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**「跨台聯播」對新加坡付費電視產業競爭與策略  
之影響研究**

**Impacts of Cross-Carriage Measure on Competition and  
Strategies in Singapore's Subscription Television Industry**

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## 中文摘要

在新加坡，付費電視產業的競爭與策略很少被討論。有鑑於此，本研究藉由檢視新加坡媒體發展管理局（Media Development Authority）於 2010 年所修訂的媒體市場行為準則（Media Market Conduct Code）之「跨台聯播」政策（Cross-Carriage Measure），利用五力分析、PEST 分析及 SWOT 分析，來探討新加坡付費電視產業的發展、競爭、策略及「跨台聯播」政策所造成的影響。

在新加坡的付費電視產業競爭趨勢中，以新電信公司（SingTel）於 2007 年所推出的 Mio TV IPTV 付費電視服務成長最多，2011 年時市占率已成長了 30%；同年，其競爭者星和有限公司（StarHub）的星和視界（StarHub TV）付費電視服務卻成長不到 1%。本研究發現，Mio TV 市占率成長之迅速是因新電信公司積極與內容提供者及電視頻道業者簽訂獨家播映權，甚至以高價購買運動電視品牌 ESPN 的眾多頻道及其旗下英格蘭超級聯賽 2010 年至 2013 年的獨家播映權。此舉讓兩家電視業者競爭越趨激烈，採取多面策略以增加訂戶率並吸引不同族群與多元喜好者，包括產品差異化策略、成本領先策略及集中化策略等。

研究結果顯示，兩家業者為爭取更多訂戶，主要採取的策略是與內容提供者及電視頻道業者簽訂獨播合約（Exclusive Carriage Agreements），但此策略也引起媒體發展管理局的關切。兩家業者所採取的獨播合約策略不僅增加了訂戶們訂閱內容的開銷，也讓訂閱星和視界服務的訂戶們面臨必須同時安裝新電信 Mio TV 服務或不得不更換服務之不便。為解決以上的問題，媒體發展局決定施行「跨台聯播」政策，規定付費電視業者必須與其他業者分享所購得的內容或頻道獨播權，並支付對方播映費，受方不准修改轉播內容，包括內容中穿插的廣告及原先業者的商標等。本研究發現，此政策將會促使付費電視業者購買更多多元化的節目內容及推出更低價格的節目組合等，有利於消費者成為付費電視服務的訂戶，同時也有利於降低既有訂戶的內容訂閱開銷。另一方面，星和公司及新電信公司兩家業者也不再需要以高價購買內容的獨家播映權，於是更專注於為各自的訂戶提供更創新及完善的服務。不過此策略亦有利於新進業者進入市場，預料將導致市場競爭更加激烈，業者們也必須更投入差異化策略。同時，此政策也意謂獨播合約的現象將會減少，間接使內容提供者的議價能力受到影響。

關鍵字：獨播合約、付費電視產業競爭、付費電視策略、  
跨台聯播、星和視界、新電信Mio TV

## Abstract

Competition and strategies in Singapore's subscription television industries were rarely examined despite the growing phenomena of such research in other countries. The implementation of the Cross-Carriage Measure presents a timely opportunity to examine developments, competition, strategies and the impacts of the Measure on the subscription television industry. Using the Five Force model, PEST and SWOT models as the basis for the research framework, this thesis adopted the case study approach and used documents from various sources to examine the subscription television industry and discuss the changes brought upon by the Measure.

Competition in the subscription television industry showed that SingTel Mio TV achieved more than 30 percent market share in 2011 since its entry in 2007 while StarHub TV grew less than one percent from 46.9 percent in 2007 to 47.5 percent in 2011. Such increase was due to the aggressive acquisition of premium programming. Competition between FTA television and the subscription television industry saw a 78 percent market penetration for the industry in 2011 and 80-odd percent for FTA television. Both providers used a combination of differentiation and cost leadership strategies to attract audience groups of different ethnicities and specific interests.

The outcome of the Measure required dominant player StarHub TV to offer its exclusive content to SingTel Mio TV's subscribers at similar prices and quality. With the Measure, consumers could enjoy a greater variety of content at more affordable prices without incurring the inconvenience of having multiple set-top boxes. However, StarHub TV might not wish to bid aggressively for exclusive content, considering the high acquisition costs for both its cable and SingTel Mio TV's IPTV platforms. Content suppliers might have lesser bargaining power for their content and more signing of non-exclusive agreements with providers. However, more competition might be expected as other operators can now acquire the previously exclusive content. The Measure might also lead to further increases in market share and ARPU for both providers as current subscribers could subscribe to other genres of content at lower subscription prices while others may see more advantages in subscribing to subscription television services. Both providers will have to devote more efforts into differentiating themselves and adopt different strategies if differentiation through exclusive content offerings were no longer used.

*Keywords: Exclusive Content, Pay-Television Competition, Pay-Television Strategies,*

*Cross-Carriage measure, StarHub TV, SingTel Mio TV*

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# Chapter One: Introduction

## 1.1. Research background

As media conglomerates slowly take shape in the various media industries in the 20<sup>th</sup> century, the influential power, ubiquitous and pervasive nature of such media industries in today's societies are allowing increasing number of studies to be done in the disciplines of media management and economics. Today, research and inquiry in the academic study of media management and economics stretches across disciplines, theoretical domains and political systems, examining critical issues in organizational behavior, strategies, competition, market concentration, as well as performances of media firms and industries. Especially in other countries, media management and economics have become increasingly prominent academic disciplines in the field of media studies (Albarran, Chan-Olmsted & Wirth, 2006).

However, Singapore's media industries are rarely examined in such academic disciplines. Scholars attributed the lack of such studies on Asian media markets (such as Singapore) on the deficiencies in reliable economic or market data that can be employed for analyzes; lack of trade records or published materials due to business practice and culture among Asian businesses in the private sector (Fu & Wildman, 2008). Among the dominant forms of mass media in Singapore, the press media have been cited in studies examining ownership, press freedom and censorship while the television industry was rarely examined in such disciplines despite undergoing tremendous changes and interesting twists since its beginning in 1963. Singapore's television industry currently consists of three major operators: a free-to-air (FTA) television service MediaCorp TV and subscription television services StarHub TV and SingTel Mio TV. Although Singapore's television industry has a shorter history as compared to its counterparts in other countries, it has also witnessed its share of competition and strategies in its short 49 years.

Competition in FTA television occurred once between 2002 and 2004 when the industry regulator Media Development Authority (MDA) released the second FTA television license to MediaWorks (a subsidiary of newspaper Singapore Press Holdings). The competition was short-lived and the industry quickly returned to a monopoly in 2004 with MediaCorp's acquisition of MediaWorks and forming the new MediaCorp TV. The company also diversified into the internet TV business in recent years. Although MediaCorp TV is the only FTA television service operator, it still experiences competition from subscription television services. The subscription television industry also faced its share of competition and strategies where the first operator Singapore Cable Vision was acquired by StarHub Telecommunications in 2002 and renamed StarHub Cable TV (which was further renamed StarHub TV recently). StarHub Cable TV continued to enjoy five years of monopoly and experienced direct competition for the first time in 2007, when SingTel Telecommunications entered the industry offering SingTel Mio TV on the Internet Protocol Television (IPTV) platform.

Competition was slow and almost non-existent between the two providers till SingTel Mio TV introduced the 'Season Pass' VOD service in 2009, offering latest television series from USA at earlier timings as compared to other television services. However, a greater influx of subscribers was observed when SingTel Mio TV managed to outbid StarHub TV and secured exclusive broadcasting rights for ESPN's range of programming and major sporting events such as the English Premier League football matches in 2009 for the next three years at a rumored sum of S\$280million (approximately at US\$224million). As a result of the successful offerings of the VOD packages and exclusive sports content, SingTel observed a 156 percent increase of subscribers from 78,000 in 2009 to 200,000 in 2010. As of December 2011, StarHub had 545,000 subscribers while SingTel had 343,000 subscribers.

However, such aggressive bidding for exclusive content brought MDA to conclude that the nature of competition is too predominately focused on the securing of exclusive broadcasting rights for content. MDA determined that the costs of acquiring such exclusive content were much higher than international benchmarks and often resulted in higher subscription costs for consumers. As an attempt to address the issue and shift the competition, MDA decided to implement the Cross-Carriage Measure, requiring the appointed subscription television service to offer its exclusive content (acquired after 12<sup>th</sup> March 2010) to other consumers on other subscription television services' platforms. However, the Measure sparked off heated debates in the industry as stakeholders became concerned with the Measure's actual formulation, feasibility and impact on competition and future development of the industry.

Several possible scenarios were emphasized in the debates. In view of the Measure, many content aggregators and channel providers in Singapore's subscription television industry felt that their negotiating rights for exclusive contracts have been compromised. Subscription television service providers seeking to sign exclusive contracts may have to bear any incurred costs in providing the exclusive content on its competitors' platforms. Correspondingly, upon expiration of existing contracts with content aggregators and channel providers, subscription television service providers may have to re-negotiate their contracts and re-strategize their subscription television services in order to compete in the industry.

## **1.2. Research objectives and research questions**

The implementation of the Cross-Carriage Measure presents a timely opportunity to examine the development, competition and strategies in the subscription television industry, which has not been examined in such areas previously. Also, considering the implications of the

Cross-Carriage Measure on future developments, competition and strategies of the subscription television industry, there is a further significance to examine the industry at this juncture, as well as the impacts of the Measure in greater detail. This thesis therefore aims to: 1) provide an in-depth understanding of competition and identify strategies used in the subscription television industry; 2) analyze the impact of the Cross-Carriage Measure on competition and strategies in the subscription television industry and 3) examine ways that the subscription television industry adapts to the Measure. Thus, the following questions are raised:

1. What is the current state of competition in the subscription television industry and what are the strategies used?
2. What are the impacts of the Cross-Carriage Measure on competition and strategies in the subscription television industry?
3. In what ways will the subscription television industry adapt to the Measure?

### **1.3. Research methodology**

This thesis reviews relevant literature to construct the actual state of the subscription television industry in Singapore and examine the issue of the implementation of the Cross-Carriage Measure. Due to the infeasibility and difficulties in gaining access to interviewees, who are predominately based in Singapore whereas the author is based in Taiwan, reviewing literature from various sources will form the dominant research approach for this thesis to examine Singapore's subscription television industry.

**Reviewing literature from various sources.** In examining media industries and markets, Albarran, Chan-Olmsted and Wirth (2006) explained that researchers gather historical and statistical data about the industry and relevant firms while analyzing relevant articles in trade

publications to provide a ‘multi-faceted view of the phenomenon under study’. Such approach is also predominant in media management and economics research examining media firms, industries and markets (Liu, 1997; Compaine & Gomery, 2000; Chan-Olmsted, 2006; Hocking, Stacks & McDermott, 2006).

Cameron & Price (2009) stated that by focusing on analyzing and examining the literature obtained in various domains, there is more control and flexibility over the process of data-gathering, as well as range and depth of information obtainable. Also, to ensure the richness of the study, data triangulation from multiple sources is often encouraged in order to view and illuminate the study from different perspectives and depths (Cameron & Price, 2009). Sources include academic literature, benchmarking data, government statistics, industry reports and organizational information such as prospectus, annual reports and audit reports (Cameron & Price, 2009). These information can be retrievable from online databases and websites of the respective companies, newspapers and magazines, academic journals and trade reports (AGS, 1997; Albarran, Chan-Olmsted & Wirth, 2006; Hocking, Stacks & McDermott, 2006; Cameron & Price, 2009). Porter (1980a) also recommended obtaining information from relevant books, trade associations and governmental departments.

Apart from referring to information available publicly on the companies’ websites, literature for this thesis will be gathered from established and reputable databases such as Ebscohost databases, LexisNexis Academic and ProQuest databases. These online databases contain extensive full-text collections of articles and documents from relevant publications and reports, such as the nation’s newspapers *The Straits Times* and *Business Times*, which is assumed to contain extensive coverage of developments and events in the country’s subscription television industry. To further ease searching of these articles, Boolean logic and keywords such

as ‘StarHub’, ‘SingTel’, ‘Cross-Carriage Measure’, ‘Cable TV’ and ‘IPTV’ are used to filter and retrieve relevant articles. Annual reports from both providers (accessible and retrievable through their websites) will be used to extract relevant figures, derive insights into the competition from the insiders’ perspectives and examine strategies applied by both providers in the industry. Relevant excerpts from books, news articles, trade and industry reports will also be used to complement and generate an overall understanding of the competition in the industry from the objective view.

#### **1.4. Scope and structure of thesis**

The thesis will begin with a literature review of studies conducted on developments, competition and strategies in subscription television industries, then supplemented by a review of frameworks commonly used to examine industries, competition and strategies in subscription television industries. It will then venture into an examination of developments, competition and strategies of Singapore’s subscription television industry. The implementation and impacts of the Cross-Carriage Measure on the subscription television industry will then be examined. The thesis is therefore divided into the following chapters.

- Chapter One introduces the background for this thesis, where the industry regulator has introduced the Cross-Carriage Measure in the subscription television industry. In light of the lack of literature examining developments, competition and strategies in Singapore’s subscription television industry, the significance of this thesis is also emphasized. Research methodology for this thesis is further clarified in this chapter.
- Chapter Two reviews literature on industry competition and strategy in subscription television industries, issue of exclusive content in subscription television industries

and identifies relevant frameworks in examining competition and identifying strategies. A research framework will then be developed.

- Chapters Three will focus on examining general environments and identifies factors that are capable of influencing the subscription television industry
- Chapter Four examines the current state of competition and strategies in the subscription television industry.
- Chapter Five will examine the issue of exclusive content in Singapore leading to the implementation of the Cross-Carriage Measure in the subscription television industry. The impacts of the Measure on the subscription television industry will be examined using the research framework.
- The final chapter then summarizes the earlier chapters and suggest recommendations for the subscription television industry. Limitations and suggestions for further research will then be detailed.

### **1.5. Significance and contributions of this thesis**

This thesis is the first of its kind which attempts to examine developments, competition and strategies in Singapore's subscription television industry.

Fu and Wildman (2008) have stated that studies of media markets in Asia are rarely found in current literature on media economics and business in the English language despite the 'growing richness, vibrancy and scale of Asian media markets'. In Singapore, previous studies done on management and economics of Singapore's communication industries focused mainly on telecommunications services provided by the players in the industry (SingTel, StarHub and MobileOne), examining customer satisfaction and service quality (Chan, Lau & Tan, 2000; Teo,

Foo & Ong, 2001; Chew, Ler & Toh, 2002). However, there are few studies examining Singapore's television industries. Some of the few include Ng, Pang and Toh (2000) who attempted to analyze marketing and advertising strategies of the players; Aw & Lek (1997) who examined the impact of cable television on the local production industry and Chua (2002) who examined brand management practice in the local television industry.

The implementation of the Cross-Carriage Measure provides a timely opportunity to examine development, competition and strategies in Singapore's subscription television industry, as well as areas of change due to the Measure. This thesis therefore seeks to provide insights and understanding into Singapore's subscription television industry and eventually hopes to contribute to the small but growing literature examining Singapore's media and communication industries. It is also desired that this thesis will be a helpful reference in allowing one to understand Singapore's subscription television industry.

#### **1.6. Term definition**

For the easy referencing of this thesis, the following key terms are as defined:

- 'Subscription television' – Subscription television services cater to niche audiences on a subscription basis through monthly or pay-per-view payment, where subscribers can choose and package their preferred content. The content on such subscription television services usually have more variety and choices as compared to content on free-to-air television. Current players in Singapore's subscription television industry include StarHub Television and SingTel Mio Television on the cable and IPTV platforms respectively.



- ‘Singapore Cable Vision’ (‘SCV’) – Acquired by StarHub Telecommunications in 2001, it was an entity comprising of state companies Singapore International Media (31%), Singapore Technologies Ventures (24%), Singapore Press Holdings (20%) and Continental Cablevision (25%), which was then the third largest cable television operator in the United States. SCV spent more than S\$600 million (US\$300 million) in establishing a nationwide state-of-the art hybrid fibre-coaxial (HFC) cable network where it leased fibre-optic cables from SingTel and built coaxial extensions to each household. It also provided internet services through broadband cable.
- ‘StarHub Telecommunications’ (‘Starhub Cable’ or ‘StarHub TV’) – The company is a fully-integrated info-communication company in Singapore, offering a full range of information, communications and entertainment services. After acquiring SCV in 2002, the company continued to offer cable TV services. It is Singapore’s largest Pay-TV operator.
- ‘Singapore Telecommunications’ (‘SingTel Mio TV’) – The company is the nation’s first telecommunications company, providing a diverse range of communication services and solutions. It is the nation’s leading mobile, broadband and fixed line operator. The company started offering IPTV services through its ‘Mio TV’ service in 2007.
- ‘Ministry of Information, Communications and the Arts’ (‘MICA’) – The ministry oversees the macro-development of information, communications and arts industries in Singapore, with particular focus on the country’s cultural and artistic developments.
- ‘Media Development Authority’ (‘MDA’) – It is an autonomous agency established by the Government to regulate and promote the media sector. The authority aims to

develop a vibrant media sector in Singapore that nurtures homegrown media enterprises and attracts direct foreign investment which promotes economic growth and provides local employment opportunities. MDA also implements the Media Market Conduct Code, consisting of policies and regulations towards market conduct, competition and public interest in the local media industry.

- ‘Infocomm Development Authority’ (‘IDA’) – Similar to the MDA, IDA is an autonomous agency established by the Government to regulate and promote the telecommunications sector.
- ‘Cross-Carriage Measure’ – Implemented by MDA in March 2010 in view of the intense competition in exclusive content by StarHub TV and SingTel Mio TV, it requires subscription television service operators to offer relevant exclusive content to their competitors’ subscribers on the competitors’ platforms with specific guidelines and requirements.

## **Chapter Two: Literature Review**

This chapter reviews past literature on industry competition and strategy, with particular focus on competition and strategy in television industries. Approaches and frameworks in examining industries, competition and strategies in television industries will be identified. The advantages and disadvantages of the approaches and frameworks will also be summarized.

### **2.1. Literature on television industries**

As media conglomerates started to take shape in the various media industries in the 20<sup>th</sup> century, the study of media industries became more prominent due to the ubiquitous and pervasive nature of media industries. Today, research and inquiry in the field stretches across disciplines, theoretical domains and political systems, allowing understanding of critical issues in economics, competition, management, media markets, organizational behavior and strategies in media firms and industries (Albarran, Chan-Olmsted & Wirth, 2006; Chan-Olmsted, 2006). Following the rising trend of media convergence (where there is an integration of data, media and telecommunications systems) and changes in economic, regulatory and technological structures, there is an increasingly growing global phenomenon of studies examining media industries. Albarran, Chan-Olmsted & Wirth (2006) also stated that literature devoted to television management in various countries is increasing from both local and global perspectives.

Television industries in United States have also been largely examined in recent years, evident from the published works of scholars such as Picard (1989) who examined concepts and issues in media economics; Compaine & Gomery (2000) who examined competition and concentration in mass media industries; Albarran (2002) who discussed media markets, industries and concepts; Hoskins, McFadyen & Finn (2004) who explored the application of

economics in new and traditional media; Chan-Olmsted (2006) who examined competitive strategies in media industries; Albarran, Chan-Olmsted & Wirth (2006) compiling scholarly works by media scholars into a media handbook examining media management and economics in the Americas and Europe and Picard (2010) examining economics and financing issues of media companies.

Chan-Olmsted (1998) examined the increasing trend of mergers and acquisitions between broadcasting companies and telephone services brought upon by convergence and deregulation. Doyle (1998) commented that there was a redundancy in examining the issue of monopolistic and competitive provision of TV programming as it was clearly established that there was an extensive and growing competition in such industries due to increasing demand for TV programmes from technological progress which lowered costs in TV production, programming and even the quality of television sets. Compaine & Gomery (2000) examined US television industries in great detail, exemplifying complex media ownership patterns among media companies and dwindling ownership regulations by the Federal Communication Commission. Compaine & Gomery (2000) stated that no research in mass communication should ignore questions of mass media ownership and economic implications of such control, as mass media in US and other parts of the world seek to maximize profits and therefore should be studied as economic institutions. To support its conclusions, Compaine & Gomery (2000) documented developments in US's broadcast, cable and satellite television industries, where many companies are managing diverse businesses spanning across various media segments and markets. Such companies include Time Warner, News Corporation, Disney, Viacom and CBS. Specific examples cited were the Disney's acquisition of ABC, the diversification into cable television

system ownership by telco AT&T through the acquisitions of TCI and MediaOne, as well as the cooperative venture of MSNBC between NBC and computer software giant Microsoft.

Hoskins, McFadyen & Finn (2004) also raised and addressed several important questions that are widely examined by scholars in media management and economics paradigm. Studies were done to examine reasons for the influential market power of particular television franchises, the process of analyzing media industries, the effects of market structure on media firms, industry conduct and performance, the type of strategies used by companies to compete, as well as measuring the competitiveness of an industry and dimensions of industry performance. Chan-Olmsted (2006) also examined strategies and competition in US's various television industries, analyzing areas of changes in the industries over the years, through the extensive use of Porter's Five Force model, environment analysis approaches and strategic frameworks. Albarran, Chan-Olmsted and Wirth (2006) also concluded that competition in US's television markets would continue to increase as new technologies and the phenomenon of media convergence allow industries to cross legal and technical boundaries to compete in several areas of communication.

In Asia-Pacific regions such as Taiwan, China, Hong Kong and Singapore, the number of television management and related studies are also increasing. In Taiwan, studies are being conducted on multichannel television management, competition and related subjects as evident through the works of Liu (1997), who examined the intense competition between multichannel operators of the various platforms and the challenges faced in audience ratings, advertising revenue, human resources, industry regulation and policy. In particular, the respective industry environments were analyzed using PEST analysis framework, followed by Porter's Five Force model and SWOT analysis frameworks. Other studies included Li & Chiang (2001) who examined market competition and programming diversity in Taiwan's television markets;

Hartanto, Kow, Santoso & Wong (2002) who conducted a strategic analysis of Taiwan's cable television industry; Chen (2002) examining the cable television industry's ownership and concentration; Tsai (2003) on the digital broadband communication industry in Taiwan; Li (2004) on market competition and media performance of Taiwan's cable television industry; Tsai & Chang (2005) who discussed mass media under convergence and Chen (2005) who discussed the broadcasting media ecology and industry in Taiwan. In particular, Chen (2002) examined ownership and concentration in Taiwan's cable television industry and concluded that the industry had become oligopolistic and was increasingly being controlled by a small number of local media conglomerates.

In other regions such as Hong Kong, Japan and South Korea, subscription television industries and their related issues have also been largely examined. In regards to the legislation and regulation, Leung and Wei (1998) examined the factors influencing the adoption of interactive TV in Hong Kong and their implications for advertising. Kang (2002) discussed factors that influenced adoption of digital cable television in South Korea. Kwak (2007) also examined the regulation of subscription television in East Asia, conducting a comparison across Hong Kong, Japan and South Korea and concluding that Hong Kong's de-regulatory framework was more effective as compared to South Korea and Japan. Shin (2007) on the other hand, conducted a socio-technical analysis of the IPTV industry in South Korea, concluding that the industry development was first driven by technology and regulation but was now driven by market forces and users' demands.

Competition and its related issues in the subscription television industries have also been examined widely. For example, Cheng (2009) examined competition and the enforcement of competition law in Hong Kong's television industries, while Rhee and Lee (2010) examined the

effects of mergers and competition on consumer benefits in South Korea's television industries. Hwang, Hong and Lee (2010) also conducted an analysis on the merger efficiency of vertical and horizontal integration in Korea's cable television industry. An empirical study examining reciprocal carriage on vertical integration and market foreclosure in South Korea's cable television industry was also conducted by Lee and Kim (2011), concluding that vertically integrated cable operators in the country tended to carry their affiliated channels and were unlikely to carry their rivals' channels. The rise of the quadruple play strategy and media convergence had also been examined. For example, Kim and Sugaya (2006) conducted a comparison of IPTV legislation between South Korea and Japan, focusing on legislation concerning the convergence of broadcasting and telecommunications and the institutional differences of the respective IPTV services.

### **2.1.1. Literature on Singapore's television industries**

Television industries in Singapore were much less examined due to various reasons. Fu & Wildman (2008) have already stated that the studies of media markets in Asia are rare. A search into past scholarly articles conducted on Singapore's media industries revealed that few studies have been done on Singapore's television industries as compared to other industries. Choi and Yeo (2001) examined the role of the government in the regulating and censoring of television content and the public's opinion on existing regulations, concluding that there was a need for revision in the regulatory policies; Tham (2004) was one of the very few studies done on examining the relationship between market competition and programme diversity in Singapore's terrestrial television broadcasting industry while Edge (2004) offered a detailed account of the

development and competition in Singapore's media industries, arguing that there was a need to 'rationalize' competition and not to eliminate it totally.

Ang (2007) on the other hand, provided a comprehensive understanding of Singapore's television industries, summarizing its developments and regulatory policies while giving a generic overview of Singapore's environments. There were also several studies done on the examination of competition in the FTA television industry, where MDA released the second FTA broadcasting license to MediaWorks (a subsidiary of Singapore Press Holdings), who competed against MediaCorp and resulted in losses for both television companies and MediaWorks' eventual withdrawal from the industry (Edge, 2004; Lee, 2005; Ang, 2007).

There were also few studies done on the subscription television industry. Previous studies conducted on the subscription television industry included Aw & Lek (1997) examining the impact of cable television on Singapore's broadcasting scene and Heng (2007) exploring audience fragmentation and polarization in Singapore's cable television market. Similar to the public television industry, the subscription television industry was dominated by a single player (StarHub Cable TV) till SingTel Mio officially started its IPTV service in 2007. The latter was not yet seen as a strong competitor against StarHub Cable TV (Reynolds, 2006; Chong, 2007). SingTel Mio TV was only predicted to become a strong competitor when it acquired exclusive broadcasting rights to the Barclays Premier League's football matches and ESPN Star Sports in 2009 (Lim, 2009; Media, 2009a).

Competition between the two subscription television service providers were mainly discussed in newspapers and trade publications but not in scholarly articles (Media, 2006; Yin, 2006; Frater, 2007; Hicks, 2007; Low, 2007; TelecomWeb, 2007; Jenna, Arena & Lim, 2010; Lane, 2010; Ramesh, 2010; Tanner, 2010; Wang, 2010b). For example, Wang (2010b) discussed



possibilities of intense competition following SingTel Mio TV's acquisitions of sports-related content and indirect competition with public broadcaster MediaCorp. Lane (2010) and Tanner (2010) briefly discussed the issue of the Cross-Carriage Measure and its impact on industry stakeholders including consumers while Jenna, Arena & Lim (2010) provided a detailed analysis of the issue.

Recent studies done were more focused on the developments of mobile TV in Singapore. For example, Lin (2010) concluded that current media laws are inadequate in managing the fast developing mobile TV industries and recommended a light-touch customized mobile TV policy should be created. Lin and Liu (2011) examined and conducted a socio-technical comparison on the development of mobile broadcasting TV in Singapore and Taiwan, concluding that Singapore was most likely to adopt the DVB-H standard and utilize a subscription model for mobile TV. Lin (2011a) and Lin (2011b) examined the emergence of three-screen TV in Singapore and argued that the current TV-centric model would not be adequate to regulate TV across multiple screens and platforms, further recommending a 'pro-innovative' three-screen TV policy with 'light-touch' licensing scheme and 'loose' content regulation so as to facilitate the development of the next generation TV.

## **2.2. Examining competition and strategies in television industries**

The classic management and economic research in business-related disciplines states that all organizations or businesses face some sort of competition, either for resources, people, cash or customers. The environments that these organizations or businesses exist in are always uncertain, therefore emphasizing the importance for businesses and companies to position themselves strategically in order to compete successfully in their industries (Bourgeois, 1996).

Porter (1980) theorized that industry structure strongly influences industry competition as well as the strategies available to companies seeking to compete against one another and therefore, the development of competitive strategy is built on the analysis of industry structure and competitors. Managers and business leaders have to understand the dynamics (or structure) of the industries they operate in, as well as trends in the external environments that may have effects on their businesses in order to position themselves strategically (Bourgeois, 1996). Almost all strategic planning approaches and frameworks involved the analysis of the direct and indirect environments where companies operate their businesses. Over the years, several approaches and theoretical frameworks have been developed and applied in real-life management, business and economic studies to examine competition.

These approaches and frameworks have also been commonly used in media management and economics research to study media firms, competition, markets and industries (Liu, 1997; Hoskins, McFadyen & Finn, 2004; McGrail & Roberts, 2005; Chan-Olmsted, 2006; Albarran, Chan-Olmsted & Wirth, 2006; Fu & Wildman, 2006). In particular relevance to analyzing competition of media industry segments, Compaine & Gomery (2000) stated that it is critical to define the relevant markets, where theoretical frameworks then can be applied.

Liu (1997) employed several theoretical models commonly used and well-established in management to examine competition in Taiwan's television industries. In particular, Liu (1997) examined the industries' general environments and communication environments, while using Steiner's SWOT analysis and Porter's Five Force Model to analyze competition in the industries.

Hoskins, McFadyen and Finn (2004) stated that competition in media industries can be categorized into four categories: *Perfect Competition*, *Monopolistic Competition*, *Oligopoly* and *Monopoly*. In media industries, monopolistic competition is seen in books, magazines and radio;

oligopoly in television networks, motion pictures and music recordings; and cable television and newspapers under monopoly. However, it is also important to note that industry and market structures can change over time (Albarran, as cited in Hoskins, McFadyen & Finn, 2004).

Albarran, Chan-Olmsted and Wirth (2006) identified several categories of theories that have been applied in media industries examining competition and strategies. Such theories spanned across the disciplines of strategic management, economics, market structure, organizational structure, culture and leadership studies. However, strategic management theories have been identified as the most widely used concepts and frameworks in media management studies to date. Among the various strategic management theories, the Structure-Conduct-Performance (SCP) model developed from the Industrial Organization (IO) has been identified as one of the dominant conceptual frameworks in studying media industries. It was also predicted that as research in media industries progressed, strategic management theories taking social, economic and regulatory environments of media industries into consideration would develop, such as incorporating the PEST frameworks into the theories. Albarran, Chan-Olmsted and Wirth (2006) also stated that as the study of strategy progressed to examining the relationship between strategy and performance, Porter (1980)'s Five Force model in integrating industrial economics and firm strategy became a major paradigm in strategy research.

In particular, to examine strategy formulation and implementation in media industries where the understanding of industry competition is compulsory, Chan-Olmsted (2006) proposed a framework integrating the environments of the media industries and resources (or capabilities) of the respective media companies. The framework stated that a media firm's ability to implement its strategy is influenced by a combination of external factors relating to the general

environment and the particular media market in which the media firm operates and competes in (Chan-Olmsted, 2006).

### **2.2.1. PEST and SWOT analysis**

In examining general environments of businesses and industries, the SWOT and PEST analysis frameworks have always been essential. The SWOT analysis (*Strengths, Weaknesses, Opportunities, Threats*) is often used to find the optimal match between resources and capabilities of a firm and external market conditions environmental trends, after which the company then can strategize and better position itself in the industry (Bouregois, 1996). *Strengths* and *Weaknesses* refer to the company's internal capabilities and limitations while *Opportunities* and *Threats* refer to any external factor(s) that may influence the company's business decisions, often which includes the company's competitors (Barney & Hesterly, 2006). The SWOT analysis is complemented by the PEST analysis (*Political, Economic, Social, Technological*) which examines specific areas and trends of the general market environment which the company is attempting to compete in (Botten and McManus, 1999).

In media management and economics research, Liu (1997) used SWOT analysis to examine Taiwan's multichannel television industry while McGrail and Roberts (2005) also demonstrated the use of SWOT analysis in influencing strategies applied in United States' broadband cable television industry. Albarran, Chan-Olmsted & Wirth (2006) also cited many studies where PEST and SWOT analysis is used by various segments of the media industries to examine management and other issues. The PEST and SWOT analysis is also extensively used by market research firms in assessing telecommunication industries and its environments (Business Monitor International, 2010; Business Monitor International, 2011).

*Strengths* in media industries can refer to the companies' branding, availability of human resources, ample professional experiences, infrastructure and coordination between various business units. *Weaknesses* can refer to media companies' high production costs in content, costly salaries for top-level management, political influences, lack of resources and conservative approaches in management and execution. *Opportunities* can refer to media companies' listing on public stock exchanges, investments and diversifications into other media segments, promotional and cost-saving efforts, consumers' continued interest in the companies' content, audience segmentation, as well as innovation in content diversity and quality. *Threats* can refer to reduction of advertisers, decrease of audience ratings, uncertainty in regulation and policy, censorship of content, as well as incompetency and lack of human resources (Liu, 1997). Liu (1997) and Chan-Olmsted (2006) also identified the following PEST factors that have affected television industries in Taiwan and the United States respectively:

- Political: political history of the country, regulatory environments of broadcasting, deregulations to encourage cross-media competition, introduce new media technologies, apply cross-promotion strategies, sharing of resources; political changes towards privatization and commercialization of media systems; opening of media borders for global diversification, increasing programming demands and revenue potential and etc.
- Economic: growth of global economy contributing to the market potential or decline of broadcasters; growth of GDP per capita allowing for more disposable income in entertainment spending; developments of global programming markets leading to more overseas media markets becoming potential revenue sources, mergers and acquisitions leading to growth of media conglomerates and creation of consolidated broadcast markets.

- **Social/Cultural:** external forces that shape the types of audience, size, preferences and behaviors; aging of baby boomer audience segment widening reach-out for broadcast advertisers, altering programming approaches, scheduling strategies and competitive positions of different broadcasters; changing attitudes towards audiences' quality of life and environment that can influence broadcasters' promotional approaches and news focuses; busy lifestyles of audiences resulting in diminishing audience loyalty and leisure time, prompting programming modularity and cross-platform marketing; growth of smaller demographic groups influencing programming and diversification strategies of broadcaster, and etc.
- **Technological:** technological advances in computing and communication technologies; product innovations in devices that spilt the consumers' investments in broadcast media products and leisure time; new digital communication technologies that facilitate the delivery of digital signals and allow value-added services such as interactivity and content options; advances in digitization and compression offering broadcasters new business opportunities, and etc.

**Table 2.1.** Opportunities and threats in television industries

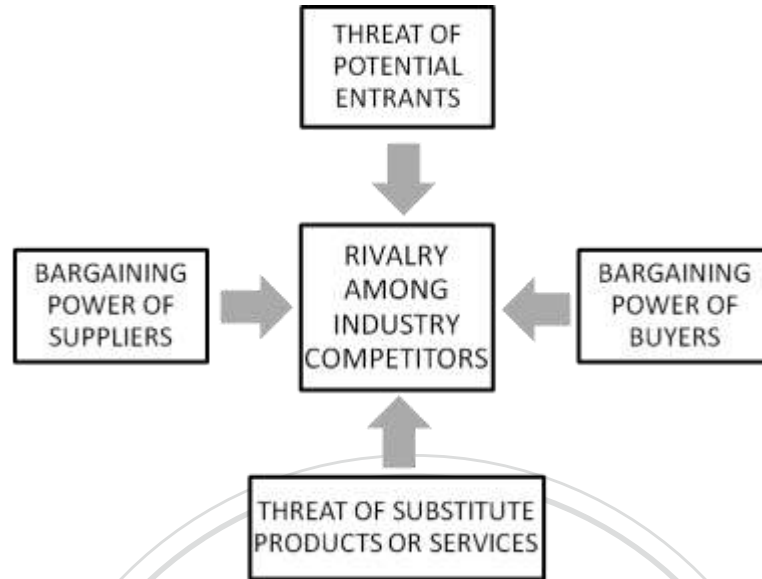
	<b>Opportunities</b>	<b>Threats</b>
<b>Broadcast Television</b>	Cost of conversion to HDTV Loss of revenue streams Direct delivery of video content Demise of traditional TV news Audience fragmentation	Multicasting Interactivity
<b>Multichannel Television</b>	Alternative forms of distribution Government reregulation Cost of technology Programming expense	New revenue streams Changes in the advertising process/model

(Source: Albarran, Chan-Olmsted & Wirth, 2006)

The above table summarized opportunities and threats in television industries. Ferguson in Albarran, Chan-Olmsted and Wirth (2006) also observed that opportunities and threats are ‘future-oriented’ and closely associated with the planning function of management.

### **2.2.2. Five Force model**

The Five Force model by Michael Porter is an extension of the Structure-Conduct-Performance (SCP) paradigm (Albarran, Chan-Olmsted & Wirth, 2006). Similar to the SCP paradigm, the Five Force model examines industry competition through the industry structure, therefore also known as a structural analysis of an industry, where the state or strength of competition in an industry is determined by five fundamental competitive forces from the key structures of the industry (Porter, 1980; Bourgeois, 1996; Barney & Hesterly, 2006). The key structures are the existing competing companies, customers, suppliers, substitutes and potential entrants in the industry. The circumstances surrounding them are the ‘competitive forces’, the intensity and areas of competition determining the level of competition and the collective strength of these five forces determines the profitability in the industry (Porter, 1980). In media management and economics research, Liu (1997) specifically applied the model in analyzing Taiwan’s television industries. Chan-Olmsted (2006) also used the model extensively to examine competition dynamics and their implications in the respective television industries in the US. The five competitive forces are shown below and will be discussed shortly. Appendix I contains a checklist for examining stakeholders in an industry.



*Figure 2.1. Diagram of Five-Force model  
(Source: Porter, 1979)*

**Threat of entry.** New entrants entering into an industry aims to build its market position, gain market share and share significant industry resources (Porter, 1979). Therefore, the threat of entry into an industry is dependent on the respective entry barriers and costs of entry, such as the ease or difficulty of gaining and using resources, investing and start-up costs, retaliations and reactions from existing competitors. If the entry barriers or costs are high, or existing competitors are expected to retaliate severely against the new entrants, the threat of entry is considered low as new entrants will not be keen to enter into the industry. Vice versa, low entry barriers or costs will heighten the threat of entry into an industry, especially in circumstances when the new entrants are diversifying from other markets and are able to leverage on existing capabilities, cash flows and other resources. Barriers of entry can be briefly summarized into the following categories: *Economics of Scale, Product Differentiation, Capital Requirements, Switching Costs, Access to Distribution Channels, Cost Disadvantages Independent of Scale and Government Policy* (Porter, 1979; Porter, 1980; Bourgeois, 1996; Botten & MaManus, 1999; Porter, 2008).



Barney and Hesterly (2006) cited the example of the online book-ordering business in United States where Amazon.com faced the threat of entry by Barnes & Noble.com and Borders.com, who were already operating in the traditional publishing industry but ventured online to compete with Amazon.com. Barney and Hesterly (2006) also cited the case of ESPN facing threat of entry by Fox Sports Regional Network and College Sports Television; Budweiser, Miller and Coors investing substantial amount of capital in advertising and brand recognition to make new entry into the brewing industry difficult and the challenge of differentiation in wine-welling in France's wine market.

The factors and persons influencing Threat of Entry in media industries are: ownership of the television stations and media systems, consumers' demand for new television services, access to distribution channels or programming, costs involved in ensuring adequate broadcasting infrastructure and manpower, capital costs involved in 'insuring' financial performances and audience numbers for the media companies, switching costs for audiences and advertisers to switch from one television station to the new entrant, number of existing television channels in the industries, differentiation in channel genre and content, reputation of existing television companies, needs and demands of television audiences, competition in pricing among existing television companies, legislative requirements and conditions for new television companies (Liu, 1997; Landers & Chan-Olmsted, 2004; Chan-Olmsted, 2006).

**Intensity of rivalry among existing competitors.** Rivalry in the industry occurs when companies feel the pressure or see an opportunity to improve their market position in their respective industries. The intensity of rivalry among existing competitors is dependent on several structural factors that interact and influences one another. Such factors include: the number and diversity of competitors in the particular industry, frequency of introduction of new products,

rate of industry growth, level of switching costs, type of product differentiation, level of fixed or storage costs and etc (Porter, 1979; Porter, 1980a; Porter, 1980b; Barney & Hesterly, 2006). The usual tactics identified in companies competing against one another include price competition, product differentiation, advertising and marketing campaigns, introduction of new products, and customer service improvements (Porter, 1980a; Porter, 2008). In general, the more intense the competition in the industry, the more difficult it is for new companies to enter and the more challenging it is for existing companies to survive (Botten & McManus, 1999).

Barney and Hesterly (2006) cited the examples of Borders.com and Barnes & Nobles.com becoming competitors of Amazon.com after their entry into the online bookselling industry; CBS, NBC, Fox, USA Networks and TNN becoming ESPN's rivals; the case of the global laptop and personal computer industry where there is no one company dominant; the trend of intense price rivalry emerging in US's fastfood industry between Burger King, Wendy's and McDonalds, as well as the competition in US's airline industry between airlines providing longer-route flights forced airlines to keep their prices low in order to attract customers.

The factors and persons influencing Intensity of Rivalry in media industries are: similar levels and areas of competency of the existing television companies, slow development of the television industries due to economic downturns in the general environments, new entrants in the industries, product differentiation in channel genres and type of content, switching power of advertisers and audiences (Liu, 1997; Landers & Chan-Olmsted, 2004; Chan-Olmsted, 2006).

**Bargaining power of suppliers.** Suppliers provide necessary resources to industries which require them and such resources include raw materials, human labor and other critical assets. Depending on the value and importance of the resources in the various industries, suppliers are at advantageous positions to negotiate for its own maximum profits. Similar to

buyers, suppliers can influence industry competition through several ways, such as charging high prices or limiting the quality of its products and services. The extent of bargaining power for suppliers in an industry depends on the concentration of suppliers, the importance of the industry as the supplier's customers, the suppliers' dependence on the industry for its revenue, switching costs faced by buyers, level of differentiation of supplier's products, replacement of supplier's products with other substitutes and forward vertical integration by the suppliers (Porter, 1979; Porter, 1980a; Porter, 1980b; Botten & McManus, 1999; Barney & Hesterly, 2006; Porter, 2008).

Barney and Hesterly (2006) identified Amazon.com's suppliers as book publishers, book authors and employees who provide programming and logistics capabilities to Amazon.com and ESPN's suppliers as the various sports leagues and TV personalities that host the various shows on ESPN. Barney and Hesterly (2006) also commented on the suppliers posing a greater threat when they are unique or highly differentiated. For example, the use of celebrities such as Michael Jordan and Oprah Winfrey meant higher costs incurred for companies who wish to leverage on them to promote their services or products.

The factors and persons influencing Bargaining Power of Suppliers in media industries are: number of channel and content providers/suppliers, viewers' demand for specific genres of content, types of content available by the providers, pricing and quality of the respective content, programming costs and syndication rules, proliferation of media outlets and content buyers, trend of vertical and horizontal integration that is elevating the position of the broadcast buyers (Liu, 1997; Landers & Chan-Olmsted, 2004; Chan-Olmsted, 2006).

**Bargaining power of buyers.** Regardless whether they are end consumers, commercial customers or intermediary vendors, buyers can influence industry competition by the extent of their bargaining power in the particular industry. Buyers often demand for better quality or value

of goods or services, which forces competitors in the industry to compete against one another. Several factors affect the extent of bargaining power of buyers such as: the type of industry, price sensitivity, quality of the product, buyers' profiles and purchasing habits, importance of products to the buyers, product variety and differentiation in the respective markets, volume and fixed costs of goods being purchased, buyer's switching costs to other substitute or alternative products, backwards integration by the buyers in attempts to remove intermediary vendors and etc (Porter, 1980a; Porter, 1980b; Barney & Hesterly, 2006). In general, Botten and McManus (1999) stated that the greater the bargaining power of buyers, the less advantage sellers has. Also, in circumstances where intermediary vendors may influence purchasing decisions of downstream customers and affect buyers' profitability in the industry, the buyers who are now in the position as suppliers (or producers) may choose to enter into exclusive arrangements with particular distributors or retailers in order to retain their greatest industry profitability (Porter, 2008).

Barney and Hesterly (2006) observed that buyers for Amazon.com included customers who purchase books and advertisers who purchase advertising space on Amazon's website. Similarly, buyers for ESPN include audiences who watch sports on television and advertisers who purchase advertising space on the network. Barney and Hesterly (2006) also commented on the trends that powerful retail firms (e.g. Walmart and Home Depot) can make significant and complex logistical and other demands on their suppliers; as well as the concerns that firms such as Campbell Soup company have on keeping their costs for the tin cans (to contain the soup) low.

Chan-Olmsted (2006) identified two categories of buyers in broadcast markets: advertisers and audiences. The factors and persons influencing Bargaining Power of Buyers in media industries are: levels of dependence in channel and content providers, possibilities of audiences switching to alternative media systems, number of subscribers and prices for content

on pay-per-view or channel subscriptions, dependence on advertisers buying advertising time and advertising volume (Liu, 1997; Landers & Chan-Olmsted, 2004; Chan-Olmsted, 2006).

**Threat of substitutes.** Substitute products perform the *same* or similar functions as the products in the particular industry that is being examined. In such circumstances, existing companies in a particular industry not only have to compete against one another, but also with companies in industries that produce possible substitute products. If those substitute products are sold at lower or equally competitive prices as compared to the products of that industry, competition in that particular industry may be affected greatly, therefore posing a threat to the industry (Porter, 1979; Porter, 1980a; Barney & Hesterly, 2006). The threat of substitutes is higher when there are low switching costs between the original products and the substitute products, or when the value or performance of the substitute product is higher and better than that of the original product (Porter, 2008). Barney and Hesterly (2006) further added that substitute products can limit the pricing of original products or even replace them in extreme situations, further affecting competition in the original industries. Factors that may affect the replacement of original products with substitute products include tax policies on the original products, any government funding or assistance to the development of the substitute products, marketing efforts and distribution of the substitute products, as well as any collective industry action taken against the substitute products by the industries producing the original products (Porter, 1980b).

Barney and Hesterly (2006) offered the example of Barnes & Nobles and Borders being substitutes for Amazon.com. Television was also observed to be a close substitute for books, with its popular offerings of comedies, dramas and documentaries providing another form of

entertainment and leisure activity. Similarly, substitutes for ESPN can also consist of sports magazines, sports pages in newspapers and personal attendances at sports events.

The factors and persons influencing Threat of Substitutes in media industries are: viewers' costs of switching to other television services, content providers' costs of switching to other broadcasting platforms or media systems, product differentiation and quality in channel content among the respective broadcasting platforms (Liu, 1997; Landers & Chan-Olmsted, 2004; Chan-Olmsted, 2006)

**Complementors.** Brandenburger and Nalebuff (1996) suggested that *complementors* should be considered other than the original five competitive forces. Citing an example of the interdependence between television content producers and television channel providers, end consumers are exemplified to value the two products more than the two products marketed individually (Brandenburger & Nalebuff, 1996; Barney & Hesterly, 2006; Chan-Olmsted, 2006). Similarly, Porter (2008) stated that 'complements arise when the customer benefit of two products combined is greater than the sum of each product's value in isolation'. Complements can affect industry profitability through the way they influence the five competitive forces and it is necessary to determine whether the influence is positive or negative. The presence of complements widens a company's markets while competitors narrow and divide the markets into smaller portions (Barney & Hesterly, 2006).

It is also interesting to note that while a company can be a complementor to one firm and a competitor to another, it can also be both a competitor and a complementor to a single firm (Brandenburger & Nalebuff, 1996). Barney and Hesterly (2006) cited an example where satellite television companies DirecTV and the Dish Network were competitors against cable television companies such as Time Warner Cable but complementors for television production companies

as well. Barney and Hesterly (2006) also cited the example of data storing companies working together to develop a common technology standard to maximize storage on storage devices. However, as companies formed a complementary relationship in one aspect such as maximizing the value of the service/product in the industry and increasing the size of the market, they may become competitors so as to gain the maximum share of the market.

### **2.2.3. Strategies**

As industry competition is heavily influenced by companies' strategic decisions in their respective industries, strategy-making became an increasingly important process among top-level management in the companies. Such trend is also observed in academic research, where business and strategic management forms an important discipline in its entirety (Porter, 1979; Porter, 1980a; Porter, 1980b; Johnson & Scholes, 1988; Bourgeois, 1996; Botten & McManus, 1999; Barney & Hesterly, 2006; Porter, 2008). In devising strategies, Botten and McManus (1999) stated that firms must first scan external and internal environments to identify possible SWOTS. Porter (1980b) commented that the five competitive forces can jointly determine the intensity of industry competition where the strongest force(s) then become a crucial aspect in strategy formulation. Porter (1980a) also stated that by developing competitive strategy, a company or business unit can find a position in the industry where it can 'best defend itself against the competitive forces or influence them in its favor'.

Similarly in media management-related research, the various aspects and dimensions of strategies are extensively examined considering the influences and impacts of strategies employed by the companies on consumers and the industries (Liu, 1997; Compaine & Gomery, 2000; Li & Chiang, 2001; Edge, 2004; Hoskins, McFadyen & Finn, 2004; Li, 2004; Liu, 2005;

McGrail & Roberts, 2005; Chan-Olmsted, 2006; Albarran, Chan-Olmsted & Wirth, 2006; Fu & Wildman, 2006). In particular relevance to media industries, Chan-Olmsted (2006) specifically stated that the formation of a strategy involves the alignment of the firm's internal resources with consideration of opportunities and threats of the changing market environments to develop competitive advantages.

Strategies can be generally classified into *Corporate Strategies* and *Business Strategies* (Bourgeois, 1996; Botten & McManus, 1999; Albarran, Chan-Olmsted & Wirth, 2006; Barney & Hesterly, 2006; Chan-Olmsted, 2006). *Corporate Strategies* are actions usually decided on a company level, where the company decides which industries or markets they will compete in (Bourgeois, 1996). Barney & Hesterly (2006) explained that these strategies are taken by the company to gain competitive advantages by venturing in multiple markets/industries simultaneously. Strategies in this category include *Vertical Integration*, *Strategic Alliances*, *Diversification*, *Mergers and Acquisitions* (Barney & Hesterly, 2006).

Chan-Olmsted (2006) stated that such strategies are playing increasingly significant roles in shaping today's media industries where multinational media corporations are expanding across product and geographical markets. Citing examples of Viacom, News Corporation, Disney, NBC Universal and ITV where there were various mergers and acquisitions, Albarran, Chan-Olmsted and Wirth (2006) also commented that the use of such 'growth' strategies resulted in 'increased economic efficiency through economies of scale and scope', where the companies leveraged on the increased market power in both audiences and advertisers to maximize market share and revenue.

*Business Strategies* are determined at the business unit level of the company, where the company decides how it will compete and gain competitive advantages in a single industry or



market, which is why business strategies are often also known as *Competitive Strategies* of the business unit. Porter (1980) proposed that *Competitive Strategies* are defined as ‘taking offensive or defensive actions to strengthen a company’s position in relation to the five competitive forces’, where a company take strategic moves to *improve* its market position, *influence* the balance of the five competitive forces or anticipate and *respond* to changes in the five competitive forces (Porter, 1980). Specific strategies belonging to this category include *Cost Leadership*, *Focus* and *Product Differentiation*, where they can be used individually or in combination (Porter, 1980).

Cost leadership focuses on companies gaining advantages by reducing their costs to below those of their competitors while product differentiation is employed when companies attempt to gain competitive advantages against competitors by increasing the perceived value of their products/services. Porter (1980a) explained that the *focus* strategy as adherence to its name, focus on catering to the needs of a particular buyer group, product segment or geographical market. Barney and Hesterly (2006) listed some examples where cost leadership and product differentiation were used extensively by industries. For example, Wal-Mart in the supermarket industry, Hyundai in the automobile industry and Casio in the watches industry advertise and emphasize on reliability and low prices as selling points, as compared to their competitors. Brands such as Victoria Secret, Rolex and Mercedes on the other hand, adopts a product differentiation strategy against their competitors in the lingerie, watches and automobile industries respectively (Barney and Hesterly, 2006).

In relation to media industries, Picard (2010) observed that product differentiation in media industries is dependent on the variety of elements related to content, the timing when the content is made available, distribution, and production choices where companies are able to target specific audience groups based on demographics, characteristics of the audience groups,

place of media use, and sales methods. Picard (2010) also commented that the ability to differentiate content in multiple ways will be increasingly heightened with information and communication technologies, to which content can be personalized, catering to the interests, needs and requests by specific audience groups. Picard (2010) also identified two forms of differentiation in television industries: *product differentiation* and *audience differentiation*.

**Table 2.2.** Product and audience differentiation in television industries

	<b>Product Differentiation</b>	<b>Audience Differentiation</b>
<b>Television Industries (cable networks/channels)</b>	Programming offered: Variety / Specialised (sports, movies, music, lifestyle, cultural) Broadcast time (Length of day/counterprogramming) Language use	Based on target audience group Segmentation by program genre Geographic location of audience

(Source: Picard, 2010)

However, Picard (2010) also observed that as competition increases in the industry, strategic choices may shift from differentiation to lowering costs and prices (cost leadership) to compete for the largest and most desirable audience and consumer groups. The table below summarizes the type of strategies applicable.

**Table 2.3.** Applicable strategies in industries

<b>Types of strategies</b>	<b>Corporate strategies</b>	<b>Business strategies</b>
	Vertical Integration	Cost Leadership
	Strategic Alliances	Focus
	Diversification	Product Differentiation
	Mergers	Audience Differentiation
	Acquisitions	

(Source: Porter, 1980a; Barney & Hesterly, 2006; Picard, 2010)

### 2.3. Issue of exclusive content

In the United States and Europe, the issue of exclusive content had been identified as a concern in many studies since the 1970s. For example, Besen (1974) stated that while other local stations in a state in the US could not obtain the same content which a particular local television station had signed exclusive rights, the presence of cable companies could reduce the value of

that exclusive agreement by providing the same content from a distant television station (from another state). Besen (1974) also discussed the consensus agreement dictated by the FCC to regulate the type of content cable companies could import. In particular for the top 50 markets in the United States, the agreement stated that local television stations could prevent the importation of content into their markets during a 12 month pre-sale period when the content is first sold in the country. For markets in the country ranked 50<sup>th</sup> to 100<sup>th</sup>, there would be no preclearance protection for local broadcasters and exclusive agreements would be limited to one or two years, depending on the genre and type of content. However, Besen (1974) also argued that the consensus agreement was not designed to promote viewer satisfaction but rather to protect the economic interests of the major broadcasters.

In more recent years, the focus in the issue of exclusive content had shifted from protecting local broadcasters' interests and protecting local programming to the problems of pricing, antitrust and competition. Bladwin, Ono and Shrikhande (1991) stated the potential for competition in the cable television industry depended on the 'resolution of the issue of cable program exclusivity' and that the trend of exclusive programming was creating significant barriers of entry for new competing services and threatening a market foreclosure. The authors stated that the FCC had begun to consider that the cable television industry was a monopoly and was considering two solutions: returning to rate regulation or encouraging direct competition for subscribers. The latter was preferred, where *de facto* exclusive (a.k.a. non-exclusive) agreements would be granted instead. It was theorized that the use of non-exclusive contracts would encourage competition that would eventually help control prices and assure quality service (Bladwin, Ono and Shrikhande, 1991). However, established cable networks such as HBO, MTV and CNN argued that not only the antitrust laws permitted program exclusivity; the copyright

law encouraged it and the First Amendment of the US stated that ‘interference with program arrangements’ was to be prevented. Furthermore, it was also argued that the lack of exclusivity did not provide incentives to produce original programming and therefore reduced diversity in the industry. Bladwin, Ono and Shrikhande (1991) however concluded that competition based on price and service was ‘of marginal benefit’ to the consumer while product differentiation would still be the ‘major consequence of competition’ to be felt by the consumer, to which product differentiation of any significance would only occur if program exclusivity is permitted. Bladwin, Ono and Shrikhande (1991) also acknowledged that counter-benefits would occur if program exclusivity was to be permitted, such as consumers facing greater costs if they wished to have a full programming service.

In developing solutions for regulators to promote ‘diversity of programming content and prevent monopoly abuse’, Doyle (1998) recommended that regulators could ‘instruct’ operators on the nature of material to be broadcasted through the terms inserted into the operators’ licenses, or impose taxes on the relevant content so that operators could ‘retain discretion over programme choice’. Doyle (1998) also concluded that measures may be established to regulate subscription fees for the exclusive broadcasting of sports events.

Armstrong (1999) identified exclusive content as a bottleneck area in the subscription television in the UK, where there is high profitability in exclusive content for existing operators but at the same time causing entry difficulties for new players. In particular, he observed that in the case of pay-TV operator BSkyB, premium programming was the major driver of subscriptions. Also, despite acknowledging that such trend of exclusive content allowed major television operators to ‘consolidate their positions’, Armstrong (1999) questioned whether such strategy was the most profitable strategy as more profit could be made from when the content

was offered to all subscribers through all operators at the same charges rather than simply offering to a subset of the subscribers.

Harbord and Ottaviani (2001) also identified that access to premium programming was widely viewed as crucial for attracting customers. Citing the example of BSkyB in the UK, the authors observed that BSkyB being the first entrant in the UK market, acquired exclusive broadcasting rights to practically all of the Hollywood studios' first-run films and most of the major sports events available to subscription television. Apart from selling the content directly to its subscribers, BSkyB also sold the content to its competitors in exchange for per-subscriber monthly payments. Such reselling for per-subscriber fees increased social welfare as premium programming became available to all consumers. Harbord and Ottaviani (2001) also explored other remedies to increase consumer welfare through regulating the methods which content rights were sold and resold. Such remedies included direct regulation of resale prices; forced divestiture of premium programming rights (requirement for company with the exclusive rights to give up a fraction of the content to rivals for a fixed payment) or forced 'rights splitting' (e.g. pay-per-view rights and non-pay-per-view rights); forced rights sharing or reselling for lump-sum fees; and non-exclusive rights selling for lump-sum fees. After analyzing the proposed remedies, Harbord and Ottaviani (2001) stated that forced rights-selling for lump-sum fees and non-exclusive sale of rights would benefit consumers to a greater extent.

Schaub (2002) also observed that premium content had proven to be a powerful driver for the roll-out of new technologies and the development of new markets. Speaking from experience, he observed that first-run (Hollywood) feature films and sports were the most efficient type of content that was able to persuade viewers to pay for new TV services which had been established at significant costs. In other parts of Europe, Nicita and Ramello (2005) also examined the

exploitation of exclusive rights over premium programming and their effects on the competition in Europe's pay-TV industry. Costs of acquiring exclusive content rights were about 70 to 80% of the total costs incurred by a pay-TV operator, invoking concerns that quasi-monopolistic markets would appear in countries such as Germany, Italy and Spain due to the various mergers announced in national pay-TV markets that might have occurred in view of the rising costs. Nicita and Ramello (2005) concluded that it was possible to have downstream competition with content sharing and also commented that pay-TV operators' competitive advantages should not rely only on exclusive content, but also on quality of services, technological innovations, pricing and packaging strategies and etc.

The issue of exclusive content provision had also become a focus for Weeds (2008), who also cited cases between cable and satellite operators in the UK, Italy and Scandinavia where there were cases of collective selling of television rights of Football Association Premier League (FAPL) soccer matches, the wholesale supply of premium channels by satellite television broadcaster BSkyB, as well as competition between Italian satellite broadcasters Telepiu and Stream and Scandinavian satellite broadcasters Canal Digital and Viasat in using exclusive content as competitive strategies. Weeds (2008) also stated that as building market share was often critical for platform operators at times of rapid adoption, premium programming (or exclusive content) played an important role in the process as competition based on pricing was insufficient in achieving such goal. Stennek (2007) also commented that the acquisition of such exclusive content allows the distributing owner of the content (or the platform) to gain 'initial advantages' over its rivals, leading to tougher bidding competition and higher prices for the television rights. Such phenomenon was known as the *bargaining effect*. However, such notion

of exclusive content also implied that consumers on other platforms were ‘prevented’ from watching them and consumers who could watch often had to pay higher prices (Stennek, 2007).

Apart from the debates that exclusive content rights were anti-competitive, paid no attention to consumer welfare and indirectly caused consumers to pay higher subscription fees, premium programme producers defended the need for content exclusivity by stating that a lack of exclusivity did not provide incentive to produce original programming and would reduced diversity in the industry (Bladwin, Ono & Shrikhande, 1991). Citing cases where cable television and satellite television operators compete against one another by offering exclusive content to consumers in countries such as Sweden and United States, Stennek (2007) also stated that the incentives for exclusive rights were capable of motivating content producers to create high-quality content.

Exclusivity in television programming (or premium programming) had been identified in the earlier paragraphs as an important strategy in television content provision where operators viewed exclusive content as a key to attract viewers and consolidate their market positions (Armstrong, 1999; Stennek, 2007; Weeds, 2008). Such valuable content consisted of live coverage of popular sports events, first-release Hollywood movies and even television channels of high quality which were ‘highly attractive to viewers’, had ‘few substitutes’ and were ‘difficult to replicate’ (Armstrong, 1999; Stennek, 2007; Weeds, 2008). However, the most recognizable type of exclusive content was the broadcasting of sports events, which formed the focus of discussion and analysis for many studies. For example, Ross (1990) observed a trend in sports clubs and leagues switching broadcasting platforms for the telecasts of their matches and games on television. One case cited was the National Football League shifting from ABC (over-the-air) to ESPN (cable network), causing subscribers to pay monthly fees to be able to view the

matches. Several approaches were used to examine whether such events violated antitrust laws, such as the Sherman Act, the Sports Broadcasting Act of 1961 and applying the Rule of Reason.

About a decade later, Cave and Crandall (2001) also stated that the increasing popularity of televised sports events were having significant effects on the broadcasting sectors in many countries. For example, the Sports Broadcasting Act passed by the Congress in the United States in 1961 led to a dramatic increase in the value of national network television sports rights for various sports such as football, basketball and baseball. Cave and Crandall (2001) also observed that the preferences for soccer among consumers in Europe allowed rights holders (the leagues and clubs) to exploit a dominant or monopolistic position in the rights market and leveraged on that market (for high prices) through collective selling of the broadcasting rights.

While pointing out that sports performed important social, integrating and cultural functions, Schaub (2002) acknowledged the increase of salaries and transfer fees of professional sportsmen and the rise in the value of TV rights due to its important role in the development of TV markets. In particular, Schaub (2002) observed that broadcasters paid 434 million Euro for the TV rights of the English Premier League for five seasons in 1992 but paid a hefty sum of 2.6 billion Euro for three seasons in 2000. The trend of such sports events as premium content consequently become subjects of highly competitive bidding wars between TV operators and resulted in 'unprecedented price increases to the benefit of sports federations and clubs'. The availability of the sports rights was further reduced by the fact that more of these rights were concluded on an exclusive basis for a long duration or covering large number of events, which only major operators could afford to bid for all the rights in the large package, thus strengthening the market position of these major operators and the likelihood in leading to a market foreclosure. However, Schaub (2002) also commented that contracts of a longer duration might be justified



when a new operator wished to enter into the market or develop a new technology which required heavy investments.

Hammervold and Solberg (2006) cited several companies leveraging on attractive sports content as an important strategy behind their market expansion, such as BSkyB in the UK, Canal Plus (Europe), Foxtel (Australia) and DirecTV (North and South America). Similar to Scheub (2002), the increases in prices for sports rights were due to the fierce competition among TV companies and platform operators and the tendency for them to prioritize the same sports. For example, a massive rise in the fees was observed when BSkyB acquired the broadcasting rights for the English Premier League in 1992 for 304 million British Pound while ITV only paid one-fifth of the amount in 1988. However, Hammervold and Solberg (2006) commented that such bidding wars and increased prices for the broadcasting rights had caused many such acquisitions of sports content to become unprofitable for television broadcasters and operators.

The acquisition and carriage of exclusive content was also an important issue among subscription television industries in Asia. However, such issues were mostly discussed in newspaper reports and trade journals, rather than in academic literature. Examples cited included Hong Kong's dominant player i-Cable losing exclusive rights for ESPN and Star Sports to Now Broadband TV in 2004. Now Broadband TV was an IPTV service operated by PCCW, the dominant fixed-line telecommunications company (Lau, 2004). Being the first subscription television operator in Hong Kong, i-Cable had strong exclusive content offerings ranging from in-house to international channels, to which the loss of ESPN would cause other operators (such as Now Broadband TV) to gain in subscriber numbers and market penetration. The wrestle for prominent sports content such as the EPL was also evident in Hong Kong's subscription television industries. One instance was seen in 2004, where i-Cable and PCCW (Now Broadband

TV) competed for exclusive broadcasting rights of the EPL, to which i-Cable eventually won the rights, having paid the higher amount for the content (Lau, 2004). As a response to PCCW's win for ESPN and Star Sports, i-Cable revamped its soccer programming and introduced interactive features such as a specialized betting channel. Analysts also stated such competition between the various operators in Hong Kong would eventually 'force down' subscriber fees (Lau, 2004).

Guevarra and Lee (2008) also discussed the uprising of the IPTV service in Asia, citing examples of PCCW in Hong Kong, SingTel in Singapore, ChungHwa Telecom in Taiwan and KDDI Corp in Japan offering 'full' services such as live broadcast channels, instead of simply just offering video-on-demand services. In particular, Guevarra and Lee (2008) also commented that these telecom operators had to make costly moves such as securing premium content in order to attract more customers. Similarly, Neill (2009) expressed that take-up rate for IPTV services in the Asia region was considerably 'dwarfed' by their respective competitors and access to exclusive content was vital and a key for subscription growth, citing the example of Hong Kong where PCCW's Now Broadband TV acquired exclusive broadcasting rights for the EPL games. Similarly in South Korea, Shin (2007) also commented that 'compelling content packaging' and 'content partnerships' played important roles for IPTV services to compete with other competitors. Media Partners Asia (2011) also conducted a review of the respective subscription television industries in Asia. In particular relevance to exclusive content, it was observed that Australian authorities implemented anti-siphoning rules to prevent subscription television operators from acquiring exclusive broadcasting rights to key sports content. There was also an apparent limitation of product differentiation in India's subscription television industry as the authorities required that 'all channels "must provide" content to all distribution platforms' (Media Partners Asia, 2011). Exclusive broadcasting rights was also an issue in

Vietnam, where a public outcry was observed over the EPL matches. To resolve the issue, using the Euro 2012 football tournament as an example, authorities required state broadcaster VTV to purchase the broadcasting rights and share them with other operators. There were also calls for ‘joint access to key broadcasting rights through a proposed new pay-TV association’ (Media Partners Asia, 2011).

Such trends were also observed in Singapore, where the aggressive bidding for sports content prompted the authority to implement measures hoping to shift the competition to other aspects and reduce acquisition costs for content. The issue of exclusive content in Singapore will be discussed in the later chapters.

#### **2.4. Summary**

Competition in the television industries has been widely examined in other countries. Fortunately due to the increasing phenomenon and importance of media conglomerates shaping today’s societies and consumer markets, more media management and economics studies are being conducted in other regions such as Asia. In Singapore however, such studies are still rare, signifying the opportunity to further examine the country’s television industries.

In the examination of media firms, industries and markets, several key approaches and frameworks were identified (Liu, 1997; Compaine & Gomery, 2000; Albarran, Chan-Olmsted & Wirth, 2006). While the *SWOT* and *PEST* analysis frameworks are common analytical tools to examine environments in relation to the company in management, business and economic research, they are considered to be ‘balance sheet’ approaches used to scan for limitations and environmental threats that may or may not be relevant to a company’s position and the state of competition in the industry (Johnson & Scholes, 1988). These frameworks are often used to

devise strategies but are less often used to examine industry competition, unlike the SCP paradigm and the Five Force Model (Reid, 1987; Porter, 1980a; Liu, 1997; Loh & Ng, 1998; Barney & Hesterly, 2006; Chan-Olmsted, 2006).

Although the *SCP* paradigm is often used to examine industry competition and is identified as the dominant framework used in media management and economics research, the Five Force Model created by Michael Porter further expanded, clarified and explicitly identifies the stakeholders and factors capable of influencing industry competition. The model also directly links the analysis of industry competition with creation of competitive strategy, where Porter (1979) stated that gaining knowledge of the five competitive forces will provide the groundwork for a 'strategic agenda of action'.

Among the respective approaches and theoretical frameworks designed to examine the company and its environments, the five force model is the only framework that attempts to integrate and examine the government's influence on individual stakeholders and competition in the industry. Porter (1980b) stated that a structural analysis of an industry is incomplete without examining how present and future government policy may affect industry competition, while Porter (1980a) discussed the *Government* as an important factor among other competitive forces that influences industry competition, such as through policy implementation, research funding, tax regulation and playing the role of a potentially powerful buyer and supplier. Porter (2008) also further clarified that the best way to understand influence of the government on competition in an industry is to examine how government policies affect the five competitive forces.

The literature review also showed that often after the examination of industries, markets and firms, strategic decision-making takes place. Such notion is also true in media management and economics research, where the analysis of media industries, markets and firms often lead to

or is prompted by the examination of strategies existing in the industries or adopted by the media firms (Liu, 1997; Compaine & Gomery, 2000; Albarran, Chan-Olmsted & Wirth, 2006; Chan-Olmsted, 2006). Strategies can be formulated and implemented at different levels, as demonstrated by Porter (1980a), Bourgeois (1996), Botten & McManus (1999), Barney & Hesterly (2006) and Chan-Olmsted (2006). In particular, business strategies formulated by the company's relevant business units are the most important strategies to determine the company's competitive strategies in a single market or industries, to which Chan-Olmsted (2006) offered a detailed examination of strategies applied in media firms.

The literature review also revealed that issues of exclusive content provision have been examined widely in other countries, from protecting local programming and broadcasters' interests to the problems of antitrust, competition and high prices. More recent studies saw exclusive content identified as a key strategy in the competition among television operators. The issue evolved around the disadvantages for consumers who have no access to the content and the high subscription prices that subscribers have to pay. Several remedies were suggested over the years to solve the abovementioned problems, such as the direct regulation of resale prices, forced splitting of rights, forced sharing of rights and non-exclusive rights selling for lump-sum fees.

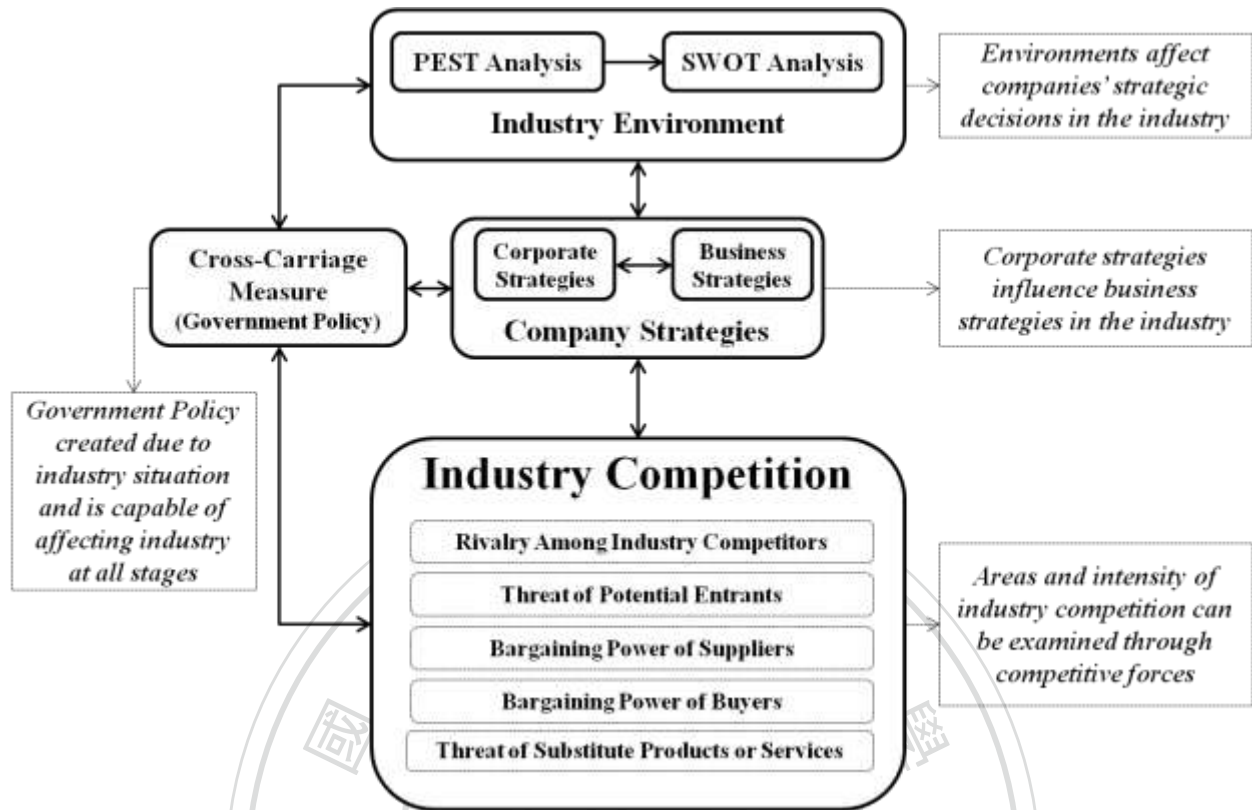
## **2.5. Research framework**

This thesis examines competition and strategies in Singapore's subscription television industry, as well as the implementation and implications of the Cross-Carriage Measure.

The literature review revealed that television industries in the US and Europe have been widely examined in studies examining ownership, market performance, management, economics, strategies and etc. However, such studies are few in Singapore. The literature review also

revealed that insights into the industry's environments are essential when examining the industry, industry competition and strategies applied in the industry. Chan-Olmsted (2006) echoes the notion in the areas of media management research when examining media industries, agreeing that 'a media firm's strategy and its ability to execute that strategy are influenced by a combination of external characteristics relating to the general environment and the particular media market in which the media firm operates in' (Chan-Olmsted, 2006). The SWOT Analysis and PEST analysis are found to be used by media companies often to assess their internal and external environments. The SCP paradigm and its more elaborate extension, the Five Force Model on the other hand are more commonly used to examine industry competition (Liu, 1997; Loh & Ng, 1998; Chan-Olmsted, 2006). However, the Five Force Model identifies five key stakeholders in an industry.

The Five Force Model is also the only model which emphasizes on the particular importance of *Government* of being capable of influencing competition in an industry through the stakeholders. The Five Force Model seems most appropriate as the research framework for this thesis as it allows for the examination of industry competition through the competitive forces. The identification and examination of strategies (which influences competition) is also incorporated into the research framework. Thus, considering the purpose of this study, which is to examine competition and strategies in Singapore's subscription television industry, as well as the implementation and implications of the Cross-Carriage Measure in the industry, the research framework for this thesis is demonstrated below:



*Figure 2.2. Research framework*

Firstly, to allow an understanding into the country's characteristics, the environments capable of influencing Singapore's subscription television industry will be examined by applying the PEST and SWOT frameworks. After which, the current state of industry competition and strategies used by the companies in the industry will be examined. The areas and intensity of competition will be examined through the five competitive forces identified in Porter's Five Force model. Lastly, the implications of the Cross-Carriage Measure (*Government Policy*) will be discussed through its possible impacts on the respective competitive forces and strategies applicable by both companies.

## Chapter Three: Singapore and its Television Broadcasting Environments

This chapter will provide an introduction into Singapore's television industries by first introducing Singapore's general environments and identifying factors that are capable of influencing Singapore's television broadcasting environments.

### 3.1. Political environment

Singapore was a colony of the British Empire from 1924 to 1963 where it was occupied by Japan in World War II from 1942 to 1945. Despite being self-governing internally after the war, leaders in Singapore sought total independence from the British and formed a federation with neighboring country Malaya in 1963 to prove its ability in being independent. However, it separated from Malaya due to 'ethnic and political incompatibility' and became a totally independent state in 1965 (Edge, 2004).

The legislative system in Singapore is mainly based on English common law with a parliamentary government where the law is modified to suit local contexts. Business Monitor International (2012) stated that Singapore has a stable political system, despite its reputation being not a 'properly functioning democracy' and an 'overprotective nanny-state' which heavily represses 'opposition voices'. However, increasing efforts are observed in recent years to enhance freedom of expression and responding to calls for more openness in the political system. While the ministries are responsible of the macro-development of the country in its respective sectors, the government establishes autonomous agencies within the respective ministries to further develop, regulate and monitor the micro-development of the sectors.

**Regulatory Aspects.** With particular relevance to the media industries, Choi and Yeo (2001) stated that the underlying paradigm for regulating of the media industries is based on the



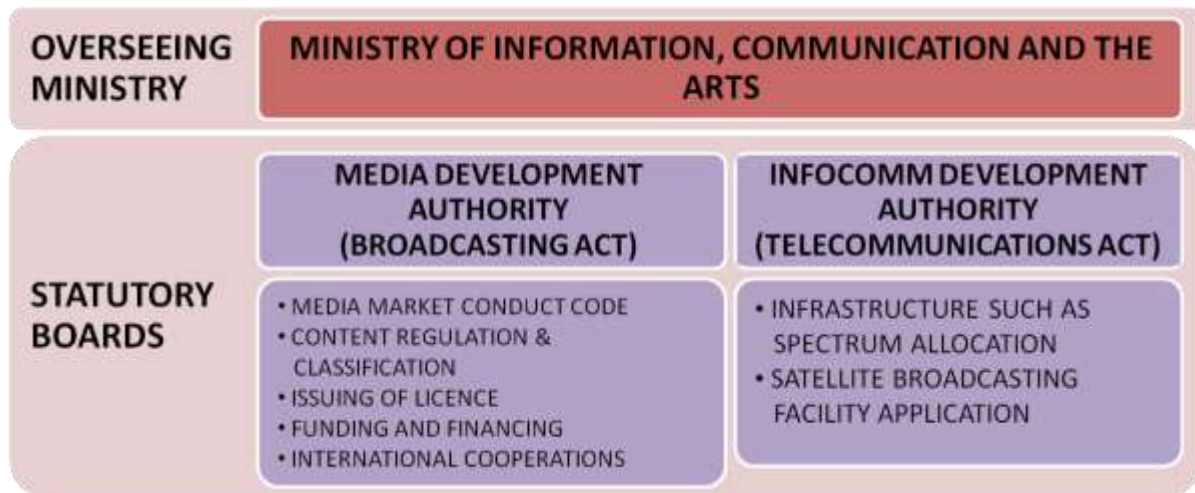
‘Powerful Effects Model’ of the media, where the media is seen to have a powerful influence on the population and individuals are easily susceptible to media influences. Ang (2007) classified Singapore’s political system as ‘Confucian, paternalistic and neo-authoritarian’, where the government enforces strict laws and maintains stringent censorship standards with regards to the media industries. Despite Singapore’s Constitution guarantees that citizens have the right of freedom of speech and expression, the government has the power to limit the right for the purpose of ‘maintaining national security, public order and morality’ (Choi & Yeo, 2001). The government justifies such tight rein on the media industries due to the ‘uniqueness and vulnerability’ of the society and ‘characteristically Asian values’ of the population (Ang, 2007).

Macro-development of Singapore’s media industries begins with the Ministry of Information, Communications and the Arts (MICA) who oversees the macro-development of information, communication and arts industries in Singapore. It is the parent ministry to Media Development Authority (MDA), an autonomous agency created as the result of a merger between the Singapore Broadcasting Authority, the Films & Publications Department and the Singapore Film Commission.

The television industries are regulated and directly monitored by MDA through the Broadcasting Act passed by the Parliament while another autonomous agency, the Infocomm Development Authority (IDA) regulates and manages information, communication and technological infrastructure such as the internet, radio spectrum and other telecommunications infrastructure through the Telecommunications Act. IDA is also in charge of approving licenses for private satellite up-linking services.

Under the Broadcasting Act, any appointment for chief executive officer, director or any chairman of board of directors in a media company must be approved by the MDA. Also, unless

approved by MDA, no person can hold more than 12 percent of shares in a broadcasting company. The figure below shows the regulatory structure of Singapore’s television industries.



*Figure 3.1. Regulatory structure of Singapore’s television industries*

Singapore does not have satellite television broadcasting but the authorities encourage media companies and broadcasters to establish operations in the country, where they can up-link their television content to regional satellites using Singapore’s relevant facilities at ST Teleport, SingTel Telecast, MediaCorp Technologies and Ascent Media Group, or operate their own satellite uplink facility where they are required to apply for a license from IDA. There is no foreign ownership restriction but companies not based nor registered in Singapore are required to appoint local agents and pay a performance bond of SGD\$50,000 (approximately USD\$40,000 at the currency exchange rate of S\$1.26=US\$1) with MDA. MDA will then coordinate with IDA on the operations of satellite uplink facilities and obtain the necessary clearance(s) on behalf of the applicants. Companies are requested to execute self-regulation in terms of content, ensuring compliance to programme codes and local laws in recipient countries, and consideration to the political, religious, cultural and racial sensitivities of the recipient countries.

*Licenses and content codes.* With particular relevance to Singapore's television industries, MDA issues broadcasting and TV-receive only licenses, develops policy guidelines as well as implement conduct and content codes which all players in the industry have to abide by. Applicants must first obtain a broadcasting license from MDA, under which broadcasting frequencies will then be assigned. Applicants are also required to apply for a telecommunication infrastructure for broadcasting system from IDA. Following which, MDA will then coordinate with IDA to obtain clearances on the allocation of broadcasting spectrum for the applicants.

The planning and channeling of the broadcasting spectrum is carried out at the international level through International Telecommunications Union (ITU), regional level through Asia-Pacific Broadcasting Union (SBU) and at the bilateral level through 'border coordination' with bordering countries. In Singapore, usage plans for broadcasting services, including spectrum allocation for digital audio and video broadcasting has been established by IDA. The PAL analogue standard is used in Singapore but the switchover from analogue to digital broadcasting is expected to free up significant amounts of spectrum for other uses. The relevant licenses, their requirements and the broadcasting spectrum established by IDA are shown in the tables below.

With the 'proliferation of media content and delivery platforms', MDA employs a co-regulatory approach towards the industries, encouraging the industries to 'self-regulate' and be 'socially responsible and to take adequate steps to ensure that content meets with community standards'. MDA do not pre-censor content but issue programme codes and content guidelines which are drafted after consulting with industry players and public advisory committees who represent Singapore's community and social standards. These committees include the Program Advisory Committee and three other advisory committees who are specifically responsible for

programme in the ethnic languages (Chinese, Malay and Tamil). The authority thus encourages and is reliant on public feedback to be alerted on possible breaches to the codes and guidelines.

**Table 3.1.** Types of subscription television broadcasting licenses in Singapore in 2012

	<b>Niche TV Licence</b>	<b>Nationwide TV Licence</b>
<b>Licence duration</b>	5 years	10 years
<b>Number of Subscribers</b>	(i) Daily reach of any single channel reaches up to 100,000 unique viewers; or (ii) Daily reach of broadcaster reaches up to 250,000 unique viewers. This Threshold applies to Related Corporations.	No limit to the number of subscribers and/or viewers in Singapore.
<b>Licence fee</b>	- 2.5% of total revenue. - Minimum licence fee of \$5,000 per annum will be applicable throughout.	- 2.5% of total revenue. - A minimum licence fee of \$50,000 per annum will be applicable throughout.
<b>Performance bond</b>	\$50,000, in the form of either banker's guarantee or cash.	\$200,000, in the form of either banker's guarantee or cash.
<b>Ownership</b>	No ownership conditions	Subject to ownership conditions as stipulated in Part X of Broadcasting Act.
<b>Must carry</b>	No must carry obligations	Must carry obligations for enabling access to local Free-to-Air channels
<b>Advertising revenue</b>	No cap on advertising revenue.	Advertising revenue not to exceed 25% of Total Revenue.
<b>Advertising time limit</b>	A 14-minute-per-hour advertising time limit applies for channels with scheduled programming. This time limit is not applicable for VOD (video-on-demand) content and interactive advertising services.	
<b>Content guidelines</b>	The Subscription TV Programme Code applies if scheduled programmes are offered, while the VOD Programme Code applies if on-demand programmes are offered.	

(Source: Media Development Authority, 2012)

**Table 3.2.** Broadcasting spectrum being used in Singapore by 2012

<b>Service</b>	<b>Band(MHz)</b>	<b>Channel Bandwidth</b>	<b>Status</b>
<b>TV (Television)</b>	174 - 230	7 MHz	In use. Fully assigned.
	494 - 790	8 MHz	In use. Mostly assigned.
<b>DAB (Digital Audio Broadcasting)</b>	174 - 230	1.536 MHz	In use. Mostly assigned.
	1452 - 1492	1.536 MHz	Not in use.
<b>DVB (Digital Video Broadcasting)</b>	494 - 790	8 MHz	In use. Mostly assigned.

(Source: Infocomm Development Authority, 2012)

***Media Market Conduct Code.*** On regulating the media industries, MDA implements the Media Market Conduct Code ('Conduct Code'), which is intended to establish clear guidelines on how media companies (or licensees) ought to conduct themselves in Singapore's media industries. With the objectives of 'enabling and maintaining fair market conduct and effective competition', 'ensure availability of a comprehensive range of quality media services', 'foster future investment and developments' and the general principle of 'safeguarding public interests', the Conduct Code adopts a theoretical approach similar to that of Michael Porter's Five Force model to establish relevant guidelines and recognize industry stakeholders such as entrants, competitors, suppliers, consumers and substitutes. The Conduct Code prescribes public interest obligations, duties of companies to end-consumers, prohibitions on unfair methods of competition, dominance and special obligations of dominant 'persons', prohibitions on agreements that restrict or distort competition, application procedures and criteria for consolidations, duties of companies to provide access to relevant resources, as well as procedures for dispute resolutions and etc. Appendix III shows relevant definitions for Singapore's television industries in the Conduct Code.

***General regulatory principles.*** The Conduct Code explicitly states that all Regulated Persons should first undertake private negotiations in good faith and self-regulate to all feasible extents. The authority states that any intervention will be taken under appropriate circumstances as it recognizes that level of competition is limited in Singapore's media industries; certain companies may have abilities to exercise Significant Market Power; and there is a need to 'develop effective competition for the benefit of consumers, to encourage innovations and to improve productivity in order to achieve public interest goals (MDA, 2011). The Conduct Code also states that, where appropriate and to any extents feasible, any decisions made by MDA will

be transparent and provided with reasoned explanations, in consultations with other relevant authorities, non-discriminating and technology-neutral. The Authority also has the right to grant exemptions from any provisions of the Conduct Code and waive any requirements or criteria for companies (with conditions) if it deems that the circumstances require them.

*Public interest obligations.* MDA places heavy emphasis on the safeguarding of Public Interest in Singapore. Hence, the following public interest obligations are imposed: 1) free-to-Air (FTA) television licensees must broadcast events of National Significance; 2) FTA television licensees must not “hoard” specific programmes and must broadcast (under specific criteria by MDA) entire durations or significant portions of National sports events, the Olympics and other relevant programmes as specified by MDA; 3) Subscription television licenses must not obtain exclusive rights to specific programmes as specified by MDA; 4) Designated video archive operators are required to make their archives available to other persons on reasonable prices, terms and conditions; and 5) Any ‘Essential Resource’ required to provide a media service must be made available for access by other media licensees with reasonable and non-discriminatory prices, terms and conditions. The Conduct Code also states that all Regulated Persons must exercise certain duties to end-consumers such as providing quality service, accurate and timely bills, safeguarding subscriber service information from unauthorized uses, implementing reasonable service termination procedures and charges, as well as preventing charging of unsolicited services or equipment.

As of 2011, in view of the competition in Singapore’s subscription television industries too focused on acquiring exclusive content, the Cross-Carriage Measure is also imposed on subscription television licensees as part of public interest obligations in the Media Market Conduct Code.

*Competition and market dominance.* In relation to competition in Singapore media industries, the Conduct Code states that unfair methods of competition are prohibited. Such methods include the use of media services to disseminate false or misleading claims and information; degrading other media licensee's service availability or quality without legitimate justifications; interfering with other media licensee's consumers, advertisers or ancillary media service providers, as well as engaging in predatory pricing or anti-competitive leveraging. Such methods are often unrelated to the availability, price or quality of the media services. Under appropriate circumstance involving affiliated companies which provide ancillary media services, MDA may require the respective Regulated Persons to 'structurally separate its operations or assets' and 'adopt accounting or auditing separations, cost allocation rules and other forms of behavioral safeguards' with its affiliates. Agreements that prevent, restrict or distort competition such as price fixing, allowing of coordinated responses to bids, market and consumer allocation, boycotting of businesses, agreeing on fixed resale prices and foreclosure of access are generally prohibited. Despite the above scenarios, MDA reserves the right to determine if any agreement is anti-competitive on a case-by-case basis and based on factors as stated in the Conduct Code.

With particular relevance to Consolidations, MDA recognizes that while mergers and acquisitions 'harm competition', can create or strengthen a Dominant Person and facilitate 'unlawful collusion amongst competing persons', they can also have pro-competitive effects such as creating economies of scale and scope. In proposing Horizontal Consolidations, MDA will employ a specific analytical framework examining the relevant market, market participants, market shares over time, market-specific factors and the estimated market share of the Post-Consolidation Entity.

With relevance to Non-Horizontal Consolidations, MDA will consider factors such as the likelihood of development of effective competition, ability of competitors to access ‘upstream’ inputs and ‘downstream’ distribution channels, enhancing of portfolio power which may increase anti-competitive strategies and facilitate collusion in relevant media markets, likelihood of other persons entering the relevant media market, as well as possible increases in net economic efficiencies passable to consumers. Other factors such as changes in the legal or regulatory environments of the industries, introduction of new services or technologies, changing consumer patterns and other public interest factors will also be taken into consideration. However, regardless of the type of Consolidation proposed, MDA reserves the right to approve or reject the proposed Consolidation at its discretion with specific conditions and instructions.

***Radio and Television (RTV) licenses.*** Households in Singapore have been required to pay fees in order to be licensed for receiving television transmission signals in the households since 1963. Introduced as a form of tax for ‘luxury items’ back in the 1960s, the fees collected (\$\$110/household) were mainly channeled towards the production and broadcasting of public service broadcast content promoting social and national harmony. Such content included news, current affairs, sports and children's programmes in the four official languages (Mandarin, English, Bahasa Malay and Tamil), as well as locally produced English and Chinese dramas. Over the years, controversies arose as citizens were reluctant to pay the fees, commenting that they were not watching the respective programmes due to the availability of subscription television. As of 2010, about 67 percent of the fees collected were used in the content production while 11 percent went towards fee collection, 15 percent towards industry development and 7 percent towards establishing reserves for future PSB and content development funding.



However, the RTV licenses were abolished permanently in 2011, a trend that was also observed in other countries due to the rise of cable television. Finance Minister Tharman Shanmugaratnam stated that the more than 99 percent of households are owning television sets and licenses were ‘losing their relevance’ as increasing media convergence was allowing Singaporeans to receive relevant broadcast content over multiple platforms that do not require license fees, such as through the internet and on mobile devices (Chua, 2011b). After the announcement, the government further conducted a massive refunding of the fees back to the households. It was also announced that future funding for public service broadcasting would be provided by the government directly.

### **3.2. Economic environment**

Singapore has flourished since its independence in 1965. In a short time of 47 years, it has become one of the ‘Four Asian Tigers’ of Asia, depending heavily on the industry and service sectors. Business Monitor International (2012) stated that Singapore is the world’s ‘fourth-leading financial centre, second-biggest casino gambling market, third-largest oil refining centre’ and one of the five busiest ports in the world. However, the country is facing increasing competition from neighboring countries providing low-cost labor and infrastructure such as China and India, as well as an aging population which may cause a shortage of well-equipped labor, more retirees and increasing financial burden per capita. The country is focused on ‘economic diversification to boost competitiveness’, where focused areas include biomedical sciences, medical services, financial services and tourism. However, it was also identified that there is a ‘significant state involvement’ in the private sector, where the government is withholding details of assets such as foreign exchange reserves and government funds worth

more than USD\$100billion. Business Monitor International (2012) cited that such move may damage investor confidence in the country and hinder domestic growth.

Singapore is considered the fifth least corrupt country in the world, where strikes and labor protests are rare as the government places heavy emphasis on creating a ‘business-friendly environment’. However, Business Monitor International (2012) cited that such political and economic stability may be due to the censoring of media and limitation of distribution of foreign publications. Despite such heavy-handed tactics, the country has one of the best business operating environments in Asia (as stated in the Index of Economic Freedom league compiled by Heritage Foundation and the Wall Street Journal) and has numerous bilateral free trade agreements with countries such as United States, Japan, India and Australia. Such a cohesive environment for doing business is expected to increase Singapore’s influence in Asia (Business Monitor International, 2012). Gross Domestic Product (GDP) per capita in 2011 was at S\$63,050 (approximately USD\$50,440) where the average household income from work was at S\$8,722 (approximately USD\$6,978). The following table shows the fluctuations in Singapore’s GDP and Average Household income from 2007 to 2011.

**Table 3.3.** Gross domestic product (GDP) per capita and average household income (S\$)

	<b>Gross Domestic Product per capita</b>	<b>%</b>	<b>Average Household Income</b>	<b>%</b>
<b>2007</b>	58,325	-	6,790	-
<b>2008</b>	55,538	-4.8%	7,691	+13.3%
<b>2009</b>	54,137	-2.5%	7,410	-3.7%
<b>2010</b>	61,071	+12.8%	7,812	+5.4%
<b>2011</b>	63,050	+3.2%	8,722	+11.6%

*\* Data extracted from Singapore Statistics and compiled for this thesis.*

The country faced decreases in GDP and Average Household Income in 2008, probably due to global economic recession and crisis during the same period. The economy only began to perform better after 2009, where the GDP and Average Household Income is seen to be

increasing, implying that consumers in Singapore may have higher disposable incomes for other leisure and entertainment purposes.

In particular relevance to media and television industries, Lee (2005) stated that despite Singapore's economy is characterized by 'global competitiveness', 'free market' and 'enterprise association', media in Singapore do not enjoy 'genuine competition' in the economy. Economic development is predominately focused on developing infrastructure and providing financial assistance through MDA to support the production and marketing of local media content in overseas markets. Bilateral co-production and collaboration agreements were signed with countries in the region (such as countries in ASEAN, China, France, Italy, Korea) to foster cooperation and create a vibrant regional media market, industry and economy. Import of foreign media content is done by the media companies themselves, but the nature of content is subjected to the respective conduct codes stipulated by the MDA.

Singapore Statistics' Economy Survey for Information and Communication Services (2010) stated that Motion Pictures, Radio and Television (where subscription television industry is classified under the same category) earned operating receipts worth S\$3.6 billion where value added was at S\$1.2 billion. Profitability ratio of the segment in 2010 was at 18 percent whereas Earnings-Expenditure ratio was at 20.7 percent. The following table shows the economic performance of the segment from 2008 to 2010. It is apparent that despite the operating receipts, expenditure and surplus are increasing each year, the increase is smaller as indicated by the percentages. Likewise, profitability ratio and earnings-expenditure ratio from 2008 to 2010 also saw smaller increases. However, the increasing trend observed still demonstrates increasing revenue growth and market potential for the three industries.

**Table 3.4.** Economic performance of motion pictures, radio and television in Singapore

	<b>Operating Receipts (S\$million)</b>	<b>Operating Expenditure (S\$million)</b>	<b>Operating Surplus (S\$million)</b>	<b>Profitability Ratio<sup>1</sup> (%)</b>	<b>Earnings- Expenditure Ratio<sup>2</sup> (%)</b>
<b>2008</b>	3,097	2,784	476	15.4	17.1
<b>2009</b>	3,418 (+10.4%)	3,026 (+8.7%)	584 (+22.7%)	17.1 (+1.7)	19.3 (+2.2)
<b>2010</b>	3,572 (+4.5%)	3,099 (+2.4%)	643 (+10.1%)	18.0 (+0.9)	20.7 (+1.4)

<sup>1</sup> Defined as ratio of operating surplus to operating receipts

<sup>2</sup> Defined as ratio of operating surplus to operating expenditure

\* Data extracted from Singapore Statistics

Apart from assisting local media production and marketing, MDA and the Economic Development Board aims to establish Singapore as a regional media hub. Ang (2007) stated that more international cable and satellite programmers have established operations in the country since 1993, in response to 'attractive policy measures' offered by the government. Such influx of foreign media companies has prompted local media to internationalize and diversify their businesses in order to remain competitive.

However, Ang (2007) also commented that the open and free market economic system which Singapore prides itself in is contradictory to the media system which has strict economic constraints due to regulation and policy. Citing the example of financial news, cultural and entertainment information, Ang (2007) commented on the attitude of the government towards them, where financial news are treated with priority as they are essential 'for the economic system to remain globally competitive' but cultural and entertainment information however, is treated with stringent standards, where censorship is deemed necessary in local media. Such standards clash with the government's goal of developing Singapore into an international hub for information, culture and telecommunications, where foreign multi-media companies are encouraged to use Singapore as a regional production and distribution center.

### 3.3. Social environment

Singapore is a multi-racial and multi-cultural country where diverse racial and religious groups co-exist. Although the country is in a dominant Islamic region in Asia, the Chinese population is the biggest, followed by the Malays, Indians and other groups such as the Eurasian, Sikhs and other foreigners who are working, studying or living in Singapore but not granted permanent residence. Correspondingly, the diverse racial groups also meant that the existence of different beliefs. Belief-wise, Buddhism, Taoism, Islam, Hinduism and Christianity co-exist in harmony in this small island country. However, Choi and Yeo (2001) stated that racial differences and conflicts existed in Singapore's history where riots between the Chinese and Malay groups occurred due to the print media paying little attention to the multiethnic composition of the population. Till today, racial sensitiveness still exists but to smaller extent.

Accordingly to Singapore Statistics in 2011, Singapore's total population was at 5.18 million, where the resident population is divided into mainly the Chinese, Malay, Indian and other groups. The tables below shows the breakdown of the population from 2007 to 2011.

**Table 3.5.** Population breakdown from 2007 to 2010 (thousand)

	<b>Total Population</b>	<b>Singapore Residents</b>	<b>Non-Residents</b>
<b>2007</b>	4,589	3,583	1,010
<b>2008</b>	4,839 (+5.4%)	3,643 (+1.7%)	1,197 (+18.5%)
<b>2009</b>	4,988 (+3.1%)	3,734 (+2.5%)	1,254 (+4.8%)
<b>2010</b>	5,077 (+1.8%)	3,772 (+1.0%)	1,305 (+4.1%)
<b>2011</b>	5,184 (+2.1%)	3,789 (+0.5%)	1,395 (+6.9%)

\* Data extracted from Singapore Statistics (Monthly Digest of Statistics March 2012) and compiled for this thesis.

**Table 3.6.** Breakdown of Singapore's residents across racial groups (thousand)

	<b>Total Population</b>	<b>Non-Residents</b>	<b>Singapore Residents</b>			
			<b>Chinese</b>	<b>Malays</b>	<b>Indians</b>	<b>Others</b>
<b>June 2010</b>	5,077	1,305 (25.7%)	2,794 (55.0%)	504 (9.9%)	348 (6.9%)	126 (2.5%)
<b>June 2011</b>	5,184	1,395 (26.9%)	2,808 (54.2%)	507 (9.8%)	349 (6.7%)	125 (2.4%)

\* Data extracted from Singapore Statistics (YearBook of Statistics 2011 and Monthly Digest of Statistics March 2012) and compiled for this thesis.

It is evident that the both the resident (consisting of Chinese, Malay, Indian and Other groups) and non-resident population (consisting of foreign expats, labor and students) are increasing by smaller percentages. The total number of resident households in 2011 was 1.15 million where each household consists of 3 persons and more. Home ownership rate is at 75 percent where the population is living in 4-room or larger flats built by the Government through the Housing Development Board and in private housing such as condominiums and landed properties. The nation's literacy rate is high at 96.1 percent where 66.6 percent have beyond secondary school education. Bilingualism is emphasized by the government as an education policy where students learn both English and their native languages in school. However, due to the unique composition of the country's population, the government recognizes four official languages, which are English, Mandarin, Bahasa Malay and Tamil respectively. Considering the multi-racial mix of the population and increasing trend of foreigners into the country, English became the most important language of communication.

The main forms of leisure and entertainment in the country vary from indoor activities to outdoor sports. However, Ang (2007) also stated that Singaporeans are 'ardent media consumers' who consume media content actively. Singapore Statistics (2011) in particular showed increasing numbers in cinema attendances, attendance for arts and cultural performances and exhibitions, visits to museums and other tourist attractions, library membership and borrowing, television licenses and transmission hours. However, a slight decrease was observed in daily newspaper circulation from 2009 to 2010 in English and Malay languages. However, the high GDP and average household income observed in the economic environment saw higher numbers of Singaporeans travelling overseas each year.

In relevance to Singapore’s media industries, Ang (2007) particularly commented that the ethnic and linguistic diversity of Singapore’s population has a ‘significant bearing’ on the media system. For example, the national public broadcaster MediaCorp TV manages and broadcasts television channels targeted at the respective racial communities, different language groups, the various age groups and the arts community. The table below summarizes the target audiences of the respective FTA channels. It is apparent that the national broadcaster has attempted to produce television programming to cater to the various communities.

**Table 3.7.** FTA channels in Singapore and their respective target audiences

<b>Channel</b>	<b>Target Audience</b>
Channel 5	English-speaking communities
Channel 8	Chinese-speaking community
Channel U	Younger generations in the Chinese speaking community
Channel NewsAsia	All communities interested in current affairs and news in general
HD5	High Definition simulcast of Channel 5.
OKTO	Kids, youth of today and growing local arts community
Suria	Malay Community
Vasantham	Indian community

*\*Data extracted from MediaCorp TV’s website and compiled for this thesis*

Further, in considering the racial ‘sensitiveness’ of the population where racial riots broke out between the Chinese and Malay communities in the past due to exaggerated reports by the print media, the government apply stringent censorship standards in the media. Particular focus is placed on the censoring of content involving national interest and security, racial and religious harmony, public morals and social values, sex and nudity, violence and crime, horror, supernatural and superstition, as well as gambling and other anti-social behavior themes. Also, due to the government’s aggressive promotion of the ‘Speak Chinese’ campaign every year, the use of dialect in mainstream media is strictly regulated, where the usage in free-to-air television is more strictly regulated as compared to subscription television.

### 3.4. Technological environment

Ang (2007) stated that one of the government's goals was to transform Singapore into an international hub for information, culture and telecommunications. Hence, several far-sighted national information technology plans have been launched and implemented by the government over the years through the Infocomm Development Authority. Such plans include the iN2015 Vision which aims to develop Singapore into an 'intelligent nation and global city powered by Infocomm'; the Next Generation Broadband Network (Next Gen NBN) which offers ultra-high speed connectivity of 1 Gbps and above to households, offices and institutions and the eGov2015 Masterplan which attempts to connect the government with the citizens through information technology. The following table shows the relevant indicators of technology development in Singapore. It is evident from the table that the number of 3G mobile phone and broadband internet subscriptions have been increasing significantly since 2007 while 2G mobile phone and dial-up internet subscriptions have also decreased radically, thus signifying the success of the government's IT plans.

**Table 3.8.** Indicators of technology development in Singapore (thousand)

	Fixed Line		Mobile Phone		Internet	
	Residential	Corporate	3G	2G	Dial-Up	Broadband
<b>2007</b>	1,087	772	1,701	3,918	1,057	956
<b>2008</b>	1,096 (+0.8%)	776 (+0.5%)	2,474 (+45.3%)	3,867 (-1.3%)	104 (-90.2%)	1,263 (+32.1%)
<b>2009</b>	1,128 (+2.9%)	768 (-1.0%)	3,160 (+27.7%)	3,697 (-4.4%)	80 (-23.1%)	1,805 (+42.9%)
<b>2010</b>	1,203 (+6.7%)	781 (+1.7%)	4,705 (+48.9%)	2,584 (-30.1%)	68 (-15.0%)	7,849 <sup>1</sup> (+334.8%)
<b>2011</b>	1,237 (+2.8%)	778 (-0.4%)	5,755 (+22.3%)	2,000 (-22.6%)	58 (-14.7%)	9,222 <sup>1</sup> (+17.5%)

\* Data extracted from Singapore Statistics (Monthly Digest of Statistics March 2012) and compiled for this thesis.

<sup>1</sup> Includes retail xDSL, cable modems, leased line and optical fibre, 3G, 3.5G/HSDPA, WiMAX, Wi-Fi hotspots access (including Wireless@SG subscriptions)

Conducted every five years, the country's latest official household expenditure survey conducted in 2007/2008 showed that ownership rate for selected IT and electronic consumer products increased over the years from 1997 to 2008. More than 98 percent of households own



television sets since 1997 while subscription to subscription television increased from 13 percent in 1997 to 45 percent in 2008. Ownership rate for personal computers also increased from 48 percent in 1997 to 77 percent in 2008; 51 percent in 1997 to 95 percent in 2008 for mobile phones; 57 percent in 1998 to 88 percent in 2008 for players and recorders while subscription to internet increased from 24 percent in 1997 to 70 percent in 2008. The table below shows the various ownership trends in detail:

**Table 3.9.** Household ownership rate of selected IT and electronic consumer products (%)

	Television Sets	VCD/DVD/CD players & recorders	Pay-TV subscription	Personal Computer	Mobile Phone	Internet Subscription/ Access
<b>1997/1998</b>	98.5	56.8	13.5	47.9	51.0	23.5
<b>2002/2003</b>	98.3 (-0.2)	82.7 (+25.9)	34.9 (+21.4)	69.7 (+21.8)	88.8 (+37.8)	55.3 (+31.8)
<b>2007/2008</b>	99.5 (+1.2)	87.8 (+5.1)	44.8 (+9.9)	77.0 (+7.3)	94.5 (+5.7)	70.0 (+14.7)

\* Data extracted from Singapore Statistics (Household Expenditure Survey 2007/2008) and compiled for this thesis.

\* The Household Expenditure Survey is conducted every five years

However, recent figures from IDA also saw the mobile phone penetration reaching 143.6 percent while household broadband internet penetration reached 191.8 percent in 2010. The table below shows the penetration rates from 2007 to 2010.

**Table 3.10.** Penetration rate of mobile phones and household broadband internet (%)

	Mobile Phone Penetration	Household Broadband Penetration
<b>2007</b>	122.5	76.9
<b>2008</b>	131.0	99.9
<b>2009</b>	137.4	142.2
<b>2010</b>	143.6	191.8

\* Data extracted from Infocomm Development Authority and compiled for this thesis.

In particular relevance to the television industries, the household expenditure survey showed that 99.5 percent of the households own television sets while 44.8 percent has subscription television subscriptions as of 2008. The survey also revealed that majority of the households owning television sets and subscribed to subscription television services were identified as mainly senior official, managers, professionals and clerical workers. Age wise, they

were 25 to 59 years old where they have a monthly household expenditure was S\$3,000 (approximately USD\$2,400) and above. Majority of the subscribers also lived in households consisting of 4 and more persons living in 4-room or larger flats and in private housing and landed properties (Singapore Statistics, 2007/2008). Such trends are expected to continue till 2013, where the next Household Expenditure Survey will be conducted.

Also, in relevance to the media industries, other than the Next Gen NBN, the government launched the NIMS (Next Generation Interactive Multimedia Applications and Services) initiative, which aims to develop a standardized set-top box. The country also aims to complete the switchover from analog television to digital television between 2015 and 2020.

### **3.5. Implications for Singapore's television industries**

Political, economic, social and technological characteristics of Singapore has been examined in this chapter. Singapore's colonial history, struggle for independence and unique position in Islam-dominant South-east Asia prompted the government to place heavy emphasis on political stability and economic prosperity. As such, the country welcomes foreign investment and encourages businesses to flourish in all sectors. This resulted in an increasing number of foreigners coming into the country. Such economic prosperity demonstrated an overall high standard of living and quality of life, evident from the high GDP per capita and average household income every year from 2007 to 2011. The unique composition of the population, which consists of multiethnic migrant groups from the region, also prompted the government to focus on national security and ensuring racial and religious harmony. Specific measures were taken to facilitate communication and interaction between the diverse ethnic groups, such as the official recognition of four official languages and the use of the English language, demonstrating

the government's effort to ensure no prejudice or bias towards any ethnic group. The high levels in literacy rate, information and technological developments exhibited the advancement of the population in utilizing information technology and establishing Singapore as a first-world developed country in the digital age.

The current environments of the country have several implications for its media and television industries. The small geographical size yet increasing population over the years indicates a small but growing consumer market for media content. The high GDP per capita and the average household income observed can also imply higher disposable income in the consumption of media content. The higher standard of living and quality of life may also prompt a demand in media content of niche genres and higher quality. However, such standard of living and quality of life also meant that the media industries may have to compete with other forms of leisure activities and entertainment for the attention of the population. Such trend may see a decline in audience loyalty and a smaller share of the audience's disposable income for each media company.

However, the diverse ethnic groups and growing numbers of foreigners in the country may also indicate the possibility of increasing demand for media content of wider variety and genres. Any increase in demand for media content however may be hindered by the government, citing the racial sensitiveness within the country and political situation of the country in the region. Such consideration for the country's well-being may prompt the government to take stringent measures in regulating the media industries, believing in the media's influence on the population. The measures include issuing of licenses, public interest obligations, censorship standards, as well as restrictions on foreign ownership, mergers and acquisitions. However, the political stability and pro-active stances taken by the government in forming bilateral economic

agreements may also create new opportunities and open new markets for local media industries in the regional and international markets.

Technological advancement in the country (evident from the high ownership of television sets, personal computers, mobile phones and other IT products) exhibits the vigorous efforts of the government in encouraging new technology for information and communication, as well as the easy acceptance and high adoption amongst the population. Such technological advancement may imply opportunities and threats for media industries, especially the broadcast industries, where new media content and interactive services can be produced, transmitted and received by consumers using the new technology. Thus after reviewing Singapore's general environments, the following summarizes the strengths, weaknesses, opportunities and threats of Singapore's subscription television industry.

**Table 3.11.** SWOT for Singapore's subscription television industry

Strengths and Opportunities	<ul style="list-style-type: none"> <li>• Establishment of MDA and IDA allows a smooth and seamless coordination between the two in the necessary stages of application and the provision of subscription television content.</li> <li>• Government's goal to become a regional media hub allows more foreign media companies to establish operations in the country, thus strengthening the necessary resources and capabilities required in providing subscription television content.</li> <li>• As the standard of living and quality of life enhances due to the growth in economy, Singaporeans may have higher disposable income for leisure and entertainment activities, among which may include watching subscription television content.</li> </ul>
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- Population in Singapore is increasing and consist of diverse ethnic, religious communities and groups that can be categorized by different interests, thus increasing the potential for niche audience groups and wider content variety.
  - Government's focus on building a nationwide technological broadband infrastructure enables subscription television services to utilize new technology standards and formats to offer subscription television content.

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Weaknesses  
and Threats

- Tight rein on regulation of media and censorship may cause foreign media companies to turn away from the country and thus deprive Singaporeans from enjoying subscription television content or premium programming.
  - Singapore's market is still considerably small for the Asia region, which may prompt foreign media companies to overlook and dismiss Singapore as a market for their television content.
  - Similarly, due to the small size of the market, there may not be sufficient incentive for advertisers to advertise on the platforms, which in turn may also indirectly affect subscription television providers' revenues.
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## **Chapter Four: Current State of Competition and Strategies**

This chapter focuses on examining the current state of competition and strategies applied in Singapore's subscription television industry. The issue of exclusive content and developments leading to the implementation of the Cross-Carriage Measure will also be detailed.

### **4.1. Development of Singapore's television industries**

Television broadcasting in Singapore began in February 1963 with Radio-Television Singapore (RTS), a governmental department under the Ministry of Culture. Even before its official commencement, then-Minister of Culture S. Rajaratnam stated that television was a 'popular and effective' medium that was far more effective than any other mass medium capable of 'broadening the intellectual horizon of the ordinary man' and that the introduction of the television marked the 'start of a social and cultural revolution' in the lives of Singaporeans. He further advised that television should be used 'intelligently and responsibly' (MediaCorp, 2011). Ang (2007) however commented that it was introduced to keep people off the streets due to various riots. Back then, RTS only offered two television channels, where Channel 5 broadcasted English and Malay programs and Channel 8 featuring Mandarin and Tamil programs. Originally only available in black and white transmission, television began full color transmission in 1974.

Following through an Act of Parliament, RTS was renamed Singapore Broadcasting Corporation (SBC) in 1980, where there was greater autonomy and flexibility in personnel, financial and production matters. By 1984, there were three free-to-air (FTA) channels available where the new channel (Channel 12) was focusing on Arts and Cultural programs (Ang, 2007). The SBC was a semi-governmental statutory board subsidized by the government and was therefore responsive to governmental pressures (Hachten, 1989).

By 1986, television broadcasting could reach 498,730 homes in Singapore, considering the country's population was at 2.5 million. Between the three channels, 140 hours of television content was broadcasted every week and about 40% of the content was produced by SBC itself, which was consider high production rate for a small country. Television content consisted of dramas in Chinese, Malay and Tamil, catering to the various racial and language groups; variety, educational, cultural, sports and children's programs. Foreign dramas and documentaries were imported and dubbed into English and the other local languages. More than 55% of all television content was in English but although imported shows from the US attracted about 300,000 to 400,000 people, locally-produced dramas in Mandarin still attracted the most number of viewers at an average of 800,000 people. Apart from offering general information and entertainment content, television broadcasting was also seen as a powerful way for the government to communicate social policies and cultural values (Hachten, 1989).

In 1994, the SBC was privatized and separated into three entities: the Television Corporation of Singapore (TCS), the Radio Corporation of Singapore (RCS) and STV12. TCS was responsible for operating Channel 5 and Channel 8, which broadcasted English and Chinese TV programs respectively. STV12 on the other hand, operated Prime 12 and Premiere 12, which focused on arts and cultural programs (MediaCorp, 2011). Shortly after in 1996, TCS was named Broadcaster of the Year at the Asian Television Awards and subsequently was awarded the same title each year till 2001. In 1995, TCS attempted to venture into other Chinese markets in Asia and began its first international channel in Taiwan as a cable television channel named Television Corporation of Singapore International (TCSI) broadcasting Chinese language programs such as drama serials. However, the overseas operation was short-lived and TCS withdrew TCSI from Taiwan in 2000, concluding that Taiwan's cable television market is far too

concentrated with too many channels and therefore deemed unprofitable. The three separate entities (TCS, RCS and STV12) were again reorganized in 1999 into one corporation named the Media Corporation of Singapore ('MediaCorp'), where the various business units were restructured to cater better to local audience segmentations.

The local terrestrial television broadcasting industry was still dominated by MediaCorp TV and in an attempt to liberalize the industry and encourage competition, the government granted the second television license to Singapore Press Holdings, who set up SPH MediaWorks in 2001 (Ang, 2007). However, the competition was short-lived as both companies' television operations were merged in 2004 in attempting to 'enhance shareholder value and stem losses', where both companies were suffering heavy losses from reduction of television advertisers and advertising revenue despite SPH MediaWorks' Chinese-language channel attracting solid viewership and outdoing MediaCorp's Chinese-language channel (MediaCorp, 2011).

Then Minister for Information, Communication and the Arts (MICA) stated that: "Wherever we can, we will try to promote and encourage competition, but we are also realistic and if competition does not work, then we have to accept that the market itself is just too small to accept more than one significant player" (Lim, as cited in Edge, 2004). Both companies cited that they believed the merger will bring 'rationality to the FTA television market'. The approval for merger was given by Media Development Authority ('MDA'), who are responsible for regulating and monitoring of media industries in Singapore. The approved merger was subjected to several conditions such as outsourcing of 285 hours of local content production to external production firms and providing quality local television content to audiences (MediaCorp, 2011).

Analysts dispute the above notion by the government and cited that that was in fact room for competition in the FTA television industry. The real reason behind SPH MediaWorks's



withdrawal from the industry was due to both companies being ‘overly enthusiastic in pricing and bidding’ in a ‘frenzied market-share battle’ (Ang & Fu, as cited in Edge, 2004). After 18 months of competition and heavy losses in advertising revenue, MediaCorp and SPH MediaWorks merged their television operations in 2004, creating a new jointly-owned company, MediaCorp TV Holdings Pte Ltd (MediaCorp TV), where MediaCorp took over most of the operations, having 80 percent ownership and SPH becoming a de facto passive investor with 20 percent ownership (Osborne, 2002). The local terrestrial broadcasting industry then returned to a monopolistic status with MediaCorp TV as the only FTA broadcaster (Ang, 2007). High-Definition television (HDTV) was then introduced in 2007, where MediaCorp became the first television broadcaster in Southeast Asia to provide HDTV channel on the terrestrial platform (MediaCorp, 2011). The table below shows a summary of offerings by MediaCorp TV today.

**Table 4.1.** Summary of offerings by MediaCorp TV

<b>MediaCorp TV</b>	
<b>License</b>	Free-To-Air
<b>Payment Method</b>	Annual Radio and TV license fee
<b>Receiving Format</b>	Analog (PAL standard) HD transmission DVB-T
<b>Channels</b>	8 channels including one HD channel
<b>On-Demand Content</b>	Through Xinmsn.com (its online streaming portal)
<b>Interactive Services</b>	Teletext (Text-based information service providing news and information-on-demand)

*\*Data extracted from MediaCorp TV's website and compiled for this thesis*

Despite the various milestones in Singapore’s terrestrial (FTA) television industry, terrestrial television viewership in Singapore has declined from 98% in 2005 to 86% in 2010 while subscription television viewership increased from null in 1994 to 37% in 2010 (Nielson Media Index, as cited in Lin, 2011b). Terrestrial television broadcasting is partially funded through the payment of annual radio and television (RTV) license fees from households and business premises. RTV license fees for 2011 are however exempted as ‘part of the FY 2011

Budget” by the government. The table below shows the number of households with terrestrial television (receive-only) licenses from 2000 to 2010, which in this case refers to MediaCorp, being the sole FTA television service provider. It is apparent that the penetration rate of FTA television is somewhat constant at 80-odd percent with little fluctuations.

**Table 4.2.** Number of resident households with FTA television licenses (Receive-Only)

	Year						
	2000	2005	2006	2007	2008	2009	2010
<b>Number of Resident Households</b>	915,100	1,024,500	1,054,100	1,074,800	1,093,100	1,119,600	1,145,900
<b>Number of Licenses (Penetration)</b>	761,000 (83.2%)	890,000 (86.8%)	888,000 (84.2%)	934,000 (86.9%)	965,000 (88.3%)	977,000 (87.3%)	958,000 (83.6%)

\* Data extracted from Singapore Statistics and compiled for this thesis.

\* Licenses were abolished permanently in 2011.

Till today, Singapore’s FTA television industry consists of only MediaCorp TV, who acquired MediaWorks’ television channels and regained its monopolistic position in the industry. MediaCorp TV’s most recent endeavors include a strategic partnership with Microsoft in creating *xinmsn.com*, an online portal offering entertainment, lifestyle and television content. MediaCorp TV currently has 7 FTA channels and 1 HD channel as shown below.

**Table 4.3.** FTA channels in Singapore

Channel	Type of Content
Channel 5	The only English mass entertainment and lifestyle channel.
Channel 8	A 24-hour Chinese news and entertainment channel.
Channel U	The entertainment channel for the working professionals and internet generation.
Channel NewsAsia	24-hour news channel with a regional reach, providing the latest in news and information on global developments with Asian perspectives.
HD5	High Definition simulcast of Channel 5, HD5 is the only free-to-air HD channel in Singapore.
OKTO	Focuses on kids, youth of today and growing local arts community
Suria	Providing entertainment and current affairs for the Malay Community
Vasantham	Providing Indian entertainment for the Indian community

\*Data extracted from MediaCorp TV’s website and compiled for this thesis

Since 2011, MediaCorp is planning to introduce a new Over-the-Top (OTT) interactive service through the use of a set-top box or another internet-enabled device (such as the game console or blu-ray player), while tapping into the country's new nationwide broadband network (Next Gen NBN). Through this service, television audiences can view and subscribe to a range of premium media content (both from MediaCorp TV and other third party content) through the internet broadband connection while using other value-adding interactive features. Interactive features include searching for past content, participating in live polls, gaining real-time traffic information, accessing exclusive behind-the-scenes footages, social networking and games. The interactive service will be made available on other viewing devices such as mobile phones and tablets in the future. As of April 2012, the service has not been officially launched. Pricing, subscription costs and other details are also unavailable.

#### **4.2. Development and competition in the subscription television industry**

Singapore's subscription television industry was also a monopoly in the early days. The first pay-TV service in Singapore started in 1994 when Singapore Cable Vision (SCV) was granted the first cable television license, which required the company to provide cable access for all homes in Singapore by January 2000 (Chiong, as cited in The Straits Times, 1999a). SCV spent more than S\$600 million (USD\$300 million) in establishing a nationwide state-of-the-art hybrid fibre-coaxial (HFC) cable network where it leased fibre-optic cables from SingTel and built coaxial extensions to each household (Toh, as cited in The Straits Times, 1997a). The government stated that SCV was to be the sole cable television service provider in the first few years so as to control the introduction of new channels. Competition and entry of other cable television companies were to be allowed later (The Straits Times, 1993).

Positioning itself as offering more choices, greater variety and better quality in television programming, SCV offered a total of 37 channels through tier packages and a-la-carte channels on its cable platform by 1997, among which included Cinemax, CNN International, Discovery, ESPN Sports, Home Box Office (HBO), MTV Asia, MTV Mandarin, entertainment channel SkyPlus, French channel TV5, TVB Zongyi and VarietyVision (Tan, 1997a; Tan, 1997b; The Straits Times, 1997b). SCV completed installation of the HFC network in October 1999, which was three months ahead of its original schedule (The Straits Times, 1999b). But by 2001, despite SCV's infrastructure reaching over 1 million homes, its cable television service subscription was only at 265,000 homes, which was approximately only 26% market penetration (Chang, 1999; Osborne, 2001).

Despite being granted exclusivity in content provision, the monopoly pay-TV service was suffering losses and only managed to garner 315,000 subscribers by July 2002, which constituted only 31.5% penetration rate of all cable-ready homes (Francis, 2002a). By December 2002, the subscription television penetration only constitutes 340,000 homes (out of about 1 million homes) despite 99% cable pass-through (Francis, 2002a; Osborne, 2002). In early 2003, the penetration rate rose slightly from 34% to 35% (Osborne, 2002; Whang, 2002). The table below summarizes the number of subscription television subscribers for SCV between 1995 and 2002.

**Table 4.4.** Number of subscription television subscribers till 2002

	Year							
	1995	1996	1997	1998	1999	2000	2001	2002
<b>Number of SCV Subscribers</b>	10,000	45,000	105,000	120,000	200,000	248,000	265,000	340,000
<b>Number of wired households</b>	80,000	360,000	600,000	660,000	926,000	Over 1 million		

\* Data extracted from relevant reports on *The Straits Times* and compiled for this thesis

\* Data was before StarHub Telecommunications' acquisition of Singapore Cable Vision in 2002

Talks of a possible merger between SCV and telecommunications company StarHub began to surface in 2001 after months of market speculation, where president and CEO of SCV, Yong Lum Sung stated that the successful merger would allow the new entity to develop into a ‘world-class communications powerhouse that offers a compelling range of cable TV, telecommunications and broadband interactive services cost-efficiently, benefiting home and business customers’ (Divyanathan, 2001). Then StarHub president and CEO, Terry Clontz also stated that both SCV and StarHub have ‘significant customer base’ in their own areas of business and both companies’ fixed networks ‘complement each other very well’. However, the merger proposal was still awaiting approval from the regulatory authorities (Divyanathan, 2001). By 2001, Singapore Cable Vision offered the following channels:

**Table 4.5. Examples of channel offerings by Singapore Cable Vision by 2001**

Group	Genre	Channels	Pricing (S\$)
Basic	World News	BBC World, CNN, CNBC	3 groups cost \$20
	Education	Animal Planet, Discovery, National Geographic	4 groups cost \$25
	Entertainment	AXN Action Channel, Hallmark Channel, MTV Southeast Asia, Star World	5 groups cost \$28
	Kids	Cartoon Network, Eureka Learning Channel, Nickelodeon	
	Chinese	CTN, MTV Mandarin, Phoenix Chinese Channel, TVBS Asia	
Basic-Plus	Sports	ESPN, Star Sports, SuperSports/Football Channel	\$6 for the group (To be merged into one channel from August)
Enhanced		Disney Channel, SunTV, TVRI, TV3	\$4 per channel
Asia		CCTV-4, TVBJ, ZeeTV	\$8 per channel
Premium		HBO, Cinemax, Star Movies, VV Drama, VV Entertainment	\$12 per channel
International		TV5, Deutsche Welle, NHK World Premium, WorldNet	\$15 per channel

*\*Data extracted from relevant news articles and compiled for this thesis*

As exclusivity in pay-TV provision for SCV ended in June 2002, the second subscription television license was put up for bidding by the government. However, there were no bids to establish the second pay-TV service, despite initial interests expressed by SingTel (Tee, 1997; Clark, 2002; Lee, 2002a). It was widely acknowledged that the small size of the cable market in

Singapore was the main reason for the lack of interest in the bidding (Francis, 2002a; Whang, 2002; Yap, 2003). There was not yet a regulatory framework for the liberalized subscription television market and it was noted that SCV as a subscription television service had to face competition in other areas such as MediaCorp's FTA channels, video rentals, cinemas and other leisure activities, to which potential entrants would have to face the same scenario (Whang, 2002). Other media commentators also questioned the viability of competition in the industry as new operators would find it tough to survive, having to compete against SCV on price and content (Francis, 2002a). Yap (2003) also commented that the government's failure to clarify its stand on the issue of exclusive content have influenced the outcome of the bidding.

Eventually, Singapore Cable Vision merged with StarHub in late 2002 (AsiaPulse News, 2001; CNET, 2001; Oyama, 2001; Lee, 2002b). The merger resulted in an one-third increase of StarHub's group revenue to S\$900 million (US\$520 million) and an integration of 'Singapore's Cable Vision's 100% broadband coverage of the city and StarHub's mobile, IDD and corporate services' (Clark, 2002; Francis, 2002a). The merger was objected by SingTel, which felt that the merger would increase competition for SingTel, which was then Singapore's dominant Telco back in 2002 (Clark, 2002). SingTel argued that such a merger would allow the merged company to part-take in 'anti-competitive pricing, discrimination or cross-subsidization' (Francis, 2002b; Tan, 2002). Such claim was rejected by the MDA, who stated that the merger would in fact increase competition, despite the overlap of services in the provision of broadband internet. However, in approving the merger, MDA required the post-consolidation entity to provide cable network access to third parties and banned SCV from promoting StarHub's internet services to its own customers (Clark, 2002).

After the merger of Singapore Cable Vision and StarHub formed StarHub Cable Vision in 2002, SingTel finally entered the subscription television industry in 2007 by establishing Mio TV on the IPTV platform with an offering of 33 channels and 600 hours of video-on-demand (VOD) content (Media, 2006; Yin, 2006; Frater, 2007; Hick, 2007; TelecomWeb, 2007). As of April 2012, MDA stated that there were more than 330 television channels available across multiple transmission platforms, a dramatic increase from 57 channels in 2002. Also, under a joint initiative by MDA and IDA, discussions with industry players and trials are being conducted into developing a universal set-top box to minimize consumers' inconvenience of having multiple set-top boxes and to encourage further development of the industry (Lin, 2011b).

Although the second subscription television license was put up for bidding again in 2005, there were no concluding results despite SingTel expressed its interest and commented that it was evaluating the possibilities of providing subscription television service through the internet broadband network (Hussain, 2005). Reynolds (2006) commented that SingTel's intention to enter into the subscription television industry was seen more of a 'value-added effort rather than direct competition to cable TV' and that there was enough time for StarHub's cable television service to grow and prosper while SingTel's subscription television service would take time and investment before it would become comparable to StarHub Cable.

Positioning itself as offering 'differentiated content', SingTel entered the subscription television industry in 2007 and attempted to differentiate itself by offering the 'flexibility of a la carte pricing and convenience to view anytime', as well as 'per channel monthly subscription' which was more affordable and increased interactivity and empowerment for its subscribers. Coincidentally, StarHub acquired exclusive broadcasting rights for the Premier League's football matches in the same year, to which it was identified as 'extremely popular' among Singaporeans

(Reynolds, 2006; Chong, 2007). The acquisition of the Premier League's broadcasting rights and existence of sports channels such as ESPN proved to be a strong anchor for StarHub in retaining its subscribers.

In offering differentiated content, SingTel acquired content from Sony Pictures Entertainment, Disney-ABC International Television, 20th Century Fox and Warner Bros International Television Distribution subsequently between 2007 and 2008 to provide on-demand and VOD content services. Although such deals allowed SingTel Mio TV to increase its subscribers substantially from 14,000 to 78,000, the greatest increase in number of subscribers was observed when the ESPN channels was removed from StarHub Cable and launched on SingTel Mio TV in late 2009 for the next three years till 2013 (Lim, 2009). Number of subscribers for SingTel Mio TV in 2009 immediately scaled from 78,000 to 200,000. Bakht (2009) stated that SingTel's investment in the ESPN sports channels and Premier League broadcasting rights was a 'financial plunge' for SingTel to attract subscribers quickly but a 'game changer' for the industry.

The acquisition of the abovementioned content was said to have triggered both service providers to change their business models where SingTel Mio TV would have to 'learn about linear channels', having focused on on-demand and VOD content previously, while StarHub would have to 'work on building new relationships with its subscribers' as the Premier League broadcasting rights had been a 'mainstay' and one of the 'jewels' in its programming, to which the loss would 'tempt subscribers to switch allegiance' (Lim, 2009; Media, 2009a; Wang, 2010b). The loss of the sports content caused StarHub to 'lost its status as the go-to platform' for sports content as ESPN also carries high-profile sporting events such as the FA Cup, Formula One, Wimbledon and the US Open. Experts stated that the loss for the rights was a 'wake-up call' for



StarHub to return to its ‘customer first’ fundamentals where it had become ‘complacent’ over the years, being the only subscription television operator in Singapore (Media, 2009a). Interestingly, after losing the broadcasting rights of the English Premier League Football matches and ESPN channels, StarHub went on to secure the broadcasting rights for the Spanish Premier League (*Primera Liga*) football matches, reaffirming the popularity of such sports content in the country. Such move however, only caused more inconvenience for consumers who wished to view both the English Premier League football matches, ESPN channels from SingTel Mio and the Spanish Premier League matches on StarHub TV, as they would have to subscribe to both providers, have two separate set-top boxes to receive the encrypted signals and incur extra costs (Jenna, Arena & Lim, 2010). Nonetheless, both providers observed overall increases in subscription numbers as evident in the table below.

**Table 4.6.** Number of subscription television subscribers from 2005

	Financial Year						
	2005	2006	2007	2008	2009	2010	2011
<b>StarHub TV</b>	448,000	487,000	504,000	524,000	539,000	538,000	545,000
<b>Increase from previous year (%)</b>	NA	(+9%)	(+3%)	(+4%)	(+3%)	(-0.2%)	(+1.3%)
<b>SingTel Mio TV</b>	NA	NA	14,000	44,000	78,000	200,000	353,000
<b>Increase from previous year (%)</b>	NA	NA	NA	(+214%)	(+77%)	(+156%)	(+77%)

\* Data extracted from annual reports by both providers and compiled for this thesis \* NA= Not Available

It is apparent from the above table that the number of subscribers for SingTel Mio TV increased dramatically after its official launch, particular in 2008 and 2010. 2008 saw the deals with Sony Pictures Entertainment, Disney-ABC, 20<sup>th</sup> Century Fox and Warner Bros in terms of VOD and on-demand content whereas 2010 saw the shift of ESPN and English Premier League matches from StarHub TV to SingTel Mio TV (Hooi, 2011c; Hooi, 2011d). Meanwhile, StarHub TV faced slow increases every year since 2006 and even incurred a slight decrease in number of subscribers in 2010, most probably due to competitor SingTel Mio TV’s introduction of the

sports channels (Blecken, 2009; Lee, 2009). The following table showed that the VOD and on-demand deals with the Hollywood studios, the acquisition of the exclusive sports channels ESPN and broadcasting rights for the English Premier League matches allowed SingTel Mio TV (which had been incurring losses in revenue till 2010) to finally earn revenue from 2010 while StarHub TV incurred slight losses (The Business Times, 2010b; Chai, 2011a; Chai, 2011b).

**Table 4.7.** Revenue earned by StarHub TV and SingTel Mio TV (S\$million)

End of Financial Year	2005	2006	2007	2008	2009	2010	2011
<b>StarHub TV</b>	262	313	342	398	405	395	376
<b>Increase from previous year (%)</b>	NA	(+19%)	(+9%)	(+16%)	(+1%)	(-2%)	(-5%)
<b>Average Revenue Per User (ARPU)</b>	45	48	51	57	56	52	NA
<b>SingTel Mio TV</b>	NA	NA	NA	NA	NA	16	79
<b>Increase from previous year (%)</b>	NA	NA	NA	NA	NA	NA	(+390%)
<b>Average Revenue Per User (ARPU)</b>	NA	NA	NA	NA	NA	NA	NA

\* Data extracted from annual reports by both providers and compiled for this thesis \* NA= Not Available

Till end of 2011, StarHub TV has garnered 545,000 subscribers while SingTel Mio TV has 353,000 subscribers. StarHub TV has a higher market penetration at 47.5 percent while SingTel Mio TV has 30.8 percent in market penetration, a significant increase from 17.5 percent in 2010. The table below shows the number of subscribers and market penetration of both providers from 2005 to 2011.

**Table 4.8.** Number of resident households with subscription television subscriptions

	Year						
	2005	2006	2007	2008	2009	2010	2011
<b>Resident Households</b>	1,024,500	1,054,100	1,074,800	1,093,100	1,119,600	1,145,900	1,146,200
<b>StarHub TV</b>	448,000	487,000	504,000	524,000	539,000	538,000	545,000
<b>(Market Penetration)</b>	(43.7%)	(46.2%)	(46.9%)	(47.9%)	(48.1%)	(47.0%)	(47.5%)
<b>SingTel Mio TV</b>	NA	NA	14,000	44,000	78,000	200,000	353,000
<b>(Market Penetration)</b>	NA	NA	(1.3%)	(4.0%)	(7.0%)	(17.5%)	(30.8%)

\* Data extracted from Singapore Statistics, annual reports by both providers and compiled for this thesis

\* Assumption that subscribers only subscribe to one provider per household \* NA= Not Available

The table below summarizes the penetration of the television industries in Singapore. It is apparent that penetration rate for subscription television is reaching almost the same level as FTA television, which may imply an increase in competition between the two. However, it is also apparent that market penetration of both television services may be reaching saturation point, reaching over 80 percent for FTA television and over 78 percent for subscription television.

**Table 4.9.** Resident households with FTA TV licenses and subscription TV subscriptions

	Year							
	2000	2005	2006	2007	2008	2009	2010	2011
<b>Resident Households</b>	915,100	1,024,500	1,054,100	1,074,800	1,093,100	1,119,600	1,145,900	1,146,200
<b>FTA Licenses (Penetration)</b>	761,000 (83.2%)	890,000 (86.8%)	888,000 (84.2%)	934,000 (86.9%)	965,000 (88.3%)	977,000 (87.3%)	958,000 (83.6%)	NA
<b>Subscription TV Subscriptions (Penetration)</b>	255,000 (27.9%)	448,000 (43.7%)	487,000 (46.2%)	531,000 (49.4%)	583,000 (53.3%)	694,000 (62.0%)	802,000 (70.0%)	898,000 (78.3%)

\* Data extracted from Singapore Statistics and compiled for this thesis \* NA=Not Available

\* FTA TV licenses were abolished in 2011 as part of the country's 2011 Financial Budget

\* Assumption that subscribers only subscribe to one provider per household

Considering the competition and development in Singapore's television industries, MDA has identified the following Persons in Singapore's Television Industries with adherence to the Media Market Conduct Code:

**Table 4.10.** Identified TV service operators with regards to the Media Market Conduct Code

<b>Designated Video Archive Operators</b>	MediaCorp Pte Ltd, MediaCorp TV Singapore Ltd
<b>Dominant Regulated Persons</b>	MediaCorp Pte Ltd (FTA television service industry) MediaCorp TV Singapore Ltd (FTA television service industry) StarHub Cable Vision (Subscription television service industry)

\* Information as correct on April 2012 from Media Development Authority

However, apart from the fierce battle between the two providers for sports content, Jenna, Arena & Lim (2010) and the regulator MDA also observed that the competition between StarHub TV and SingTel Mio was focused on securing exclusive rights for other genres of content, resulting in only seven out of 179 channels are common to both platforms by 2010. Such

focus on exclusive carriage agreements and broadcasting rights not only cause consumers' inconvenience in wishing to view all channels available, but also content fragmentation and content acquisition costs that were higher than international benchmarks, which the costs of subscribing to such content would inevitably be borne by consumers. To address such concerns, particularly the issue of exclusive content, MDA decided to intervene and implement the Cross-Carriage Measure to rectify the problem and shift industry competition to other areas.

### 4.3. Strategies by StarHub TV and SingTel Mio TV

**StarHub TV.** StarHub prided itself as a fully integrated info-communications and entertainment company. After acquiring Singapore Cable Vision in 2002 and changing the subscription television service's name to 'StarHub Cable Vision', StarHub launched the overall corporate strategy of 'Hubbing', which drove all business strategies till today. Today, *StarHub Cable* is changed to *StarHub TV* to provide a better consistency across the company's businesses.

**Migration from analog cable to digital cable.** Attempting to enhance and transform customers' passive viewing experiences into interactive experiences, StarHub TV began upgrading its cable broadcasting system from analog cable to digital cable in May 2004. The migration from analog cable to digital cable was quickly completed in about five years from 2004 to 2009, as shown in the table below.

**Table 4.11.** Number of analogue vs. digital cable subscribers for StarHub TV

	Financial Year							
	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total Number of Subscribers</b>	412,000	448,000	487,000	504,000	524,000	539,000	538,000	545,000
<b>Analogue Cable Subscribers</b>	359,000 (87%)	251,000 (56%)	165,000 (34%)	96,000 (19%)	20,000 (4%)	-	-	-
<b>Digital Cable Subscribers</b>	53,000 (13%)	197,000 (44%)	322,000 (66%)	408,000 (81%)	504,000 (96%)	539,000	538,000	545,000

\* Data extracted from annual reports by StarHub and compiled for this thesis

Digital cable allowed StarHub TV to offer more advanced services that would have higher levels of interactivity and wider choices of television channels, The digital compression technology expanded StarHub TV's channel capacity by approximately six times, from 50 channels on analog cable to 130 channels on digital cable. Interactive services included Video Mosaic, TV games, Chat, enhanced TV, Electronic Program Guide, Pay-Per-View, Near Video-On-Demand, Personal Video Recording and time-shifting.

**Hubbing.** In essential, 'Hubbing' was StarHub's interpretation of 'quadruple play', where the various services (mobile, cable TV, broadband, fixed network) were integrated, bundled and packaged together to give 'greater value and convenience to customers'. For example in 2005, StarHub's customers can watch Premier League matches 'live' on cable and watch video highlights of the matches on their mobile phones. The 'Hubbing' concept claimed to increase cost efficiency, cross-selling, ARPU (average revenue per user) and loyalty to the company, especially since customers could obtain subscription discounts and other benefits from the various services offered by StarHub. The company also specially cited that marketing costs were lower when promoting a suite of services rather than individually. The 'Hubbing' strategy was claimed to be very successful for the next few years and a 'key differentiator' among customers, increasing customer subscription to more than one service and customer spending, leading to an expansion in customer base and enhancing customer loyalty.

StarHub TV also began switching from analogue to digital cable platform in 2005 and launched a new digital video recorder which also featured the electronic program guide (EPG). The digital platform enabled StarHub to offer more channels such as the Karaoke TV and Demand TV (similar to VOD service on a pay-per-view basis), as well as developing more interactive features and increasing viewing flexibility such as time-shifting. To attract new

viewers, StarHub TV offered free previews of channels on its Preview Channel during festive season (e.g. Chinese New Year) and regional premieres of new drama series (e.g. HBO's hit mini-series 'Rome'). StarHub TV also secured broadcasting rights for popular sporting events such as the FIFA World Cup on pay-per-view channel basis, where subscribers can watch a series of matches over a few months or through the entire season. In the same year, StarHub TV also launched several new channels, broadcasted 'live' other sports events such as American Basketball and American Football through pay-per-view channels, and won several awards at the PromaxBDA Awards. It also reached out to niche audiences such as launching a 24-hour Malay channel targeting the Malay communities. As of 2005, despite being the sole subscription television service, it recognized that there was still growth potential such as increasing ARPU through 'continued innovation in service offerings'.

Carrying on with the 'Hubbing' strategy in 2006 in cross-selling their services, StarHub stated that its cable TV service would continue to focus on 'offering more innovative services, greater viewing control, more content choice, more value in the price of content plus an overall excellent customer service and experience'. The company continued to launch new channels, innovative features and services such as Smart TV (digital video recorder and interactive TV service with a dual tuner feature) and FlexiWatch (pre-paid cable TV service charged on daily basis). Innovative features include the use of the TV remote to send SMSs to StarHub Mobile customers and checking of email accounts on the TV screen. StarHub was also the official broadcaster for the 2006 FIFA World Cup and also signed a new three-year contract for the broadcasting rights of the English Premier League matches on its cable TV, mobile and online platforms, starting from the 2007/2008 season.

Following the opening up of the subscription television industry and the launch of SingTel's IPTV service as a competitor in 2007, StarHub stated that it would focus on taking the 'Hubbing' strategy to higher levels, upgrading customer relationship management systems, allowing the company to exploit opportunities in offering new services, retain more customers and generate higher spending among existing customers. In the same year, StarHub TV also became the first operator in Southeast Asia to launch commercial high-definition television service (HDTV) on the platform. A new set-top box ('HubStation') featuring the DVR and doubling up as a broadband modem was also launched, which further increased customer convenience through accessing multiple services (TV, broadband, voice calls, text messages) through a single box. The new set-top box contained an EPG (electronic program guide) and allowed viewers to also play interactive games and watch free international channels. These viewers can subscribe to more channels via the monthly subscription packages or through the FlexiWatch service.

StarHub retained the 'Hubbing' strategy in 2008. Despite SingTel's entry into the industry, StarHub still held the leadership position in 'offering the best branded content and widest coverage of homes', where it launched new channels (targeting sports audiences and niche communities such as the ethnic groups) and managed to extend their relationships with 'critical content brands' in sports and entertainment genres. StarHub Cable changed its name and restructured its relevant television services under the same umbrella of 'StarHub TV', allowing a better consistency in look, increased similarity in navigation throughout all content and a better user experience for customers across multiple screens and devices. For example, it secured exclusive broadcasting rights for the UEFA Euro 2008 and made it available across multiple platforms. It also upgraded the transmission platform in order provide new services such as VOD

content and introduced a new set-top box ('HubStation HD') which contained a free digital fixed-line voice service and access to broadband internet service. StarHub TV also did a major re-aligning of their content offerings in 2008, introducing new channels (linear channels, VOD and on-demand) and groupings targeting various audiences (mainstream, niche and special interest), as well as allowing customers to identify and add their favorite content to their subscription packages more conveniently and economically. StarHub also struck deals with US studio CBS to offer hit TV series such as police drama Crime Scene Investigation (CSI) as VOD content; other content providers (such as VV Drama, TVBJ and HBO) to provide on-demand channels and also with SGX (Singapore Exchange) to offer financial information and stock prices as an interactive service. StarHub TV also offered an unprecedented coverage of the Beijing 2008 Olympic Games with six dedicated channels.

However, with the new competitor in the industry, subscription prices increased for the first time due to increases in content costs. By 2009, StarHub TV was offering more than 145 channels spanning across education, entertainment, drama, movies, documentaries and sports. All analogue cable subscribers have also shifted to the digital cable platform allowing the company to broadcast more channels and develop more interactive features on the platform. The company however, lost broadcasting rights of the English Premier League football matches (2010-2012) to competitor SingTel due to high bidding costs. It tried to justify and reduce its loss by stating that StarHub TV was going to introduce other sports content (including local soccer matches, the 2009 Asian Youth Games, 2010 Youth Olympic Games, Spanish League football matches, rugby, wrestling, tennis and a self-packaged sports channel) and lower subscription costs to its sports packages by 50%. The company also claimed that the loss of the Premier League content would not cause significant loss of subscribers as there was still 'family interest'



in the content the company offered, such as news, entertainment and movies. VOD content was expanded to include drama series and movies from Hollywood, Hong Kong, Japan, Korea and Indonesia. The karaoke service was re-launched with 30,000 music videos and more interactive features. Interactive services such as booking of movie tickets could be conducted over the television platform. StarHub also launched more channels on its mobile TV platform, offering a total of 24 channels across news, entertainment, kids and documentary genres. StarHub also introduced a new mobile TV client with easy-to-use features and settings to facilitate the subscription of television content on its mobile TV platform.

‘Hubbing’ remained the key strategy in 2010. StarHub TV was the official broadcaster for the 16<sup>th</sup> Asian Games in Guangzhou and also broadcasted the 2010 FIFA World Cup and the inaugural Youth Olympic Games. In particular, StarHub organized a 3D screening of the final FIFA World Cup matches downtown and ‘live’ screenings at other 16 locations to attract its subscribers. In attempting to retain subscribers who may switch to SingTel Mio TV for the Premier League content, StarHub TV slashed subscription costs for its sports package and revamped its other packages into value-pack bundles that offered higher discounts. In responding to MDA’s implementation of the Cross-Carriage Measure, the company recognized that signing of exclusive deals with content providers would be discouraged, but emphasized that the company would focus on: 1) providing the most comprehensive range of branded quality content that appeals to different audiences in the family and 2) innovating its interactive TV and on-demand offerings in order to ‘differentiate’ itself in the market. StarHub TV also continued to introduce new channels across the various genres and played the role of a content aggregator more actively in packaging and bringing together other sports content such as basketball, tennis, badminton, table tennis, squash and cricket matches. The company also widened its focus to

including more interactive features (such as the ‘catch-up’ channels) and acquiring more VOD content (such as with Paramount Pictures, TVB, Celestial Movies and MD Entertainment). However, the company also hinted at more focus would be given to mobile TV, IPTV and internet TV innovations in the near future.

The ‘Hubbing’ strategy continued in 2011. StarHub TV continued to increase their sports content offerings, such as securing broadcasting rights for UEFA Euro 2012, LionsXII, other European football leagues, matches of other forms of sports, as well as content in other genres such as Korean culture-oriented channels, news and Asian entertainment. UEFA Euro 2012 would be the first major event that was acquired exclusively after the implementation of the Cross-Carriage Measure. However, StarHub TV stated that it hoped to increase its market share through the broadcast and acknowledged that it would be required to provide the content to SingTel Mio TV’s subscribers. Details of the broadcast, however, have yet to be released. Apart from sports content, the company also focused on increasing HD content and the taking up of the HD HubStation (in view of the increasing purchases in HD television sets), VOD content as well as enhancing its mobile TV service, which was part of the company’s ‘TV anywhere’ strategy, enabling subscribers to access and watch content anytime and anywhere on multiple devices. The Cross-Carriage Measure however, was deemed to have no ‘significant impact’ on the company in the ‘near term’. Other notable deals include a multi-year renewal with content provider FIC (Fox International Channels) and on-demand content acquisition from Universal Studios, 20<sup>th</sup> Century Fox and Walt Disney Studios.

As of the end of 2011, StarHub TV offers a total of 179 channels (137 on Standard Definition, 23 HD, 10 VOD and nine free-to-air channels) spanning across sports, news and Asian entertainment (e.g. dramas, variety shows, concerts) and lifestyle genres. The channels are

differentiated by groupings, price ranges and target audiences. Apart from linear SD and HD channels, StarHub TV operates 10 VOD channels with drama series and movies acquired from major Hollywood studios and Asian entertainment content providers. The interactive set-top box, HubStation HD offers interactive services such as games, checking of lottery, betting results, weather information, movie show times in local cinemas and purchasing of movie tickets, as well as easy subscription to new channels, searching of content and on-demand content with a few clicks of the remote control. The HD set-top box also allows subscribers to record content and catch-up on missed parts and episodes of television content being shown.

**SingTel Mio TV.** SingTel Mio TV entered the subscription television industry in late 2007, officially putting an end to StarHub TV's monopoly in the industry since 2002 and offering consumers 'choice' in the industry. The company first positioned the service as 'Generation Mio', a 'next-generation' service that was part of an innovative communications solution transferring 'the home line into an integrated digital super highway'. Similar to StarHub, SingTel also began to offer 'quadruple play' services with its Mio TV service. The Mio TV service was positioned as the 'most flexible digital pay TV service' that allowed viewers to watch 'what they want, when they want'. Focusing on VOD content, it differentiated itself through offering 'the widest range of VOD titles on any Singapore television platform', offering flexibility of viewing anytime. It secured deals with content owners and producers such as Sony Pictures, Walt Disney, 20<sup>th</sup> Century Fox and Universal Pictures to offer VOD content. Sports content-wise, it secured broadcasting rights for the UEFA Champions League and the UEFA Cup 2009 to 2012 for its mobile, internet and IPTV platform.

In 2008, SingTel Mio TV launched the 'Season Pass' offering, which offered the latest Hollywood TV series 'as early as 24 hours after the US premiere'. Such offer was said to a 'first

in the world'. The company also offered free on-demand access to 'live' broadcasts of the Italian Seria A football matches. Focusing on 'selling' the TV service, the company bundled the service with its fixed line and internet broadband offerings to offer the 'mio Home' bundled plan, targeted at the average family. The 'mio Home' plan allowed customers to enjoy substantial cost savings, one-stop convenience, discounts for mobile services and other free features. Also, acknowledging on the converging of broadcast media and telecommunications technologies creating more opportunities to expand their suite of services and products, SingTel also ventured into providing its Mio TV service on mobile. However, the increase in subscribers for the year was attributed to the success of its 'mio Home' bundled plans and 'broad content offering'. As of end 2008, SingTel Mio TV offered 56 linear channels and VOD content of over 600 movies, 50 US and Asian drama series. Content on the Mei Ah channel was broadcasted in original languages and with dual language options, instead of being subbed in Mandarin. Such features were consider differentiating factors for the IPTV service.

In 2009, the company's strategy was to 'change the game' and 'stay ahead' in the industry through the limitless possibilities created through innovation and technology. The IPTV service strived to increase its subscriber base through leveraging on key iconic content and introducing more multimedia services that were bundled with the IPTV service. In particular, the iconic content were the English Premier League matches, which the company outdone competitor StarHub and won its broadcasting rights starting from 2010 to 2013. SingTel Mio TV attempted to differentiate its EPL offerings from previous ones by offering more interactive features such as allowing subscribers to access statistics, player and football club profiles, as well as enjoy multiple viewing angles of the matches through the touch of a button on the remote control (Ang, 2010). ESPN Star Sports (previously also a major program offering for competitor

StarHub) was also acquired. The IPTV service also acquired broadcasting rights for UEFA Champions League and UEFA Europa League, as well as the FIFA World Cup broadcasting rights for IPTV, mobile and internet platforms.

The acquisitions of sports content was themed a ‘winning strategy’ for SingTel Mio TV to significantly increase its subscriber base quickly. SingTel’s CEO further stated that SingTel Mio TV would become ‘the new home for sports’. Non-sports content wise, SingTel Mio TV also acquired broadcasting rights for Granada TV and other channels, as well as selected dramas and documentaries from BBC and ITV Global Entertainment, which would be made available one month after being telecasted in the UK. The company also targeted at niche audiences such as the Indian community with the launch of its first Tamil language channel offering general entertainment content; and other channel bundles at promotional subscription prices for the respective ethnic audiences.

By 2010, creativity and innovation had become the key cornerstones for the company’s businesses as the company established its strategic direction as ‘leading and shaping the multimedia and ICT market’. SingTel Mio TV became the first provider to offer 3D movie content and introduced other innovative interactive features (such as high quality games on-demand) on the IPTV platform. Bloomberg Television and another new channels joined the expanding suite of channels offered by SingTel Mio TV. The ‘Season Pass’ VOD offerings and sports content acquired in the previous year for 2010’s broadcasts remained the greatest attractions for subscribers. SingTel Mio TV also ventured into aggregating and packaging its own channels such as the Jia Le channel, which became Singapore’s first Asian Entertainment channel with a Hokkien focus. All in all, SingTel Mio TV positions itself as a subscription television service offering more flexibility, greater variety, high-definition programs and cheaper

content. As of the end of 2011, it offered more than 80 channels through various price packages and targeting at different audiences. The set-top box allows subscribers to schedule and record content in advance, while also offering interactive features such as voting in polls, ‘live’ scores for sports content and etc.

**A comparison between both providers.** The table below briefly summarizes their characteristics and content offerings by both StarHub TV and SingTel Mio TV.

**Table 4.12.** Summary of offerings by StarHub TV and SingTel Mio TV

	<b>StarHub TV</b>	<b>SingTel Mio TV</b>
<b>License</b>	Subscription nationwide television service	Subscription nationwide television service
<b>Platform</b>	Hybrid Fibre-Coaxial	Internet Protocol
<b>Must-Carry</b>	Yes	Yes
<b>Payment Method</b>	Monthly payment/Pay-Per View	Monthly payment /Pay-Per View
<b>Receiving Method</b>	HubStation HD HD Interactive Set-top Box	HD Set-Top Box with Digital Video Recording (DVR) Feature
<b>Channels</b>	179 channels (including 23 HD, 11 on-demand and 8 FTA channels)	75 channels (including 12 HD, 15 on-demand channels and 8 FTA channels)
<b>VOD</b>	Over 600 titles (spanning across Asian drama series, Taiwanese talk shows, educational programs, Bollywood Movies, entertainment programs, concerts and sports)	Over 600 titles (spanning across US TV dramas, 3D content, blockbuster movies, Asian movies, Bollywood Movies and British TV content)
<b>Interactive Features</b>	<ul style="list-style-type: none"> <li>- Checking of lottery, betting results and weather information, movie showtimes</li> <li>- Purchasing of movie tickets, Subscription to new channels and on-demand content</li> <li>- TV games</li> <li>- Programme Search</li> </ul>	<ul style="list-style-type: none"> <li>- Sharing of opinions on Mio Stadium</li> <li>- Checking Sports-related latest news, statistics and rankings</li> <li>- Tracking scores</li> <li>- Multi-viewing (viewing 4 simultaneous matches on the same screen)</li> </ul>

*\* Data compiled from annual reports and websites of all providers. Information is accurate as of April 2012.*

Both providers hold nationwide subscription television licenses where they are subjected to a minimum license fee of S\$50,00 per annum, a S\$200,000 performance bond, must-carry obligations to offer free-to-air television content to their subscribers, a restriction on amount of advertising revenue as well as ownership conditions as stipulated in the Broadcasting Act. However, it is also obvious that StarHub TV has a more extensive offering of television channels

as compared to SingTel Mio TV. More details can be found in the appendices (Appendix IV and V). The most recent examination of VOD content offerings by both providers show that both providers seem to offer more than 600 titles for VOD content. A comparison of interactive features offered by both providers shows that StarHub TV's interactive features cater towards offering convenience for subscribers in other aspects of their lifestyles while SingTel Mio TV's interactive features are geared towards the enhancement of subscribers' viewing experiences of content on the platform.

Content offerings by both providers can be generally classified into the following genres: entertainment, infotainment, news, lifestyle, education, general interest and sports. Apart from genres, audiences can be classified by ethnicity and nationality, such as the Chinese, Malay, Indian communities and foreigners from Philippines, Australia, France, Russia and Germany, who are residing in Singapore (please refer to Appendix IV, V and VI). Apart from must-carry obligations of the country's free-to-air television channels, the two companies practice exclusive carriage agreements (ECAs) with majority of their content providers and aggregators. The use of price bundles are evident in both providers, to which Lane (2010) commented that 'packaging channels in bundles' is a major form of the pay-TV business model in Singapore and in other countries, where a wide variety of content is available at market-friendly prices because they are 'packaged' together, allowing some channels to be 'cross-subsidized' by other channels in the same packages. Apart from offering linear channels, both providers also offer VOD content, on-demand channels and interactive features through their set-top boxes (please refer to VI).

The table below summarizes the various strategies applied in the industry thus far. A comparison of both providers' strategies shows that corporate strategies such as acquisitions and diversifications occurred in the industry.

**Table 4.13.** Summary of strategies by StarHub TV and SingTel Mio TV

	<b>Corporate strategies</b>	<b>Business strategies</b>
<b>StarHub TV</b>	<ul style="list-style-type: none"> <li>- Acquisition of Singapore Cable Vision in 2002</li> <li>- Offering of quadruple play services ('Hubbing')</li> </ul>	<ul style="list-style-type: none"> <li>- Differentiation through focus in linear channels, exclusive content offerings</li> <li>- Focus in bundling content catering to different audience groups with different ethnicities and interests</li> <li>- Cost leadership</li> </ul>
<b>SingTel Mio TV</b>	<ul style="list-style-type: none"> <li>- Diversification into the subscription television business</li> <li>- Offering of quadruple play services ('mio Home')</li> <li>- Acquisition of key iconic content to build up subscriber numbers</li> </ul>	<ul style="list-style-type: none"> <li>- Differentiation through focus in VOD content ('Season Pass'), sports content and 3D content</li> <li>- Focus in bundling content catering to different audience groups with different ethnicities and interests</li> <li>- Cost leadership</li> </ul>

For example, StarHub TV's acquisition of Singapore Cable Vision in 2002 allowed the telecommunications company to diversify into the internet and the subscription television businesses, paving the way for the company to enter 'quadruple play' era. Similarly, the country's biggest telco SingTel also diversified into internet and subscription television services, considering its readily available infrastructure that was capable of providing relevant services. StarHub TV adopts 'Hubbing' while SingTel adopts 'Generation Mio' as their 'quadruple play' corporate strategies, leveraging on the increasing trend of convergence and integration of digital media and telecommunications in everyday life. SingTel's diversification into the subscription television service significantly increased the intensity of competition in the industry and also allowed it to offer quadruple play services, causing it to become a direct competitor against StarHub in more than one area of business.

Business strategies are being used in combination by both providers. *Product differentiation* is extensively used by both providers, as evident in the aggressive acquisition of exclusive content and the differences in focus on linear channels for StarHub TV and VOD and 3D content for SingTel Mio TV. Being the earlier subscription television operator in the country, StarHub has a bigger and wider range of content acquired from its content providers and



aggregators,. However, its expertise is more evident in linear channel offerings, where more than 179 channels are offered spanning across different genres and target audience groups. SingTel on the other hand, focuses on VOD content to differentiate itself from StarHub, acquiring the wider range of US dramas ('Season Pass') and broadcasting them soon after their US premieres. SingTel also acquired more than 400 blockbuster and popular movies, buffing up its VOD content library. *Focus* is also apparent in instances such as offering specific content on promotional prices in celebration of specific festive seasons and the offering of content targeted at specific audience groups such as the ethnic communities (e.g. Chinese, Malay, Indian and etc) and consumers with specific interests (e.g. lifestyle, education, news, sports, US dramas and etc). *Cost leadership* is also observed in the practice of bundling television content with other quadruple play services by StarHub and SingTel citing 'value for money', as well as in both providers competing against each other in offering similar genres of content at competitive prices. Cost leadership is used extensively by SingTel Mio TV, as subscription costs for its channel bundles are considerably lower than StarHub TV.

One similarity between both providers is the emphasis on particular content as exclusive content, where it is deemed a 'key' to attract new subscribers and retain existing subscribers quickly. Such tactic is demonstrated in StarHub TV's exclusive carriage of key content such as sports content and other television channels in retaining its subscribers from switching to the new provider SingTel Mio when it was first launched. Similarly, SingTel's acquisition of the Premiere League matches and ESPN in 2009 as exclusive sports content quickly led to a dramatic increase in its subscriber numbers and a slight decrease in StarHub's subscriber numbers.

#### **4.5. Summary**

Development, competition and strategies in Singapore' subscription television industry has been examined to great extent, revealing that competition in the industry has intensified with the entrance of SingTel Mio, challenging StarHub TV's position as the leading subscription television service and leading to the beginning of a content 'war' began between both providers, as observed in the aggressive acquisition of key iconic content that was deemed important in attracting and retaining subscribers. Various strategies were applied in the industry, as observed in both providers' tactics in trying to outdo each other especially by using product differentiation in content offerings to increase subscriber numbers and retain existing subscribers.

However, the over-dependence on exclusive content eventually prompted MDA to implement the Cross-Carriage Measure, stating that the Measure would allow StarHub TV and SingTel Mio TV to shift their business strategies to other areas such as customer service and innovation. The following chapter will seek to examine the issue of exclusive content in the industry, as well as industry development after the implementation of the Measure and its impacts in the industry.

## **Chapter Five: Impacts of the Measure on the industry**

This chapter will examine the issue of exclusive content in Singapore, the actual implementation of the Cross-Carriage Measure, as well as impacts of the Measure on the industry through the implications on the respective stakeholders.

### **5.1. Exclusive content in Singapore and the Cross-Carriage Measure**

Exclusive content has actually been one concern of the subscription television industry in Singapore since 2003. MDA had not clarified its stand on the issue and following the release of bidding for the second subscription television license, MDA issued a consultation paper seeking opinions of industry players and potential entrant on how exclusive agreements between subscription television service operators and content providers should be regulated (Lee, 2003; Yap, 2003). It proposed that the regulation of exclusive agreements would ‘ensure effective free-market competition and a level playing field’ for new entrants. However, StarHub TV reacted strongly to the consultation, stating that by not allowing exclusive agreements may result in ‘duplication of existing services and content which would ultimately be at the expense of the consumer’. Meanwhile, SingTel stated that exclusive content was ‘anti-competitive’ and could be used to ‘foreclose competition’ (Lee, 2003).

It was only in 2006 that MDA announced that exclusive carriage agreements (ECAs) ‘do not substantially foreclose potential entrants’ access to content’ and that content could be ‘considered critical for the success of a Pay-TV service’ (Lee, 2006; Media Development Authority, 2006; Frater, 2007). In the press statement, MDA also stated that it recognized the importance of giving industry players ‘maximum room to freely negotiate carriage agreements on mutually agreed terms’. However, MDA also stated that if exclusive carriage agreements

were to be found later to have negative impacts on consumers or the market, the regulatory body will intervene to derive the best approach towards addressing the problem (Lee, 2006; Media Development Authority, 2006). Ong (2006) was cynical and questioned MDA's method of analysis of the issue, where no full report was released publicly, citing 'commercial sensitivity'.

SingTel's entry into the subscription television industry in 2007 received generally positive responses by industry stakeholders who welcomed the competition. However in the same year, SingTel later challenged StarHub's right to sign ECAs with content providers. It was however ruled that 'exclusive deals were not anti-competitive' and that the market was 'big enough' for both companies. This court ruling was applauded by foreign media companies (Frater, 2007). In 2009, the bidding for exclusive broadcasting rights of significant sports events such as the English Premier League (EPL) football matches again sparked off heated debates between the two operators. Lee (2009) reported that SingTel Mio TV acquired the BPL rights for a ransom amount of S\$280 million, which was reportedly 90% of StarHub's net profit for previous year and that SingTel Mio TV was unlikely to recover the cost. Lee (2009) also commented that such aggressive move taken by SingTel might be considered 'anti-competition' by MDA, which would eventually result in MDA's intervention into the subscription television industry. Industry watchers suggested that both companies should launch joint bids to 'reduce artificial increase in rates' which the 'savings can then pass on to consumers' (Media, 2009b).

Sure enough, MDA commented that the subscription television industry is 'negatively impacted' by the 'proliferation of exclusive content deals' where content costs were much higher than international benchmarks (Stein, 2010). Chai (2010b) also observed that StarHub has 'locked in' a range of 'prized content', such as the TVB drama serials, AXN and Star World through exclusive broadcasting contracts, leaving SingTel Mio TV little choice in acquiring

popular content that was required to grow its subscriber numbers. Thus, MDA viewed that ECAs cause a high degree of ‘content fragmentation’ and consumer inconvenience’ where ‘consumers incur more costs in having to subscribe to different operators if they wish to watch diverse program offerings’ (Media Development Authority, 2011). The authority also concluded that such situation was unlikely to self-correct and intervention was needed to address this ‘market failure’ (Chua, 2010a).

Hence, aiming to shift industry focus from acquiring exclusive content to service differentiation and other areas, MDA felt that the timing was appropriate to intervene, thus proposing the Cross-Carriage Measure, which was designed to ‘facilitate greater consumer access to pay TV content, and shift the focus of competition in the market from an exclusivity-centric strategy to other aspects, such as service differentiation and competitive packaging and pricing’ (MDA, as cited in Stein, 2010; Hooi, 2011a). The Measure in essential require subscription television operators (‘Supplying Qualified Licensee’) to make relevant television content acquired on an exclusive basis (‘Qualified Content’, SQL) available for consumers on other operator (‘Receiving Qualified Licensee, RQL’)’s platforms. More details of the Measure can be found in Appendix II. Acting Minister Mr Lui Tuck Yew stated that such move will allow consumers to ‘access available content from a single set-top box regardless of which retailer acquired the rights to the channel’, thus reducing consumers’ inconvenience and any incurred costs. Media Development Authority (2011) also stated that this Measure aims to foster ‘a vibrant pay TV market to the benefit of consumers and industry’ as new subscription television retailers and services are entering the market, bringing more choices and innovative offerings to consumers, apart from increased television channels.

The Measure however immediately sparked off heated discussions and unhappiness within the industry, in particular, the strongest negative feedback coming from CASBAA (Cable & Satellite Broadcasting Association of Asia), which represented the interests of 130 content producers, subscription television platform operators and equipment-and-service suppliers across 16 Asian markets. Companies in the association included HBO Asia, Sony Pictures, Fox International Channels and NBC Universal Global Networks (CASBAA, 2010; Chai, 2010e; Chua, 2010b). The association denounced the Measure, calling it ‘a new level of micromanagement’ of Singapore’s subscription television industry (Hooi, 2011). The association was particularly concerned with the apparent removal of exclusive content offering on a single platform in Singapore’s pay-TV industry, which is seen from their perspective as an anti-competitive move in the local subscription television industry. Such restriction was seen to be banning the practice of negotiating exclusive contracts with content providers and hindering the ‘pace of investment in creative content, additional channels and technological advances such as HD television and 3D television content’ (CASBAA, 2010; Tanner, 2010).

The association also commented that the Measure may cause content providers to ‘flee Singapore rather than comply with the MDA’s rules’ and that the consumers would eventually become the end-losers, losing ‘long-term access to a whole new generation of new video content’ (Tanner, 2010). Other companies such as Discovery Asia, Disney-ABC and sports marketing agencies Sportfive and the World Sport Group also expressed concerns in licensing complications, revenue-sharing and billing complexities (Chai, 2010e). Other concerns raised included violation of intellectual rights across platforms, quality of customer service provision and allocation of human resources, subscription and billing costs, difficulties in individual channel pricing due to bundling practices, ownership of technical glitches and repair costs, as

well as any implementation and platform-transfer costs incurred by both subscription television operators (Brown, 2010; The Business Times, 2011). Lane (2010) also commented that the implementation of the Measure would require StarHub TV and SingTel Mio to ‘restructure their retail service packages’ and ‘unbundle channel packages into a-la-carte offerings’. Despite the above negative responses, the Consumers Association of Singapore (CASE) welcomed the Measure, stating that the Measure would reduce inconvenience for consumers, who no longer need to apply for multiple set-top boxes to view exclusive programming. However, the association also urged MDA to take more precise actions in dealing with the issue of downtime and unsatisfactory viewing quality of the channels.

The Measure was officially gazetted to the Media Market Code in July 2011 alongside with more detailed terms and conditions on billing matters, technical support, customer service as well as content security protection requirements to facilitate implementation of necessary systems and infrastructure for the effective implementation of the Measure (The Business Times, 2011). As of April 2012, MDA has recognized the following parties in regards to the Measure:

**Table 5.1.** Identified operators with regards to Cross-Carriage Measure

<b>Supplying Qualified Licensee (SQL)</b>	StarHub Cable Vision (StarHub TV)
<b>Receiving Qualified Licensee (RQL)</b>	StarHub Cable Vision (StarHub TV) SingTel Mio Television

*\* Information as correct on April 2012 from Media Development Authority*

The Cross-Carriage Measure may also be interpreted as the following (Chua, 2011a; Media Development Authority, 2011):

- Any channel or programming content containing basic functions (in linear or non-linear format) acquired or renewed on exclusive basis after the Effective Date by StarHub TV constitute Qualified Content. StarHub TV will bear all costs in making Qualified Content available for SingTel Mio TV’s subscribers, unless it can negotiate a mutually agreeable

agreement with SingTel Mio TV with regards to Costs to make the Qualified Content available to SingTel Mio TV's subscribers.

- Qualified Content does not apply to subscription television content delivered over StarHub TV's internet and mobile platforms. However, both StarHub TV and SingTel Mio TV must make information on such Qualified Content available on their respective websites and viewing guides for subscribers' knowledge.
- When acquiring Qualified Content, StarHub TV needs to also purchase broadcasting rights for SingTel Mio TV's IPTV platform and ensure that the intellectual property rights of the channel or content providers of the Qualified Content are safeguarded. SingTel Mio TV on the other hand, will have to ensure an adequate content protection and security system to prevent piracy and physical and digital theft from the beginning where it receives Qualified Content from StarHub TV to transmission to reception by subscribers through its set-top boxes.
- SingTel Mio TV's subscribers subscribing to Qualified Content from StarHub TV must be able to receive the content on their set-top boxes within 5 working days after requesting. These subscribers will become direct subscribers of StarHub TV and they will have to notify StarHub TV directly if they wish to terminate the Qualified Content.
- Qualified Content offered by StarHub TV to SingTel Mio TV's subscribers must be offered unmodified, unedited and at same prices (with the same price discounts and promotions), quality, terms and conditions. Any feedback or complaint received from the subscribers must be treated in a non-discriminatory manner.



## 5.2. Industry development after the Cross-Carriage Measure

**Industry development in 2010.** Since the Cross-Carriage Measure was announced, the third largest telecommunication company MobileOne (M1) also expressed its interest in providing subscription television services, citing that the Measure was a ‘positive development’ that gave consumers a ‘greater variety of content at ‘competitive prices’. However, MobileOne would still require time to ‘get acquainted’ with the business while the other two providers would have already accumulated several years of experience (Chai, 2010b). Analysts also stated that the Measure will ensure that relevant service providers will ‘bid for content deals rationally’ as there was no longer the case of ‘winner-takes-all’. It was also commented that the measure may effectively ‘kill off the impetus’ for acquiring exclusive content as neither StarHub TV nor SingTel Mio TV had the ‘incentive to overpay’ (Chai, 2010b; Chua, 2010a; Ng, 2010).

The measure also implied that SingTel Mio TV was able to bid for any content that was once exclusive to StarHub TV only when the existing contracts expire (Chai, 2010b). Ng (2010) also echoed the notion, noting that StarHub TV would be at a disadvantage when SingTel’s financial power enabled SingTel Mio TV to attract more key content to its platform. Such loss of key content could also implied the loss of attraction for StarHub’s quadruple play services, thus resulting in a loss in subscriber numbers and revenue for its quadruple play services (Ng, 2010). However, there were also disagreements that SingTel Mio TV would overtake StarHub TV in the provision of subscription television content as the latter’s cable TV system was most likely to remain the ‘preferred mode of transmission’ for subscription television content. Furthermore, the obligation of the Measure for StarHub TV to share its exclusive content may imply that SingTel Mio TV will no longer bid aggressively in order to secure its own content, thus indirectly lowering StarHub TV’s content acquisition costs (The Business Times, 2010a).

On the acquisition of content in 2010 following the implementation of the measure, StarHub TV and SingTel Mio TV attempted to conduct a joint bidding for the broadcasting rights of the 2010 FIFA World Cup Tournament. However, the broadcasting rights were offered to both providers on a non-exclusive basis less than six weeks before the broadcasts and were not subjected to the conditions of the Cross-Carriage Measure. The securing of broadcasting rights resulted in high subscription prices of S\$88 (USD\$70), rumored to be 4.5 times higher than StarHub's acquisition of the tournament in 2006, due to the asking price by the tournament itself (Chai, 2010c). However, the delayed securing of rights resulted in both providers unable to attract advertisers (such as sports brands Puma and Adidas) and create other promotional campaigns to defray their content acquisition costs (Chai, 2010c; Wang, 2010a).

There were also discussions that the implementation of the Measure may not have any significant impact at all. In particular, apart from StarHub TV and SingTel Mio TV, content providers play an important role in ensuring the success of the Measure in the reduction of content acquisition costs. Chai (2010d) especially commented more than three-quarters of subscription content in Singapore was obtained from overseas sources in US, Taiwan, Hong Kong and from various international sports events such as FIFA World Cup, who often attached 'premium value' to their content. The Measure was seen as a 'strong-arm tactic' in 'artificially suppress the value of the content' and therefore may result in outright rejections from content providers in providing their content to consumers in Singapore (Chai, 2010d). However, the Measure was postponed to take effect in 2011 after a lengthy deliberation and consideration for StarHub TV and SingTel Mio TV to become accustomed to the Measure (Chai, 2010g).

Apart from announcing the measure in 2010, the local relevant authorities IDA and MDA also ventured further into developing a universal subscription television box (Project NIMS) by

establishing an industry committee to explore and determine the appropriate technology standards, which can leverage on the country's new nationwide fibre-optic broadband infrastructure (Next Generation NBN) to offer new services and applications through the internet. Members of the committee included representatives from ESPN Star Sports, MobileOne (M1), SingTel and StarHub (Chai, 2010a). In particular, Tham (2010) also stated that StarHub, SingTel and three other firms (M1, M2B World and 1-Net Singapore) had applied for licenses with the relevant authorities to provide internet TV over the Next Generation NBN. M2b World was Singapore's home-grown IPTV pioneer while 1-Net Singapore belonged to MediaCorp.

Competition in the industry was further intensified in late 2010, months after the implementation of the Cross-Carriage Measure as MobileOne (M1) also entered the industry, offering a range of low-cost educational programming, music shows and movies through its 1box service on a pay-per-view basis (Chai, 2010f). Such diversification into the subscription television business allowed M1 to be at the same level with its stronger competitors in offering quadruple play services, competing head-to-head in mobile, internet and television services. Despite positioned as a 'value-added service' for its customers who were already using its other services, M1 was not included in the Cross-Carriage Measure due to its late launch in 2010. Tham (2010) also stated that M1 still faced 'strategy challenges' and would need to 'improve its competitive positioning' or fear of being 'marginalized'. Chai (2010f) further commented that M1 lacked financial power as compared to StarHub TV and SingTel Mio TV in acquiring content and may have to adopt a niche approach in selling its 1box service. Some niche features included using the set-top box to surf the internet, as well as playback photographs and family videos on the TV screen.

**Industry development in 2011.** More changes due to the implementation of the Cross-Carriage Measure were observed in 2011. After losing exclusive broadcasting rights of the English Premier League matches to SingTel Mio TV, StarHub TV secured non-exclusive broadcasting rights for the Italian League matches (Serie A) till 2012, to which StarHub TV stated that it was ‘pleased to strengthen’ its line-up of sports content. To enhance its Serie A offering, StarHub TV also created enhanced content such as previews, highlights and magazine presentations featuring behind-the-scenes footages of players, football managers and fans (Chai, 2011a; The Straits Times, 2011). Apart from Serie A, StarHub TV also acquired non-exclusive broadcasting rights for the European Under-21 championship, which may have further signified the diminishing interest in acquiring broadcasting rights for sports events on the exclusive basis (Voon, 2011).

Another major change in the industry due to the Measure could be observed in StarHub renewing its contract with Fox International Channels (FIX) on a non-exclusive basis. Fox International Channels supplied StarHub TV with more than 30 channels, among which included Star World, Star Movies, Sky News, Channel [V] and the National Geographic channels (Hooi, 2011e; Ng, 2011). The channels are detailed in the following table.

**Table 5.2.** Channels offered by Fox International Channels (FIC) available on StarHub TV

BabyTV	FoxCrime	Star Chinese Channel
Channel [V]	FoxCrime HD	Star Chinese Movies
Channel [V] India	FX	Star Chinese Movies 2
Channel [V] Mainland China	FX HD	Star Chinese Movies 2 On-Demand
Channel [V] Taiwan	National Geographic Adventure	Star Chinese Movies HD
FOX	National Geographic Adventure HD	Star Chinese Movies Play
Fox Family Movies	National Geographic Channel	Star Gold
Fox Family Movies HD	National Geographic Channel HD	Star Plus
Fox HD	National Geographic Music	Star World
Fox Movies Play	National Geographic Wild	Star World HD
Fox Movies Premium	National Geographic Wild HD	TVN
Fox Movies Premium HD	Sky News HD	TVN HD

The contract renewal on a non-exclusive basis signified an opportunity for SingTel Mio TV to examine and negotiate with FIC to offer their content to its own subscribers as such move would allow SingTel Mio TV to further raise its market share (Hooi, 2011e; Ng, 2011). Such opportunity is further enhanced by SingTel Mio TV expressing its decision to divert its focus from the aggressive acquisition of content to hiring experts to strengthen its customer service and marketing efforts targeted at Chinese, Malay and expatriate viewers. Other audience groups identified included the PMETs (professionals, managers, executives and technicians). Such change in SingTel Mio TV's focus in attempting to cater to a different audience group could be observed in its provision of Celestial Movies to its Chinese viewers.

**Industry development in 2012.** For year 2012, StarHub TV has acquired exclusive broadcasting rights for UEFA Euro 2012 football tournament from 8<sup>th</sup> June to 2<sup>nd</sup> July 2012 (Hooi, 2011c). In acquiring exclusive broadcasting rights, StarHub TV was also required by the Measure to acquire broadcasting rights for SingTel Mio TV. Subscription revenue would also go directly to StarHub, who would be offering the content to SingTel Mio TV's customers on SingTel Mio TV's platform but bearing StarHub's branding and commercials. Analysts however doubted the tournament to have 'huge impact' on SingTel Mio TV's subscriber base or 'aggressively increase' StarHub TV's subscriber base, as the UEFA tournament was 'not the most popular piece of content' and that there was an absence of bidding (Hooi, 2011f). Despite Hooi (2011c) predicting that SingTel Mio TV may be reimbursed any carrying cost incurred, Lim (2011) stated that StarHub TV had enough time to defray any extra incurred costs through 'tie-ins with sponsors'. An examination of StarHub TV's website shows that identical content are offered to both StarHub TV and SingTel Mio TV's subscribers at similar prices, consisting of 31 'live' matches in four dedicated HD channels, as well as on TV, mobile and online platforms.

In adherence to MDA’s requirements in implementation of the Measure, it was confirmed that StarHub TV has purchased the broadcasting rights for the UEFA Euro for both its own HFC and SingTel Mio’s IPTV platform. StarHub TV also published relevant information, terms and conditions for SingTel Mio’s customers who wish to subscribe, such subscription methods, the number of working days to process the requests and etc. On the other hand, SingTel Mio only included such relevant information in its FAQ page on its website (please refer to Appendix VII). Despite the similar prices in subscribing to the content, it is apparent that customers on SingTel Mio’s platform incur an additional activation charge in order to receive the content. Furthermore, they are only able to watch the two HD channels but not the SD channels. It is not revealed whether StarHub is bearing all costs or has established mutually agreeable terms with SingTel to share the incurred costs in making the content available to customers on SingTel Mio’s platform. (Hooi, 2012a). Hooi (2012a) also commented that SingTel Mio TV could have accepted compensation in the form of a ‘token sum’, arrived at as a ‘commercial arrangement between the two operators’. The table below summarizes the UEFA Euro 2012 offering:

**Table 5.3.** UEFA Euro 2012 Pay-per-view pack

	<b>StarHub TV’s platform</b>	<b>SingTel Mio TV’s platform</b>
<b>Number of Matches</b>	All 31 ‘live’ matches	
<b>Channels of Broadcast</b>	2 HD channels and 2 SD channels (inclusive of complete coverage with ‘LIVE’ and simulcast matches, opening and closing ceremonies, pre and post match analyses, tournament highlights, primetime repeats and pre-match programmes)	2 HD channels
<b>Pricing</b>	Early Bird Price: S\$58.85 Usual Price (after 9 May 2012): S\$69.55	Early Bird Price: S\$58.85 Usual Price (after 9 May 2012): S\$69.55 Activation charge: S\$10.70

*\* Information as correct on April 2012 from both providers*

However, Hooi (2011d) commented that StarHub TV’s exclusive carriage of the UEFA tournament was insufficient to assess future developments of the industry as it was only a one-off event as compared to multi-year deals with other content providers. Hooi (2011d) commented

that SingTel Mio TV would still need a unique selling point to attract and retain subscribers when its exclusive carriage of the English Premier League matches and ESPN Star Sports ends in 2013. On the other hand, StarHub TV ventured into producing and owning its own content in order to differentiate itself as a subscription television service provider through the production of reality TV channel named 'The Academy Fantasia Channel', sponsored by personal care and consumer goods company Unilever through the brand Sunsilk. The channel will feature a reality TV show where 14 contestants compete against one another to win a two-year singing contract with record label Ocean Butterflies Music; daily recap programmes and weekly concerts by the contestants. Actual production work is outsourced to local production companies while StarHub TV is responsible in seeking out sponsors, getting government approvals and playing the role of liaison between relevant parties (The Edge, 2012a). With the implementation of the Measure, The Edge (2012a) also predicts more experimentation in the industry in the form of more 'content production, mergers and acquisitions, or new digital offerings'.

SingTel Mio TV was also seen incurring harsh criticisms and receiving many complaints from subscribers who were watching 'live' broadcasts of the Premier League matches on May 13<sup>th</sup>, 2012, where the broadcasts were interrupted several times, resulting in 'frozen' and blackened out screens. The interruptions also evoked an inquiry and possibility of a penalty from Media Development Authority for being unable to transmit smooth broadcasts of the matches. Viewers further suggested that the broadcasting rights should be returned to StarHub TV instead, who did not incur such problems in the past.

Apart from MobileOne's entry into the subscription television industry, Kylin TV is also set to enter the industry with the largest collection of television channels (over 50 'live' channels) from Mainland China, targeting at the Chinese community in Singapore, who make up more than

50 percent of the entire population. Kylin TV is a cloud-based IPTV subscription service offering high-definition, ‘live’ and on-demand content originated from Mainland China to overseas Chinese communities in other countries in North America, Europe and Asia. The IPTV service can be received on multiple platforms such as through Kylin TV’s set-top box, the personal computer, iPad and Panasonic’s Smart TV. The table below shows a comparison of offerings for the Chinese population by Kylin TV, StarHub TV and SingTel Mio TV.

**Table 5.4.** Comparison of offerings for the Chinese community (Kylin TV vs. incumbents)

		<b>KyLinTV</b>	<b>StarHub TV</b>	<b>Singtel Mio TV</b>
<b>Content &amp; Quality</b>	<b>Number of Channels</b>	Over 50 live Chinese channels	Up to 27 channels	Up to 12 channels
	<b>Chinese HD Channels</b>	Yes	No	No
	<b>Chinese Kids VOD Service Availability</b>	Yes	No	No
	<b>Free Access to Popular Internet Videos</b>	Yes	No	No
<b>Pricing</b>	<b>Lowest-priced Chinese TV Base Package</b>	S\$14.99/month	S\$27.82/month (with selection of 3 basic groups)	Jingxuan Pack: S\$21.90/month
	<b>Most Popular Chinese TV Package, “Great Wall TV Pack”</b>	S\$19.99/ month (30+ channels)	No	No
	<b>Prepay Option With Savings</b>	One month free for 12-month prepaid plan	No	No
	<b>Free Channels</b>	8 channels	No	No
<b>Device Option</b>	<b>Set-top Box, PC</b>	Both	Only set-top box	Only set-top box
<b>Set-top Box Feature</b>	<b>Live Channel</b>	Yes	Yes	Yes
	<b>48 Hour Automatic DVR (Record-less DVR)</b>	Yes, no additional cost	Only with DVR (additional charge applied)	
	<b>Channel Selection &amp; Channel Playback</b>	Yes, no additional cost	Only with DVR (additional charge applied)	
	<b>Fast Forward, Rewind &amp; Pause</b>	Yes, no additional cost	Only with DVR (additional charge applied)	

*\*Information extracted from www.kylin.com and compiled for this thesis*

It is noted that Singapore will become the regional hub for Kylin TV to further develop its operations in Asia. A comparison between Kylin TV, StarHub TV and SingTel Mio TV sees Kylin TV’s offerings priced lower as compared to the incumbents. There is also a greater variety



of Chinese content, inclusive of HD channels and VOD content. Kylin TV also offered features such as playback and recording of content free whereas such features are only available at additional charges for the incumbents.

MDA also announced that since the implementation of the measure, retailers have introduced over 35 channels in the market and more than 16 channels are available on more than one platform since the measure was introduced. Previously only seven channels are available across multiple platforms. However, an actual cross-examination of offerings by both StarHub TV and SingTel Mio TV shown that only 11 channels are available on both platforms. The table below shows a detailed description of the respective channels. It is apparent that over 160 channels are still currently available only on StarHub TV, including the 36 channels offered by Fox International Channels (FIC) on non-exclusive terms.

**Table 5.5.** Channels on both StarHub TV and SingTel Mio TV

Australia Network	Australia's international television channel offering a rich and diverse range of general programming including dramas, lifestyle, news, documentaries and kids' entertainment.
Bloomberg Television	A business and financial news network providing coverage of the people, companies and events that move the markets and shape the business day ahead.
CCTV News	An English-language news channel for international audience.
CCTV-4	An international Chinese channel featuring news, information and dramas.
Celestial Movies	A 24-hour channel that offers exclusive first-run blockbusters from Hong Kong, Japan and Korea.
Colors	A channel that offers the latest Bollywood films only 1 month after its theatrical release. As one of the Top 3 TV stations in India, COLORS entertains with leading-edge Hindi variety shows and dramas.
ITV Granada	A channel that offers the best in British television, such as UK's leading entertainment, award-winning drama, contemporary comedy, provocative reality shows and the hottest talk shows.
KBS World	A channel that offers select Korean drama series telecasted only 4 weeks after their debut in Korea.
One HD	A channel that offers the best and latest exclusive Korean dramas, with selected titles premiering just weeks after their debut broadcasts in Korea; hippest K-pop variety and music shows, young and trendy idol dramas to highly popular soap operas. Programmes are aired with Chinese subtitling and selected shows with Mandarin dubbing.
Russia Today	A channel that covers world affairs and stories with a fresh view and a window to Eastern Europe.
Ten Cricket	A cricket channel which covers international cricket in Sri Lanka, South Africa, Pakistan, West Indies and Zimbabwe.

*\*Information extracted from StarHub TV and SingTel Mio TV and compiled for this thesis*

MDA also concluded a one-year 3D TV trial testing the transmission of 3D content across multiple platforms, including cable and IPTV platforms, to which the success of the trial implies that StarHub TV and SingTel Mio TV can offer more 3D content to their subscribers and leverage on them to differentiate themselves.

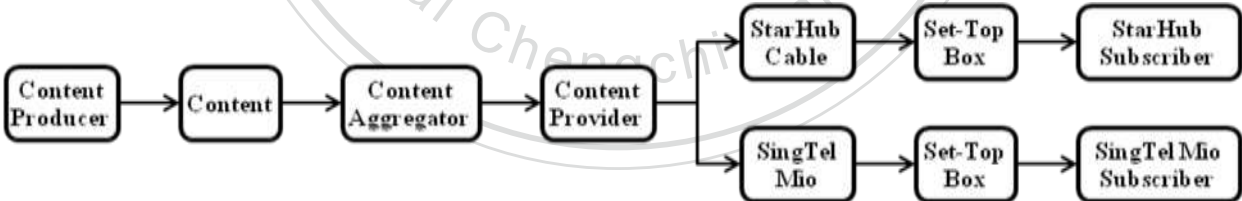
Latest developments in the television industry observed in June 2012 saw that Project NIMS (Next Generation Interactive Multimedia Applications and Services) was shelved by the MDA, citing that none of the proposals submitted by the various industry stakeholders could ‘achieve the desired outcomes of minimizing inconvenience to consumers accessing multimedia content, applications and services from multiple providers’ (The Edge, 2012b). Challenges such as commercial and technical issues in billing across operators, interoperability and common technical standards were also raised. Analysts also commented that the small market size of Singapore would not be commercially viable to develop a common set-top box when two subscription television operators (StarHub TV and Mio TV) already dominate the market with their own services and set-top boxes (Tham, 2012). It was also commented that these delays would eventually benefit the incumbent players and create negatively impacts on potential and new entrants, especially MobileOne, who had wished to make use of the new technology to offer its video services to the greater masses.

The government also announced its decision to complete the switchover from analog transmission to digital transmission by the end of next year. Minister for Information, Communications and the Arts Yaacob Ibrahim said that digital television ‘not only offers better image and sound quality, but also frees up scarce spectrum for other services, such as wireless broadband’. Hooi (2012b) also commented that such digital development would bring along stiffer competition for the respective broadcasters. The digital transition will also benefit

companies who are involved in the storing and converting of content into various formats for the different ‘screens’. The digital transmission may also benefit the infocomm market as non-subscribers (to subscription television) will require digital receivers operating on the DVB-T2 standard in order to view the content. Hooi (2012b) reports that currently about 40 percent of households in Singapore are not subscribed to subscription television.

**5.3. Impacts of the Measure on industry stakeholders**

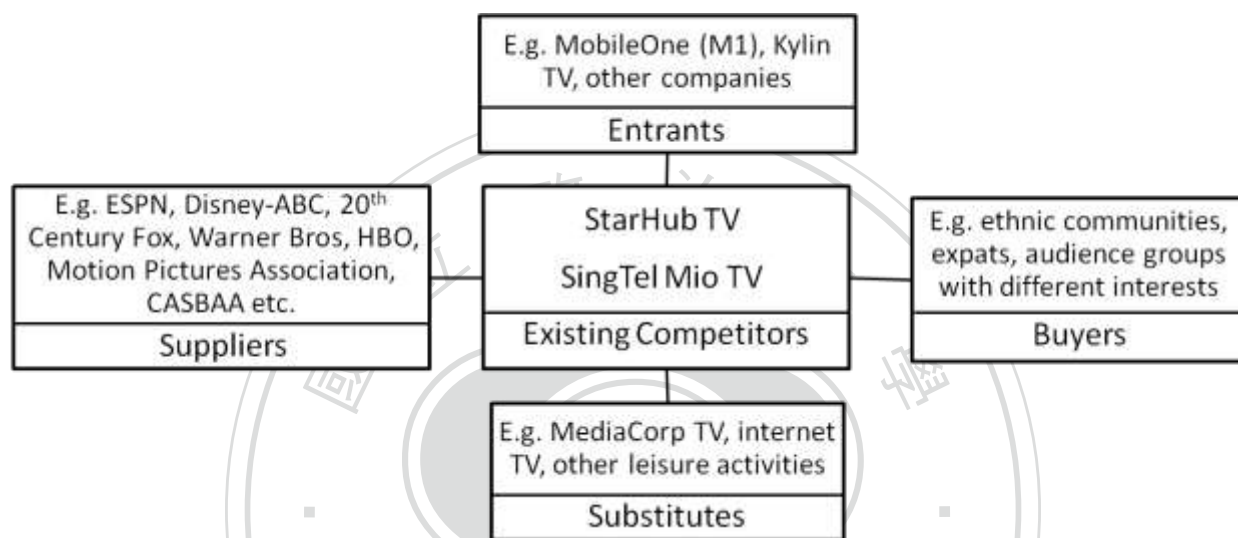
With reference to industry developments after the implementation of the Measure, this section will attempt to examine industry dynamics in Singapore’s subscription television industry based on the Five-Force Model before and after the implementation of the Cross-Carriage Measure. The earlier chapters demonstrates that Singapore’s subscription television industry begins with the acquisition of content by subscription television service providers StarHub TV, SingTel Mio and their content aggregators, converted into the appropriate signals and transmitted to the respective set-top boxes for decoding and reception by their subscribers, as shown below:



*Figure 5.1. Subscriber relationship before implementation of Cross-Carriage*

It is evident that there is a clear distinction in relationship between the service providers and their subscribers. Customers who subscribe to StarHub TV’s content can only receive the content through StarHub TV’s set-top boxes and vice versa. This also meant that customers who wish to watch content from both service providers will have to install or rent both service

providers' set-top boxes, resulting in more installation or rental costs and increased inconvenience of having multiple set-top boxes. However, with the implementation of the Cross-Carriage Measure, the current situation is expected to change. Using Porter's five force model in identifying stakeholders in Singapore's subscription television industry, the earlier chapters also demonstrates that the industry consist of the following stakeholders:



*Figure 5.2. Stakeholders in Singapore's subscription television industry*

Apart from existing competitors StarHub TV and SingTel Mio TV, entrants in the industry consist of the country's third largest telecommunication company, MobileOne (M1) and other interested parties such as Kylin TV; suppliers comprise of content providers and aggregators such as ESPN, HBO, Fox International Channels, Disney-ABC, as well as trade representation by CASBAA and Motion Pictures Association (MPA). Buyers mainly consist of the country's population, who can be further categorized by their respective ethnicities and differing interests in television programming such as sports, movies, entertainment, education and lifestyle etc. Substitutes on the other hand, can comprise of internet TV provided by other providers and other forms of leisure and entertainment activities. However, the industry also consists of a business-to-business component where StarHub TV and SingTel Mio TV become

buyers of content while content providers and aggregators assume the roles of suppliers, entrants, existing competitors and substitutes. The table below summarizes the influences of stakeholders before and after the Measure. The following paragraphs shall discuss the implications of the Cross-Carriage Measure for the respective stakeholders.

**Threat of entry before the Measure.** Entry into Singapore's subscription television industry requires adequate financial abilities from the potential entrants. Regulatory authorities such as MDA and IDA places heavy restrictions and conditions on new entrants seeking to enter the industry. For example, no one person can hold more than 12 percent of shares in a media company and there are financial requirements which the companies have to achieve before establishing themselves fully in the industry, such as the performance bond of SGD\$200,000 and the annual license fee of SGD\$50,000 for the nationwide subscription television license. Also, advertising revenue is capped at maximum of 25 percent of total revenue, posing a restriction on advertising space and time that the new entrant can offer in order to break even and earn significant profit.

There may also be a significant difficulty in infrastructure as the broadcasting spectrum in Singapore has mostly been assigned, leaving little free spectrum for new entrants. The small size of the market may also pose a challenge to new entrants, who will be competing against the more established operators and FTA television operator MediaCorp, who are already serving more than half of the total households in Singapore. Furthermore, in order to attract consumers, precedents in the industry demonstrated that acquiring exclusive content may be a key strategy for new entrants to strengthen and differentiate themselves. However, most of the popular content had already been 'locked' into exclusive contracts with StarHub TV, thus resulting in a higher level of challenge for new entrants.

**Threat of entry after the Measure.** The implementation of the Measure may benefit new entrants leveraging on the hybrid fibre-coaxial or internet protocol platform to offer their content, as they may be a potential RQL to offer StarHub TV's exclusive content to its own subscribers. Furthermore, if non-exclusive deals become the norm due to the infeasibility of acquiring exclusive content, new entrants may also stand to gain as they will be able to secure their own deals with much sought-after content providers who were previously only available on StarHub TV. For example, the entry of MobileOne's 1Box service and Kylin TV may steal some subscribers away and indirectly cause the incumbents' ARPU to decrease with the offerings of educational and Chinese content respectively. However, it is also important to note that while the Measure allows the new entrant to grow its subscriber base through offering StarHub TV's exclusive content, the tactic is considerably a short-term outcome unless it is able to offer more innovative and attractive offerings that allows it to retain its subscribers.

**Intensity of rivalry among existing competitors before the Measure.** Prior to the entrance of SingTel Mio TV, StarHub TV had enjoyed several years of monopoly in the subscription television industry. The examination of developments, competition and strategies in the industry has revealed that competition has intensified since the entrance of SingTel Mio TV, as evident from its aggressive and strategic acquisition of key iconic content (e.g. ESPN, Premier League matches, US dramas and etc), as well as differentiation with VOD and 3D content. However, due to StarHub TV's range of other exclusive content offerings, it remained the leading player in the industry. Chai (2010b) also commented that content providers continued to 'lean towards' StarHub TV as it had a larger subscriber base and therefore can 'afford to pay more' for their programmes. Apart from StarHub TV and SingTel Mio TV having to compete

with each other, both providers also have to face competition from FTA television service MediaCorp TV.

**Intensity of rivalry among existing competitors after the Measure.** The Measure may affect the securing of exclusive broadcasting rights for content, which in turn will affect the intensity of rivalry between StarHub TV and SingTel Mio TV. Several scenarios may occur. Firstly, as appointed by the MDA as a Supplying Qualified Licensee (SQL), StarHub TV will have to purchase broadcasting rights for SingTel Mio TV's IPTV platform if the company wishes to acquire content on the exclusive basis. However, this may also imply a decline in competition between both providers as the content will still have to be made available to SingTel Mio TV anyway, despite StarHub TV incurring higher content acquisition costs in the situation where it will have to bear the extra costs itself if it is unable to determine mutually agreeable terms with SingTel Mio TV to share the extra costs in making the content available to SingTel Mio TV's subscribers.

Secondly, the implementation of the Measure may also imply that StarHub TV may be less keen to renew their existing exclusive content on an exclusive basis when the contracts expire, unless StarHub TV plans to leverage on the content to differentiate itself from its competitors and increase its revenue through offering the same exclusive content to SingTel Mio TV's subscribers. Such situation therefore implies an increased availability of a wider range of content which SingTel Mio TV can acquire and offer to its subscribers and a possible decline in competition between both providers. Thirdly, as a result of the second scenario where there are lesser incentives for exclusive content, content acquisition costs may be lowered as both providers no longer has to compete aggressively against each other and offer high bids in acquiring content exclusively.

The implementation of the Measure may also create other significant opportunities for StarHub TV and disadvantages for SingTel Mio TV. Despite being appointed a RQL by the regulatory authority, SingTel's subscribers form a direct relationship with StarHub TV when requesting to receive exclusive content offered by StarHub TV, thus leading to a significant increase in StarHub TV's subscriber base for the specific exclusive content. Such scenario also implied that StarHub TV will allow potential advertisers to gain access to a larger consumer base across platforms, increasing the possibilities of attracting more advertisers and generating higher advertising revenue. However, any revenue through subscription and access to such content on SingTel Mio TV's platform is earned by StarHub TV. SingTel Mio TV may not stand to gain much incentive despite making broadcasting spectrum on its platform available for StarHub TV's exclusive content, unless it is approached by StarHub TV to negotiate commercial terms to share any incurred costs and the relevant profits.

**Bargaining power of suppliers before the Measure.** Suppliers in Singapore's subscription television industry refer to content providers and aggregators such as ESPN, HBO, Fox International Channels, 20<sup>th</sup> Century Fox, Sony Pictures, Universal Pictures and etc. These suppliers account for majority of existing television content in subscription television services all over the world and have established their reputations and brands over the years, thus levitating their bargaining power against platform and subscription television service providers. Such trend is similar in Singapore, where more than three-quarters of the content is also acquired from these suppliers and where consumers' demands for such media content are high. Such trends contribute to the increase in bargaining power of the suppliers. The small size of Singapore's market as compared to other countries may also cause these suppliers' bargaining power to be



higher, as these providers could bypass Singapore if not for StarHub TV and SingTel Mio TV offering higher prices in order to offer these suppliers' content to their subscribers.

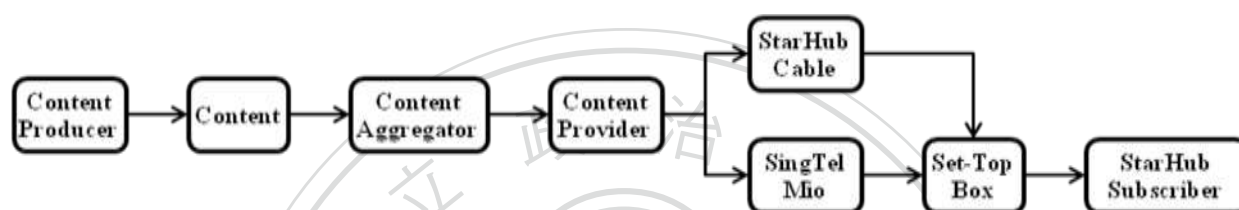
**Bargaining power of suppliers after the Measure.** Several scenarios may occur. Firstly, as the Measure requires StarHub TV to purchase broadcasting rights for both its own and SingTel Mio TV's IPTV platform if it wishes to offer the content exclusively, content suppliers' bargaining power may decline significantly as there may be no competition between StarHub TV and SingTel Mio TV in bidding for the content. On the other hand, bargaining power of suppliers may also be affected if both providers are looking into offering the content on non-exclusive basis, as this may imply that providers may offer lower prices to acquire the content, leaving little room for suppliers to negotiate better prices for the content. Another scenario may also occur where content suppliers hold the ultimate bargaining power if they refuse to back down on their asking prices for StarHub TV and SingTel Mio TV to offer to their subscribers, leading them to choose to bypass Singapore's market instead. Bargaining power of suppliers may also be affected as StarHub TV and SingTel Mio TV may start to seek alternative ways to produce their own content, reduce their dependence on big-time content providers or seek new suppliers who have yet to enter Singapore's market.

**Bargaining power of buyers before the Measure.** Buyers in Singapore's subscription television industry can be categorized into three kinds: 1) end-consumer subscribing to content provided by StarHub TV or SingTel Mio TV; 2) StarHub TV or SingTel Mio TV acquiring content from content providers and aggregators and 3) advertisers purchasing advertising time with StarHub TV or SingTel Mio TV. Bargaining power of consumers can be observed in several scenarios. Firstly, the growing but diverse population in Singapore may indicate an increase in demand for more variety of content, thus increasing bargaining power of consumers.

Secondly, as consumers are penalized (between S\$50-S\$70) in early termination of their subscription television services, bargaining power will be reduced significantly due to high switching costs from one provider to another as consumers might be unwilling to bear the early termination charges imposed upon them. In another scenario, if subscription costs for subscription television programming are too high, consumers may be reluctant to subscribe to the content. Such incidents were observed in the many complaints against high subscription costs for sports content over the years. Lastly, if the content does not generate interest and desire for the consumer, demand and subscription rate for the content will be lower. The last two scenarios may significantly increase consumers' bargaining power in the industry.

Between the two providers in acquiring content, StarHub TV may have higher bargaining power with content providers and aggregators as it has a more established reputation and experience as a subscription television service and has a larger group of subscribers as compared to SingTel Mio TV. On the other hand, SingTel Mio TV may have higher bargaining power due to its financial abilities in securing exclusive broadcasting rights. This scenario is particularly observed in SingTel Mio TV outdoing StarHub TV by offering higher bids in acquiring ESPN's suite of programming and broadcasting rights for Premier League matches. Last but not least, the bargaining power of StarHub TV and SingTel Mio TV may be minimal in scenarios where content providers or aggregators have significant branding and reputation for its content, therefore limiting StarHub TV and SingTel Mio TV's bargaining power in acquiring content at lower prices. Also, between StarHub TV and SingTel Mio TV, advertisers are more likely to advertise with StarHub TV due to its larger subscriber base as compared to SingTel Mio TV. Vice versa, if SingTel Mio TV wishes to attract advertisers, its bargaining power may be reduced significantly due to its smaller subscriber base.

**Bargaining power of buyers after the Measure.** From the end-consumer perspective, relationships between subscribers and service providers will be split into two explicit forms: *direct relationship* and *platform relationship*. With the implementation of the Measure, SingTel Mio's subscribers subscribing to StarHub TV's exclusive content will retain a platform relationship with SingTel Mio TV while forming a new direct relationship with StarHub TV and becoming StarHub TV's subscribers.



*Figure 5.3. Change in subscriber relationship after implementation of Cross-Carriage*

Such move may allow StarHub TV to increase its subscriber base, which in turn increases its bargaining power in acquiring content. Consumer wise, StarHub TV's subscribers who wish to watch SingTel Mio's content will still have to install and rent SingTel Mio's set-top boxes. Thus in the near future where StarHub acquires or renew its content deals on an exclusive basis, the Measure may benefit SingTel Mio TV's subscribers to a larger extent as compared to StarHub TV's subscribers, as they can gain access to a wider variety of programming without incurring the inconvenience of having to install and pay for additional set-top boxes. The implementation of the Measure therefore may also increase bargaining power of SingTel Mio TV's subscribers in demanding for more variety of content while showing no significant impact for StarHub TV's subscribers. The bargaining power of buyers may also increase due to entry of new subscription service providers (e.g. MobileOne's 1Box service and Kylin TV), to which StarHub TV and SingTel Mio TV may have to work hard and offer more attractive content in order to retain their subscribers.

**Threat of substitutes before the Measure.** Apart from StarHub TV and SingTel Mio TV, more than 80 percent of the households in Singapore can access FTA television which offers a range of content targeted at the specific ethnic and arts audiences. As compared to subscription television, FTA television is partially funded with an annual radio and television license fee of about SGD\$110 whereas subscription television service is billed on a monthly basis dependent on the providers' bidding prices for the content, therefore providing as a cheaper alternative to subscription television content. M1's and Kylin TV's entry into the industry may also prove to be substitutes for StarHub TV and SingTel Mio TV in the near future if it is able to develop its unique selling points and attract consumers. Even if the loss of subscriber numbers are not greatly affected, ARPU per user for StarHub TV and SingTel Mio TV may face slight decreases due to the substitutes available.

The high level of adoption of technology among the population also enables consumers to easily seek, download and watch other alternative media content on video-sharing websites YouTube and Baidu.com, or even deploy virtual private networks (VPN) to subscriber to US-based internet TV services Netflix and Hulu.com. Some may even use services that allow viewers to access cable TV content in other countries through an internet-connected computer (Tham & Chin, 2010). Shameen (2011) also commented that video streaming from the internet and devices such as Apple TV and Google TV were changing consumers' viewing habits for television content.

**Threat of substitutes after the Measure.** Firstly, the implementation of the Measure may facilitate the increase in subscription for SingTel Mio TV and reducing the likelihood of its substitute products or services as there is increased convenience in accessing and subscribing content without having to occur significant switching costs or install additional set-top boxes

from StarHub TV. Secondly, as the implementation of the Measure meant that subscription prices for content may be lowered due to the lack of incentives in acquiring exclusive content, there is a likelihood that the desire for substitute products or services may be lower as there is a higher chance that subscribers on both platforms (cable and IPTV) can access and watch the content on their respective platform. However, it is still important to note that unless subscription prices for subscription television content may be lowered, consumers may increasingly seek substitute products or services from other sources such as the internet, MobileOne's 1Box service, MediaCorp's OTT interactive service or Kylin TV to access a greater variety of content despite the implementation of the Measure.

**Complementors in Singapore's subscription television industry before and after the Measure.** Complementors in the industry can be exemplified in the practice of offering set-top boxes with the subscription to television content and the bundling of other services (such as mobile, internet and fixed line) with subscription television services. Complementors can also be observed in the interdependence between content suppliers and channel service providers, as well as between channel providers and platform operators. Content suppliers and channel providers depend on platform operators such as StarHub TV and SingTel Mio TV. Vice versa, platform providers depend on channel and content providers to increase their subscriber numbers and revenue for their subscription television services, to which subscribers are also essential to attract advertisers and generate advertising revenue.

Such complementors aim to offer increased convenience and cost-savings for consumers, which hopefully, in turn may encourage more spending on subscription television content. The practice of offering channel bundles at 'value-for-money' prices also exemplified such situation

where consumers gain access to more variety of content and services through channel bundles instead of subscribing to them at individual prices which are often more expensive.

The implementation of the Measure may bring extreme influences for both StarHub TV and SingTel Mio TV in using complementors. From one perspective, there may be no obvious change in the use of complementors as they continue to serve the purposes of enticing consumers. From another perspective, with the decline in exclusive content offerings due to the lack of incentives for both providers to offer exclusive content, both providers may have to depend more on complementors to continue to attract and retain subscribers for its quadruple play services. The table below summarizes the influences of stakeholders before and after the Measure.

**Table 5.6.** Influences by stakeholders in the subscription television industry in general

	<b>Before the Measure</b>	<b>After the Measure</b>
<b>Threat of new entrants</b>	Low	Low to Moderate
<ul style="list-style-type: none"> <li>- Entry into Singapore’s subscription television industry requires high financial commitment from the new entrants</li> <li>- Singapore’s market is small and current providers already account for more than 75 percent of market share</li> <li>- May not be feasible for new entrants to venture into the industry unless it is able to differentiate itself strongly</li> <li>- New entrants may attract subscribers away from current providers and reduce their ARPU</li> </ul>		
<b>Intensity of rivalry among existing competitors</b>	High	Moderate
<ul style="list-style-type: none"> <li>- Intensity of rivalry may be reduced as providers no longer have to bid aggressively for content unless StarHub TV has the intention of using it as part of its business strategy to emphasize its positioning in the industry</li> </ul>		
<b>Bargaining power of suppliers</b>	High	Moderate
<ul style="list-style-type: none"> <li>- Measure reduces incentives for both StarHub TV and SingTel Mio TV to bid aggressively to acquire exclusive content</li> <li>- Bargaining power of existing suppliers may decrease with the entry of new suppliers and service providers</li> </ul>		
<b>Bargaining power of buyers</b>	Moderate	High
<ul style="list-style-type: none"> <li>- Bargaining power of consumers (buyers) may be significantly increased as they stand to benefit in the form of more content offerings from other operators and at more affordable prices</li> <li>- StarHub TV and SingTel Mio TV (buyers) also stand to benefit from being able to acquire more non-exclusive content from content and channel providers at more affordable prices</li> </ul>		
<b>Threat of substitutes</b>	Moderate	Moderate to High
<ul style="list-style-type: none"> <li>- Adoption of new technology, substitute services and applications are expected to increase</li> <li>- High subscription costs to content may imply reduction in subscription and increase in take up of substitute services</li> </ul>		
<b>Use of complementors</b>	High	High
<ul style="list-style-type: none"> <li>- Use of complementors in the industry is common</li> <li>- Implementation of the Measure does not seem to have any obvious negative impacts unless both providers no longer see incentives in offering such quadruple play services</li> </ul>		

#### **5.4. Summary**

The above sections have attempted to examine the implementation of the Measure and discuss its implications through the use of Porter's Five Force model. With the implementation of the Measure, StarHub TV is obliged to offer its exclusive content to SingTel Mio TV's subscribers regardless whether the move is part of StarHub TV's business strategy or intention. Likewise, SingTel Mio TV is compelled to make space available on its platform for StarHub TV's exclusive content, despite the possibilities that such move will not benefit SingTel Mio TV in growing its subscriber base or strengthening its unique selling points in the industry.

Since the implementation of the Measure, StarHub TV and SingTel Mio TV attempted to conduct a joint bidding for the broadcasting rights of the World Cup tournament but eventually resulted in the organizer awarding individual non-exclusive contracts to both providers, demonstrating the preferences for non-exclusive deals rather than joint biddings among content channel providers. StarHub TV has also renewed its contract with Fox International Channels on a non-exclusive basis, a first time since its entry as a content provider in Singapore's subscription television industry, which also meant that more exclusive content may be 'freed up' and made available for SingTel Mio TV to acquire. Also, for the first time since the Measure's implementation, StarHub TV acquired exclusive broadcasting rights for the UEFA Euro 2012 matches, to which it is obliged to make the content available for SingTel Mio TV's subscribers.

Such turnout of events demonstrated that the Measure can result in different endings and may be dependent on the decisions StarHub TV makes in regards to the content it acquires in the future. From one perspective, the Measure will contribute to an increase of non-exclusive deals and lower subscription prices for consumers for both providers, as there is no longer incentive for StarHub TV or SingTel Mio TV to bid aggressively for content. From another perspective,

StarHub TV may turn out to be the biggest winner as it can reach out to a larger subscriber base and generate more revenue through SingTel Mio TV's platform if it decides to offer exclusive content. Such move may help generate interest and create awareness about StarHub's range of other services among SingTel Mio TV's subscribers, which in turn may help to increase subscription rate for StarHub's other services. From the final perspective, SingTel Mio TV may stand to benefit to a greater extent as it is able to retain its subscribers (who are not sports fans) and offer other popular content to its subscribers (e.g. the ethnic and expatriate communities) as it is finally able to negotiate and bid for content held exclusively by StarHub TV. The influence of stakeholders in the industry before and after the implementation of the Measure for each provider is summarized below:

**Table 5.7.** Influences by stakeholders for both providers before and after the Measure

	StarHub TV		SingTel Mio TV	
	Before the Measure	After the Measure	Before the Measure	After the Measure
<b>Threat of new entrants</b>	Low	Moderate	Low	Moderate
	Government regulations and small market size discourages entry. However, with the Measure, new entrants now can gain access to more popular content to attract consumers.			
<b>Intensity of rivalry from competitors</b>	Moderate	High	High	Moderate
	It was the dominant player with highest number of subscribers. However, the Measure now allows its rivals to acquire its previously exclusive content to attract more subscribers.		Before the Measure, it has to compete with StarHub TV for subscribers. The Measure will allow it to reduce its aggressive bidding for content and focus better on meeting the needs of its subscribers.	
<b>Bargaining power of Suppliers</b>	High	Moderate	High	Moderate
	Before the Measure, suppliers can request high prices for their content due to the competition between the two providers. However, the Measure may reduce incentives for providers to bid aggressively for exclusive content			
<b>Bargaining power of Buyers</b>	Low	Moderate	Low	Moderate
	With the Measure, consumers now have more alternatives to gain access to subscription content. both providers have to work harder to attract consumers and retain their subscribers.			
<b>Threat of substitutes</b>	Moderate	Low	Moderate	Low
	Before the Measure, both providers face threats from substitutes such as internet TV and streaming video websites. However, the threat may be lower as subscription costs to StarHub TV or SingTel Mio TV may be lower with the decrease in exclusive content offerings.			



## Chapter Six: Conclusions

The number of studies examining competition and strategies in subscription television industries are increasing due to the rapid growth of the cable television and IPTV industries. However, there is an apparent lack of such studies examining Singapore's subscription television industry, presenting a timely opportunity to examine the competition and strategies applicable in the industry. The implementation of the Cross-Carriage Measure also further encourages an examination into the industry's development after the Measure and changes brought upon by the Measure. This thesis adopted the case study approach and examined documents from various sources, such as the country's newspapers, academic literature and trade reports.

In the examination of competition and strategies in media industries, the PEST and SWOT frameworks are used to examine environments surrounding the industry and identify the companies' competitive advantages and disadvantages. The Five-Force model is used to identify stakeholders in the industry and examine their levels of influence on the competition. Stakeholders include new entrants, existing competitors, suppliers, buyers and substitutes. The use of strategies in the industry was also discussed. In particular, strategies can be divided into corporate and business strategies, where specific tactics can be applied, such as mergers and acquisitions, diversifications and strategic alliances for corporate strategies; differentiation, cost leadership and focus for business strategies.

The *Government* is seen to be playing an important role in the Five-Force model, whose policies and measures are capable of influencing all five stakeholders, which in turn will affect competition in the industry. The power of the government (or the regulator) was of significant importance in the subscription television industries, where exclusive content was causing problems in protecting local broadcasters' interests and local programming, as well as escalating

prices, violation of antitrust laws and unfair competition. The regulators were urged to solve the abovementioned problems and several remedies were suggested, such as the direct regulation of resale prices; forced divestiture of premium programming rights or forced ‘rights splitting’; forced rights sharing or reselling for lump-sum fees; and non-exclusive rights selling for lump-sum fees.

Political, economic, social and technological trends in the general environments identified factors that were capable of influencing development and competition in the industry. Political factors revealed that local authorities are stringent in the regulation and monitoring of the industry, where service providers such as StarHub TV and SingTel Mio TV are obliged to must-carry FTA television programming and subjected to several terms and conditions in regards to its acquired content (where they are subjected to the respective censorship in the respective content code) and financial performance in the industry (where they are required to submit performance bonds and limit a cap in advertising revenue).

The country’s general economic environment show that consumers are enjoying a higher GDP per capita, a higher standard of living and quality of life in general, which may in turn prompt an increasing demand and desire for more variety of television programming that is different from FTA television. The social environments of the country also contribute to the increasing demand and desire for more variety of international television programming as the country’s population and number of households is growing and becoming more diverse due to the high influx of foreigners and expatriate communities (as observed in the increase of international programming in French, Russian, German, Japanese, Korean, Filipino, Indian and etc). The high literacy rate and internationalization of the population may also contribute to the increase in subscription for subscription television programming as they may demand for better

quality international programming. However, it is also worth noting that the delicate composition of the population (consisting of multi-racial, religious and ethnic groups) may also influence the level of censorship, diversity of content offering and other considerations in the provision of subscription television programming so as to cater equally to all groups, as well as preserve peaceful and harmonious co-existence amongst the various groups. Lastly, the high level of adoption of new technology and standards may imply a fast take-up on subscription television programming, which requires the use of a set-top box and navigation through the use of a remote control. The emphasis on enhancing the country's broadband infrastructure (such as the Next Generation NBN) also contributes to the developments in the industry where similar subscription television services or applications may be developed.

**Competition and strategies in the subscription television industry.** Developments, state of competition and strategies applied in the industry prior to the implementation of the Measure were examined. While Singapore Cable Vision set the foundation for the industry back in the 1990s, it was making losses and eventually was acquired by StarHub Telecommunications in 2002. The successor StarHub TV continued to become a monopoly player till 2007 when SingTel Telecommunications entered the industry with its Mio TV service on the IPTV platform. Majority of the market share is held by StarHub TV, due to its longer years of establishment and its exclusive range of linear channel offerings accumulated over the years. Such exclusive contracts with content providers and aggregators caused SingTel Mio TV to be at a slight disadvantage when it entered the industry, employing a slightly different set of strategies, as apparent in the initial focuses in VOD content where deals were made with several Hollywood studios to offer current drama serials at earlier timings as compared to the past and difficulties

faced in attempting to acquire other popular content (which most of it has already been ‘locked in’ by StarHub TV under exclusive multi-year contracts).

Such acquisitions and diversifications are similar to those between telecommunications companies and television industries in other countries such as the United States and in Taiwan, where the merged business units leverage on the integration of relevant infrastructure and adopt quadruple-play strategies to gain larger market share and maximize revenue potential. A closer examination of business strategies by both providers revealed that product differentiation and cost leadership are commonly used in combination, where content is categorized into different price packages catering to different target audiences.

However, such focus was not sufficient for SingTel Mio TV to grow its subscriber base quickly, prompting the company to bid aggressively for popular content that was previously held exclusive by StarHub TV, evident from the acquisition of ESPN Star Sports and broadcasting rights for major sports events. Such acquisitions allowed SingTel Mio TV to increase its subscriber base very quickly, but resulting in high subscription prices and increased inconvenience for consumers, having to manage multiple set-top boxes and remote controls. Such developments in the industry sparkled off the concerns in the acquisitions of exclusive content at prices higher than international benchmarks and further prompted the authorities to implement the Cross-Carriage Measure.

**Impacts of the Cross-Carriage Measure and ways that the subscription television industry adapted to the Measure.** The final ruling of the Measure eventually resulted in StarHub TV having to offer its exclusive content to subscribers on SingTel Mio TV’s platform at identical prices and quality offered to its own subscribers. After the implementation of the Measure, the providers began to acquire content more rationally. Instead of bidding for exclusive

rights for the 2010 FIFA World Cup tournament, StarHub TV and SingTel Mio TV conducted a joint-bidding, to which individual non-exclusive rights were awarded to each operator. Also for the first time, StarHub TV renewed its contract with Fox International Channels on the non-exclusive basis. This could signify the beginning of more such contracts between StarHub TV and content providers. The opportunities also increase for SingTel Mio TV to make deals with the same content providers, allowing it to attract more consumers and retain its subscribers for other genres of content. Such opportunities will also apply to other new entrants in the industry.

Further impacts of the Measure were also examined. Apart from benefiting consumers, the Measure seems to still benefit dominant player StarHub TV to a greater extent. Despite having to purchase broadcasting rights for the exclusive content on SingTel Mio TV's platform (with the assumption StarHub is bearing all costs and has no mutually agreeable terms with SingTel Mio to split relevant costs or revenue), StarHub TV can still gain access to a larger subscriber base through SingTel's IPTV platform while SingTel Mio TV may have to incur extra costs and inconvenience in making the content available on its platform to its own subscribers. The higher acquisition costs incurred by StarHub TV in purchasing the broadcasting rights may be equalized by the increase in subscriber numbers, defrayed through tie-ins with sponsors or through advertising revenue from advertisers.

The Measure may benefit SingTel Mio TV to a smaller extent. The obligation to share content in the Measure implies lesser incentives for StarHub TV to renew or acquire contacts on the exclusive basis, which also means that SingTel Mio TV will be able to negotiate for content (held exclusive by StarHub TV previously) that may be essential in helping to retain and grow its subscriber numbers in other content genres apart from sports.

The impacts of the Measure on the respective stakeholders were also examined. The threat of entry in the industry before the Measure was already low due to the small size of Singapore's market where more than 75 percent is already dominated by existing competitors, the financial commitments and strict regulations imposed, as well as the entry of other operators such as M1's 1Box service and Kylin TV. The threat of entry after the measure is slightly higher, as new operators will have greater access to premium programming previously held exclusive by StarHub TV or SingTel Mio TV. Intensity of rivalry may lower slightly between existing competitors StarHub TV and SingTel Mio due to the decline in incentive to continue acquiring content on the exclusive basis while the threat of substitutes is still high as both providers face indirect competition from FTA television MediaCorp, internet streaming video websites, internet TV and other substitute products, services or applications. The development of the new broadband infrastructure (Next Gen NBN) may also cause StarHub TV and SingTel Mio TV to face more competition from other new internet services or applications that can offer similar services.

Implementation of the Measure may allow the bargaining power of buyers to increase as StarHub TV and SingTel Mio TV no longer has to abide by content providers' high asking prices and can negotiate for more affordable prices, which in turn will translate to lower subscription prices that will benefit consumers to a greater extent. Such move also implies a slight decrease in suppliers' bargaining power as they may no longer face aggressive bidding from StarHub TV or SingTel Mio TV to acquire their content on an exclusive basis. However, the suppliers may be appeased slightly knowing that they can gain access to a larger audience group across platforms through the implementation of the Measure.

Thus considering the above impacts of the Measure in the industry from various perspectives, more competition can be expected between existing providers StarHub TV and SingTel Mio TV as well as with new entrants as content may no longer be bounded by exclusive contract agreements. The Measure may also lead to a further increase in market share and ARPU for both providers as current subscribers can subscribe to other genres of content at possible lower subscription prices while more consumers may see increased advantages in subscribing to subscription television services. However, with the influx of new entrants, current providers may have to devote more efforts into strategizing and differentiating themselves from one another if product differentiation through exclusive content offerings are no longer major strategies for the providers.

**Recommendations.** Ultimately, the Measure is set to benefit end consumers, who will be able to enjoy greater variety of content at more affordable prices without incurring the inconvenience of having multiple set-top boxes and remote control devices, assuming content providers do not bypass Singapore's market due to the small market size. With the development of the industry observed so far, more non-exclusive agreements will be signed and more content previously held exclusive will be made available at more affordable subscription prices. Thus, consumers are encouraged to take full advantage of the Measure to subscribe and gain access to content which they previously were unable to.

StarHub TV will have to work harder to differentiate itself in other areas and adopt other strategies such as innovation in content offerings if exclusive content offerings will no longer become its top priority. Such sentiments were echoed in newspaper articles commenting that StarHub TV 'needs to return to its innovative roots' and remind consumers again why they have chosen StarHub TV over SingTel Mio TV. However, despite the Measure resulted in the first

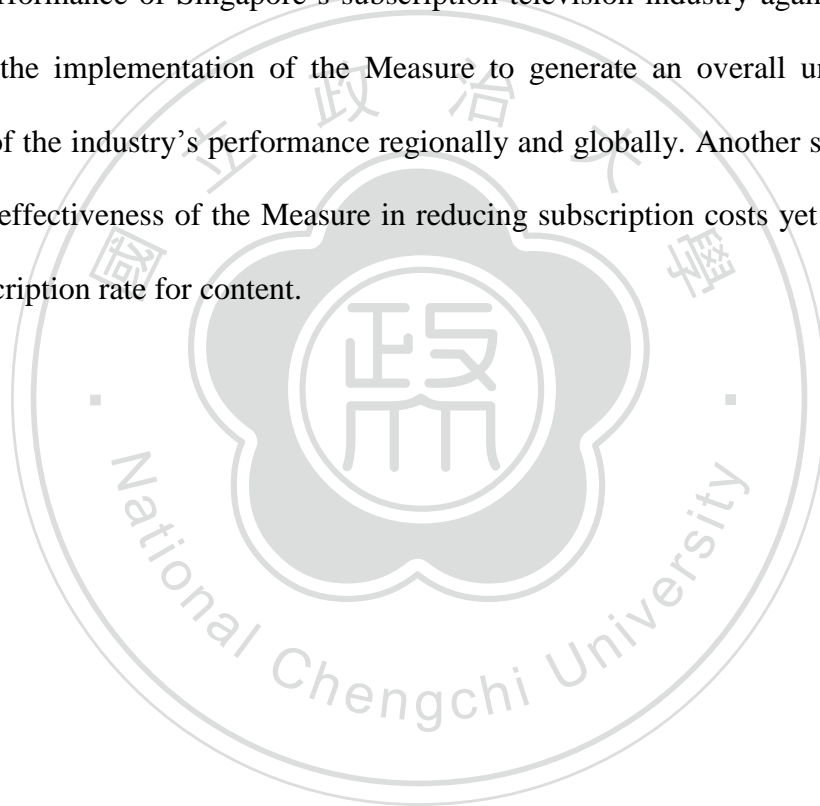
instance of StarHub TV's renewal of iconic content by Fox International Channels on a non-exclusive basis, StarHub TV should continue to acquire exclusive content as they may help reinforce its strategic positioning in the industry and enhance its unique selling points. SingTel Mio TV should also continue to acquire content exclusively if the content helps to strengthen its positioning in the industry and allows it to attract more subscribers. However, from the perspective of increasing consumer welfare, both providers are recommended to bid for non-exclusive broadcasting rights for premium content, as past studies and the situation in Singapore's subscription television industry demonstrated that exclusive content caused disadvantages and inconveniences for consumers who were unable to gain access to the content.

From the perspective of the regulator, although the implementation of the Measure prompted the start of more non-exclusive contracts between content providers and StarHub TV, MDA received harsh criticisms and skepticism from the industry, particularly the suppliers, on the redundancy and effectiveness of the Measure. Hence, it will have to monitor closely future developments of the industry so as to examine the impacts of the Measure on industry competition, stakeholders and its long-term effectiveness.

**Limitations of thesis and recommendations for future research.** This thesis adopted the case study approach and used various forms of documents for examination and analysis, such as annual reports, industry reports and newspaper articles. The examination and analysis could have been further complemented with insights from the subscription television service operators through personal interviews. However, such possibilities were minimal for this thesis due to difficulties in gaining access to relevant personnel. Thus it is suggested that further studies can be conducted using such methods of study.



A longitudinal study can be done several years down the road to examine the long-term effectiveness of the Measure. A more in-depth study into strategies and promotional campaigns for such content can also be conducted to examine further the implications of the Measure in the industry. A study examining audience ratings, ARPU, preferences of genres and types of content among audiences and subscription to specific content after the implementation of the Measure can also be done to assess the effectiveness of the Measure. Lastly, a study can be done to compare the performance of Singapore's subscription television industry against those in other countries after the implementation of the Measure to generate an overall understanding and benchmarking of the industry's performance regionally and globally. Another study can be done to examine the effectiveness of the Measure in reducing subscription costs yet at the same time increasing subscription rate for content.



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## Appendices

### Appendix I: Checklist for examining stakeholders in an industry

<b>Existing Competitors</b>	<ul style="list-style-type: none"> <li>• How competitive is the industry?</li> <li>• What are the areas of competition?</li> <li>• Who are the main competitor(s)?</li> <li>• What form of competition most likely takes place?</li> <li>• What competitive strategies do they adopt?</li> <li>• What are their competitive advantages?</li> <li>• How does product differentiation takes place?</li> </ul>
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>• Who are the suppliers? How concentrated are they?</li> <li>• To what extent does companies in the industry depend on them?</li> <li>• Can companies in the industry switch suppliers easily?</li> <li>• How important are their product(s) or service(s) ? On quality? On cost? On amount of output?</li> <li>• Is there threat of forward integration?</li> <li>• What is their bargaining power?</li> </ul>
<b>Potential Entrants</b>	<ul style="list-style-type: none"> <li>• What are the barriers of entry?</li> <li>• What can be done to raise or reduce the barriers of entry?</li> <li>• Who are the potential entrants?</li> <li>• What are their characteristics?</li> <li>• What are the entrants' competitive strategies?</li> <li>• How will they affect existing competitors?</li> </ul>
<b>Potential Substitutes</b>	<ul style="list-style-type: none"> <li>• What are the substitutes or alternatives?</li> <li>• What are the possible impacts on the industry?</li> </ul>
<b>Buyers (Customers)</b>	<ul style="list-style-type: none"> <li>• Who are the customers of the industry?</li> <li>• How fast is customer demand growing on the overall and in different segments?</li> <li>• What is the potential for finding or creating new markets or niches?</li> <li>• What are the switching costs?</li> <li>• How price sensitive is each customer segment towards the service(s) and the product(s)?</li> <li>• What is the customer's bargaining power?</li> </ul>

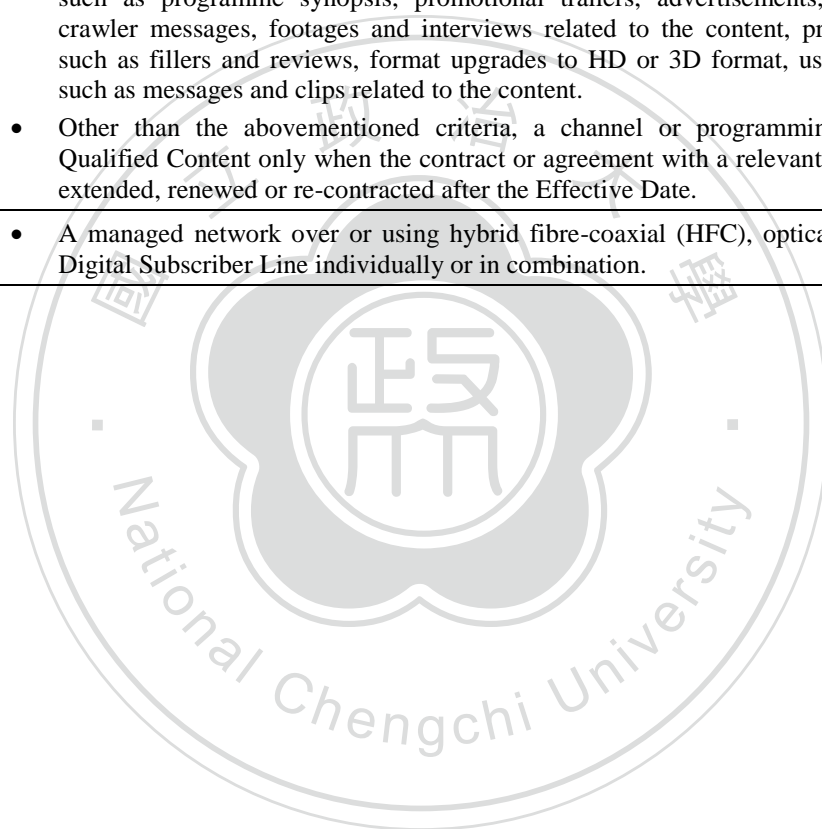
## Appendix II: Definitions and conditions of the Cross-Carriage Measure

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<b>Supplying Qualified Licensee (SQL)</b>	<ul style="list-style-type: none"><li>• Any Regulated Person who is licensed to provide any Subscription Television Service and produces, commissions or acquires Qualified Content.</li><li>• The SQL must make available all of its Qualified Content from 1<sup>st</sup> August 2011 onwards for transmission and reception on all Relevant Platforms of all RQLs as designated by MDA. SQLs are required to acquire all relevant rights to broadcast Qualified Content on all Relevant Platforms. In any circumstances the SQL wish to be exempted from cross-carrying Qualified Content, it will be required to appeal to MDA and cite its reasons while MDA still reserves the right to make the final decisions.</li><li>• The SQL is required to notify MDA as well as RQLs within specific timeframes when any channel or programming content becomes or ceased to become Qualified Content. It is also required to publish and maintain a list of its Qualified Content on its website and viewing guide, while allowing RQLs to also publish similar information on their own websites and viewing guides.</li><li>• The SQL must: 1) provide the Qualified Content to RQLs in its entirety and in an unmodified and unedited form; 2) make the Qualified Content available to its subscriber the same time as its RQLs; 3) ensure that the level of quality of the Qualified Content made available to its subscribers is similar to that of the RQLs; 4) ensure not to degrade the viewing or customer service experience of subscribers accessing its Qualified Content from RQLs; 5) ensure to acquire all relevant rights before bundling any channel or programming content with Qualified Content.</li><li>• The SQL will be required to enter into a customer service arrangement with subscribers of the RQLs who request for access to Qualified Content. It is required to provide the Qualified Content within 5 working days of such requests and at prices (including discounts and promotions), terms and conditions similar to that provided to its own subscribers. Any feedback or complaint by the RQLs' subscribers must be handled without discrimination. It is also required to inform RQLs' subscribers when any channel or programming content ceased to be Qualified Content.</li><li>• The SQL and RQLs are allowed to enter into mutually acceptable agreements to negotiate costs in providing Qualified Content to the RQLs' subscribers. However, if there is no such agreement, the SQL will bear its own cost in making Qualified Content available to RQLs and also any incremental costs directly incurred by RQLs in providing its subscribers with Qualified Content.</li></ul>
<b>Receiving Qualified Licensee (RQL)</b>	<ul style="list-style-type: none"><li>• Any Regulated Person who is designated by MDA as a Receiving Qualified Licensee. The Regulated Person is licensed to provide a nationwide Subscription Television Service on any Relevant Platform and has 10,000 or more subscribers at any point in time.</li><li>• The RQL must not violate or infringe any intellectual property rights owned by the SQL or from whom the SQL obtained the Qualified Content. It must ensure that it has a adequate content protection system from transmission by the SQL to reception by its subscribers on their set-top boxes. The content protection system must be able to prevent unauthorized access, piracy, physical and digital theft of the Qualified Content at all stages.</li><li>• The RQL must also: 1) carry the Qualified Content on all its Relevant Platforms in its entirety, at a similar level of quality as the SQL and in an unmodified and unedited form; 2) make the Qualified Content available to its subscribers at the same time as the SQL; 3) not degrade the viewing experience.</li><li>• The RQL must make available on its website and viewing guide any information on Qualified Content by the SQL. It must ensure the its subscribers can access Qualified Content within 5 working days of their requests. It must also handle its subscribers' feedbacks or complaints about any Qualified Content in a non-discriminatory manner when notified by the SQL.</li></ul>

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	<ul style="list-style-type: none"> <li>The RQL must not impose any form of charge on its subscribers who wish to access Qualified Content provided by the SQL and inform subscribers to notify the SQL directly when they wish to terminate their subscriptions to the Qualified Content.</li> </ul>
<b>Qualified Content</b>	<ul style="list-style-type: none"> <li>Any channel or programming content (in linear or non-linear format) offered a-la-carte or part of a channel bundle and acquired on exclusive basis by a Regulated Person for broadcast on a Relevant Platform, consisting of basic functions such as electronic programme guide and synopsis, dual-sound options, subtitles, stereo/surround sound, navigational access (e.g. left, right, up, down, OK, Enter, Exit) and display of elapsed and remaining time.</li> <li>The incorporation of the following 'value-added' services in any channel or programming content will not cause it to become Qualified Content: Subtitles, dubbing, commentaries, pre and post programme documentaries, enhanced interactive features such as contests and voting services, button feature allowing subscribers to view content-related information such as programme synopsis, promotional trailers, advertisements, press conferences, crawler messages, footages and interviews related to the content, programme highlights such as fillers and reviews, format upgrades to HD or 3D format, user-generated content such as messages and clips related to the content.</li> <li>Other than the abovementioned criteria, a channel or programming content becomes Qualified Content only when the contract or agreement with a relevant Regulated Person is extended, renewed or re-contracted after the Effective Date.</li> </ul>
<b>Relevant Platform</b>	<ul style="list-style-type: none"> <li>A managed network over or using hybrid fibre-coaxial (HFC), optical fibre, Asymmetric Digital Subscriber Line individually or in combination.</li> </ul>



## Appendix III: Relevant definitions in the Media Market Conduct Code

- The Media Market Conduct Code can be accessed at <http://www.mda.gov.sg/Policies/PoliciesandContentGuidelines/Pages/Competition.aspx>

<b>Advertiser</b>	Any person that purchases, or intends to purchase, advertising capacity in, or on, any media service by a Regulated Person.
<b>Ancillary Media Service</b>	Provision of infrastructure, systems, services, information or other resources that are used or intended to be used in connection with the provision or delivery of any media service. Examples include video programme productions and newspaper distribution.
<b>Ancillary Media Service Provider</b>	Any person who provides an Ancillary Media Service.
<b>Applicants</b>	A Regulated Person and any other persons with whom it proposes to enter into a Consolidation.
<b>Consolidation</b>	A merger, acquisition, take-over or other similar transaction that results in two or more independent economic entities becoming a single economic entity. Consolidations can take the form of a Horizontal Consolidation or a Non-Horizontal Consolidation.
<b>Control</b>	Ability of a person to exercise decisive influence over the activities of another person whether existing by reason of rights, contracts or any other means, or any combination of rights, contracts, or other means.
<b>Consumer</b>	An end-consumer or any other person who purchases goods, services or access (as the case may be) as inputs for that person's production, resale or provision of any media service.
<b>Designated Video Archive Operator</b>	Any person who is specified by MDA to be a Designated Archive Operator, usually a Free-to-Air Television Licensee. The operator is usually required to archive General Entertainment programmes which are of social or cultural significance. The operator is also required to make the contents of its archives available to third parties on reasonable prices, terms and conditions, such as through a catalogue or by licensing the archived content to others for broadcasting purposes.
<b>Dominant Person</b>	A Regulated Person who has significant Market Power and are able to act without significant competitive restraints from competitors. Such Person is decided by MDA and special regulatory obligations are often imposed on them. In general, MDA holds that a Dominant Person has a market share exceeding 60 percent of the relevant media market. Specific practices such as price squeezing, mandatory bundling, abusive or over-reaching contract terms, discrimination on prices, terms and conditions are prohibited.
<b>Essential Resource</b>	Any apparatus, accessory, system, service, information or such other resource of any kind, used or intended to be used in connection with the provision or delivery of any media service provided by a Media Licensee.
<b>Events of National Significance</b>	Events of National Significance include National Day Parade, National Day Rally, Prime Minister's National Day Message, Parliamentary proceedings and debates, Speech on Annual Budget, general elections, by-elections, presidential elections and state funerals
<b>Free-to-Air Television Licensee</b>	Any person licensed under the Broadcasting Act to provide a Free-to-Air Television Service. Licensees are required to broadcast Events of National Significance, including "live" or "delayed" broadcasts. Competitive Tender and relevant criteria will be used when there is more than one person capable of operating as the "lead broadcaster".
<b>Free-to-Air Television Service</b>	Any free-to-air television service or special interest television service which is made available to the audience for whom it is intended without payment of a subscription fee.
<b>General Entertainment</b>	Other programmes that do not constitute either Events of National Significance, or News, Current Affairs or Information Programmes, and includes drama, comedy, game and quiz

<b>Programmes</b>	shows, sporting events, and any other programmes specified by MDA.
<b>Horizontal Consolidation</b>	A Consolidation that involves 2 or more persons who are current competing providers of the same media service (or media services that are close substitutes), at least one of whom is a Regulated Person.
<b>Media Licensee</b>	Any person who holds a broadcasting licence under the Broadcasting Act.
<b>Media Market</b>	Any product or geographic market segment within a media market.
<b>Non-Horizontal Consolidation</b>	A Consolidation that involves 2 or more persons who are not current competing providers of the same media service (or media services that are close substitutes), at least one of whom is a Regulated Person.
<b>Person</b>	Any individual, company, partnership or association, and any body of persons, corporate or unincorporated.
<b>Post-Consolidation Entity</b>	The economic person that would be created if MDA approves the Consolidation Application.
<b>Regulated Person</b>	Any person specified by the Minister, who holds any broadcasting licence granted under the Broadcasting Act, whether before, on or after 1st January 2003.
<b>Significant Market Power</b>	A Regulated Person who has the ability to act without significant competitive restraint from its competitors.
<b>Subscriber</b>	An end-consumer who agrees to purchase or who has purchased a Subscription Service
<b>Subscription Fee</b>	Any form of consideration.
<b>Subscription Service</b>	A service provided by a Regulated Person to an end-consumer upon the payment of a subscription.
<b>Subscription Television Licensee</b>	Any person licensed under the Broadcasting Act to provide a Subscription Television Service. Licensees are restricted from obtaining certain exclusive rights for programmes such as the Olympics Games, South-East Asian Games, Asian Games, Commonwealth Games and the Singapore League (Soccer) games.
<b>Subscription Television Service</b>	Any subscription television service, video-on-demand service or special interest television service which is made available to the audience for whom it is intended only upon payment of a subscription fee.
<b>To negotiate in good faith</b>	The duty of good faith requires that such persons must take diligent measures to maximize the chance of reaching an agreement, on commercially reasonable terms, where feasible.

*\* Information extracted from MDA's Media Market Conduct Code and compiled for this thesis.*



		<b>Channels</b>	<b>Pricing (SGD\$)</b>
Complimentary Channels (Free)		Airang, Australia Network, Bloomberg Television, DW (Asien), E City, NHK World TV, Russia Today, SuperSports Arena, TVRI, Interactive TV, Eurosportsnews	Free with any Subscription
World News	Basic Group	BBC World News, CCTV News, CNBC, CNN	3 Basic Groups: \$27.82 4 Basic Groups: \$32.10 5 Basic Groups: \$35.31 6 Basic Groups: \$37.45 All Basic Groups: \$39.59  3 Basic Plus Groups: \$33.17 4 Basic Plus Groups: \$39.59 5 Basic Plus Groups: \$43.87 6 Basic Plus Groups: \$47.08 All Basic Plus Groups: \$50.29  * Add Basic HD Upsize: \$8.56/group
	Basic Plus	CNN Headline News, Fox News Channel, Sky News	
	Basic HD Upsize	Sky News (HD)	
Education	Basic Group	Animal Planet, Discovery Channel, TLC, History Channel, National Geographic Wild, BBC Knowledge, National Geographic Channel	
	Basic Plus	Crime & Investigation Network, National Geographic Adventure, National Geographic Music	
	Basic HD Upsize	Discovery HD World, History Channel HD, Geographic Wild HD, National Geographic Channel HD, National Geographic Adventure HD	
Entertainment	Basic Group	Animax, AXN, FOX, DIVA Universal, MTV South-East Asia, Star World	
	Basic Plus	beTV, Channel [V], FoxCrime, Universal Channel, Syfy, WarnerTV	
	Basic HD Upsize	AXN HD, Fox HD, MTV Live HD, Star World HD, FoxCrime HD, Syfy HD, Universal Channel HD	
Kids	Basic Group	Cartoon Network, Disney Channel, Nickelodeon, Disney Junior	
	Basic Plus	BabyTV, Boomerang, CBeebies, Nick Jr	
Chinese Infotainment	Basic Group	MTV China, Phoenix Chinese Channel, CTI TV, TVBS Asia	
	Basic Plus	Asia Travel, Channel [V] Mainland China, Channel [V] Taiwan, Phoenix InfoNews, Xing Kong	
Chinese Entertainment	Basic Group	One, Star Chinese Channel, TVB8, TVBS-News, tvN	
	Basic Plus	TTV World, TVB Classic Channel, TVB Xing He Channel, KBS World	
	Basic HD Upsize	One HD, tvN HD	
Lifestyle	Basic Group	Asian Food Channel, Discovery Home & Wealth, Discovery Science, FX, Discovery Turbo, E! Entertainment, Food Network Asia, The Biography Channel	
	Basic Plus	BBC Entertainment, ITV Granada, MGM, truTV, Turner Classic Movies, BBC Lifestyle, The Style Network	
	Basic HD Upsize	FX HD, Food Network Asia HD	

Add-On Channels	Sports Group	Eurosport, Football Channel, Golf Channel, NBA TV, PGA Tour On-Demand, Racquet Channel, Sports HD, SuperSports, SuperSports Plus, WWE Series On-Demand, Setanta Sports	\$12.84/group
	All Sports Network Pack	All Sports Network, All Sports Network HD	\$21.40/group
	Cricket	Cricket Extra, Neo Cricket, Ten Cricket	\$32.10/group
	Chinese	CCTV-4, 8 On-Demand	\$8.56/ channel
		Shen Zhou News Channel and CCTV-4 Pack	\$8.56/ month
	VV Drama Pack	VV Drama, VV Drama (+3)	\$12.84/group
	TVB Cantonese On-Demand	TVBJ, TVB Cantonese On-Demand	\$10.70/group
	Asia	Vijay	\$4.28/channel
		KMTV, Sensasi, Vannathirai	\$6.42/channel
		Asianet, Channel-i, Colors, MNC International, Sony Entertainment TV, Star Gold, Star Plus, Zee Cinema, Zee TV, EROS Bollywood On-Demand	\$8.56/channel
	Sun TV Pack	Sun TV, Sun Music	\$8.56/group
	MNC Indonesian Pack	MNC Business, MNC International	\$8.56/month
	Star Hindi Movies & Music Pack	Star Gold, Channel [V] India	\$8.56/month
	Kids	Momokids Asia	\$6.42/channel
	Movies	Celestial Classic Movies	\$6.42/channel
		Celestial Movies, MAX	\$8.56/channel
	Star Chinese Movies	Star Chinese Movies, Star Chinese Movies 2, Star Chinese Movies Play, Star Chinese Movies 2 On-Demand, Star Chinese Movies HD	\$12.84/group
	KIX & Thrill Pack	KIX, Thrill	\$8.56/group
	Movies	HBO	\$12.84/channel
	The HBO Pack	HBO Family, HBO Hits, HBO HD, HBO On-Demand, HBO Signature, HBO Hits HD (Subscription to HBO is required)	\$4.28/group
	Fox Movies Pack	Fox Movies Premium, Fox Movies Premium HD, Fox Family Movies, Fox Family Movies HD, Fox Movies Play	\$17.12/group
	Entertainment	Fashion TV	\$8.56/channel
	CinemaWorld Pack	CinemaWorld, CinemaWorld HD, CinemaWorld On-Demand	\$8.56/group
	International	TV5Monde Asie	\$8.56/channel
		NHK World Premium, The Filipino Channel	\$16.05/channel
	On-Demand Channels	Disney Channel @ Play (Subscription to Kids Basic Group is required)	\$4.28/channel
		Ruyi Hokkien Channel On-Demand	\$6.42/channel
KaraOK!		\$10.70/channel	
iConcerts Pack	iConcerts, iConcerts HD, iConcerts On-Demand	\$8.56/group	



Packs	Chinese Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• STAR Chinese Movies Pack, TVB Cantonese Pack, VV Drama Pack</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$61.53/month (U.P. \$79.18/month)
	Malay Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• MNC Indonesian Pack, ONE Sensation Pack, Sports Group</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$55.11/month (U.P. \$70.62/month)
	Tamil Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• Sun TV Pack, Vijay, Vannathirai</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$48.69/month (U.P. \$62.06/month)
	Hindi Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• COLORS, STAR Plus, Zee TV</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$53.50/month (U.P. \$68.48/month)
	Box Office Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• CinemaWorld Pack, FOX Movies Pack, The HBO PAK</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$66.34/month (U.P. \$85.60/month)
	Sports Fanatics Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• Sports Group, KIX and Thrill Pack, MAX</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$56.71/month (U.P. \$64.20/month)
	Family Favorites Pack	<ul style="list-style-type: none"> <li>• 3 Basic Groups</li> <li>• HD Interactive set-top box</li> <li>• Sports Group, FOX Movies Pack or The HBO PAK</li> <li>• 8 On-Demand or MNC Indonesian Pack or Zee Cinema</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> </ul>	\$63.13/month (U.P. \$81.32/month)
	Ultimate Pack	<ul style="list-style-type: none"> <li>• All 7 Basic Plus Groups</li> <li>• Chinese Entertainment channels (Celestial Movies + STAR Chinese Movies Pack + TVB Cantonese Pack + VV Drama Pack)</li> <li>• Movies channels (KIX &amp; Thrill Pack + The HBO PAK + FOX Movies Pack)</li> <li>• Sports Group</li> <li>• On Demand channels (Ruyi Hokkien Channel On Demand + KaraOK!)</li> <li>• FREE 3 months Basic HD Upsize (new customers)</li> <li>• FREE 12 months HD Interactive set-top box rental worth \$77.04</li> </ul>	\$117.59/month (U.P. \$182.97/month)

**Appendix V:  
Offerings of SingTel Mio TV (As of June 2012)**

Set-Top Box	Type	Charges
	HD Set-Top Box (Rental is Free-of-Charge)	First Box: \$16.05/month Additional Box: \$12.84/month Installation Charge: \$53.50 Minimal Content Charge: \$16.05/month
		Optional Add-on features for first set-top box: Digital Video Recording Feature: \$10.70/month 1 <sup>st</sup> Cordless Home Connect: \$12.84/month
		Other administrative charges: Service Activation Fee: \$32.10 Service Call Fee: \$53.50/trip Cancellation of service before service installation: \$16.05 Cancellation of service during installation: \$53.50 Transfer of Service Ownership: \$10.70
		Loss of equipment or replacement charges: HD Set-Top Box: \$321.00 HD Set-Top Box with DVR Feature: \$535.00 HD Set-Top Box Power Adaptor: \$21.40 Remote Control: \$53.50

		Channels	Pricing (SGD\$)
Free Preview Channels		Mio TV Preview	Free
Free Family Channels	Lifestyle/General Interest	Travel Channel HD, Li (HD), We tv (HD), Dragon TV, KBS World, Australia Network, ETTV Asia, We tv On-Demand	Free
	Drama	ITV Granada	
	Sports	Mio Stadium 104, ESPNews	
	News	France 24 (English), Bloomberg Television, DW, Russia Today, ETTV Asia News, CCTV News, Times Now	
	Kids	BabyFirst, ETTV Yoyo, KidsCo	
A-La-Carte Channels		France 24 (French) GMA Pinoy TV	\$9.90/month \$14.98/month
VOD Content		Season Pass (85 titles) 3D (10 titles) Latest Blockbusters (36 titles) Favorite Movie Hits (412 titles) Asian (34 titles) Bollywood (22 titles) British TV (10 titles) Filem Kita (2 titles)	\$5.00 to \$40.00/title \$6.41/ title \$3.99/ title \$2.99/ title \$2.99/ title \$3.99-\$4.99/ title \$1.60/title \$2.99/title

<b>Packs</b>		<b>Channels</b>	<b>Pricing (SGD\$)</b>
Sports Packs	Mio Stadium Pack	Mio Stadium (HD), mio Stadium 103-109, mio Stadium (SD), mio Stadium (3D), mio Stadium On-Demand	\$34.90/month
	ESPN Star Sports Pack	ESPN, Star Sports, ESPN (HD), ESPN Player	
	Goal TV Pack	GoalTV 1, GoalTV 2	
	ESPNNews	ESPNNews	
	Setanta Rugby	Setanta Rugby (\$19.90/month)	
	Cricket Pack	TEN Cricket, Star Cricket (HD), Star Cricket Plus 124 (\$19.90/month)	
	ASN HD	ASN HD (\$19.90/month)	
Easy Packs	Easy Pack Jingxuan	ESPN Star Sports Pack, Entertainment Pack, Jingxuan Pack	\$29.90/month
	Easy Pack Astro	Astro Pack, ESPN Star Sports Pack, Entertainment Pack	\$29.90/month
Desi Pack		SET (Hindi), SAB TV, Colors, MTV India, EROS Bollywood, Sony Max	\$29.90/month
Astro Pack		Astro Ria, Astro Aruna, Astro World On-Demand	\$11.00/month
Kondattam Pack		Sun TV, Adithya TV, Kalaignar TV, Jaya TV	\$19.90/month
Jingxuan Pack		CCTV-4, One (HD), Celestial Movies, Celestial Classics Movies, Celestial Movies On-Demand, Celestial Classic Movies On-Demand, Jia Le Channel, Jia Le On-Demand, Mei Ah Movies Channel (Asia), Mei Ah Movies On-Demand, mobtv Select, Yoshimoto Azio	\$21.90/month
Entertainment Pack		Sony Entertainment Television, Sundance Channel, KIX (HD), The Film Factory, FOX On-Demand, PictureBox, Sundance On-Demand	\$21.90/month
USTV Pack		USTV Crime, USTV Drama, USTV Entertainment, USTV Thriller	\$19.90/month
Ultimate Pack		Free Family Channels Entertainment Pack Jingxuan Pack Astro Pack Mio Stadium Pack ESPN Star Sports Pack Jaya TV Kalaignar TV Colors MTV India Eros Bollywood USTV Pack	\$49.90/month

**Appendix VI:**

**Comparison of offerings between SingTel Mio TV and StarHub TV  
(As of June 2012)**

<b>Entertainment (English)</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
Animax	FOX On-Demand
AXN	ITV Granada
AXN HD	KIX HD
beTV	Mio TV Preview
Channel [V]	PictureBox
CinemaWorld	Sony Entertainment Television
CinemaWorld HD	Sundance Channel
CinemaWorld On-Demand	Sundance On-Demand
Diva Universal	The Film Factory
Fashion TV	USTV Crime
FOX	USTV Drama
Fox HD	USTV Entertainment
FoxCrime	USTV Thriller
FoxCrime HD	
HBO	
HBO Family	
HBO HD	
Hbo Hits	
HBO Hits HD	
HBO On-Demand	
HBO Signature	
iConcerts	
iConcerts HD	
iConcerts On-Demand	
KIX	
MAX	
MTV Live HD	
MTV Southeast Asia	
Star World	
Star World HD	
Syfy	
Syfy HD	
Thrill	
Universal Channel	
Universal Channel HD	
Warner TV	

<b>Entertainment/Infotainment (Chinese)</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
8 On-Demand	CCTV-4
Asia Travel	Celestial Classic Movies On-Demand
CCTV-4	Celestial Movies
Celestial Classic Movies	Celestial Movies On-Demand
Celestial Movies	Dragon TV
Channel [V] Mainland China	ETTV Asia
Channel [V] Taiwan	Jia Le Channel
CTI TV	Jia Le On-Demand
E City	Mei Ah Movies Channel (Asia)
KaraOk!	Mei Ah Movies On-Demand
KBS World	mobTV select
MTV China	One HD
One	Yoshimoto Azio
One HD	
Phoenix Chinese Channel	
Phoenix InfoNews	
Ruyi Hokkien Channel On-Demand	
Shen Zhou News Channel	
Star Chinese Channel	
Star Chinese Movies	
Star Chinese Movies 2	
Star Chinese Movies 2 On-Demand	
Star Chinese Movies HD	
Star Chinese Movies Play	
TTV World	
TVB 8	
TVB Cantonese On-Demand	
TVB Classic Channel	
TVB Xing He Channel	
TVBJ	

<b>Entertainment (Malay/Indonesian)</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
MNC Business	Astro Aruna
MNC International	Astro Ria
Sensasi	Astro World On-Demand
TVRI	

<b>Entertainment (Tamil/Hindi/Bangla)</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
Asianet	Adithya TV
Channel [V] India	Colors
Channel-i	Eros Bollywood
Colors	Jaya TV
EROS Bollywood On-Demand	Kalaignar TV
Sony Entertainment TV	MTV India
Star Gold	SAB TV
Star Plus	Sony Entertainment TV (SET)
Sun Music	Sony Max
Sun TV	Sun TV
Vannathirai	
Vijay	
Zee Cinema	
Zee TV	

<b>News</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
BBC World News	Bloomberg
Bloomberg Television	CCTV News
CCTV News	DW
CNBC	ETTV Asia News
CNN	France 24 (English)
CNN Headline News	Russia Today
Fox News Channel	Times Now
Sky News	
BBC World News	

<b>International</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
Arirang	Australia Network
Australia Network	France 24 (French)
DW (Asien)	GMA Pinoy TV
KMTV	KBS World
NHK World Premium	
NHK World TV	
Russia Today	
The Filipino Channel	
TV5Monde Asie	
Arirang	
Australia Network	
DW (Asien)	
KMTV	

<b>Kids</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
BabyTV	BabyFirst
Boomerang	ETTV Yoyo
Cartoon Network	KidsCo
Cbeebies	
Disney Channel	
Disney Channel @ Play	
Disney Junior	
Momokids Asia	
Nick Jr	
Nickelodeon	

<b>Lifestyle/General Interest/Education</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
Animal Planet	Travel Channel HD
Asian Food Channel	We TV HD
BBC Entertainment	We TV On-Demand
BBC Knowledge	
BBC Lifestyle	
Crime & Investigation Network	
Discovery Channel	
Discovery HD World	
Discovery Home & Wealth	
Discovery Science	
Discovery Turbo	
E! Entertainment	
Food Network Asia	
Food Network Asia HD	
FX	
FX HD	
History Channel	
History Channel HD	
ITV Granada	
MGM	
National Geographic Adventure	
National Geographic Adventure HD	
National Geographic Channel	
National Geographic Channel HD	
National Geographic Music	
National Geographic Wild	
National Geographic Wild HD	
The Biography Channel	
The Style Network	
TLC	
TruTV	
Turner Classic Movies	
Animal Planet	
Asian Food Channel	
BBC Entertainment	

<b>Sports</b>	
<b>SingTel Mio</b>	<b>StarHub Cable</b>
All Sports Network	ASN HD
All Sports Network HD	ESPN
Cricket Extra	ESPN HD
Eurosport	ESPN Player
Eurosportsnews	ESPNNews
Football Channel	GoalTV 1
Golf Channel	GoalTV 2
NBA TV	Mio Stadium 103-109
Neo Cricket	mio Stadium 104
PGA Tour On-Demand	Mio Stadium 3D
Racquet Channel	Mio Stadium HD
Setanta Sports	Mio Stadium On-Demand
Sports HD	Mio Stadium SD
SuperSports	Setanta Rugby
SuperSports Arena	Star Cricket HD
SuperSports Plus	Star Cricket Plus 124
Ten Cricket	Star Sports
WWE Series On-Demand	Ten Cricket
All Sports Network	ASN HD

<b>VOD Content</b>	
<b>SingTel Mio</b>	<b>StarHub Cable</b>
Season Pass (85 titles)	Movies (18 titles)
3D (10 titles)	Asian Series (8 titles)
Latest Blockbusters (36 titles)	Education (4 titles)
Favorite Movie Hits (412 titles)	Entertainment (18 titles)
Asian (34 titles)	Children (4 titles)
Bollywood (22 titles)	Concerts (19 titles)
British TV (10 titles)	Sports (1 title)
Filem Kita (2 titles)	

<b>HD Channels</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
AXN HD	KIX HD
All Sports Network HD	ASN HD
CinemaWorld HD	ESPN HD
Discovery HD World	Mio Stadium HD
Food Network Asia HD	One HD
Fox HD	Star Cricket HD
FoxCrime HD	Travel Channel HD
FX HD	We TV HD
HBO HD	
HBO Hits HD	
History Channel HD	
iConcerts HD	
MTV Live HD	
National Geographic Adventure HD	
National Geographic Channel HD	
National Geographic Wild HD	
One HD	
Sports HD	
Star Chinese Movies HD	
Star World HD	
Syfy HD	
TVN HD	
Universal Channel HD	

<b>On-Demand Channels</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
8 On-Demand	Astro World On-Demand
CinemaWorld On-Demand	Celestial Classic Movies On-Demand
EROS Bollywood On-Demand	Celestial Movies On-Demand
HBO On-Demand	FOX On-Demand
iConcerts On-Demand	Jia Le On-Demand
	Mei Ah Movies On-Demand
PGA Tour On-Demand	
Ruyi Hokkien Channel On-Demand	Mio Stadium On-Demand
Star Chinese Movies 2 On-Demand	Sundance On-Demand
TVB Cantonese On-Demand	We TV On-Demand
WWE Series On-Demand	
8 On-Demand	Astro World On-Demand
CinemaWorld On-Demand	Celestial Classic Movies On-Demand
EROS Bollywood On-Demand	Celestial Movies On-Demand
HBO On-Demand	FOX On-Demand
iConcerts On-Demand	Jia Le On-Demand
	USTV Crime
	USTV Drama
	USTV Entertainment
	USTV Thriller

<b>Channels on both platforms</b>
Australia Network
Bloomberg Television
CCTV News
CCTV-4
Celestial Movies
Colors
ITV Granada
KBS World
One HD
Russia Today
Ten Cricket

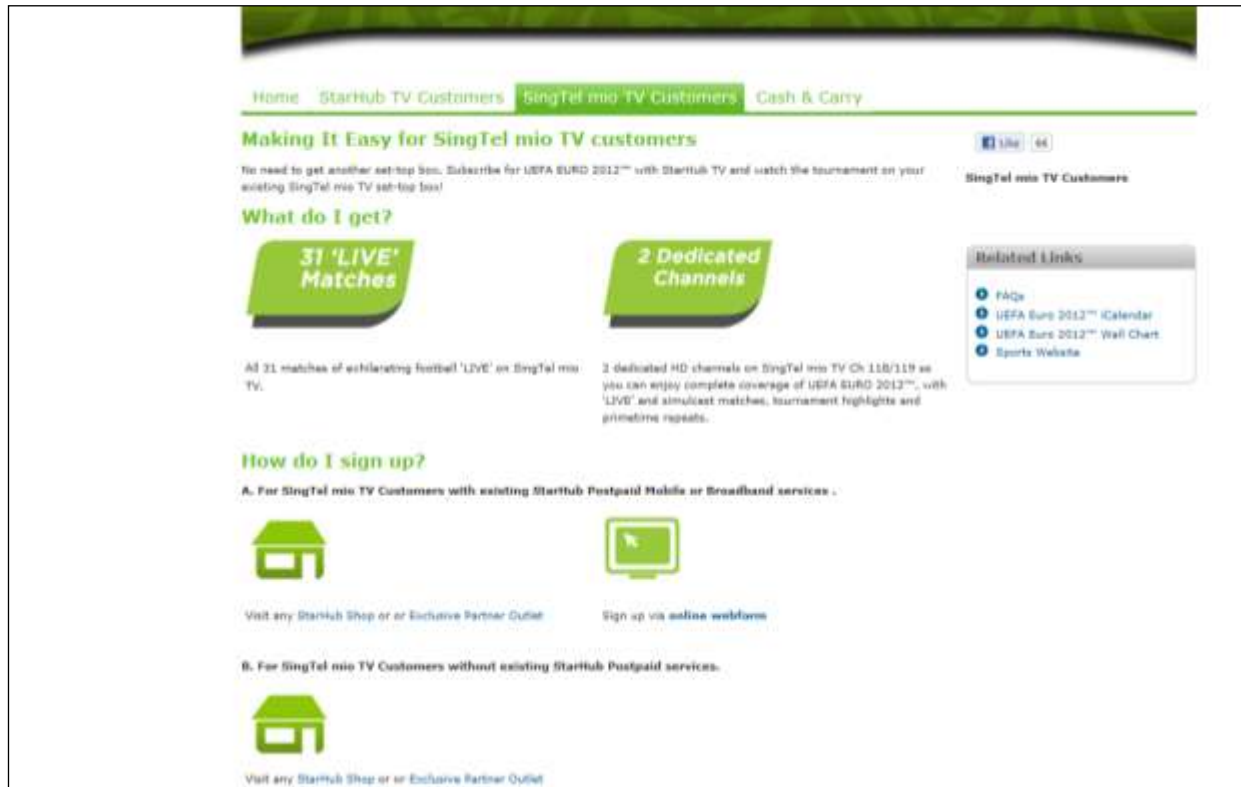
<b>Interactive Features</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
Interactive TV (4D results, stock prices, movie showtimes, weather information, StarHub offers, purchase movie tickets)	Channel Guide (include programme schedules, synopses, information about programme genres, cast and crew and programme durations. The Picture-In-Picture (PIP) function allows a live preview of the channels in the Channel Guide)
On-Screen TV Guide (7-day TV listings, TV show synopses, Cast and Crew information, Available language audio tracks)	Scheduled recording (Digital Video Recording Feature)
	Configuration of 'Favourite/Most Watched' channels
	Parental Control Lock
	Control of 'live' TV
	Interactive Application for mio Stadium (vote in polls, compete to win prizes, get information on their favorite clubs, Live Scores and more)
	ESPN Player

<b>Equipment</b>	
<b>StarHub Cable</b>	<b>SingTel Mio</b>
HubStation HD (One-touch recording, Smart TV, Broadband Internet Access, free home phone line, pause, rewind, restart)	HD Set-Top Box
HD Interactive Set-Top Box (with Digital Video Storage Device)	Digital Video Recording (DVR) Feature
Remote Control	ADSL2+ Ethernet Modem (1 port)
	Remote Control



## Appendix VII: StarHub's UEFA EURO 2012 offering for Cross Carriage

- **StarHub Cable's Webpage**



- **Terms and Conditions On StarHub Cable's website**

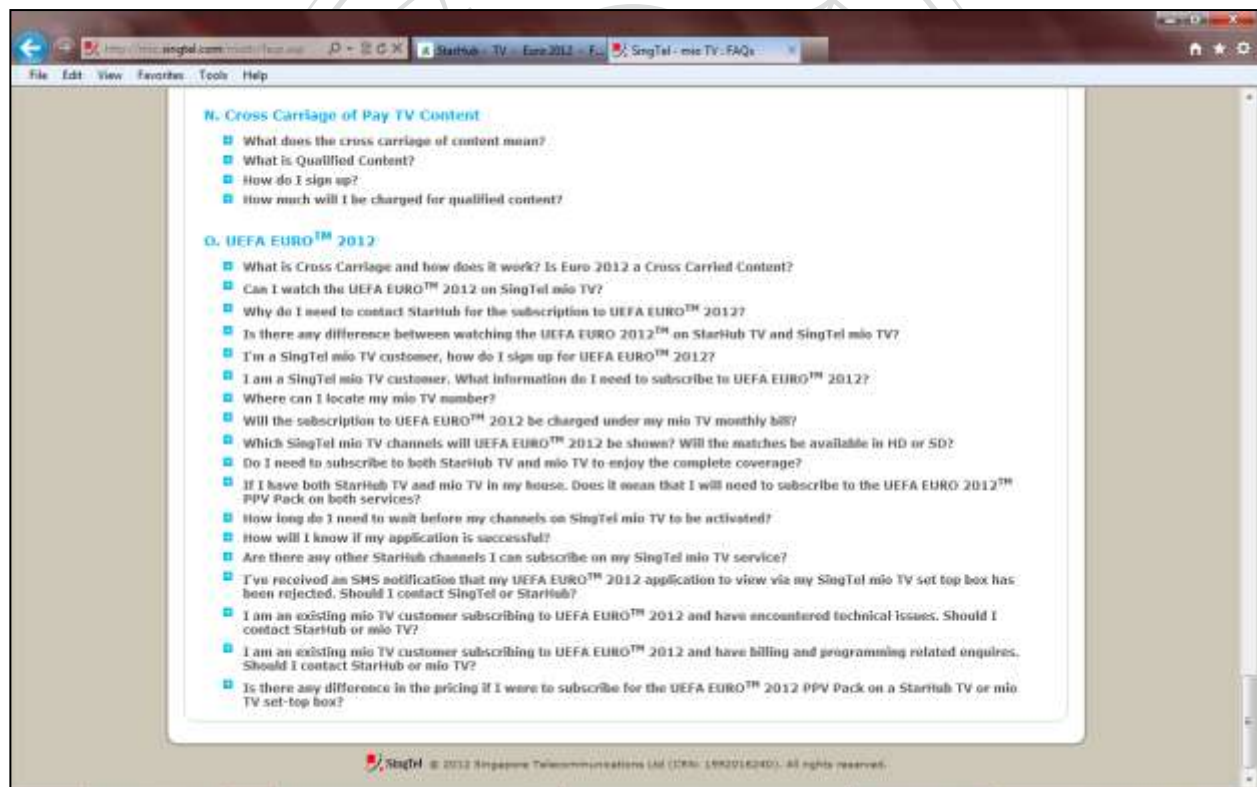
1. StarHub's UEFA EURO 2012™ Pay-Per-View (PPV) Postpaid Pack is available to SingTel mioTV subscribers who wish to access the Pack using their SingTel mioTV set-top box ("Cross-Carriage Customers"). StarHub UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers includes live telecast of 31 matches from final tournaments of the UEFA European Football Championship held in 2012 over 2 a la carte channels and will be made available on a post-paid basis.
2. StarHub reserves the right to reject any application for subscription to StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers.

3. A one-time early bird subscription of \$58.85 (including GST) is applicable to Cross Carriage Customers who sign up on or before 9 May 2012. For subscriptions from 10 May 2012, a one-time subscription of \$69.55 (including GST) is applicable.
4. In addition, a one-time activation charge of \$10.70 (including GST) is applicable to StarHub's UEFA EURO 2012™ PPV Pack for Cross Carriage Customers.
5. Subscription of StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers will require a processing period of 5 working days from 23 April 2012.
6. In order to ensure that smooth authentication and provisioning of the Pack, SingTel mioTV subscribers must provide the same NRIC and mioTV number as their SingTel mioTV subscription.
7. There will be no refund on the payment for StarHub's UEFA EURO 2012™ PPV Postpaid Pack if the order or subscription of StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers is cancelled or terminated for any reason whatsoever.
8. Only customers who subscribe to StarHub's UEFA EURO 2012™ PPV Postpaid Pack may opt in free to enjoy simultaneous broadcast on mobile and online. For online, customers can view via PC/ laptops and/or tablets through Hub ID login on [www.starhubtv.com](http://www.starhubtv.com). Mobile customers can view on StarHub TV On Mobile via the Gee! Portal. No other types of StarHub's UEFA EURO 2012™ PPV Pack customer will be entitled to the simultaneous broadcast.
9. StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers will not be pro-rated for any reason whatsoever and, save and except for the early bird discount, the same rate will apply regardless of the date of subscription of StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers.
10. The Hub Club discount is not applicable to the subscription of StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers.
11. All UEFA EURO 2012™ channels will be available from 1 June 2012 to 8 July 2012.
12. StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers is part of StarHub Cable TV Services. The subscription to StarHub's UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers is subject to these terms and conditions, StarHub's General Terms & Conditions for Info-communications Services and the Service

Specific Terms and Conditions for StarHub TV Services which can be found at [www.starhub.com](http://www.starhub.com) (collectively “the StarHub Terms and Conditions”).

13. StarHub reserves the right to revise any of the StarHub Terms and Conditions and/or such other terms and conditions agreed or accepted by customers (including price plans and payment terms) at its discretion without prior notice. Customers’ sign-up for StarHub’s UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customer and continued reception or use of StarHub’s UEFA EURO 2012™ channels under StarHub’s UEFA EURO 2012™ PPV Postpaid Pack for Cross Carriage Customers will constitute acceptance of the StarHub Terms and Conditions (including revisions thereof).

- **SingTel Mio’s Webpage**



- **FAQs for UEFA EURO 2012 (SingTel Mio’s website)**

1. **What is Cross Carriage and how does it work? Is Euro 2012 a Cross Carried Content?**

MDA implemented the cross-carriage measure (Measure) on 1 Aug 2011. Under the Measure, pay TV retailers who have acquired any exclusive content on or after 12 Mar 2010

must offer the content to other subscribers through set-top boxes of qualified pay TV retailers, if the subscribers request for access to the content.

In the case of UEFA EURO™ 2012, StarHub has acquired the broadcast rights of the event on an exclusive basis. Hence, UEFA EURO™ 2012 will be made available to requesting mio TV customers via mio TV set-top boxes.

mio TV customers do not need another set-top box to catch the matches.

mio TV customers, who wish to enjoy the UEFA EURO™ 2012 via mio TV set-top box, will have to contact StarHub directly to sign up.

During the sign up, mio TV customers will have to provide the following details:

- 8 digital mio TV number, which can be found on your bill
- NRIC / Foreign ID of the mio TV subscriber

SingTel mio TV customers will receive a bill for the subscription charges of UEFA EURO™ 2012 from StarHub.

## **2. Can I watch the UEFA EURO™ 2012 on SingTel mio TV?**

Yes, a mio TV customer can subscribe to UEFA EURO™ 2012 PPV Pack with StarHub and watch the matches on the mio TV set top box.

All 31 'LIVE' EURO matches on StarHub TV will be available.

The telecast of UEFA EURO™ 2012 on StarHub TV and SingTel mio TV will be identical.

## **3. Why do I need to contact StarHub for the subscription to UEFA EURO™ 2012?**

As StarHub has acquired the exclusive broadcast rights to the UEFA EURO™ 2012, customers who wish to watch the event via mio TV set-top box will need to sign up for the service directly with StarHub.

## **4. Is there any difference between watching the UEFA EURO 2012™ on StarHub TV and SingTel mio TV?**

The content will be identical.

The same UEFA EURO™ 2012 programmes will be made available regardless of whether customers are watching via StarHub TV set-top boxes or mio TV set-top boxes. Only HD channels will be available on SingTel mio TV.

**5. I'm a SingTel mio TV customer, how do I sign up for UEFA EURO™ 2012?**

From 27 March 2012, SingTel mio TV customers can sign up at any StarHub Retail Shop or Exclusive Partner outlet. Customers will need to bring along their Identification Card and their existing 8 digit mio TV numbers found on the SingTel bill.

There will be a processing period of 5 working days, starting from 23 April 2012.

**6. I am a SingTel mio TV customer. What information do I need to subscribe to UEFA EURO™ 2012?**

You will need to provide your Identification Card and 8 the digit mio TV Number, which is located on your monthly SingTel bill.

**7. Where can I locate my mio TV number?**

You can locate your mio TV number in your monthly mio TV bill. An illustration is below.

**Mock Bill**

Date of Bill	16 Jan 2012	Bill - ID	Account No.	Deposit (SGD)	0.00
					<b>Amount (SGD)</b>
Balance Brought Forward from Previous Bill					877.64
Amount Outstanding (Payment after 13 Jan is not shown on this bill)					877.64
Total Current Charges Due By 30 Jan 2012					82.28
<b>Total Amount Due</b>					<b>959.92</b>
<b>Details of Current Charges</b>					
<b>MIO TV NO. 20169818</b> <i>Includes FREE: HD Set-Top Box</i>					
G mio TV Service 20 Jan 2012 to 11 Feb 2012 -					
G 12 mths Jingxuan Pack 20 Jan 2012 to 11 Feb 2012 (Prorated Charge) 15.19					
G 12 mths FOX On Demand 20 Jan 2012 to 11 Feb 2012 (Prorated Charge) 8.01					
<b>Total for 20169818</b>					<b>23.20</b>
<hr/>					
<b>MIO TV NO. 20231316</b> <i>Includes FREE: HD Set-Top Box</i>					

**8. Will the subscription to UEFA EURO™ 2012 be charged under my mio TV monthly bill?**

StarHub will bill you for all charges in relation to UEFA EURO™ 2012.

SingTel will not bill you for the UEFA EURO™ 2012

**9. Which SingTel mio TV channels will UEFA EURO™ 2012 be shown? Will the matches be available in HD or SD?**

There will be 2 unique UEFA EURO™ 2012 broadcast channels in HD on SingTel mio TV. The main channel (SingTel mio TV CH118) will be available 24 hours daily, whereas the other channel (SingTel mio TV CH119) will cater to simulcast LIVE matches.

**10. Do I need to subscribe to both StarHub TV and mio TV to enjoy the complete coverage?**

If you are not an existing StarHub TV customer and currently subscribe to SingTel mio TV, you can subscribe to the UEFA EURO 2012™ PPV Pack at any StarHub Retail Shop or Exclusive Partner outlet to watch the matches on SingTel mio TV set-top box.

If you are an existing StarHub TV customer, you should contact StarHub for details on how to subscribe to the UEFA EURO™ 2012.

**11. If I have both StarHub TV and mio TV in my house. Does it mean that I will need to subscribe to the UEFA EURO 2012™ PPV Pack on both services?**

No, you can choose to sign up the UEFA EURO™ 2012 PPV Pack on either StarHub TV or SingTel mio TV set-top box. The UEFA EURO™ 2012 channels will only be available on the set-top box which you have opted for.

**12. How long do I need to wait before my channels on SingTel mio TV to be activated?**

For existing SingTel mio TV customers who sign up to UEFA EURO™ 2012 with StarHub, the UEFA EURO™ 2012 channels will be activated within 5 working days from the day of sign-up.

However, if you have signed up for UEFA EURO™ 2012 before 23 April 2012, the channels will be activated by 28 April 2012.

**13. How will I know if my application is successful?**

A confirmation SMS will also be sent by StarHub from 23 April 2012.

**14. Are there any other StarHub channels I can subscribe on my SingTel mio TV service?**

No, at this stage, other StarHub TV channels are not available on SingTel mio TV service.

Only UEFA EURO™ 2012 channels will be available as it is the only exclusive content that StarHub has obtained since 12 March 2010.

**15. I've received an SMS notification that my UEFA EURO™ 2012 application to view via my SingTel mio TV set top box has been rejected. Should I contact SingTel or StarHub?**

If you have received an SMS notification that your UEFA EURO™ 2012 application has been rejected, please refer to the SMS and contact the relevant Pay TV provider. The relevant provider will assist to verify the cause of rejection and advice on next course of action.

**16. I am an existing mio TV customer subscribing to UEFA EURO™ 2012 and have encountered technical issues. Should I contact StarHub or mio TV?**

For any technical assistance on your mio TV set-top box, please contact mio TV technical support hotline at 1688.

**17. I am an existing mio TV customer subscribing to UEFA EURO™ 2012 and have billing and programming related enquires. Should I contact StarHub or mio TV?**

For any billing or programming related enquiries for UEFA EURO™ 2012, please contact StarHub Customer Care at 1633.

**18. Is there any difference in the pricing if I were to subscribe for the UEFA EURO™ 2012 PPV Pack on a StarHub TV or mio TV set-top box?**

StarHub charges the same UEFA EURO™ 2012 PPV subscription price to all customers regardless if it is subscribed on a StarHub TV set-top box or a SingTel mio TV set-top box.

However, StarHub will charge a one-time activation fee if you are not an existing StarHub TV customer. For more details, contact StarHub Customer service hotline at 1630.