and newsletter may be built in to maintain these customer loyalty in face of competition.

(iii) Establish Premium Telephone Services

It is to build an advanced service infrastructure offering premium quality and service provision levels. This will be built on the advanced digital network that will be 100% available throughout Hong Kong in June 1993. A sales and marketing-driven promotion programme for the fully digital network should be developed to create customer's awareness and draw benefits closely to the general consumer.

(iv) Build Product Marketing Skills

Product marketing skills and knowledge should be built to develop a common understanding of Hong Kong Telecom's strategic approach through training and development programmes.

(b) Customer Service

It is necessary to listen to customers to understand their needs and the criteria by which they will judge the company. Also, it is necessary to constantly review and improve the performance from the customer's perspective to ensure that the company are easy to do business with. In Consumer Sales, the following strategy could be adopted:

- (i) Maintain Time-to-answer standard for Hotline 1000 and 1800 to be 90% answered in 9 seconds.
- (ii) Set up TQM agreement with Service Provision, External Planning, Customer Account, Operator Services such that ownership principle of customers and the timing standard within the supply chain could be fixed.
- (iii) Fully utilize the temporary contract staff in Hotline 1000 during peak traffic hour.
- (iv) Develop the mechanism to measure the bill payment waiting time of customers in the bill collection outlets. It could be done by selecting 5 out of 20 outlets and measuring the average bill payment waiting time in the peak hour. Quality standard could be set in gradual progression after the existing performance could be measured.
- (v) Apart from customer survey which measure employee's performance from customer's perspectives, internal monitoring system could be set up to measure the front-line employee's performance in the area of efficiency, knowledgeability, responsibility, competence, attitude and care about customers needs. The staff's performance is judged from

the supervisors instead of from customers.

- (vi) Interactive Voice Response System should be fully implemented in the Hotline such that the incoming traffic could be lesser by channelling the customer to an appropriate answered party.

(c) Quality Image

It is to achieve status in the telecommunications marketplace as the benchmark for Asia and to attract customers on the basis of company's reputation.

The strategy implemented in Consumer Sales could be:

- (i) Co-ordinate Telecom CSL shops and Hong Kong Telecom Service Centres to present a common face to customers.
- (ii) Introduce standardized uniforms for employees who are involved in day to day contact with customers to present a crisp and efficient picture to the public.
- (iii) Continue the implementation of TQM programmes throughout the Business unit and establish a Quality Representative to coordinate with line managers for achievement of quality. In addition, it should seek ISO 9000 accreditation for the order taking and order processing unit before end of 1994.

(d) People

It is to give clear direction and leadership to create an environment which encourages high levels of achievement, enhanced productivity, open communication and appreciation of the contributions of others. It is the commitment to develop the people by substantial investment in training.

The strategy used in Consumer Sales could be:

- (i) Introduce sales incentive and quality award to the sales unit if the sales target and quality target could be achieved. To encourage team work, the incentive should be granted on team basis and the bonus should be confined to use in group and celebration function.
- (ii) Introduce Best Sales Staff selection on monthly and annual basis to reward the good performers.
- (iii) Introduce leadership training for all senior staff to improve customer satisfaction and to prepare them to manage change more effectively.
- (iv) Introduce customer service workshops for all front-line and supervisory staff to equip them to achieve improved customer service and productivity to cope with and successfully manage change.
- (v) Arrange external visit to companies in other industries which have high reputation in customers services. For example, Motorola, Hang Seng Bank, American Express etc.

Overall speaking, the strategy crafted in Consumer Sales is in line with the company's grand strategy. Based on the growth trend in international and local telephone revenue, the following grand objectives are set:

- International Telephone service revenue in consumer market grows by 20% annually
- Local Telephone service revenue in consumer market grows by 12% annually

We will look how the functional strategies could help achieve the business objectives.

### Functional Strategies

#### Product

- (a) The overall product strategy should be reviewed such that each individual product is re-positioned in a way to increase the penetration and thus maximize the value per line and lock-in customers in the coming competitive environment. For example, the second exchange line is currently positioned as a solution to 'line-fighting' in a household. As a result, most of the second exchange line do not subscribe Starline because the customers are only "encouraged" to use the lines for outgoing calls. In a recent second line lucky draw promotion, 10,000 customers applied for second line but only 2,000 of them subscribed, MagicStar or HomeFax 2 although the subscription could lead them into lucky draw. Therefore, the product positioning of second line need to be revised because a "bare" second line is a net-loss product! If the product is positioned as a personal belongings for each adult or a 'loving line' for the lovers, the market segment is immediately enlarged and it is easier to promote the premium service on the line. This positioning will be further reinforced as 'Portable Number' become available as the line (i.e. the number) can thus follow the 'master' eternally.
- (b) According to the customer profile, 55% of customers did not find the FastStar package an optimal combinations of wanted features. Those customers do not subscribe to FastStar may get incentive to subscribe

premium service if the package could be tailor-made to individual needs. Hence, it is recommended to launch an additional Flexible package to the customers such that the customers are free to choose any 3 features (except Conference Calling and Duplex Ringing which are independently charged) at a price of HK\$16.

- (c) As revealed in the survey findings, the acceptance to new products is much higher in Starline customers than in non-Starline customers. Hence, the new products such as EasyCall, Caller IDD should be positioned as a premium product particularly promoted to Starline and MagicStar/FastStar customers so as to increase the value per each residential line.
- (d) In view of 50% acceptance of Call Waiting Enhancement features, this feature can be packaged as Call Waiting Master and sold individually to all Call Waiting customers.
- (e) In stimulating IDD traffic, IDD 200 and Auto Hong Kong Direct should be promoted together with the promotion of Tone Dialler. It is because IDD 200 and Auto Hong Kong Direct must be used on a tone-dial phone, but it is not uncommon for the customers to encounter a pulse-dialling phone (i.e. rotary type) when they need to make IDD 200 and Auto Hong Kong Direct. This experience is more common when customers are staying in other countries and going to make Auto Hong Kong Direct Call. Therefore, if a customer has a tone-dialler on hand, he/she could make IDD 200 and Auto Hong Kong Direct even a tone-dial phone is not available.
- (f) Hong Kong Telecom used to promote individual service to customers, no matter it is a local or international product. In order to strengthen Hong

Kong Telecom's image as a single entity and provide total package solutions to different market sectors, it is recommended to use the concept of integrated product marketing to package Hong Kong Telecom's services into different total solution formats to meet specific market segment's telecommunication requirements/needs. Under this concept, we could develop a product package for residential customer moving home because the market size for moving customers in Hong Kong was over 50,000 annually. They are easily caught because they have to contact Telephone Company when they need to move. Based on their requirements/needs, the following package could offer customers much convenience when they move.

Main elements : (i) Telephone line

(ii) MagicStar/HomeFax 2

Optional elements : (i) IDD

(ii) Calling Card

(iii) Automatic Call Forwarding (ACF) - one month free of charge

(When someone calls the old number, the call will be automatically forwarded to the new number without the knowledge of the caller)

(iv) Changed Number Interception (CNI) - one month free of charge after ACF ends

(When someone calls the old number, a recorded message released by telephone exchange will advise the caller the new number)

IDD incentives : Give \$10 discount coupons for customers to use in five international calls. Customers are encouraged to make IDD calls to inform their relatives/friends overseas. This serves to stimulate IDD traffic.

### Price

Following the new agreement on tariff increase, the overall pricing strategy should be crafted to sustain the competitive advantage of the company. The current pricing in telephone line rental is very competitive where the pricing in international telephone is not very competitive in some of the routes. While the new agreement allows the local telephone tariff to be increased by inflation-minus-four and requires international telephone tariff to be reduced by a total of 12% in three years, the following strategy is recommended.

- (a) A differential tariff should be established for first and each subsequent additional lines. The first line tariff could have a larger amount of percentage increased, say inflation-minus-four. It is because the threat of competition in the first line market is relatively lesser when portable number helps to lock-in the customer. From Appendix 1, the average family size per household was about 3.2. It is expected that future line growth mainly comes from second line market. Thus, the tariff of second line should be set at a lower level, say 5-10% below that of the first telephone line. The differential tariff for first and 'second' line serves two purposes :
  - (i) To pre-empt competitors entering the second line market which is the major target sector for competitors



- (ii) To stimulate the installation of second line plus some premium services as to achieve the objective of maximizing the number of lines installed
- (b) A higher tariff increase is recommended for those premium features that are more price inelastic, such as Call Waiting and Call Security. From the customer survey, 88% of respondent customers said that Call Waiting is at least a pretty good idea and 91% of customer would probably continue to subscribe the service, even if the charge is increased 10% (i.e. from \$10 to \$11). Also, the subscription of Call Security is deemed necessary for those customers really have security problems. Hence, these types of services could really have a bigger profit margin for the company to compensate the lower tariff in other areas.
- (c) The reduction of international telephone services should be more in the routes to US, Canada, Australia and Continental Europe, say by 20% but the reduction on the route to China and other Asian countries could be lesser or even kept to be 'zero'. The rationale behind is :
  - (i) The existing competitors have their transit gateway in US and Canada which can thus offer cheaper charge for the international call to US, Canada and Continental Europe. A head-on competition is expected for these routes.
  - (ii) The competition for the route to China and Asia-Pacific is nearly zero. With the growing traffic from Hong Kong to China, this route is really a 'cash-cow' for Hong Kong Telecom.
  - (iii) The lower tariff for the route to US, Canada, Australia and Europe could stimulate the international traffic because the international

telephone service requirements for these routes are increasing when the number of emigrants to these areas increases.

### Distribution

The distribution strategy should aim at strengthening the three existing sales channels and developing new sales channels to maximize the sales return. Regarding the existing sales channels, their role should be clearly defined as follows :

(a) Inbound Sales

Hotline 1000 centre should remain as the general enquiry Hotline for all products because it is the most cost-effective channel to secure a sales order. With full implementation of Interactive Voice Response System (IVRS), the cost-effectiveness in selling could be maximized. The sales staff should exercise proactive selling for each incoming call. With the Hotline 1000 being publicised in each product leaflet, bill insert, newspaper and company's correspondence, the vast amount of incoming calls (over 150,000 per month) provides a great opportunity for Consumer Sales to maximize sales return.

The incoming traffic pattern of the incoming calls should be closely monitored such that adequate manpower can be arranged to cope with the peak traffic. In general, the traffic is most busy on the first day after holiday and the last day before a holiday (i.e. mostly are Monday and Friday respectively). Within the same day, the traffic is most busy in the morning from 9:00 am to 11:00 am. As the traffic fluctuates drastically within a week and within a day, it is useful to employ contract temporary staff to act as a "buffer" manpower source to cope with the peak traffic. In the less busy

period of time, these staff could be arranged to be part-time off or to perform other duties.

When the target customers of Consumer Sales are mainly residential customers, it is reasonable to operate a Hotline 1000 centres such that it offers the most convenient channel for the customers to interact with the telephone company. Therefore, in a competitive environment, it should be planned to extend the service hours of Hotline 1000 to 9:00 pm on Saturday and 9:00 am - 5:00 pm on Sunday.

(b) Outbound Sales

From the customer survey, it could be seen that telemarketing is a very successful and effective way to promote value-added services such as Starline, Faxline and Citinet services. Over 60% of customers got information on telephone products/services through telesales staff. Thus, the telemarketing should be treated as a dynamic proactive channels to sell value-added services.

For special promotion program, say second line or Starline free trial programme, telemarketing channel should be fully utilized to increase the successful rate. In that case, Hotline 1800 is positioned as a promotion Hotline such that the number is publicised for every promotion programme. It is distinguished from Hotline 1000 in that it is useful to divert the expected heavy traffic to Hotline 1800 and maintain the service level of 1000.

Telemarketing system is useful to increase the efficiency of the operations. A telemarketing system should include call list database, auto-dialling facilities, real-time updating of sales results, consolidation of sales performance statistics and connection with order-processing system.

(c) Retailing

The main role of retailing service centres/counters is to provide a face-to-face channel for customers to interact with the telephone company. The selection of the location of the retailing shops should be considered very carefully such that the customer traffic is great enough to justify the presence of a service centre. It is effective to set up a shop or counter inside department stores and commercial complex because a certain degree of customer traffic has been grown up.

When the monthly bill collection amounts to 300,000, it is useful to introduce the telephone services to the customers while they are queueing up to pay the telephone bill. However, a prudent approach should be adopted such that the customers won't be annoyed by the sales staff.

When the value-added services becomes more and more advanced and sophisticated, it is useful to make use of retailing service centres for product display and product demonstration. For example, a 'Citinet' corner can be set up in a service centre situated at the business district and an 'international telephone service' corner can be set up in other service centres with the target customer group. Also, a 'mega' store can be trial run in some busy district such that the customers can get a total solution on all telephone requirements in the shop.

(d) New Sales Channels

The following new sales channels should be developed to maximize the sales return.

(i) Mobile Sales Desk

It is useful to set up mobile sales desk in, say new housing estates to collectively harvest the sales to new home owners. Also, when telemarketing staff could not effectively sell to customers with lesser education background or older age, it is useful to use the mobile sales desk to really demonstrate the usefulness of the new features. We could identify those areas by referring to the sales result of the telemarketing programmes. For example, if the telemarketing programmes result in Yuen Long village region is well below the average successful rate, a mobile sales desk could be set up there to demonstrate and promote the telephone services.

(ii) Agents

Telephone vendors can be appointed to act as the agents of Hong Kong Telecom to sell the telephone services when customers buy a telephone set in their shops. This kind of partnership helps to boost up the whole telephone market.

(iii) Customer-get-customer

Customers themselves can also be appointed as agents when they could introduce their friends and relatives to subscribe to the telephone services. For example, a MagicStar customer could be invited to refer sales lead of MagicStar among their friends, colleagues and relatives. Attractive gift or service charge discount can be rewarded to those successful referral.

## Promotion

For local telephone services, the promotion strategies mainly include :

(a) Free trial

From the high successful rate of the free trial programmes, the strategy should be continued to be adopted to increase the penetration of the value-added services.

(b) Free rental

To promote second telephone line, free rental of 1 month in the festive season such as Christmas and Valentines' Day would be delivered as a gimmick to increase the penetration. Together with the lower tariff of second line, this promotion can be acted as a catalyst to induce the desire to instal a second line.

(c) Lucky draw and free gifts

An annual grand promotion event on the major products, just as second line and MagicStar could be organised with lucky draw for a group of grand prizes.

The promotion channels include :

(a) Direct Mail

Direct mail of all promotion programme will be sent to the target customers of each product. For example, direct mail of MagicStar promotion will be sent to FastStar customers.

(b) Bill Insert

From the customer survey, bill insert is proved to be effective and the mailing cost of direct mail can be even saved.

(c) Video

Video with different product introduction and promotion can be set up in the retailing shops.

(d) Radio

The slogan of the value-added telephone services could be frequently broadcasted in radio during the morning and evening time. Also, the promotion event can be advertised in radio.

(e) TV

TV advertising for MagicStar could be useful in increasing the awareness of MagicStar to the general public.

(f) MTR stations

The advertising panels of 6 MTR stations (Central, Admiralty, Tsimshatsui, Mongkok, Kowloon Tong and Tsuen Wan) will be booked for general promotion of the value-added services.

(g) Printing Advertising

Newspaper advertising campaign can be launched for the lucky draw promotion campaign. Since most of the residents in Hong Kong are Chinese, it is more effective to spend most of the budget on Chinese newspaper advertising.

(h) Others

Other promotion channels including Telephone Kiosk advertising, company vehicle advertising and tram/bus advertising could be used to increase the general public awareness on the telephone services.

For international telephone services, the promotion strategies for stimulation of

international traffic will be :

- (a) Continue TV advertising on IDD to remind customers to use IDD as the communication channel with their overseas relatives/friends.
- (b) Set up IDD Callers Club for those heavy users and give discount to them when they achieved a certain amount of IDD expenses.
- (c) Use telemarketing to introduce IDD 200 to Calling Card holder's such that the customers are well aware that they can even make IDD calls in the office without an IDD line.
- (d) A wallet card with full list of Auto-Hong-Kong-direct numbers of different countries should be distributed in travelling agents, airline companies, Tourist Association and Airport counters such that people leaving Hong Kong can be aware of the way to directly call Hong Kong by using their Calling Card. Since the charge is based on Hong Kong IDD rate which mostly is much cheaper than making international call from overseas to Hong Kong, the international telephone usage can be encouraged.

### Sales Force

The sales force requirements in different sales channels could be different.

Thus, the sales force strategy is different in the three sales channels.

#### (a) Inbound Sales

The Inbound Sales staff should be versatile enough to handle the sales enquiries of all the telephone products. Thus, it requires basically a full time staff who are trained to provide quality customer services to the customers. Suggestive selling will be the proper strategy for them in selling. Training



course should be held to change their attitude from passive to pro-active. At present, most of them only take down what the customer requests. In the coming future, they should take their own initiative to introduce new products to customers. Whenever a customer requests to disconnect a line, the staff should endeavor to find out whether they are just moving to a new home and a Homemover package will be introduced to those movers.

Although employment of part-time staff may be necessary during the peak traffic period of time, their quality should be maintained and the quantity should be kept in a low level as compared with full time staff. In business district such as Hong Kong Island, the Hotline 1000 staff should have better English skill to cope with the English-speaking customers.

(b) Outbound Sales

With targeted selling programmes and the vast amount of telephone calls to be made, it is more cost-effective to employ part-time telesales employees. It is realised that their working cycle as a part-timer will not be very long, usually 3-6 months. Therefore, continuous recruitment and training of new part-timers become very important in Outbound Sales.

The number of part-timers on the job should be continuously monitored so that recruitment activities could be followed when the sales force drops below a certain level.

With the help of a telemarketing system, it is possible to devise a commission scheme for the part-time telesales employees so that they are motivated to sell more.

The part-timer demand grows rapidly in these two years as a lot of service companies learn to use part-timer to reduce the staff overhead. The tighten demand pushes up the cost of part-times and also increased the turnover rate as well. Therefore, a long term strategy should be developed to employ Cantonese-speaking Chinese from mainland China to satisfy the demand.

(c) Retailing

The requirements in Retailing are completely different as they interact with customers on a face-to-face basis. A standardized uniform with a smiling face is always required in the retailing industry. Therefore, sales staff with pleasant outlook and nice presentation should be recruited.

Retailing shops are opened in public holidays and Sundays. So, the staff recruited need to be on shift rota and their salaries should be higher than those in the Hotline centre and the office.

When Retailing also requires some employees to perform cashier duty in bill collection, it should separate these staff from the sales staff in terms of duty, job requirement, pay scale and training. It is because the two jobs are completely different and it is seldom to find a single person who can do the same best job in the two duties.

Retailing Staff represents the company in front of general public, their quality and presentation directly affects the Quality Image of the company. Therefore, there should be no part-time staff in the retailing shops.

## **CHAPTER VII**

### **CONCLUSIONS**

The industry, competitive and company situation analysis has been done. The analysis of macroenvironment and chief economic characteristics of consumer telephone services market reveals that the industry is still very attractive even in the open competition environment. When Hong Kong Telecom is still holding the franchise of operating international telephone services market, the competitive situation is still advantageous to the company.

The market size of consumer telephone services is big enough when every household needs at least one telephone line for communications. The traffic growth in international business grew more than 20 percentage in the past ten years and it is expected that the growth trend will continue when the economic developments of Hong Kong sustains in the coming century.

Hong Kong Telecom is playing quite well in selling Starline services such that the Starline penetration increases to 65 percentage in these few years. However, in light of customer surveys, it was found that the company need to review its overall strategy in product packaging, pricing, promotion and customer services.

With the analysis groundwork, we are able to identify the strategic issues in

the area of quality customer services, international traffic stimulation and market segmentation.

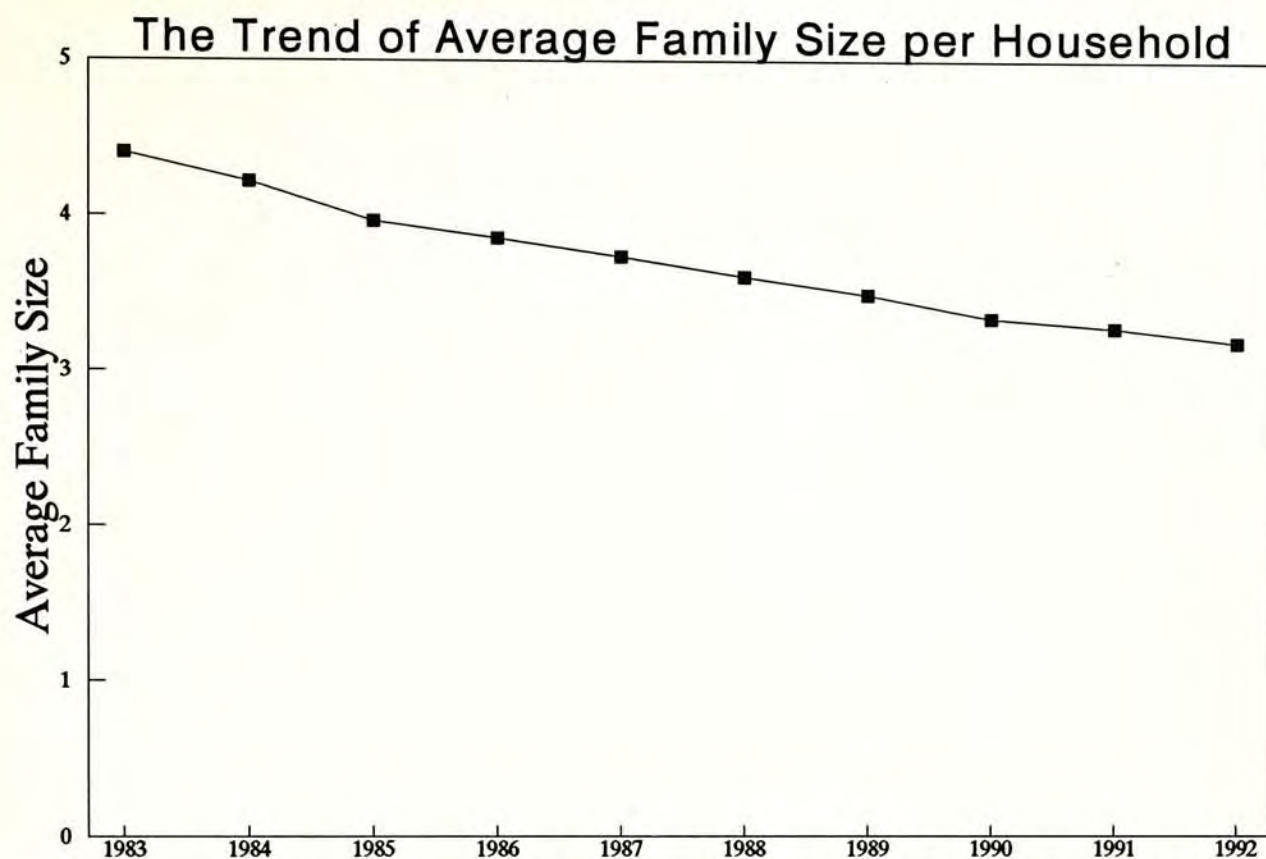
Quality customer service is the key of success in doing business in consumer market. On one hand, a list of initiatives was being brought out to improve the customer service standard. On the other hand, it is necessary and important for the company's management to provide a stable organization in line with staff mindsetting to sustain the momentum of quality revolution.

International revenue contributes a very large proportion of company's profit. However, Hong Kong Telecom is required to reduce IDD tariff by a total of twelve per cent in three years which largely affects the revenue contribution. IDD stimulation could be done through pricing and promotion strategy revision. Routes with more inelasticity and high growth was identified so that the price reductions were set to minimal. On the other hand, telesales channel is recommended to use for IDD stimulation.

Market segmentation for the mass consumer market is a useful tool in differentiate the different customer groups for targeted sales. A fully integrated customer database is very useful to facilitate market segmentation in mass market. It is realised that it takes time to develop the custome database. However, it is helpful to build up a simple telephone bill matrix model for differentiating the different customer groups.

To conclude, we have achieved the objectives in devising the strategy in the 'Grand' and 'Functional' level. The situation and key strategic issue analysis leads us to believe that a continued growth strategy is required for Hong Kong Telecom to maintain its leading position in consumer telephone services market. In the areas of

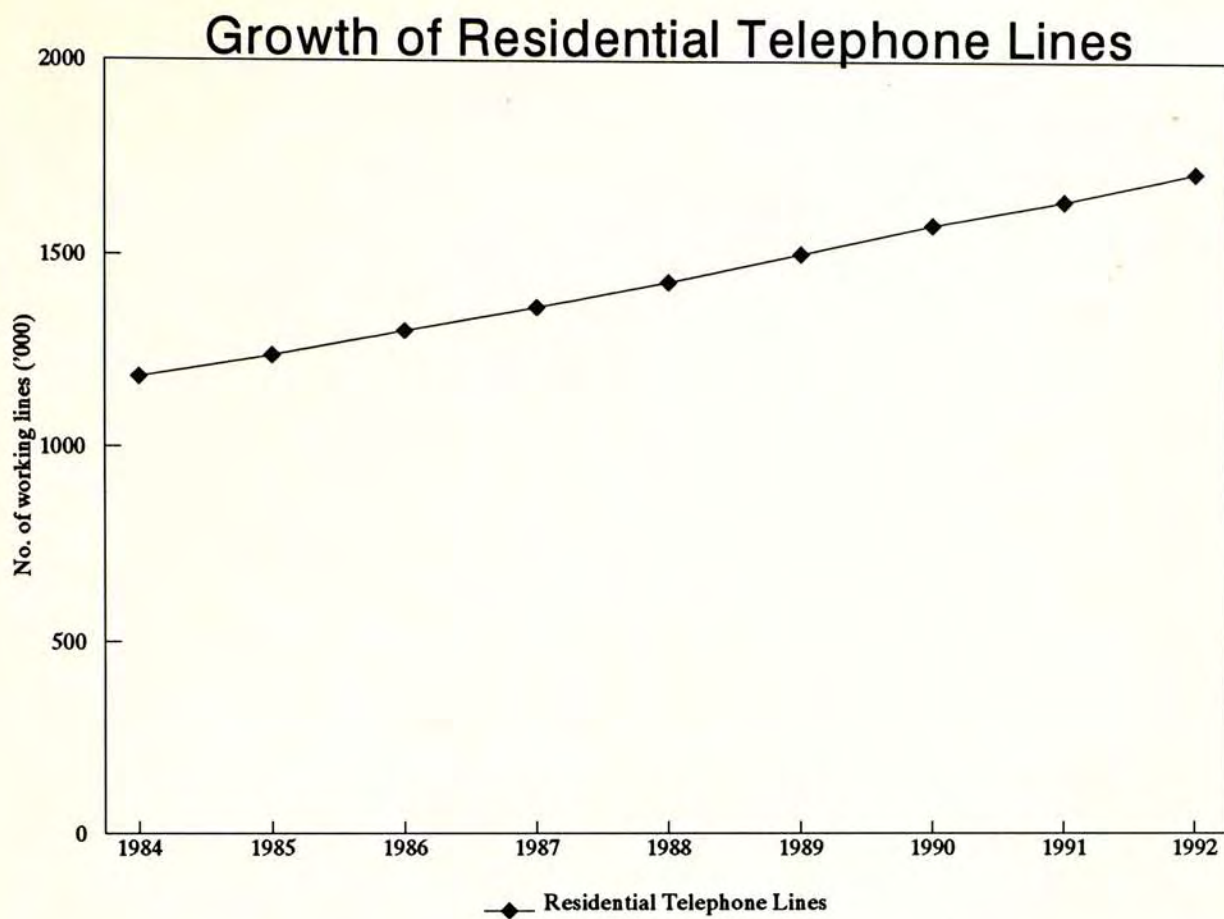
'Market Positioning", "Customer Services", "Quality Image" and "People", the strategic actions were initiated so that the company is able to meet the challenge that competition brings. In functional level, overall strategies in Product, Pricing, Distribution, Promotion and Sales Forces were reviewed completely so that a coherent and consistent marketing mix was devised for Hong Kong Telecom to pre-empt the coming competitors and to further strengthen its leading position in Hong Kong consumer telephone services market.



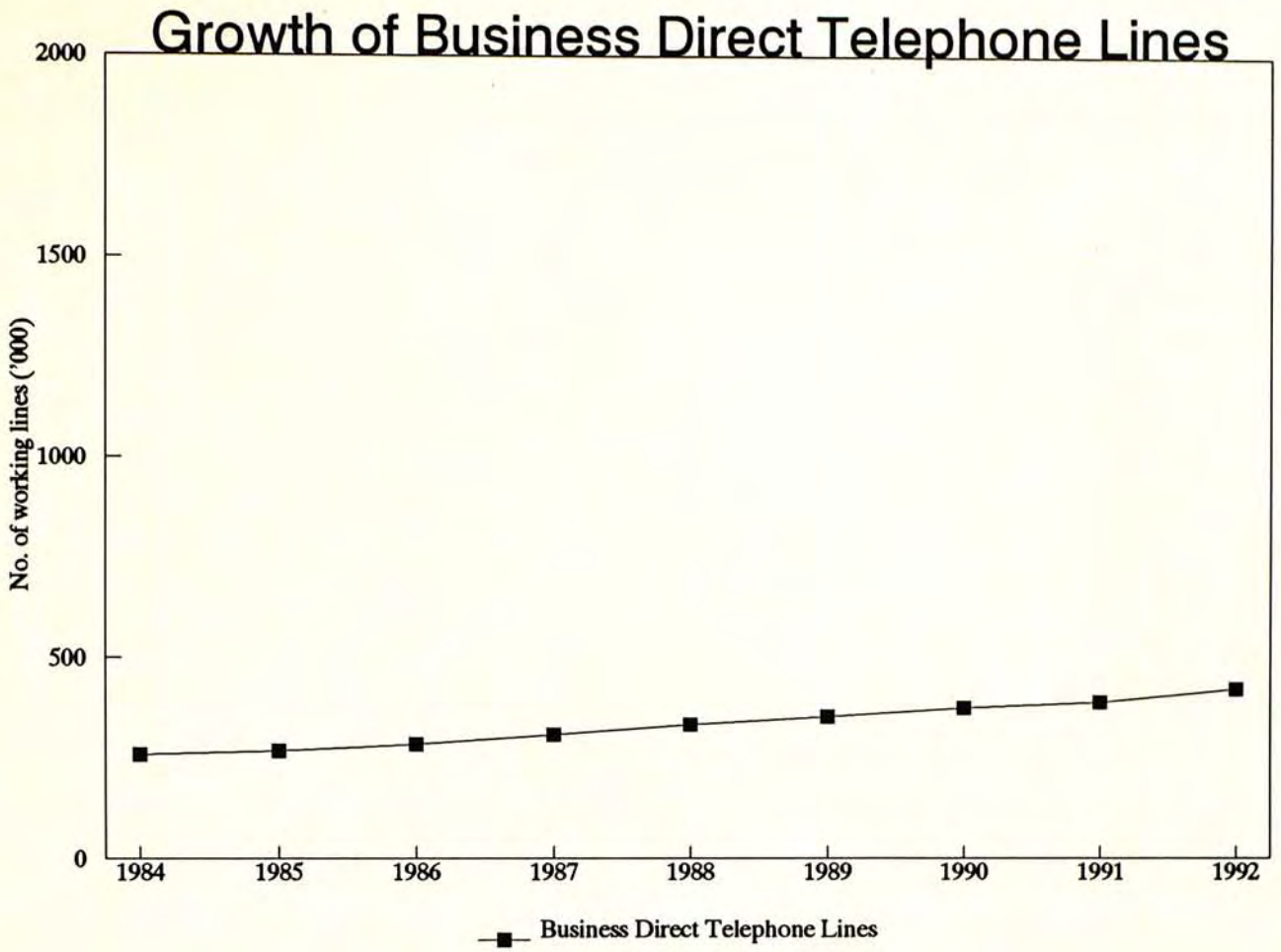
Assumption: Average Family Size = Estimated Population/Total stock of permanent living quarters

Note: For Estimated Population Mid-period figures used  
For Total stock of living quarters 3rd quarter figures used

Source: Hong Kong Monthly Digest of Statistics

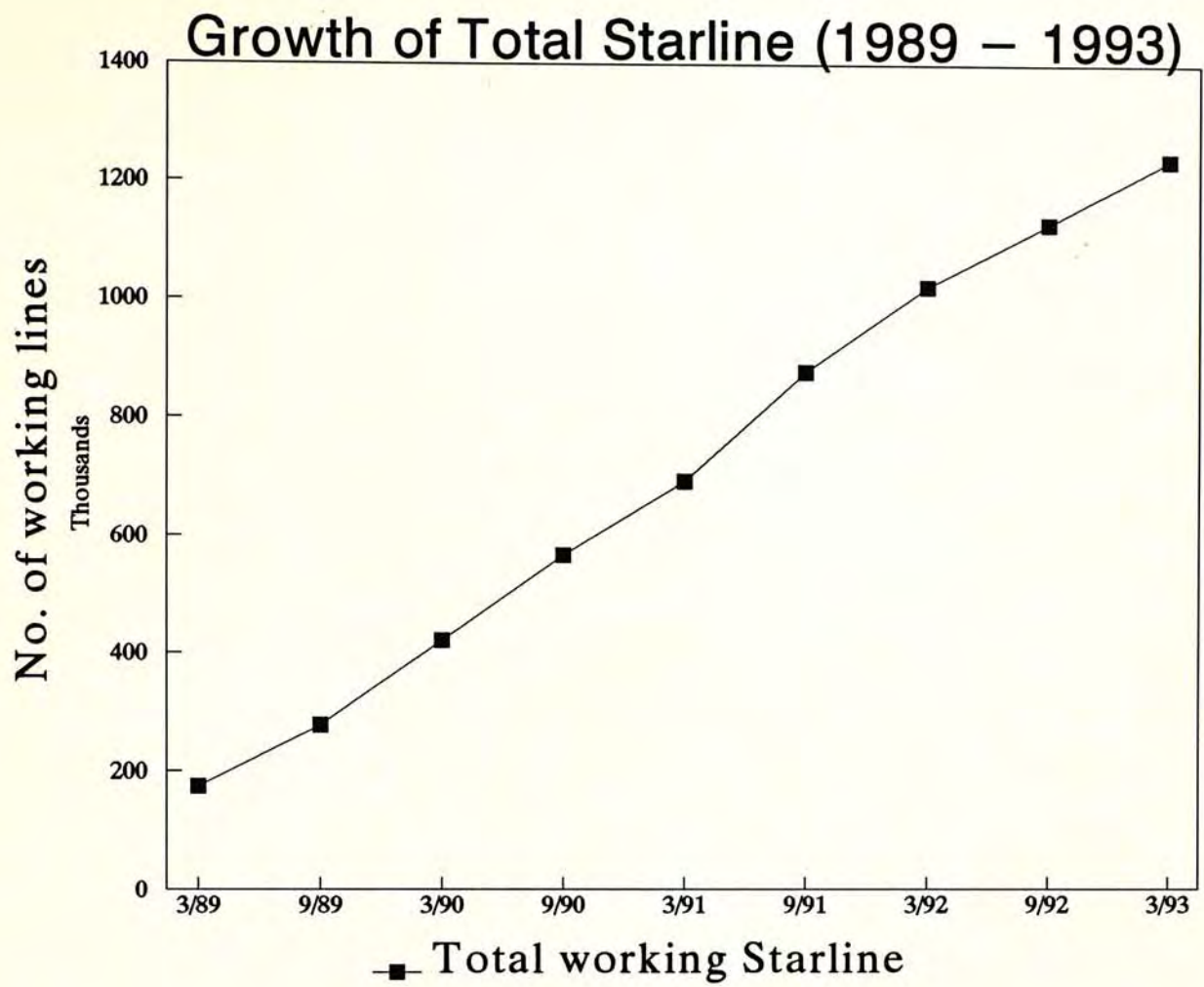


Source: Hong Kong Telecom Annual Report 1992

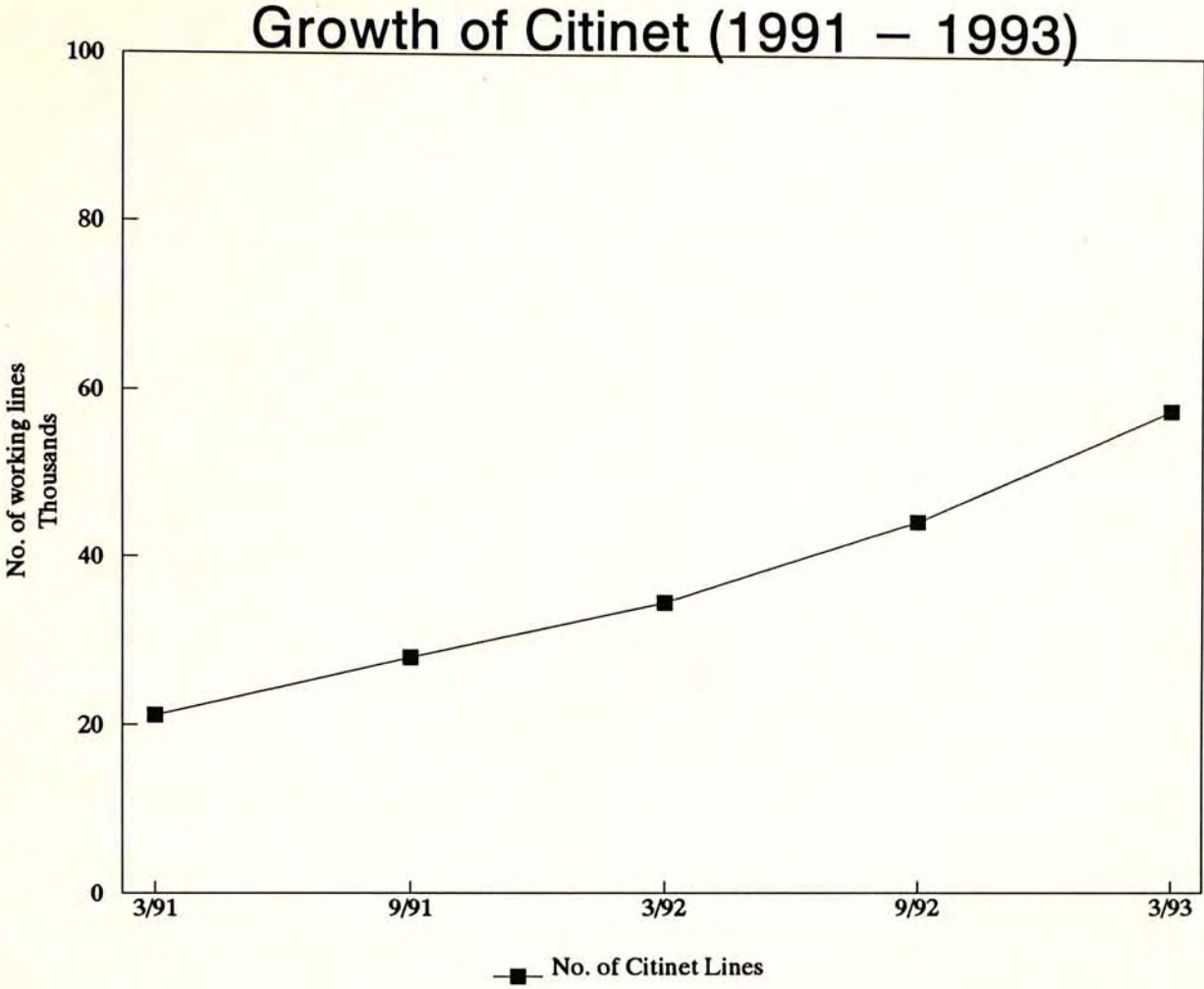


Source: Hong Kong Monthly Digest of Statistics Dec 1992

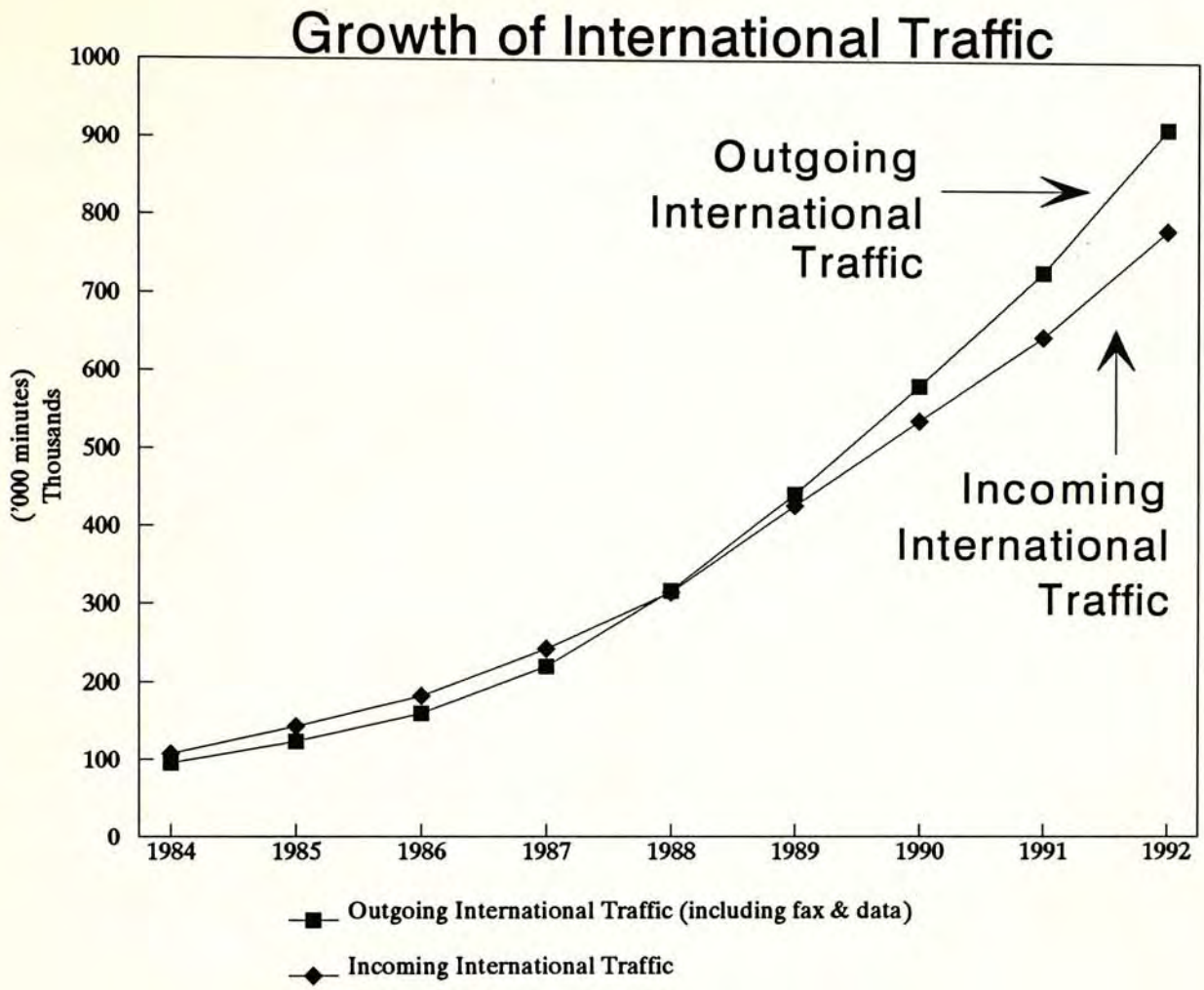




Source: Summary of Starline Statistics, Hong Kong Telecom



Source : Summary of Statistics, Hong Kong Telecom



Source: Hong Kong Telecom Annual Report 1992

## APPENDIX 7 : Questionnaire of Customer Surveys

Survey 1 : Residential Customers who subscribe single Call-Waiting function

A. Where do you get the information about the Call-Waiting function ?

(more than one answer is allowed)

- i) Bill insert
- ii) Promotion letter
- iii) Called by telesales staff of HK Telecom
- iv) Through HK Telecom/CSL staff during enquiry
- v) Friends/Relatives
- vi) Newspaper

B. By which channel did you order your service ?

- i) When first time introduced by HK Tel staff
  - phone
  - shop
- ii) Letter
- iii) Call Hotline

C. Which of the following phases best describes your feelings about the Call-Waiting function ?

- i) It's a great idea
- ii) It's a pretty good idea
- iii) It's a so-so idea
- iv) It's not a very good idea
- v) It's a poor idea

D. How often did you use the Call-Waiting function ?

- i) > 12 times/day
- ii) 10 - 12 times/day
- iii) 7 - 9 times/day
- iv) 4 - 6 times/day
- v) 0 - 3 times/day

E. Assume the price of Call-Waiting function is \$11/month.

- i) I definitely would continue to subscribe
- ii) I probably would continue to subscribe
- iii) I might or might not continue to subscribe
- iv) I probably would not continue to subscribe
- v) I definitely would not continue to subscribe

F. Have you heard about FastStar ?

- i) Yes, go to G
- ii) No, go to I

G. When did you get the information ?

- i) Bill insert
- ii) Promotion letter
- iii) Called by telesales staff of HK Telecom
- iv) Through HK Telecom/CSL staff during enquiry
- v) Friends/Relatives
- vi) Newspaper

- H. What was your reason for not subscribing ?
- i) Not useful
  - ii) Expensive - What is the reasonable price ?
  - iii) Sub-optimal combination of Starline features in the package  
(please state the preferred combinations)
  - iv) Others (please specify)
- I. Please rank the following new services in order of priority that you would like to subscribe (you can have zero choice).
- i) Easy call
    - Automatic Callback on busy line
    - Automatic recall last caller
  - ii) Call-waiting enhancement
    - Automatic cancel Call-Waiting for international call
    - Cancel Call-Waiting
  - iii) Twin line package - Call Forward Busy
  - iv) Voice mail
  - v) Caller ID
  - vi) Portable number
- J. Please state your education level
- i) University or above
  - ii) Secondary
  - iii) Primary
  - iv) Not attended any school

K. Please state your household income

- i) > \$25,000/month
- ii) \$20,001 - 25,000/month
- iii) \$15,001 - 20,000/month
- iv) \$10,001 - 15,000/month
- v) \$5,001 - 10,000/month
- vi) Below \$5,000/month

L. Please state your age

- i) 72 or above
- ii) 54 - below 72
- iii) 36 - below 54
- iv) 18 - below 36
- v) below 18

M. Please state your sex

- i) Male
- ii) Female

## Survey 2 : Residential Non-Starline Customers

- A. Have you heard about Call-Waiting function ? (i.e. you can hear some beep tone when someone call you and you are on the phone)
- i) Yes, go to B
  - ii) No, go to C
- B. Where did you get the information ?
- i) Bill insert
  - ii) Promotion letter
  - iii) Newspaper
  - iv) Called by telesales staff of HK Telecom
  - v) Through HK Telecom/CSL staff during enquiry
  - vi) Friends/Relatives
- C. How often did you use telephone at home ?
- i) > 20 times/day
  - ii) 16 - 20 times/day
  - iii) 11 - 15 times/day
  - iv) 6 - 10 times/day
  - v) less than 5 times/day



D. What prevented you from subscribing the Call-Waiting service?

- i) No application
- ii) Expensive
- iii) Don't know the service
- iv) Other reasons (please specify)

E. Please rank the following new service in order of priority that you would like to subscribe (you can have zero choice).

- i) Easy call
  - Automatic callback on busy line
  - Automatic recall last caller
- ii) Call-Waiting enhancement
  - Automatic cancell Call-Waiting for international call
  - Cancel Call-Waiting
- iii) Twin line package
  - Call Forward Busy
- iv) Voice mail
- v) Caller ID
- vi) Portable number

F. Please state your education level

- i) University or above
- ii) Secondary
- iii) Primary
- iv) Not attended any school

G. Please state your household income

- i) > \$25,000/month
- ii) \$20,001 - 25,000/month
- iii) \$15,001 - 20,000/month
- iv) \$10,001 - 15,000/month
- v) \$5,001 - 10,000/month
- vi) Below \$5,000/month

H. Please state your age

- i) 72 or above
- ii) 54 - below 72
- iii) 36 - below 54
- iv) 18 - below 36
- v) below 18

I. Please state your sex

- i) Male
- ii) Female

### Survey 3 : Residential Customers on International Services

A. Have you heard about IDD ?

- i) Yes, go to B
- ii) No, go to C

B. Where did you get the information ?

- i) Bill insert
- ii) T.V. advertising
- iii) Called by telesales staff of HK Telecom
- iv) Through HK Telecom/CSL staff during enquiry
- v) Friends/Relatives
- vi) Newspaper

C. Do you have any friends/relatives live abroad ?

- i) Yes, go to D
- ii) No, stop here

D. Do you have any contact with those friends/relatives abroad ?

- i) Yes, go to E
- ii) No, stop here

- E. Which of the following channel you are using to contact them ?
- i) Letter
    - Y
    - N (omit F)
  - ii) IDD, including calling card, fax
    - Y (omit J)
    - N (omit G, I, and K)
  - iii) Visiting
    - Y
    - N (omit H)
- F. Please state frequency of communication by letter per year.
- i) more than 12 times
  - ii) 10 - 12 times
  - iii) 7 - 9 times
  - iv) 3 - 6 times
  - v) less than 3 times
- G. Please state frequency of communication by IDD per year.
- i) more than 48 times
  - ii) 25 - 48 times
  - iii) 13 - 24 times
  - iv) 7 - 12 times
  - v) less than 7 times

H. Please state frequency of communication by visiting per year.

- i) 5 times or above
- ii) 4 times
- iii) 3 times
- iv) 2 times
- v) less than once

I. How much do you spend for IDD service per month ?

- i) Less than HK\$500
- ii) \$500 or above

J. Reason for not using IDD ? (more than one answer is allowed)

- i) Expensive
- ii) Time difference
- iii) Don't have friends/relatives phone numbers
- iv) Others (please specify)

K. Reason for using IDD ? (more than one answer is allowed)

- i) Convenience
- ii) Immediate and direct
- iii) Warmth
- iv) Get used to
- v) Laziness and trouble in writing letter
- vi) Others (please specify)

L. Please state your education level

- i) University or above
- ii) Secondary
- iii) Primary
- iv) Not attended any school

M. Please state your household income

- i) > \$25,000/month
- ii) \$20,001 - 25,000/month
- iii) \$15,001 - 20,000/month
- iv) \$10,001 - 15,000/month
- v) \$5,001 - 10,000/month
- vi) Below \$5,000/month

N. Please state your age ?

- i) 72 or above
- ii) 54 - below 72
- iii) 36 - below 54
- iv) 18 - below 36
- v) below 18

O. Please state your sex ?

- i) Male
- ii) Female

Comparison Table among those who paid more than HK\$500/month, less than HK\$500/month and those who didn't use IDD

<u>Characteristics</u>	<u>N-IDD</u>	<u>&lt; \$500</u>	<u>&gt; \$500</u>
1. Reason for using IDD			
- convenience	-	6 (100%)	2 (100%)
- immediate and direct	-	6 (100%)	2 (100%)
- warmth	-	6 (100%)	1 (50%)
- get used to	-	0 (0%)	2 (100%)
- laziness and trouble in writing letter	-	2 (33%)	2 (100%)
2. Education			
- university or above	0 (0%)	0 (0%)	2 (100%)
- secondary	3 (50%)	5 (83%)	0 (0%)
- primary	1 (17%)	0 (0%)	0 (0%)
- not attended any school	2 (33%)	1 (17%)	0 (0%)
3. Household income/month			
- > \$25,000	0 (0%)	1 (17%)	2 (100%)
- 20,001 - 25,000	1 (17%)	1 (17%)	0 (0%)
- 15,001 - 20,000	1 (17%)	2 (33%)	0 (0%)
- 10,001 - 15,000	2 (33%)	2 (33%)	0 (0%)
- 5,001 - 10,000	2 (33%)	0 (0%)	0 (0%)
- below 5,000	0 (0%)	0 (0%)	0 (0%)
4. Age			
- 72 or above	0 (0%)	1 (17%)	0 (0%)
- 54 - below 72	0 (0%)	1 (17%)	0 (0%)
- 36 - below 54	3 (50%)	1 (17%)	1 (50%)
- 18 - below 36	3 (50%)	3 (50%)	1 (50%)
- below 18	0 (0%)	0 (0%)	0 (0%)

## APPENDIX 8 : Summary of Results of Customer Surveys

### Survey 1 : Residential Customers who subscribe single Call-Waiting function

#### A. Where do you get the information about the Call-Waiting function ?

(more than one answer is allowed)

i)	Bill insert	20	(36%)
ii)	Promotion letter	30	(54%)
iii)	Called by telesales staff of HK Telecom	35	(63%)
iv)	Through HK Telecom/CSL staff during enquiry	12	(21%)
v)	Friends/Relatives	2	(4%)
vi)	Newspaper	2	(4%)

#### B. By which channel did you order your service ?

i)	When first time introduced by HK Tel staff		
	- phone	24	(43%)
	- shop	1	(2%)
ii)	Letter	0	(0%)
iii)	Call Hotline	31	(55%)

#### C. Which of the following phases best describes your feelings about the Call-Waiting function ?

i)	It's a great idea	6	(11%)
ii)	It's a pretty good idea	43	(77%)
iii)	It's a so-so idea	7	(12%)
iv)	It's not a very good idea	0	(0%)
v)	It's a poor idea	0	(0%)



D. How often did you use the Call-Waiting function ?

i)	> 12 times/day	1	( 2%)
ii)	10 - 12 times/day	1	( 2%)
iii)	7 - 9 times/day	1	( 2%)
iv)	4 - 6 times/day	6	( 6%)
v)	0 - 3 times/day	47	(84%)

E. Assume the price of Call-Waiting function is \$11/month.

i)	I definitely would continue to subscribe	1	(2%)
ii)	I probably would continue to subscribe	50	(89%)
iii)	I might or might not continue to subscribe	4	( 7%)
iv)	I probably would not continue to subscribe	1	( 2%)
v)	I definitely would not continue to subscribe	0	( 0%)

F. Have you heard about FastStar ?

i)	Yes, go to G	48	(86%)
ii)	No, go to I	8	(14%)

G. When did you get the information ?

i)	Bill insert	0	( 0%)
ii)	Promotion letter	30	(63%)
iii)	Called by telesales staff of HK Telecom	40	(83%)
iv)	Through HK Telecom/CSL staff during enquiry	10	(21%)
v)	Friends/Relatives	0	( 0%)
vi)	Newspaper	0	( 0%)

H. What was your reason for not subscribing ?

i)	Not useful	25	(45%)
ii)	Expensive - What is the reasonable price ?	0	(0%)
iii)	Sub-optimal combination of Starline features in the package (please state the preferred combinations)	31	(55%)
iv)	Others (please specify)	0	(0%)

I. Please rank the following new service in order of priority that you would like to subscribe (you can have zero choice).

i)	Easy call		
	- Automatic Callback on busy line		
	- Automatic recall last caller	31	(55%)
ii)	Call-Waiting enhancement		
	- Automatic cancel Call-Waiting for international call		
	- Cancel Call-Waiting	28	(50%)
iii)	Twin line package - Call Forward Busy	11	(20%)
iv)	Voice mail	14	(25%)
v)	Caller ID	28	(50%)
vi)	Portable number	12	(21%)

J. Please state your education level

i)	University or above	3	(5%)
ii)	Secondary	25	(45%)
iii)	Primary	23	(41%)
iv)	Not attended any school	5	(9%)

K. Please state your household income

i)	> \$25,000/month	3	( 6%)
ii)	\$20,001 - 25,000/month	7	(12%)
iii)	\$15,001 - 20,000/month	6	(10%)
iv)	\$10,001 - 15,000/month	21	(38%)
v)	\$5,001 - 10,000/month	17	(30%)
vi)	Below \$5,000/month	2	( 4%)

L. Please state your age

i)	72 or above	2	( 4%)
ii)	54 - below 72	2	( 4%)
iii)	36 - below 54	20	(35%)
iv)	18 - below 36	32	(57%)
v)	below 18	0	( 0%)

M. Please state your sex

i)	Male	30	(53%)
ii)	Female	26	(46%)

## Survey 2 : Residential Non-Starline Customers

- A. Have your heard about Call-Waiting function ? (i.e. you can hear some beep tone when someone call you and you are on the phone)
- |                 |    |       |
|-----------------|----|-------|
| i) Yes, go to B | 32 | (94%) |
| ii) No, go to C | 2  | (6%)  |
- B. Where did you get the information ?
- |  |    |       |
|--|----|-------|
| i) Bill insert                                 | 2  | (6%)  |
| ii) Promotion letter                           | 25 | (74%) |
| iii) Newspaper                                 | 2  | (6%)  |
| iv) Called by telesales staff of HK Telecom    | 28 | (82%) |
| v) Through HK Telecom/CSL staff during enquiry | 7  | (20%) |
| vi) Friends/Relatives                          | 3  | (9%)  |
- C. How often did you use telephone at home ?
- |                        |   |       |
|------------------------|---|-------|
| i) > 20 times/day      | 0 | (0%)  |
| ii) 16 - 20 times/day  | 0 | (0%)  |
| iii) 11 - 15 times/day | 5 | (15%) |
| iv) 6 - 10 times/day   | 7 | (20%) |
| v) less than 5/day     | 3 | (9%)  |

D. What prevented you from subscribing the Call-Waiting service?

i)	No application	31	(91%)
ii)	Expensive	1	(3%)
iii)	Don't know the service	2	(6%)
iv)	Other reasons (please specify)	0	(0%)

E. Please rank the following new service in order of priority that you would like to subscribe (you can have zero choice).

i)	Easy call		
	- Automatic callback on busy line		
	- Automatic recall last caller	2	(6%)
ii)	Call-Waiting enhancement		
	- Automatic cancell Call-Waiting for international call		
	- Cancel Call-Waiting	5	(15%)
iii)	Twin line package		
	- Call Forward Busy	0	(0%)
iv)	Voice mail	2	(6%)
v)	Caller ID	7	(21%)
vi)	Portable number	3	(9%)

F. Please state your education level

i)	University or above	0	(0%)
ii)	Secondary	14	(41%)
iii)	Primary	16	(47%)
iv)	Not attended any school	4	(12%)

G. Please state your household income

i)	> \$25,000/month	2	( 6%)
ii)	\$20,001 - 25,000/month	0	( 0%)
iii)	\$15,001 - 20,000/month	3	( 9%)
iv)	\$10,001 - 15,000/month	13	(38%)
v)	\$5,001 - 10,000/month	15	(44%)
vi)	Below \$5,000/month	1	( 3%)

H. Please state your age

i)	72 or above	0	( 0%)
ii)	54 - below 72	2	( 6%)
iii)	36 - below 54	15	(44%)
iv)	18 - below 36	17	(50%)
v)	below 18	0	( 0%)

I. Please state your sex

i)	Male	19	(56%)
ii)	Female	15	(44%)

### Survey 3 : Residential Customers on International Services

#### A. Have you heard about IDD ?

i) Yes, go to B	48	(100%)
ii) No, go to C	0	( 0% )

#### B. Where did you get the information ?

i) Bill insert	10	(21%)
ii) T.V. advertising	40	(83%)
iii) Called by telesales staff of HK Telecom	5	(10%)
iv) Through HK Telecom/CSL staff during enquiry	6	(13%)
v) Friends/Relatives	2	( 4% )
vi) Newspaper	5	(10%)

#### C. Do you have any friends/relatives live abroad ?

i) Yes, go to D	22	(46%)
ii) No, stop here	26	(54%)

#### D. Do you have any contact with those friends/relatives abroad ?

i) Yes, go to E	14	(64%)
ii) No, stop here	8	(36%)

E. Which of the following channel you are using to contact them ?

i)	Letter		
	- Y	14	(100%)
	- N (omit F)	0	( 0% )
ii)	IDD, including calling card, fax		
	- Y (omit J)	8	(57%)
	- N (omit G, I, and K)	6	(43%)
iii)	Visiting		
	- Y	2	(14%)
	- N (omit H)	12	(86%)

F. Please state frequency of communication by letter per year.

i)	more than 12 times	0	( 0%)
ii)	10 - 12 times	1	( 7%)
iii)	7 - 9 times	2	(14%)
iv)	3 - 6 times	2	(14%)
v)	less than 3 times	9	(65%)

G. Please state frequency of communication by IDD per year.

i)	more than 48 times	1	(13%)
ii)	25 - 48 times	1	(13%)
iii)	13 - 24 times	0	( 0%)
iv)	7 - 12 times	1	(13%)
v)	less than 7 times	5	(61%)



H.	Please state frequency of communication by visiting per year.		
	i) 5 times or above	0	(0%)
	ii) 4 times	0	(0%)
	iii) 3 times	0	(0%)
	iv) 2 times	0	(0%)
	v) less than once	2	(100%)
I.	How much do you spend for IDD service per month ?		
	i) Less than HK\$500	6	(75%)
	ii) \$500 or above	2	(25%)
J.	Reason for not using IDD ? (more than one answer is allowed)		
	i) Expensive	6	(100%)
	ii) Time difference	2	(33%)
	iii) Don't have friends/relatives phone numbers	3	(33%)
	iv) Others (please specify)	1	(17%)
K.	Reason for using IDD ? (more than one answer is allowed)		
	i) Convenience	8	(100%)
	ii) Immediate and direct	8	(100%)
	iii) Warmth	7	(88%)
	iv) Get used to	2	(25%)
	v) Laziness and trouble in writing letter	4	(50%)
	vi) Others (please specify)	0	(0%)

L.	Please state your education level		
i)	University or above	2	( 4%)
ii)	Secondary	20	(42%)
iii)	Primary	22	(46%)
iv)	Not attended any school	4	( 8%)

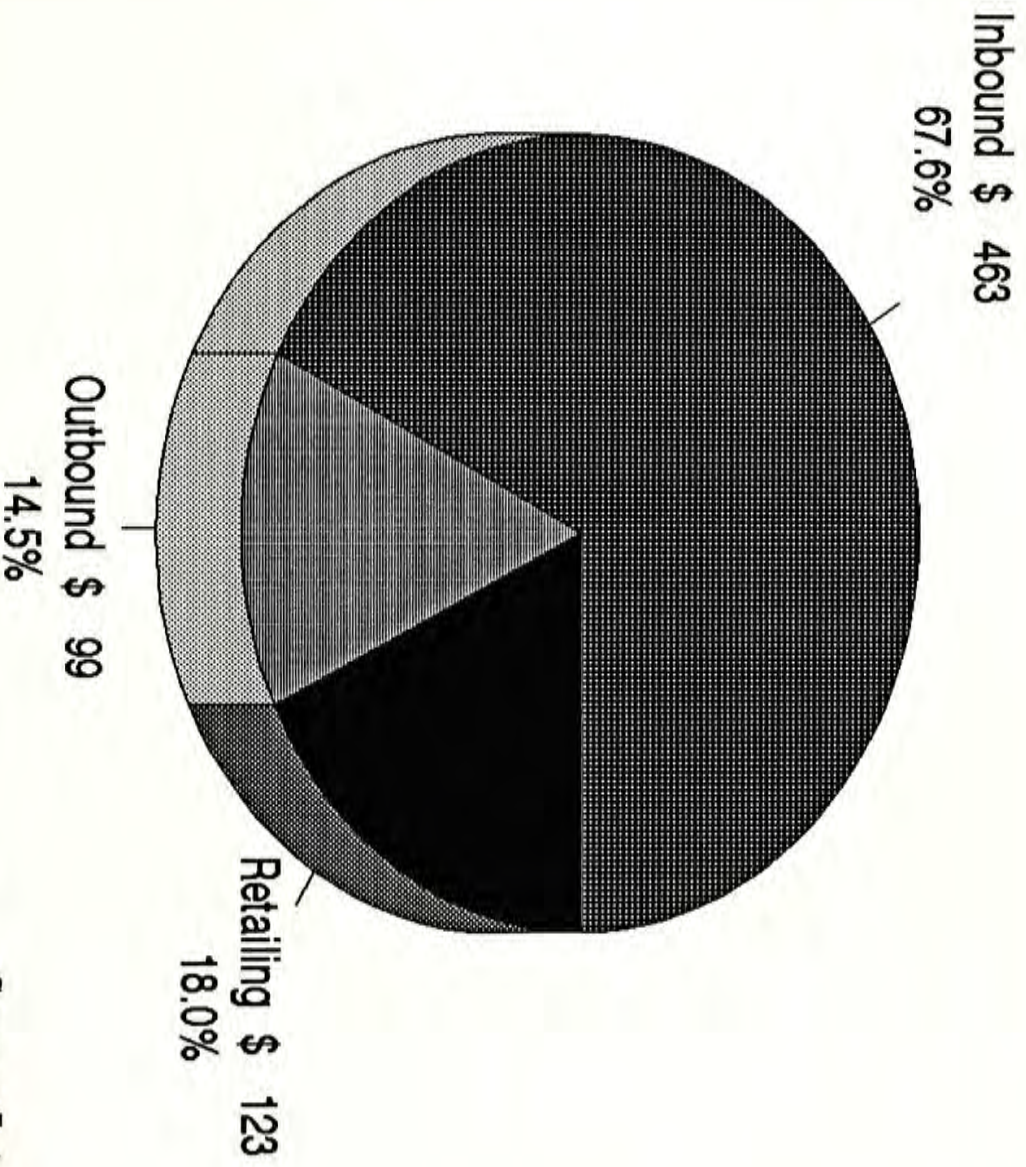
M.	Please state your household income		
i)	> \$25,000/month	3	( 6%)
ii)	\$20,001 - 25,000/month	4	( 8%)
iii)	\$15,001 - 20,000/month	4	( 8%)
iv)	\$10,001 - 15,000/month	9	(20%)
v)	\$5,001 - 10,000/month	24	(50%)
vi)	Below \$5,000/month	4	( 8%)

N.	Please state your age ?		
i)	72 or above	2	( 4%)
ii)	54 - below 72	3	( 6%)
iii)	36 - below 54	21	(44%)
iv)	18 - below 36	22	(46%)
v)	below 18	0	( 0%)

O.	Please state your sex ?		
i)	Male	28	(58%)
ii)	Female	20	(42%)

**Gross Sales Revenue (\$M) Distribution**

**Among Three Sales Channels**

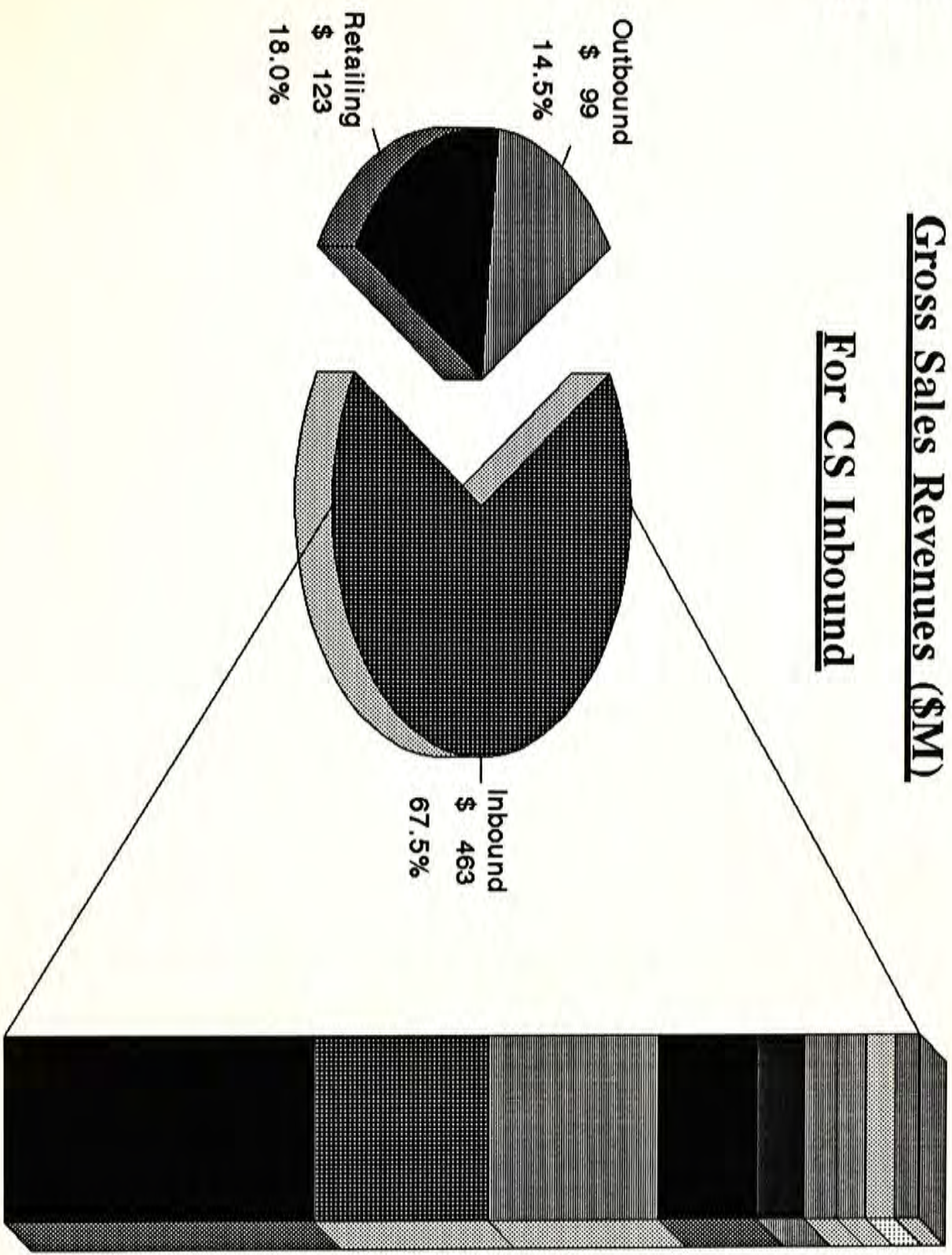


Source: Internal Statistics in Consumer Sales

**Breakdown of the Major**

**Gross Sales Revenues (\$M)**

**For CS Inbound**



Starline \$ 12  
 Datel \$ 15  
 Homefax 2 \$ 15  
 Others \$ 17  
 DDI \$ 24  
 Business Faxline \$ 50  
 Hunting \$ 87  
 Business DEL \$ 88  
 Residential DEL \$ 156

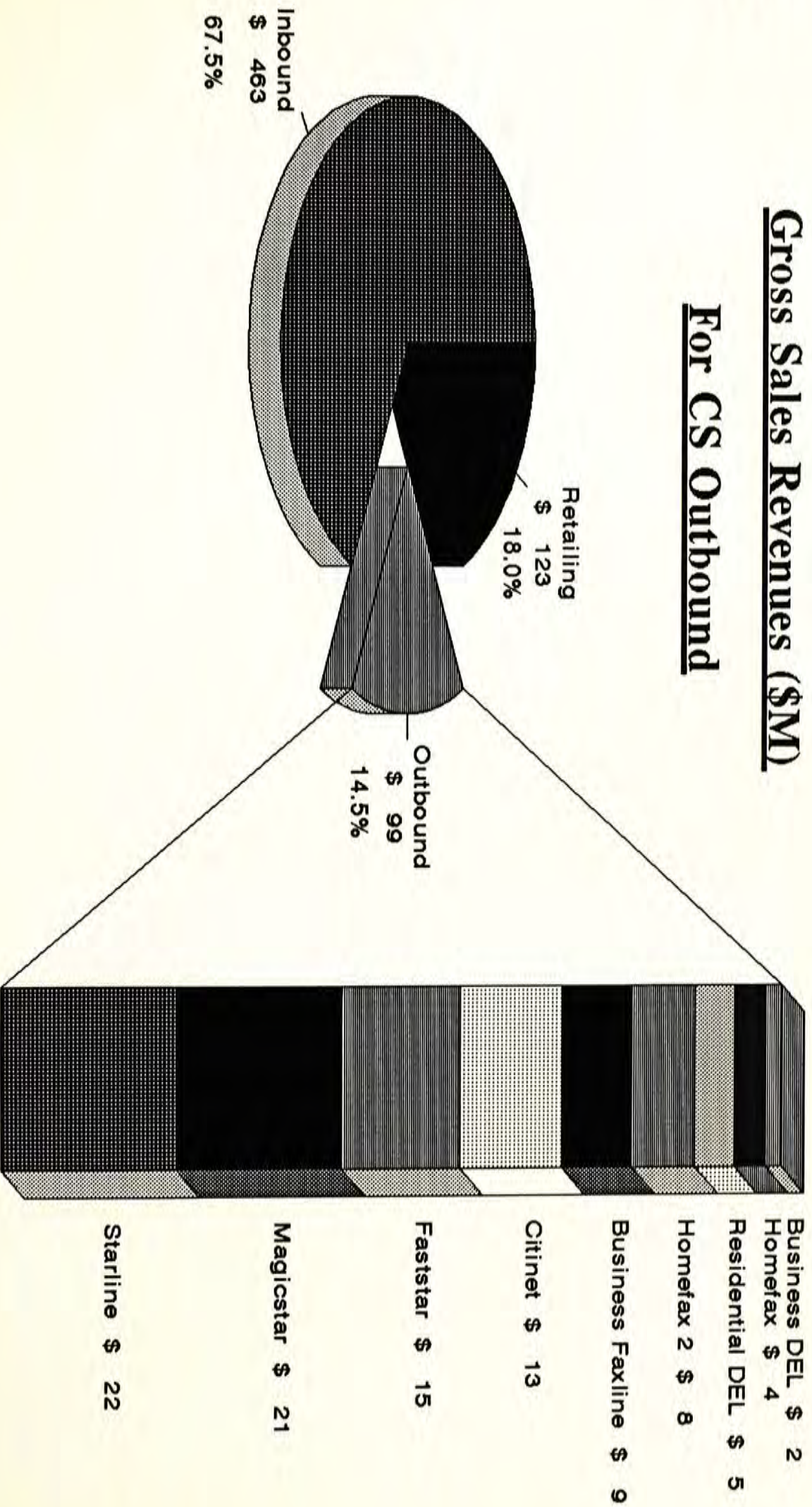
Note: Others =  
 Citinet, Homefax, Faststar  
 Magicstar & Standard Phone

Source: Internal Statistics in Consumer Sales

## Breakdown of the Major

### Gross Sales Revenues (\$M)

#### For CS Outbound

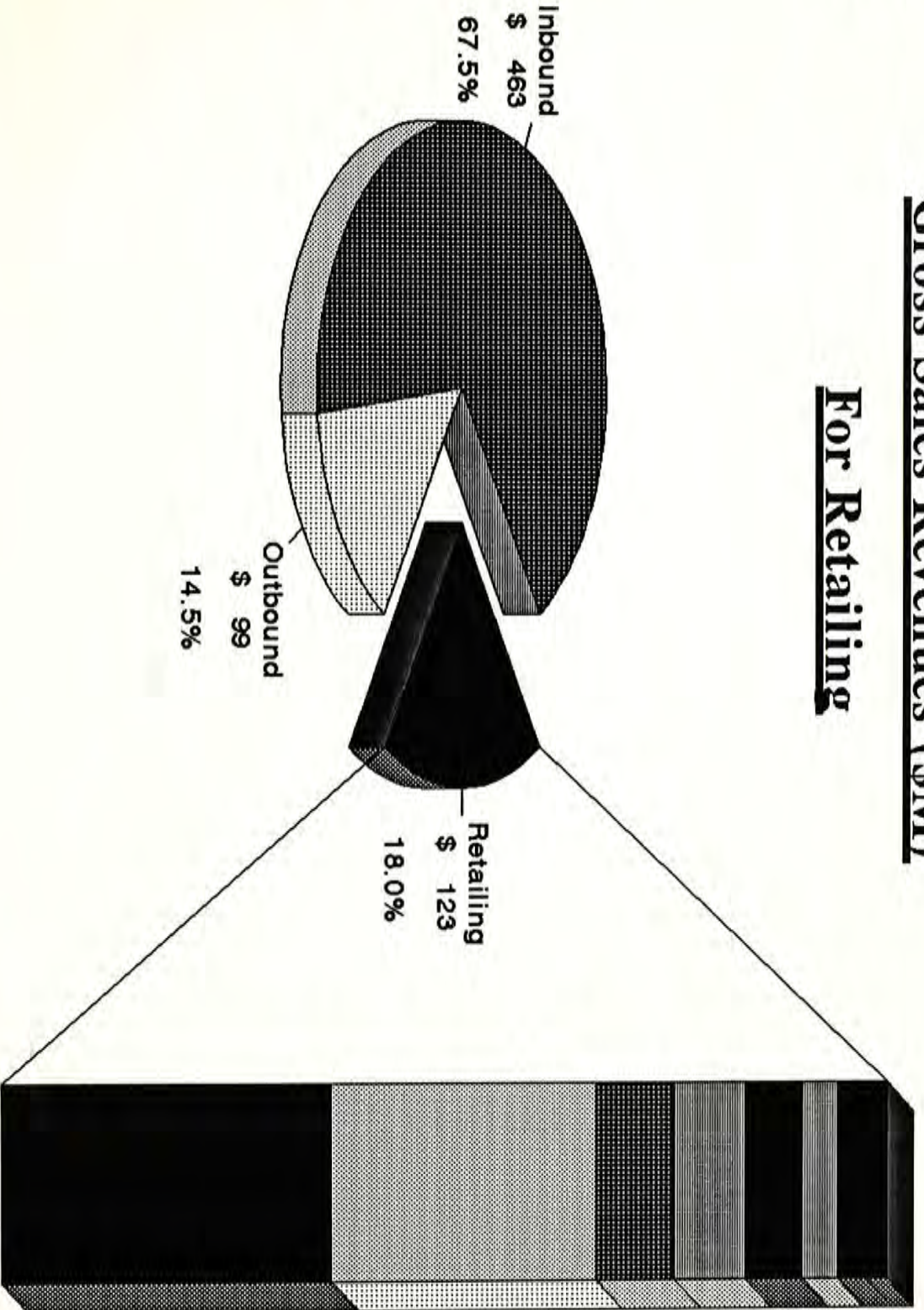


Source: Internal Statistics in Consumer Sales

**Breakdown of the Major**

**Gross Sales Revenues (\$M)**

**For Retailing**



Magicstar \$ 3  
 Telegram \$ 4  
 Homefax 2 \$ 5  
 Business Faxline \$ 8  
 Business DEL \$ 10  
 Others \$ 11  
 Residential DEL \$ 37  
 Phone Card \$ 46

**Note:**

Others = Hunting, DDI, Citinet,  
 Homefax, Starline, Faststar,  
 Standard Phone, Telex,  
 Telegram, Encoding Fee,  
 Faxway & Manual Call

Source: Internal Statistics in Consumer Sales

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