Nanyang Business School

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Company Analysis of M1

B6015: Corporate and Business Strategy

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1 OBJECTIVE

Our group has decided to analyse MobileOne Ltd or commonly known as M1 as we felt that it is an interesting firm to study at this juncture in Singapore's current telecommunications industry landscape.

There are three mobile telecommunication operators in Singapore namely: SingTel, M1 and StarHub. M1 is the only firm that is currently dedicated to mobile communications and mobile related business whilst both SingTel and StarHub are in other extended Telecom businesses like broadband, cable, direct telephone services, IT, satellite and so forth. Though both SingTel and StarHub have comparable business units, SingTel is listed whilst StarHub is not. M1 though only a mobile communications player was listed last year.

Another local telecommunication player was in the limelight recently – ST Telemedia – as it successfully bided to gain control of the American firm Global Crossings. ST Telemedia, a Temasek-controlled firm, has the controlling stake in StarHub. Their latest move begets the question as to whether it has the same aspiration as SingTel to become a global Telecom player as well.

In light of the above, it would be interesting to study M1's future. Can M1 survive in the long run by just concentrating on mobile communications business? In view of Singapore's currently small and limited market, should M1 look beyond Singapore for future growth? Should it stay on its own or is it more strategic for it to strike alliance with other players? As all the Telecoms are in one way or another linked to Temasek Holdings, is it time for consolidation so as to position Singapore Telco firms to be better poised for global competition?

Our analysis seeks to understand the various issues and views involved and we hope to arrive at some recommendations as well.

2 TELECOMMUNICATION INDUSTRY

2.1 General

In telecommunication industry, regulatory and technological factors are generic key driving forces in almost any marketplace. Between these two, the application of technologies in telecom industry

is more uncertain, therefore, we choose to discuss this factor in depth in next section, as well as the resulting consumer behaviour as affected by it. In general, driven by these two factors, there are a number of industry trends identified:

Liberalisation and globalisation

A country's regulatory policy on telecom industry virtually determines the entry barrier and degree of competition in its local market. With today's wide-spread of business globalisation and liberation reform in this industry across many counties, there are many domestic monopolies being eliminated, and new competitors being introduced. However, there are many aspects to regulatory policy. Regulation for basic competition in the public switched telephone network (PSTN) for local calls, enterprise "on and off-net" traffic, long-distance and international calls. Recent growth markets in mobile and data have created the greatest competitive effects across telecom services.[1]

Starting with deregulation and liberalization of telecom industry, the influx of new entrants forced many incumbent operators to move beyond their traditional boundaries and into new geographical markets in order to offset declining revenue and market shares, apparently SingTel is a good example of this. Instead of growing organically, these incumbent operators resorted to partnering/acquiring/merging with carriers possessing complementary assets. As operators become more geographically dispersed, they need to expand their networks' reach. Enterprises require assistance in the coordination and delivery of services across boundaries—local, regional and global.

Convergence of Infrastructure

The majority of carriers today utilize multiple network infrastructures for voice, data, IP and video applications. Previously, technologies used to building data networks were unable to handle multiple or delay-sensitive types of communications, such as voice and video simultaneously. However, the emergences of intelligent communication equipments, advances in fibre optics cabling and sophisticated networking protocols are enabling formerly incompatible applications to cohabitate on a common network infrastructure. Although voice revenue still constitutes the majority of industry players' income stream, the growth of data traffic is far exceeding voice.

Compelling Emergence of Mobile and Wireless Services

Wireless will find a role in many consumer products, ranging from mature devices like mobile phones to new applications in tools, boys, home-entertainment systems, domestic appliances and biomedical sensors. The massive SMS users may start to move away to business due to email and

instant messengers' greater interoperability properties. Wireless broadband will emerge, but will face challenges in the most lucrative, high-density areas from incumbent wired vendors that are geared to hold onto territory through price reductions and aggressive marketing. The bottom line is whether there are ways in which wireless technology can reduce cost and improve functionality and service quality. Therefore, for telecom operators managing costs will become more critical, which will only be enabled by stable network infrastructure and successful application of economical technologies like Bluetooth and 802.11 chips into consumer products. But the wide range of wireless technologies and the lack of networking standards for domestic applications will continue to confuse the market and consumers through 2007. [2]

Like in any other industry, the development and competition environment varies greatly in market scales. Here, we choose to analyse three relevant markets as for M1:

2.2 Global Market

Although the liberalisation reform is still going-on in the telecom industry, but the degree of deregulation various greatly from country to country. Many countries view telecom industry as one of the national key infrastructure. Mr. Leong Kong Thai, director-general of TAS, emphasised the distinction between "liberalization" and "deregulation".[3] The main concerns come from negative consequence of non-regulation, which may be inefficiency in building incomparable network infrastructures and waste of undue resources. Although many countries joined WTO and agreed to open up their local telecom markets, but the degrees of openness vary widely from country to country. For example, the Singapore government opened the telecom market to full competition in April 2000. Direct and indirect foreign restrictions on public telecommunications licenses were lifted. However, foreign companies need to incorporate local subsidiaries, as only locally incorporated companies are allowed to hold licenses. Such a restriction adopted by Singapore government as compared to those by other Asia countries is regarded as insignificant. There are more stringent restrictions in regulating foreign operators.

For telecom industry, the traditional voice service is saturating in developed and even most developing countries. The emerging services, services and content based, are highly dependent on the preference of customers. With the diverse spread in the entire global markets, in terms of geography and most significantly demography, as well as economic and technological

developments, to be a successful global player is a great challenge. So far, a number of big players are struggling in the global field and learning their lessons.

2.3 Asia Market

Since 1997, Asia has coped with telecom deregulation, operator privatizations and entry into the World Trade Organization. However, even within the Asian market, a relative narrower scale as compared to world market, the diversity of regulatory maturity is also present, as the following table illustrates.

Country	2002 Ranking	2007 Forecast	Briefing
Australia	2	1	Very late to market with low penetration
China	4	3	The "sleeping giant" will skip legacy narrowband networks. It is expected, by 2005, broadband demand will run away as mobile has.
Hong Kong	2	1	Regulation favours fully competitive markets.
India	4	3	Partially liberalised market.
Indonesia	5	4	PT Telkom retains its monopoly for basic services in Jakarta and East Java. Telkom has a right to an ownership stake in any telecom company, including its own competitor. Foreign ownership capped at 35%.
Japan	2	1	Intensive competition is emerging
Malaysia	3	3	Consolidation is under way, with too many vendors deflating sector profitability and their ability to deploy broadband.
New Zealand	3	2	With a dispersed population, the broadband deployment is somewhat more expensive to take off.
Philippines	3	2	Tough competitive environment due to a plague of unlicensed operators and cellular fraud that have cost legitimate operators millions of dollars in revenue, and deters foreign entrants.
Singapore	2	1	Fairly liberalised telecom market
South Korea	2	1	Regulatory openness is in transition to a completely competitive telecom economy.
Taiwan	2	2	Incumbent carrier Chung Hwa is now aggressive about broadband after a severe learning experience of losing market share in rising mobile markets.
Thailand	4	4	Liberalisation plan was delayed by the country's constantly changing political landscape.
Rest of Asia/Pacific	5	4	Countries like Vietnam, Laos, Myanmar, Pakistan, Cambodia and others

Scoring:
1- Fully open to competition
2 - In transition
3 - Some progress
4 - Opening markets
5 - Effective monopoly

Table 1: Market Openness by Country[4]

Unlike European and American markets, most of Asian markets are developing and still in the process of liberalisation. The incumbent domestic operators possess less power in competition when the market is open, in other words, the market is lack of competent and dominant regional players. This provides good opportunities since the rivalry in regional playing is still immature and loose.

In relative terms, Asian markets are regarded as fragmented markets, with powerful domestic players. Highly diverse local investment environments and cultural contexts deter the growth of a strong regional player who can replicate the same business model across different countries.

2.4 Singapore

There are three active players in Singapore telecom industry, namely SingTel, M1 and StarHub. While the other two competitors are offering a wider range of services, like fixed line telephony and broadband internet access, M1 is rather a pure player in mobile-related service.

With cellular penetration now at 80.9 percent (as of September 2003), the market has shown signs of slowing down. With limited growth potential and declining average revenue per user (ARPU), market conditions are very tough. In July 2002, Virgin Mobile, a mobile virtual network operator formed by Virgin Group and SingTel, announced its decision to shutdown its operations, citing the saturated market as a key reason.[5] In such a matured cellular market where cellular connection growth is starting to plateau, cellular operators are now competing on service offerings and price.

SingTel has moved outside the domestic market to sustain revenue growth. To date, it has made investments in five countries in Asia Pacific. With these investments, there are potential synergies and cost savings from activities such as equipment procurement, product development and benchmarking for best practices. M1, the only pure-play mobile operator in Singapore, has also partnered with international operator Vodafone in an attempt to provide its subscribers global roaming facilities. In 2003, M1 also teamed up with a few Asian mobile operators in order to gain

economies of scale and strengthen their positions in their respective markets. The alliance is Asia Mobility Initiative (AMI), a nonexclusive alliance between Hong Kong CSL, Maxis (Malaysia), M1, Smart (Philippines) and Telstra (Australia). This will help in gaining competitive advantage in areas like roaming, procurement and new application development. However, considering the heterogeneity of the region in terms of technologies deployed, cultures and business models, it remains to be seen if the AMI can really achieve its objective.

Over the last year, both SingTel and Starhub have introduced their own wireless broadband service. Currently, the fragmented solutions market, lack of standard infrastructure and the limited number of participating establishments are issues to be addressed.

3 TECHNOLOGY TREND & DEVELOPMENT

3.1 Current Generations of Mobile Telecommunication Networks

In Singapore, the existing mobile networks of Singtel, M1 and Starhub are all so-called *second generation* (2G) networks in which speech and data transmission is based on the digital GSM[1] technology. These networks were installed in the 1990s and initially supported voice and low-speed data transmission at 9.6 kbps. Technical enhancement in the last years have upgraded the capabilities with HSCSD[2] and GPRS[3] which offer higher data rates (around 20-50 kbps). GPRS furthermore is "packet.-switched" which means that the user can stay "online" all day long without blocking one of the scarce communication channels of the system. Only when data transfers occur, channels are occupied, but these channels are shared among several users leading to an efficient usage of the communication infrastructure. Such an upgraded network is called a "2.5G" network (between second and third generation). At the moment, all three Singaporean network operators are in the phase of building up third generation ("3G") networks based on WCDMA. These networks have even higher data transmission capabilities in the range from initially 140 kbps to 2 Mbps under excellent radio conditions. The mobile phones (terminals) for these 3G networks also will foster increased multimedia capabilities like large colour displays video transmission and internet access capabilities.

[1] GSM = Global System for Mobility, a 2G standard that evolved from the European "Groupe Spéciale Mobile".
[2] HSCSD = High Speed Circuit Switched Data, a procedure in which several circuit switched channels of 9.6 or 14.4 kbps are bundled in order to multiply the data rate.

3.2 Services

In the initial phase of the cellular mobile networks in Singapore (2G), operators could only offer voice transmission and slow data connections of 9.6 kbps that allowed a laptop user to dial up an internet provider (ISP) by using the mobile phone as a modem. Additionally, SMS was provided and turned out to be a real success story by enabling users to send small messages of 160 characters to another user. Although never envisaged initially for that purpose, SMS has been a true revenue generator for the operators. The ongoing technical evolution of the networks to 2.5G and new features of the mobile phones have brought along a phone-based internet access named WAP[4] that however has not been truly successful so far as the Japanese counterpart "i-mode". Another new feature which is still in the phase of introduction is MMS[5] which enables users of advanced terminals to send messages to each other that are composed of a picture, a melody and text. Later, MMS shall also include the possibility of sending small video clips. The operators promote these features heavily and hope to generate additional revenue by these new multimedia features. New terminals also can download ring tones and wallpapers. M1 offers such services which even include "Property Info" for potential property buyers. Since this playing field is relatively new to the operators, we can expect operators to come up with new ideas in the future.

M1 is currently even experimenting with the download of short video clips. Movie trailers or music clips to the mobile phone. Other operators like Vodafone offer sports resumes of football matches or news clips. Since these offers are at their initial stage, it is not clear whether they will be adopted by the customers. Another idea is online gaming, and Nokia has launched its terminal named "N-Gage" especially for this purpose. All these ideas can be realized very well with existing 2.5G networks, although services like music and video downloads will definitively benefit from the higher bandwidth of 3G networks. Then, also features like videoconferencing will be possible. M1 recently has shown a demonstration video conference based on their 3G equipment[6]. The company also plans to offer 3G as a substitute for leased lines in the business field[6].

3.3 M1's Networks

After the foundation of M1 in August 1994 and the granting of a licence in May 1995, the company finally launched both its cellular telephone service based on GSM and its paging service in

[3] GPRS = General Packet Radio Service, a packet-switched network that shares an adjustable number of physical channels among users so that all users can stay "always online". Transmission capacity is only allocated when a user requests a data transfer.
[4] WAP = *Wireless Application Protocol*, a standard fort he transmission of web pages to mobile phones.
[5] MMS = *Multimedia Messenging Service*

April 1997. The paging service will be closed down on 31 December 2003 since the customer base has decreased over the last years[7], and the M1 customers will be given the option to switch to the M1 GSM network at "attractive handset prices and subscriptions"[7]. From next year on, M1 will then focus its existing GSM (2.5G) infrastructure and the start of its 3G network that is planned for the second half of 2004[6].

Besides the mobile network, M1 also owns an international gateway switch which initially connected M1 customers to international networks[8]. The switch was delivered by Lucent and went operational on 29 June 2000. On 14 July 2000, M1 won the bid for the "002" IDD[6] call prefix for its premium circuit-switched calls[9]. Similar to Singtel's structure of IDD calls, M1 launched an VoIP[7] IDD service which went operational on 29 October 2000 under the prefix "021"[10]. Both services which initially were limited to M1 customers only, were opened up to the public in March 2001 providing M1 with an additional revenue stream from IDD calls[11]. M1's "1818 International Calling Card" is another step to win price-sensitive customers by offering VoIP telephone service based on a prepaid calling card that can be used from all phones and offers cheap rates to over "200 destinations"[12].

3.4 The Singapore Market for Mobile Telephony

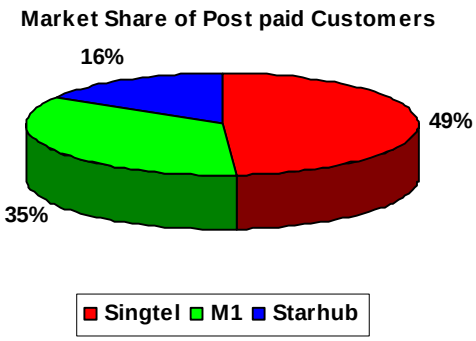

Figure 1: Market Share[13]

Singapore is a mature market for mobile telephony and can be regarded as one of the most advanced markets worldwide, as to the type of terminals and network services offered. Three players with own networks offer GSM services, Figure 1 [13] shows their respective market share. The market is almost saturated with a penetration rate of 82% (Oct. 2003) and hence growth can only be reached at the cost of another operator or by the introduction of new services. Figure 2 shows the subscriber number and the penetration rate[14].

[6] IDD = *International Direct Dialling*, customers can execute international phone calls directly from their terminals, without the help of an operator.
[7] VoIP = *Voice over IP*, the phone call is routed over internet connections as a packet stream and converted into a phone call near the destination thus avoiding the costly internationally switched connections.

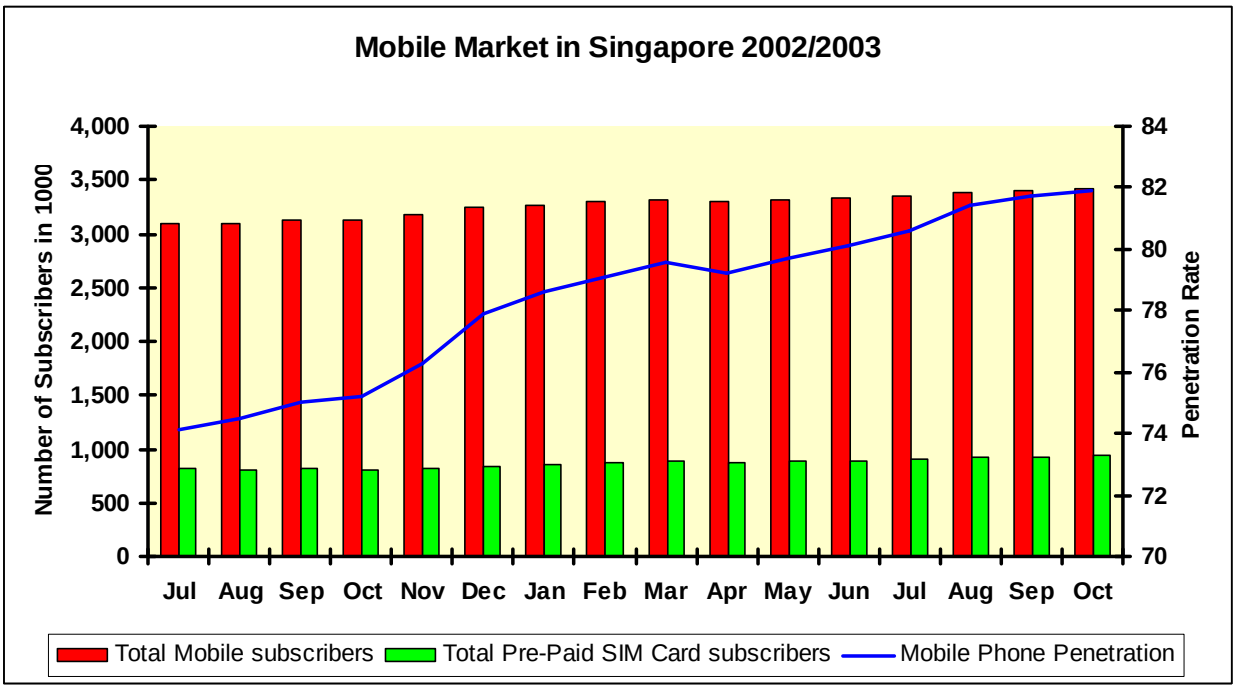

Figure 2: Mobile Subscribers and Penetration Rate in Singapore in the Years 2002 and 2003[14]

Pre paid customers represent only a fraction of the overall customer numbers, but in terms of revenue, the pre paid customers show a significantly higher average revenue (ARPU) when compared to the post paid customers as Figure 3[13] indicates.

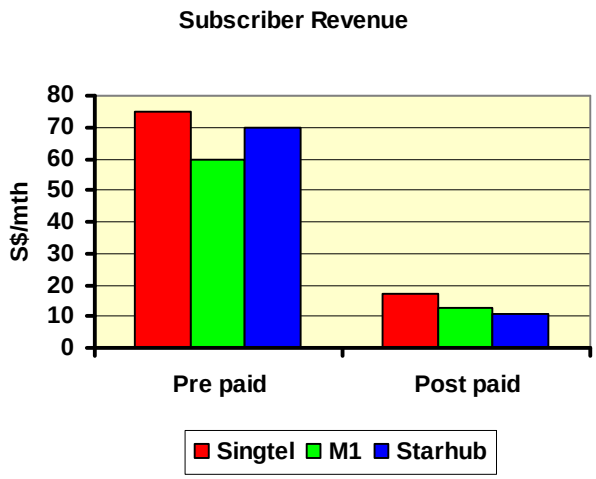

Figure 3: Average Revenue per Subscriber (ARPU)[13]

The ARPU values are similar across all operators, with Singtel generating a slightly higher ARPU than Starhub and M1. Modern mobile phones come with an increasing amount of built-in features like MMS or cameras. But how do consumers actually make usage of these features? Figure 4[15] highlights some survey findings for Singapore in 2002. The application download is most of the times related to the download of ring tones and icons that are offered for the respective type of phone[16]. Operators like M1 usually offer these downloads as a value-added service for their users[17].

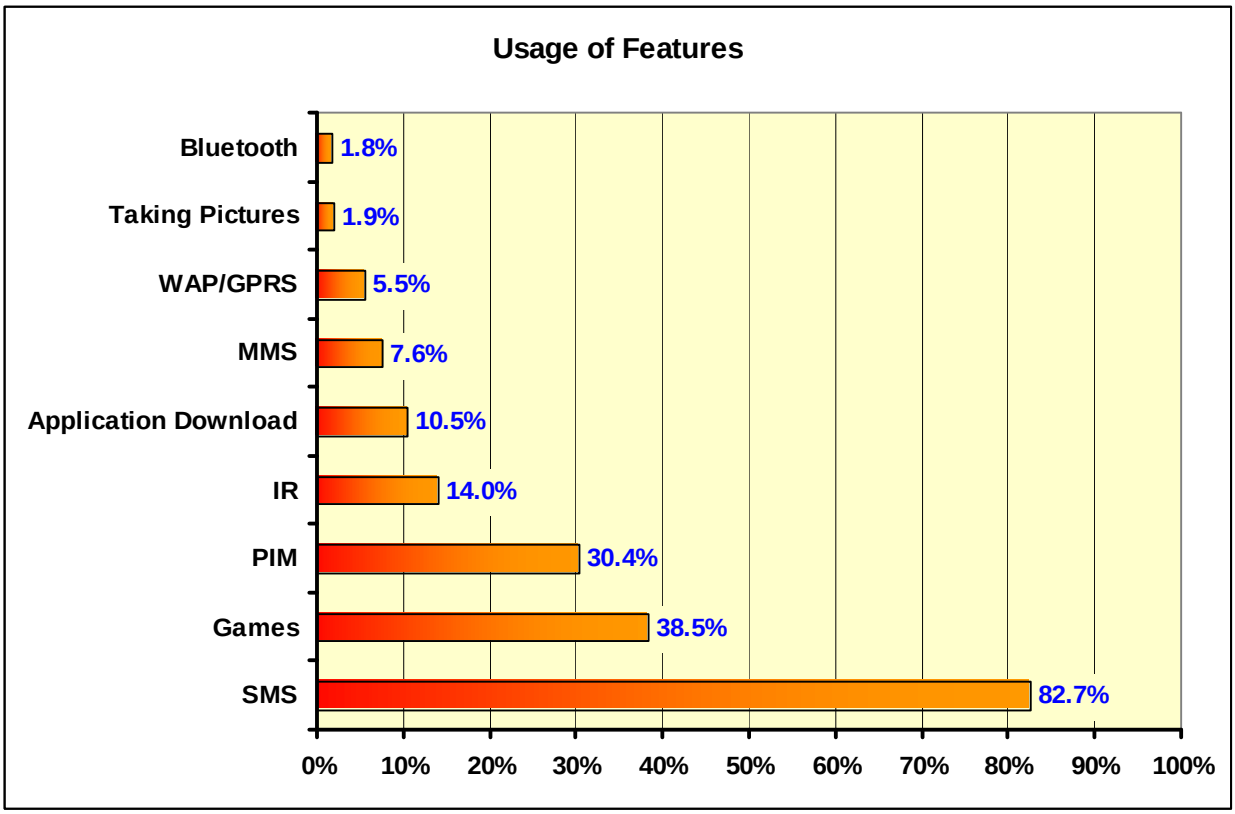

Figure 4: Usage of Features in Mobile Phones in Singapore[15]

3.5 Technology Outlook

The introduction of 3G networks has experienced several delays over the last years, throughout all operators worldwide, mostly due to technical difficulties. The existing 2.5G networks already offer the possibility of data transfers at a constrained bandwidth that allows features like online gaming, MMS, chats and multimedia downloads that do not require real-time speed. 3G will increase these possibilities by real-time multimedia and videoconferencing. The alliance with Nokia has teamed M1 up with the leading provider in the field of mobile communication that aligns well with M1's pioneering spirit in the introduction of new innovative features.

While the available bandwidth will increase in the coming years, there is considerable uncertainty about how to transform this technical development into sustainable revenues. At the current stage, operators are experimenting with several ideas like entertainment, information, mobile commerce, communication or multimedia services which are listed in Table 2.

Current Ideas for 2.5G and 3G Services		
Realm	**Classification**	**Examples**
B2C	Information	Weather Forecast
		Stock Market
		News
	Communication	Chats and Instant Messaging
		Email
		Push-to-Talk ("Walkie-Talkie")
	Entertainment	Ring tone download
		Picture download
		Java games
		Dating
		Soft porn
	Multimedia	MMS
		Audio streaming
		Video streaming
	M-Commerce	Ticketing
		Online reservation
B2B	M-Commerce	Billing functions
		Advertisement
	Mobile Business Solutions	Telemetries
		Machine-to-Machine communication
		Video Supervision
	BPM Enhancement	Workflow management

Table 2: Current Ideas for 2.5G and 3G Services[18,19]

In the past two years, there has been a hype about all the possibilities in the field of mobile applications and mobile business that experts saw emerging as a result of the increased bandwidth, e.g. in [20]. Recently, analysts have become more cautious, and Gartner predicts in the company's "Hype Cycle"[21] that even MMS still needs at least two years until it reaches the "plateau of productivity". They reason their prediction with the fact that only a small fraction of phones is capable of handling MMS, and that the market awareness is small. In their special report on MMS and GPRS in Asia[22], the company claims that MMS "adoption has not been as rapid as …cellular service providers had hoped"[22] and that the MMS user penetration had just reached 5% so far. This view contrasts grossly with the inflated expectations that were prevalent among all industry observers in the years 2000/2001. The only company that so far has had remarkable success with its services is the UK-based operator Vodafone with its "Vodafone live!" service that seems to

generate revenue among Vodafone's European customers[23]. M1 has realized this potential and consequently joined Vodafone's "Partner Network Community"[24]. Other uses of the packet-switched GRPS technology in 2.5G networks like internet surfing with the laptop seems to expensive, especially when compared to the existing WLAN and broadband infrastructure in Singapore[25].

Concerning the underlying technology, Gartner predicts that 3G "mobile technology will be insignificant in 2004" and that most operators' revenues will only be a "few percent derived from data traffic other than messaging"[26]. The company advises operators to "new digital content and services delivered over 2.5G networks and ignore 3G"[26].

Singapore can well serve as a test market for innovative new services in the mobile telecommunications market, especially concerning messaging applications. With an average of 107 SMS per year (2002)[27], only Filipinos send more SMS per user in Asia. The divulgation of WLAN, notebooks, broadband and other products of latest technological developments in Singapore prove that the population is keen to experiment and use new technologies. Therefore, the country can well serve as a test bed for new services.

4 BACKGROUND OF M1

4.1 Origins

The firm MobileOne Ltd (M1) was formed in August 1994, and in May 1995 it won the license to operate Singapore's second cellular telephone service as well as a radio paging service. It launched both services on 1 April 1997 and ended SingTel's monopoly. M1's launch was considered a huge success as within three weeks of its launch, it signed up more than 35,000 cellular customers, one of the world's highest take-up rates for a new market entrant then.

M1's deliberate fresh approach paid off as it began to set the pace for innovative services by introducing features such as 24-hour customer service, longer off-peak hours and bundled SMS. As a result of strong branding and value proposition, M1's sales soared. Within 21 months of commencing operations, M1 achieved profitability several years ahead of projection. M1 has made significant progress, gaining considerable brand presence and market share. It has earned itself a reputation as an innovative and quality mobile service provider with a customer-focused approach to business.

M1 business includes data and m-commerce services as well. With its vision of facilitating wireless access to the Internet, M1 launched its mobile portal in February 2000 offering information services and applications from leading regional and international content providers. It has also launched GPRS (General Packet Radio Service) and MMS (Multimedia Messaging Service), the latest in wireless technology. M1 has been awarded a 3G license and is currently conducting trials on 3G technology.

On 4 December 2002, M1 was listed on the Singapore Exchange. It was Singapore's largest public offering in three years and the third largest of all times.

4.2 Owners

Founding shareholders - Keppel Telecoms (14.16%), SPH Multimedia (14.16%) and Great Eastern Telecommunications (12.14%) - now jointly own 40.46% of M1 with the rest owned by institutional and public investors.

Both Keppel Telecoms and SPH Multimedia are linked to the Temasek Holdings, the investment arm of the Singapore Government whilst Great Eastern Telecommunications is linked to the Hong Kong based Hutchinson Group controlled by Li Ka Shing.

4.3 Vision & Mission Statement

M1‘s vision is “t*o be the leader in personal communications, distinguished by innovativeness and dedication to our customers, people and shareholders.*”

Its mission is “*To be an efficient and totally customer focused company, achieving the highest satisfaction for our customers, people and shareholders.*”

4.4 Financial Performance

M1 have been profitable since their first full year of operations and have today over a million customers.

The total revenue of M1 and its subsidiaries has grown at a compound annual rate of 24% from S$412.8 million for the year ended 31 December 1999 to S$639.1 million for the year ended 31

December 2001. For the eight months ended 31 August 2002, the Group's unaudited operating revenue was S$459.7 million, an increase of 8% over the same period in 2001.

With the Group's rapid growth in mobile customers and revenue, the Group has, through a focus on profitability and with an emphasis on financial discipline, grown EBITDA by a compound annual growth rate of 44% from S$106.9 million for the year ended 31 December 1999 to S$222.9 million for the year ended 31 December 2001. The Group's net profit also achieved a compound annual growth rate of 71% from S$34.4 million for the year ended 31 December 1999 to S$100.5 million for the year ended 31 December 2001. For the eight months ended 31 August 2002, the Group recorded an un-audited net profit of S$80.6 million and an un-audited EBITDA of S$175.0 million.

Financial Summary as at 3rd Quarter 2003

(S$m)	1999	2000	2001	2002
Total operating revenue	412.8	567.8	639.1	698.8
Service revenue	332.9	448.5	547.5	628.9
EBITDA	106.9	160.2	222.9	270.9
Profit after tax	34.4	58.8	100.5	128.4
EPS (cents)	3.3	5.6	9.6	12.2
Capex	138.7	126.5	157.7	134.0
Free cash flow	(15.4)	3.7	(38.4)	105.4
Dividend/share (cents)	-	-	-	7.3
Net Assets/share (cents)	15.1	20.7	30.3	42.5
Net debt/equity (x)	2.2	1.6	1.2	0.6

4.5 Next Step Forward

In M1's inaugural and latest 2002 Annual Report, it stated that their main challenge would be to sustain growth in a competitive market with high mobile penetration. They warned that they can no longer expect big growth numbers of their start-up years. They would strive to maintain profitability with disciplined cost management, combined with growth coming from mobile non-voice services, and the latter will be their focus. They will expand its international call services as well.

According to its latest plans, M1 says that "*For its future growth, the Group plans to leverage its strong brand identity to cross-sell its different products, and capitalize on key brand elements for specific product positioning or to penetrate new target market segments. M1 has also set its sights on encouraging higher usage per user by continuing to develop targeted, needs-based service packages and tariffs as well as by promoting mobile services as a substitute for fixed line services*".

It appears that M1's growth strategy is to concentrate on its mobile communications business by creating innovative services and products, rather that broadening their business by going into other information/IT communications businesses. We note however, that their growth areas are not exclusive i.e. their competitors are also doing likewise

The question then is whether this business strategy is sustainable for M1 future?

5 SWOT ANALYSIS

In consideration of global, regional and Singapore business environments, and M1's unique characteristics, we analyse M1's competitive strengths, weaknesses, opportunities and threats in the followings:

Strengths

- Strong brand equity, it is perceived as being innovative and fun.
- Strong in the 19-29 age group.

Weaknesses

- Product portfolio is limited, unlike SingTel and StarHub, which can bundle fixed-line service with their cellular offerings.
- Unlike SingTel, M1 lacks the potential to reap cost savings from having a huge regional customer base.
- The founding shareholders are keen to exit the cellular business – potential of being acquired or taken over. This creates negative impact on the staff morale perspective.
- Financial inflexibility – 78.97% of its total assets are in fixed assets, which in turn comprises mainly of networks and related application systems. Whilst SingTel's fixed assets are weighted only of 37.5% of total assets.[28]

Opportunities

- There is no powerful pure mobile operator in the Asian market, like Vodafone in Europe.
- Mobile and wireless technologies are advancing, and customer behaviour pattern is evolving.
- Pervasive contents and services available for bundling into offering.

Threats

- Growth in Singapore cellular market is limited.
- The full application and integration of wireless technologies may take off in a few years time. Current usage of contents based mobile transmission is insignificant.
- With telecom liberalisation reform continuing in Asian markets, European and American big players will enter the market with strong financial support and competency in cross-country context.

6 WHERE IS M1 HEADING FOR?

From proceeding analysis, problems are obvious: growth in Singapore telecom industry is saturated, technology development and resulting consumer behaviour is uncertain; domestic players in Asian context are still dominant; M1 as a pure mobile operator, its business is more vulnerable. The question is where M1 is heading for? There are rumours in the market that M1 is an acquisition target, since its founders are keen to exit the industry. We believe that chances of M1 being acquired or merging with Singapore company are higher than that with foreign firms, rationales are discussed in option 2. There are still many ways or alternatives for M1 to compete in such a stiff market. However, to simplify our discussions, we present two most probable scenarios and various challenges underneath. They are: first option – status quo: M1 stands along and continue its business strategy; and second option – merge with StarHub.

6.1 Option 1 – Status Quo: M1 Stands Alone and Continue as a Pure Mobile Player

This option means that M1 has to develop its business further without merging or being acquired by another telecom. As in all businesses, there are two ways to achieve more profits. M1 can grow and increase revenue which is, in theory at least, not limited. In practice, the question here is whether M1 can succeed to introduce services that are either appealing to consumers in a way that customer "must" have them or whether they can offer services to their business customers that enable them to save more money elsewhere. The second possibility to increase profits is to cut down costs, but this option is severely limited as there is a downward constraint as to how much costs can fall. For

cutting down costs, alliances are a useful approach because development efforts can be shared and consolidated.

6.1.1 New Services for M1

As to future growth possibilities, all mobile operators face the problem that the average revenue per user (ARPU) which results from telephony has recently only experienced slow growth, and telephony is a commodity service. There are practically no options to further increase the revenue just from telephony. While an operator can always stipulate people to phone more by lowering prices, the operator can increase the revenues only marginally by this step.

All studies on mobile communication predict that growth will happen in the field of mobile data and hence, all mobile operators worldwide are focussing on the introduction of new services in this field. Table 2 shows ideas that are common among all operators worldwide. Some operators have already tried one or the other idea, but success has been limited and the implementation and advertising of new services are costly. Also, if too many services are introduced and subsequently dismissed due to the lack of interest, customers may be confused and lose interest in the services that are then scheduled for introduction in future.

Service Ideas for M1			
Realm	**Classification**	**Examples**	**Solution Possibility**
Consumer	Information	Stock Market	already available
		News	already available
	Communication	Chats and Instant Messaging	co-development, 3rd party
		Push-to-Talk (“Walkie-Talkie”)	source
		Home Zone	co-development
	Entertainment	Ring tone download	already available
		Picture download	already available, 3rd party
		Games	co-development, community
		Dating	source, 3rd party
	Multimedia	MMS	available, but enlarge scope
		Audio streaming	implement and source, 3rd party
		Soccer video clips	implement and source
Business	M-Commerce	Advertisement	Implement, 3rd party
	Internet Access	3G Access for Business Travellers	implement
	Telephony	Virtual PBX	implement

Table 3: Service Ideas for M1

It is therefore very essential that M1 focuses on these services that will most yield a breakthrough usage in Singapore. To be able to succeed in offering new service, other than telephony and SMS, marketing competency is of critical importance to M1's success. The breakthrough will succeed if the following challenges are addressed:

Service development and implementation

We notice that M1 does not process strong finance to develop intensive technology development, (the financial weakness was discussed in SWOT analysis), therefore, we do not recommend M1 to go for own development. The alliance between M1 and Vodafone, which will be mentioned below is very advantageous in shared development and implementation. This makes sense since the efforts and costs can be shared with a partner, and both benefit from the development.

For some services, it is best to open the network for other providers and just to earn revenue based on the transmitted volume of data. The i-mode example in Japan proves that such an approach need not be bad, since the operator can so avoid to engage in a multitude of different development and implementation of which obviously many usually fail. The risk, but of course also, the benefits are outsourced to a 3rd party provider. However, the network operator can earn money based on the transmitted data, which is a risk-less earning method.

Service offering

Based on Table 2, Table 3 shows a suggestion of services in which M1 should be engaged. We viewed the service offering, albeit should be closely adherent to the technology advancement, a marketing strategic issue rather than of technological concern. We believe four elements are essential for successful service offerings in the mobile telecom business.

- **Innovative service bundling**

  There are too many services available for offering now, and there are more under development and about to be launched to the market. As to which service should M1 engage, we would discuss in further technical details at the latter part of this section. Generally, it will be ideal if M1 can be a market leader in terms of service bundling and offering. That requires not only successful application of new technologies into the business field, but also continuous innovative bundling which highly satisfy customer needs. However, service

bundling pattern is easy to be imitated by the competitor, a way to win the battle is being an innovative market leader.

- **Wide range of varieties, targeting various market segments, but not confusing**
  The idea is easy to say than to do. An in-depth examination of customer needs in various market segments is essential. However, the art aligns at the optimal choices for each market segment and how the market should be segmented, to the extent that customer needs are fulfilled and yet the varieties are not too much to confuse the market.

- **Satisfactory customer service, prominent brand**
  M1 has, through years of development, achieved a prominent brand in mobile industry. To continue its business strategy in mobile-related business, M1 needs to maintain its premium brand image and deliver highly satisfactory customer services with low cost. This involves total operation and service efficiencies.

As to the services in which M1 should engage, we suggest the following approach: In the field of consumer applications, we see potential in the four fields Information, Communication, Entertainment and Multimedia. Among these services, some require further explanation. “Chat and Instant Messaging” is successful among young people, and M1 can also repeat the same success in the mobile world if M1 can team up with either Yahoo or Microsoft and offer either the Yahoo Messenger or the MSN Messenger on the mobile platform with the possibility not only to chat with mobile users but also to chat with users that use this software on desktop PCs. A purely mobile chat client is doomed to fail, only chat client which can interconnect with existing desktop chat clients will ever have a chance, and such clients will surely be adopted very well by young users who commute in the MRT and buses.

“Push-to-Talk” is an application that is “in fashion” at the moment. However, it is still not clear if it is a trend or a fad, and therefore, M1 must not implement such a platform on their own. The platform is to be supplied by the infrastructure manufacturer and also the mobile phones have to be supplied by the phones manufacturers. While mobile phones increasingly will have such features built in, this is not self-evident on the infrastructure side, and M1 should try to engage the infrastructure manufacturer in a leasing agreement for this feature so that they can leave the contract, if “Push-to-Talk” turns out to be a fad rather than a trend.

All the entertainment services actually only serve in order to increase traffic and not to make money. That is why M1 should not invest substantial resources in this field, but rather co-develop or source solutions.

As to multimedia, we see that the MMS service has to be improved substantially. Up to now, MMS has been introduced with the possibility to take a photograph on a "camera phone" and to send it to another user with some melody and text included. However, a recent study shows that the adoption and usage lags behind initial expectations[29]. This shows that proper applications for MMS are still missing. Possible solutions could be maps that are coupled with location-based services like "Where is this street?" or "Where is the next MRT line?", etc. We also see a possibility for music downloads at reasonable price rates of S$1-2 per song, including the traffic. For that, M1 has to examine the possibility with a media company like BMG or Sony and see whether they are willing to allow music to be downloaded. However, M1 should not engage under all conditions in that service. If a low price cannot be yielded, M1 should refrain from establishing an over-priced service that then subsequently will only be refused by the consumers. We must keep in mind that consumers still have a vast pool of MP3 songs at home which they have obtained via several, not only legal channels, and which they can tap on for free currently.

Vodafone has shown with their "Vodafone live!" portal that soccer clips can yield revenue, and in Singapore, English soccer is a favourite among the sports which is widely reflected in the print media. Consequently, we recommend M1 to follow Vodafone's example and offer video clips of goals and spectacular shots in the field of soccer. Here again, the alliance Vodafone-M1 could be beneficial for the take-over of such a service from M1 and for the co-development of future adjacent services.

For business customers, we recommend a different strategy from what is commonly referred to as typical applications. Commonsense ideas circle around "mobile internet access" for businessmen that use their laptops while sitting in cafés or "with the customer". But that scenario has not proved to be realistic. First of all, business trips within Singapore are not as long that businessmen have to have internet access while they find themselves in a taxi or in the MRT. Secondly, most of the time, they are either in their office where they have internet access or they typically can resort to an internet access at one of the popular cafés like "Starbucks", "Délifrance" or "Coffee Club" where the local broadband suppliers (Singnet, Starhub, Pacific) offer WLAN access. The situation is, however, different for foreign business travellers who come to Singapore and who may want to

have an internet access for their time being in Singapore. Some of them can resort to infrastructure in the hotels, but since they are no customer of the local broadband suppliers, they are typically cut off outside the hotel. Also, not all hotels offer broadband access. If M1 can tap these business travellers or even sophisticated tourists and offer them a pre-paid SIM card for the internet access with their 2.5G or 3G phone, that could in fact be a market. And there is not much investment in infrastructure because 2.5G and 3G infrastructure is in place already and the travellers bring in their own phones, usually.

Another field which has not yet been tapped is advertisement. The major advertiser here is JCDéceaux, a company which owns most of the advertisement space at bus stops and in town. Surely, sooner or later, JCDéceaux will "go electronic", that is have billboards that can change their content, and for M1 with their existing 3G infrastructure in place that has lots of bandwidth available, that could also be a market where they can deliver updates for these electronic billboards.
Another possibility to extend M1's reach is offering a "Virtual PBX" for companies. Keeping in mind that 3G offers plenty of bandwidth and that the infrastructure has already been built up, M1 can try to launch a campaign by which they try to convince SME to completely "go mobile" and cancel their PBX and landline connections. Such a package would include a series of numbers and very cheap connections between these registered phone numbers that then comprise a virtual office network. Like that, mobile office workers like service and maintenance staff can connect to the office cost-efficiently. However, it means that the connection fees must be very cheap. The "Home Zone" in the consumer realm is a similar approach with which the operator "Viag Interkom" (now O2) in Germany has increased its customer base substantially. This operator promoted a certain tariff in which phone calls which were done from home (in the "home zone") were substantially cheaper than calls abroad. Customers then cancelled their home phone line and fully relied on their mobile connection enjoying reasonable rates for conversations from their home and higher ones when they were away from home. The identification of the "home zone" is technically done in the network which can determine in which area of the town the caller is located. Such a business model is especially suitable for Singapore. In contrast to Germany where many users may be reluctant to abandon their phone line because the access to the internet in Germany is almost exclusively done based on phone lines (or ADSL), many Singaporeans use the cable TV for the internet access (Starhub) and are potential customers for this service.

6.1.2 Strategic Alliance

The current alliance of M1 with Vodafone[24] is an excellent move of the company. It will enable M1 to jointly develop new products[30] and services with Vodafone, a European company that has large experience in the mobile (only) phone business and that so far has the only really profitable entertainment portal named "Vodafone live!" outside of Japan[23]. This alliance looks much more promising as the "Asian Mobility Initiative (AMI)" which is somehow a vague collaboration with an indeterminate timeframe[31]. M1's alliance with Vodafone, however, makes the Singaporean operator the preferred partner of Vodafone and may channel existing Vodafone customers to M1's network while they are in Singapore. We must keep in mind that Vodafone operates in countries which make up a substantial part of foreign travellers entering Singapore, and luring these customers away from Singtel to M1 would be profitable and does not require infrastructure investments.

Interestingly Vodafone is also named as a company who could be interested in taking over M1 in the long run[30].

6.1.3 Regional Player

Today in Asia, investment in telecom industry is extremely tough for foreigners, due to lots regulatory issues and cultural diversity. However, that does not mean that M1 stands no chances to become a regional player. In a longer run, the Asian countries will liberalise their telecom markets, when the only challenge remains as how to serve diverse customer needs under different cultural contexts. If M1 has the ambition to be Vodafone in Asia, it should starts to accumulate its experience even when the overseas market is not open. Buying a stake in a foreign mobile operator, provided M1's own financial and the target country's regulation allow, is not a bad idea for investing in a partially open market.

6.2 Option 2 – Merge with StarHub

This option will give M1 better growth prospects as compared with the earlier option. Besides mobile business, the new entity will have businesses in the following as well:

- IDD
- Broadband
- Cable TV

- Fixed Network

The growth areas would be data services, cable TV and broadband besides mobile. By not relying on just one segment of the telecom business, M1 would not be subject to great vulnerability with the spread of business risk and relying on other faster growing segments for growth prospects. This is significant in view of expected slower growth due to the high penetration rate and the highly competitive environment in Singapore cellular market.

The other advantages support this option.

6.2.1 Synergies

If M1 merges with StarHub, it will not only boost the mobile business of the StarHub group, it will also bring about greater synergy to M1 and StarHub. One clear advantage is the cutting down of duplication of common resources. The other advantage is the synergy that would result in the areas of technology, proprietary knowledge/software, distribution network, multi technology platforms, research and development and so forth. The new entity would tremendously benefit from this with regards to its business development.

StarHub Mobile is perceived as a weaker operator as compared with M1. During its early days after its inception in March 2000, StarHub experienced problems like customers receiving poor signals resulting in disruptive calls, billing issues and the perception that it is a poorer cousin of M1 when it comes to innovation and marketing of its services. If the two mobile firms are combined, they will create a new force which will make them the dominant mobile player with an enlarged market share of 51% as compared with the incumbent SingTel's share at 41%.

To the M1 customers, the new combined entity will give them greater product offering comparable to SingTel. There will be greater opportunities for more innovative product packaging and cross selling available to them as StarHub have a wide range of other info-communication services and products. As economies of scale are envisaged, M1 customers are likely to enjoy better prices. In terms of the value of stock, M1 will enjoy greater growth potential with StarHub as StarHub business is broader based and also possess greater growth prospects like cable and internet.

To the StarHub group, this increased market share will enable them to compete more effectively with Singtel. With a bigger customer base, there are better economies of scale and StarHub can leverage this to their greatest advantage. Also, tapping on M1's innovation and creativity would correct StarHub Mobile's positioning, image, standard and business. In this respect, the M1 team must be allowed to drive and lead the mobile operations of the merged business. To the StarHub's customers, they would be able to assess the trendsetting and innovative services of M1.

6.2.2 Strategic National Interest

In view of the highly dynamic and competitive global economic landscape, the Singapore government has been urging Singapore businesses whether they are Temasek linked companies, or the private sector firms to aspire to become regional if not global players. The recent consolidation and regional expansion of the local banks is one prime example of positioning Singapore firms to compete with global competitors in the local scene as well as for them to compete in the global arena. Singapore is a proud nation, it's not a good idea to let foreigners to acquire or take over any of its telecom companies. By combined these two smaller telecoms, it creates barrier for interested buyer to control them.

ST Telemedia the major and controlling shareholder in StarHub recently made the headlines with its successful acquisition of Global Crossing, USA. To the majority layman, ST Telemedia is a relatively unknown telecom firm in comparison with SingTel but on closer look , it has a pretty broad range of telecom services (refer to Appendix) comparable to Singtel albeit at a smaller scale. It has the capability and resources to be a regional and global player as SingTel as well. Its recent buy of Global Crossing reaffirms it aspiration to be a serious global player in the info-telecommunications industry.

We feel that with M1 joining the group, this would greatly strengthen ST Telemedia's mobile business. With M1 innovation and creativity, their mobile business would be better poised to compete in the highly competitive global environment. This is significant in view of the industry's current and future direction to rely on the mobile platform to boost revenue.

Looking at the macro level, we would hold the view that two strong telecom firms would be better of for Singapore and for the telecom firms.

6.2.3 Common Shareholders

When we analyze the major shareholders of the three telecoms, there are some common shareholders:

M1	SingTel	StarHub
Keppel Telecom (14.16%)	Temasek Holdings (60%)	ST Telemedia (50%)
SPH (14.16%)		SPH (9%)
Great Eastern Telecom (12.14%)		MediaCorp of Singapore (14%)
		BT UK (12%)
		NTT Japan (15%)

SPH hold stakes in both M1 and StarHub. If one traces all the government linked companies (SPH, Keppel Telecom, ST Telemedia, and MediaCorp) to its parent origin, Temasek Holdings actually controls all the three telecoms.

We feel that with SPH having common shareholding in both M1 and StarHub, the proposed merger could be made easier. Further, potential hardship could be reduced with StarHub being able to redeploy redundant staff to other business units in view of its larger business portfolios. Integration issues like culture difference could be problematic but this can be reduced if M1 is allowed to take the lead and allowed to run as an independent business unit. This is not difficult as StarHub group is already structured and run as various independent firms like StarHub Internet, StarHub Cable and so forth. Preserving and enhancing M1's culture would be wise and critical to StarHub. In view of this, StarHub mobile team should be integrated into the M1 team and not the reverse.

6.2.4 Backdoor Listing

Recently StarHub announced that they aim to be listed within the next two years. We hold the view that with the proposed merger with M1, StarHub can have a backdoor listing which is a more efficient process. Not will they only save time, this strategy will also help them save costs and resources needed to do an initial public listing from scratch. This savings in time and money can be better redeployed to focus on business development.

The only concern we can see is the regulatory body IDA who may prefer to have at least 3 mobile players in Singapore. Whilst their objective may be to create free competition in Singapore, we feel that the overall national strategic interest of Singapore should be taken into greater consideration. Further, as a business concern, M1's future growth would be limited as compared to teaming up with StarHub.

7 SUMMARY & CONCLUSION

M1 is a successful mobile operator, but with the high penetration rate in Singapore, it has limited space to grow as a pure mobile player. Although continue to concentrate in mobile business will face a lot of challengers, there are still sustainable ways to do that, Vodafone is a good example. But competing in Asian market is totally different from that in European Union, M1 stands a chance to be Asian Vodafone, if it follows closely with technology evolvement and continue to be innovative in service offerings.

To reduce M1's vulnerability, it may be a good idea to merge with StarHub. By combining sizes and customer bases, the mergers enhances both entities' positioning in the market, and assist them to achieve higher cost efficiency. It may be also a good idea for their common shareholders and the Singapore nation as a whole. However, M1 needs to watch out and plan with due diligence in the integration process. To protect and even strengthen its great name in the mobile industry is perhaps M1's first priority in the process.

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