

Interactive Digital Media (IDM) IDM takes flight



Deloitte conducted the Annual IDM Flash Study in 2011 on the state of the Interactive Digital Media (IDM) sector in Singapore. The objective of the study was to assess key growth indicators and understand the long term outlook of the sector.

IDM takes flight...

New Media and Digital Transformation over the past half decade have demonstrated strong power to transform multiple industries and business. Improved communications, alternate commerce & channels for go-to-market, advertising, customer service, productivity improvement, and core changes in business models have all ensued.

In this regard, the Interactive Digital Media (IDM) sector in Singapore provides a unique insight into a converging industry and high-growth sector. Equally important, IDM statistics & trends provide a bell weather and indicator to the overall impact of Digitization and Digital Transformation across industries. As a lens into the future, IDM represents an important sector for Singapore businesses and government to watch and analyze going forward.

Over the years that Deloitte has conducted this Study, we have seen the IDM sector weather turbulent economic times whilst sustaining strong double digit growth. This resilient sector has consistently outperformed Singapore's GDP and the country's traditional media and ICT sectors.

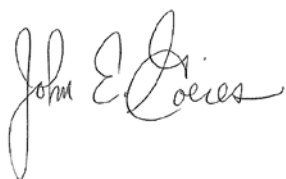
With CAGR growth for Value Add (VA) over the past 4 years of 26% and Employee growth of 22%, IDM represents an outlier growth segment in Technology, Media, and Telecommunications (TMT), akin to Information Technology in the '80's and '90's, BioTech from this decade, and Business Intelligence / Data Analytics in more recent times.

The latest report shows the IDM sector recording its highest growth rates since the commissioning of the study in 2006. IDM results between 2009 – 2010 display that:

- Revenues grew by 31%
- Value Add (VA) grew by 30%
- Employment grew by 32%
- 2/3rds of Revenue, VA, and Employment was created from local companies
- 2,700 IDM jobs created year-on-year

The 2011 Study revealed consistent growth across all sub-sectors. Within IDM, the mobile sub-sector has shown the strongest consistent growth over recent years, with companies now realigning their strategies towards enabling content to be accessible by all users on multiple platforms. In addition, Singaporean companies have shifted their market focus from traditional oversaturated markets to neighboring countries within Southeast Asia and the Middle East. Insights from the study also reveal that cross-platform technologies and standards will help further propel the industry forward; however, in order to fully bear the fruit of an ever evolving IDM landscape, continual talent development / renewal is required to meet the talent supply and specialization demands of a high-growth IDM sector.

We trust that you'll find the study both insightful and valuable as a benchmark to track changes and opportunities in this dynamic sector. We would be pleased to elaborate on these findings and help your organization determine related opportunities as IDM growth "takes flight" and accelerates.



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Key findings

Deloitte's 2011 Interactive Digital Media (IDM) Flash Study has once again demonstrated that the IDM sector continues to go from strength-to-strength in Singapore. The status of Singapore as a digital hub for the Asia Pacific region continues to flourish, even as the industry landscape continues to evolve.

Between 2007 and 2010, all the key indicators displayed a healthy Compound Annual Growth Rate (CAGR):

- Value Add (VA) grew by 26%;
- Revenues grew by 22%;
- Employment grew by 22%; and
- Establishments grew by 14%

In particular, the companies from the 20th to 80th percentile of Value Add in the sector have shown strong growth in both revenue and employment terms.

But this is not just a historical growth story: there are still challenges and opportunities that present themselves to the IDM sector in both the short and long-term. The survey highlighted 3 key factors that could represent the biggest opportunities for the sector: greater collaboration, increased focus on driving innovation and a leveraging of Singapore's strategic position to reach out to regional markets. The success of companies like Razer, Mozat and Kai Square bodes well for the future and the vibrancy, in large part due to the abundance of funding from both public and private means, leads to continued optimism.

Year-on-Year growth from 2009 to 2010 was encouraging:

- Value Add grew by 29.7%
- Revenue grew by 31.0%
- Employment grew by 32.4%
- Establishments grew by 9.0%

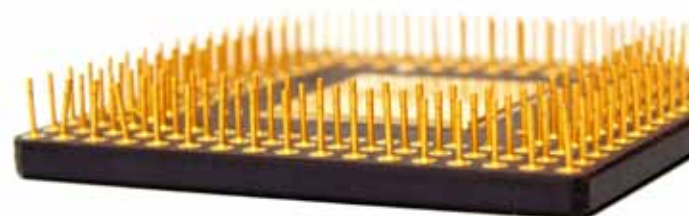
Key highlights

- Value Add (VA) has doubled from 2007 to 2010
- 5000 jobs were added from 2007 to 2010
- Local companies contributed 66% of VA, Revenue and Employment

However, there are still challenges to be overcome: for example, the lack of standardization has led to a fragmented industry, which means many companies are struggling to balance the focus of their talent base. Another issue identified by a number of respondents related to the need for knowledge transfer from global experts and top entrepreneurs. Quite a few respondents said that they would like to see the government play more of a role in facilitating the collaboration in the sector that will be critical to continuing the momentum.

Ultimately, what the survey has demonstrated once again is that the change in the IDM landscape is very much an evolution, not a revolution. The growth rates being seen are expected to continue into the foreseeable future and local companies will be the biggest beneficiaries of this.

The future for IDM, like the future for Singapore, is bright.



Background

In August 2006, the Interactive Digital Media Programme Office (IDMPO) was set up to coordinate a multi-agency strategic IDM R&D Programme with funds from the National Research Foundation (NRF). The objectives were to establish Singapore as a preferred place for IDM R&D, be the source of innovation within media sector, develop a sustainable ecosystem and fuel vibrancy, and help pioneer the next generation Web media.

Sector definition and design

Similar to last year's study, this study adopted the definition that has been synthesized from multiple industry experts and international best practices.

The definitions are as follows:

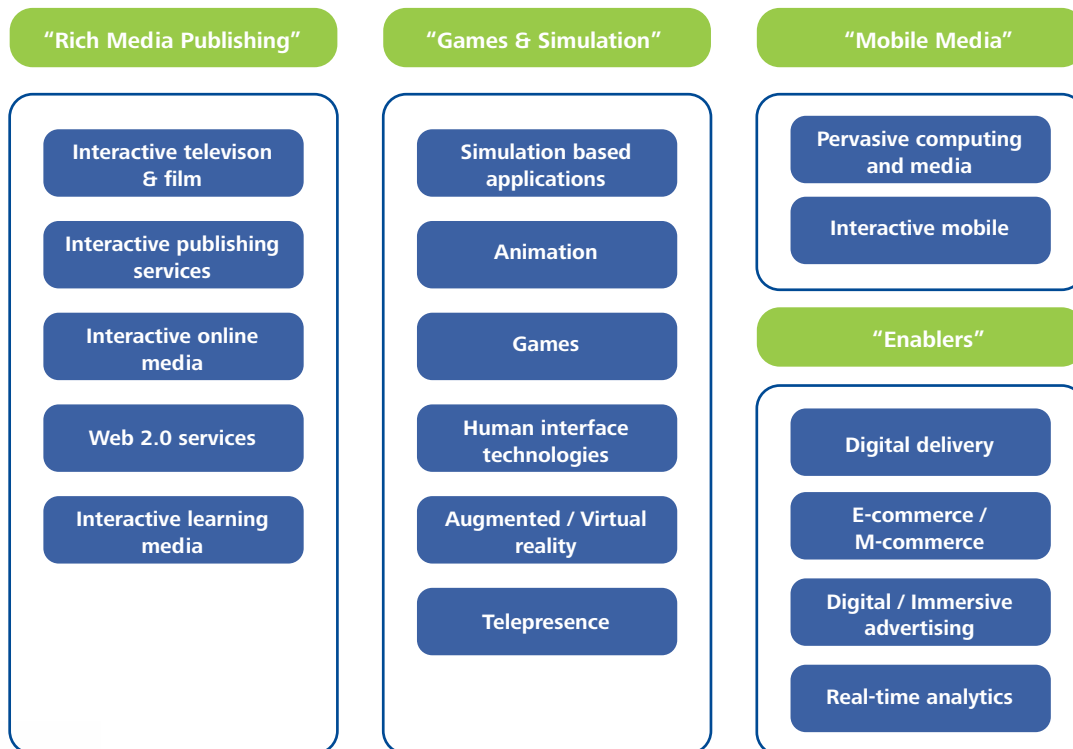
- "IDM is digital media which enables users to interact with other users or with the media itself for the purposes of entertainment, information, commerce, and education."
- "The IDM sector involves those entities that engage

in or enable the creation, publishing, distribution, and delivery of interactive digital media."

The IDM sector is composed of three key components, which are:

- The IDM industries include all those sectors that are involved in creating, publishing, production, display, and distribution of IDM-related content; it can be further segmented into Rich Media Publishing, Mobile Media, Games & Simulation, and Enablers.
- The interdependent industries include all those sectors that are engaged in production, manufacture, and sale of devices and equipment to wholly or primarily facilitate the access or delivery of IDM.
- The embedded sector is composed of vertical businesses that are involved in the development and purchase of IDM-related services.

The IDM sector was broken down further into 16 subsectors:



In ensuring an accurate and conservative study:

- Only known names of companies in the IDM space have been used for creating the master list of IDM universe in Singapore and in estimating number of establishments.
- This study only includes the IDM-related revenues and headcounts involved in IDM-related activities from the companies surveyed.

IDM sector overview

- VA doubled from 2007 to 2010
- 5,000 Jobs added over the same 3-year period
- Local companies contributed more than 66% of VA, Revenue and Employment

The Singapore IDM Sector has witnessed impressive growth since its inception. The sector contributed Singapore Dollars (SGD) 1.20 Billion of VA to the economy in 2010 and showed strong growth between 2007 and 2010 at 26% CAGR. The IDM sector doubled the VA contribution to the economy in the last three years (2007-2010) and from 2009-2010, VA contribution to the economy increased by 29.7%. Total revenues grew by about 22% during this period (2007-10) and contributed to an estimated of SGD 2.09Billion in 2010. The IDM sector continued to outperform GDP growth and has remained an important contributor to the economy.

From 2009-2010, VA increased by 30% growth. Since Deloitte 's first IDM Flash Study in 2007, we have calculated that VA grew by 26% CAGR from 2007-2010 adding \$597M over this period to the national economy. Employment grew at 32% from 2009-2010, reflecting the positive outlook of the economy compared to 6.6% growth in employment during the global downturn of 2008-2009. Over the three year horizon 2007-2010, employment grew at 22% to a total estimate of 11,072 employments, with an addition of 4,956 jobs since 2007.

Figure 1: IDM sector overview

	VA	Employment	Companies
	S\$1,198m	11,072	794
	29.7% Growth*	32.4% Growth*	9% Growth*

	Rich media & publishing	Mobile media	Games & simulation	Enablers
VA	\$463m	\$218m	\$374m	\$142m
Jobs	4,080	1,298	4,138	1,556
Companies	280	104	287	124

GDP grew 13.9% in 2010 with 4 year CAGR growth of 4.3%
 * Indicates percentage growth from 2009 to 2010

Figure 2: IDM Est. VA S\$m, 2007 to 2010 ⁽¹⁾

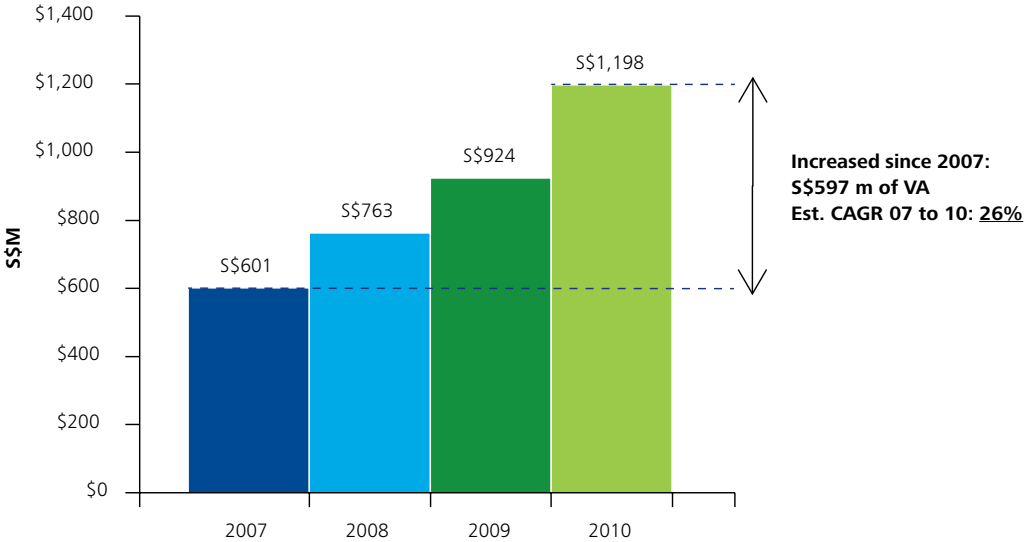
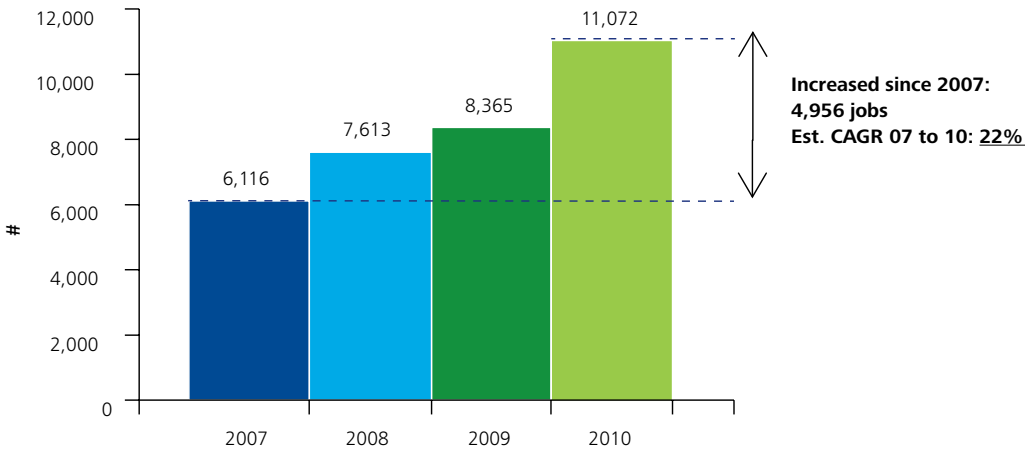


Figure 3: IDM Est. Employment, 2007 to 2010 ⁽¹⁾



Productivity (VA / Emp)	S\$98K	S\$100K	S\$110K	S\$108K	CAGR (2007-10): 3.3%
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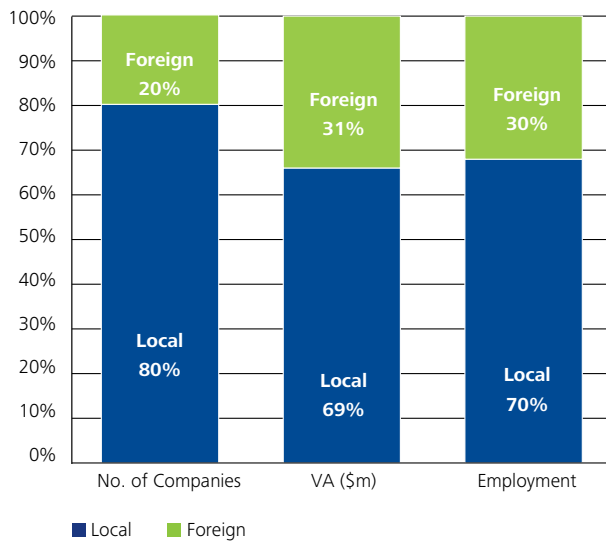
#GDP grew 13.9% in 2010 with 4 year CAGR growth of 4.3%
 Notes: (1) All data are estimations; 2007-2010 are estimation based on primary markets research and interviews.

Sustainability: the fundamental theme

Sustainability of Singapore’s IDM sector has been a key theme throughout previous studies. The creation of a world-class advanced infrastructure, nurturing local companies to be the leader in their sectors, facilitating grassroots innovations and expanding to regional markets have been the key pillars of this multi-pronged strategy.

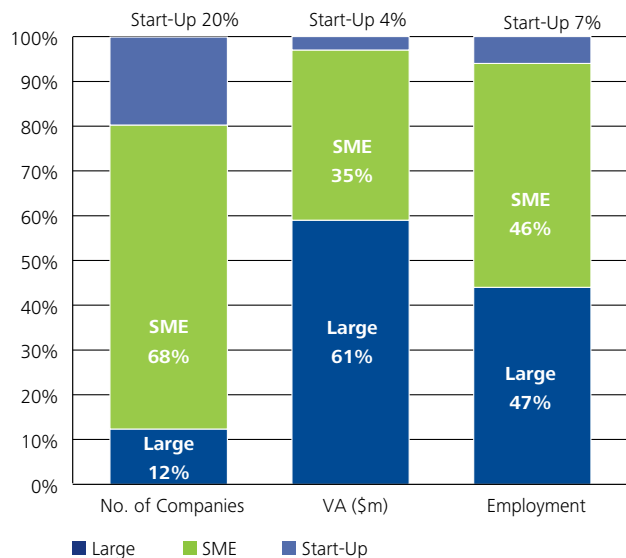
The 2011 IDM Flash Study identified 794 establishments within the IDM space in Singapore. This figure represented a 14% growth over 2007 to 2010. Within the three year period, numerous foreign establishments entered Singapore resulting in a growth of approximately 28%, or 215 additional companies since 2007. Local companies constituted 80% of the industry and contributed to 69% of the sector VA. Foreign companies that are relatively larger in size accounted for approximately 20% of establishments and 31% of VA in 2010.

Figure 3: IDM sector contribution: by company origin



The IDM sector VA is predominantly made up of local establishments with 66% of total share of VA (S\$786mn) and a growth rate of 25% from 2007-2010. The number of foreign firms has increased over this period showing a growth rate of 28% from 2007-2010 with VA contribution of 34% in 2010.

Figure 4: IDM sector contribution: by company size



The IDM sector employment is predominantly made out of local establishments with 68% of total employment (7,522), and a growth rate of 23% CAGR compared to 19% CAGR for foreign establishments.

Grassroots innovations fuelling sector growth

The Singapore IDM eco-system growth is also being fostered by new innovations. Singapore IDM companies have also expanded their services beyond Asian shores and reached out to the global market.

- **Increasing adoption:** Increasing adoption of applications that are provided by Singaporean IDM companies to key players, such as Singtel, StarHub, Maxis, and TelkomSel.
- **Attracting foreign investments:** New local and foreign investments, such as those from China, are also being attracted by various start-ups owing to their viable business models and plans of expansion to the various markets.
- **Attracting foreign talent:** The IDM sector is also attracting talent from across the globe, bringing in requisite expertise to Singapore.
- **Increasing global reach:** Many Singapore-based companies are expanding their international presence.

Razer is a gaming hardware company that produced the multi-award winning 'Razer Switchblade' prototype. It has offices in nine cities around the globe including San Francisco, Austin, Hamburg, Shanghai, Shenzhen, Seoul, Singapore and Taiwan.

Mozat, a leading mobile social networking provider for telecommunication and service providers worldwide, has been building the social media hub for some of the world's top mobile operators including Vodafone in Egypt, Saudi Telecom (STC) in Saudi Arabia, Umniah Telecom in Jordan, Viva Telecom in Bahrain and Kuwait, and Telkomsel in Indonesia.

Kai Square started in 2006 as a 4-man startup and has grown to become a 50-strong regional specialist in the surveillance market. Their state-of-the-art security systems coupled with Kai Square's Unified Platform built on 3G Technology has been the secret to capturing big clients like SMRT, SingHealth and the Singapore Ministry of Home Affairs.



<p>2006 Employees: 4</p> <p>Offices: Singapore</p>		<p>2010 Employees: 50</p> <p>Offices: Singapore, Beijing, Tianjin, Bangkok</p>
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Kai Square started in 2006 as a 4-man startup and has grown to becoming a 50-strong regional specialist in the surveillance market. Juzz4Security recently made the news for securing funding from the Singapore-Israeli Industrial Research and Development Foundation.

The 2011 Deloitte Technology Fast 500 Asia Pacific programme ranks the region's 500 fastest growing technology firms, and among the 13 winners from Singapore was Kai Square Pte Ltd which came in at #62 with revenue growth of 777%, and mobile application solutions provider Mozat, which came in at #129 with 360% growth.

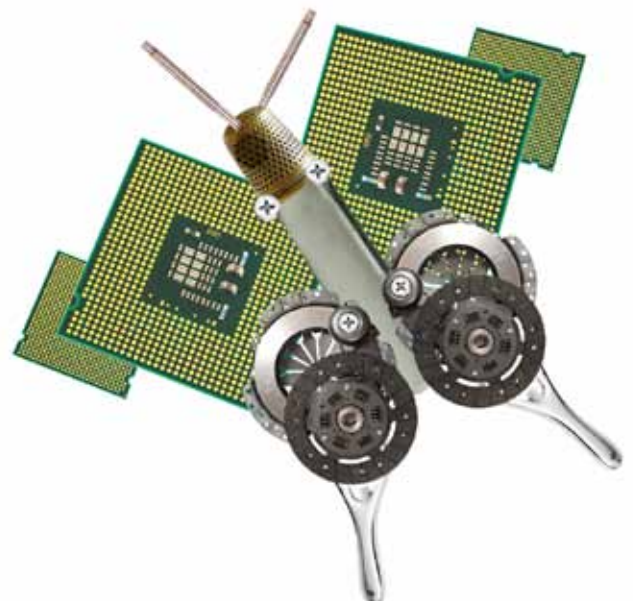
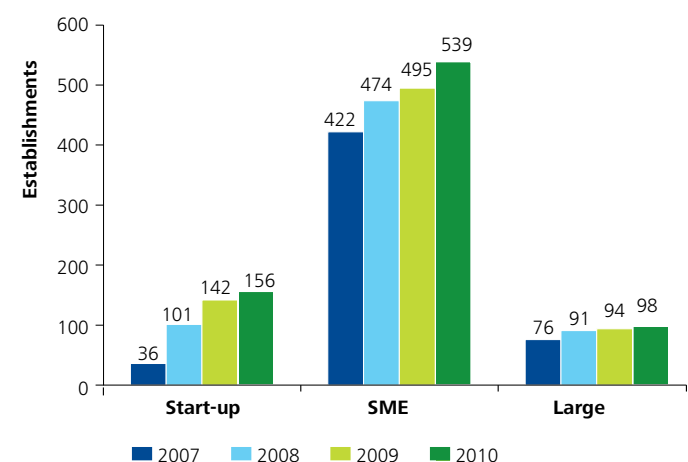


Figure 5: Company distribution by size

The IDM sector is driven by a diverse pool of local start-ups and SMEs with an influx of foreign MNCs

	Start-up	SME	Large
Share of 2010 %	20%	68%	12%
Share of 2007 %	7%	79%	14%



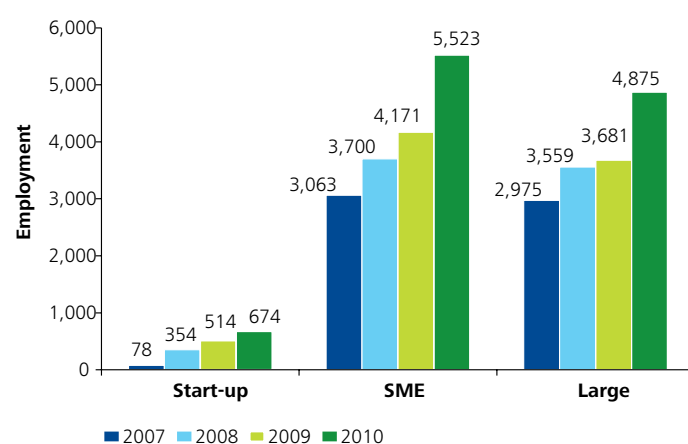
- The IDM sector is driven by SMEs (68% of total establishments)
- Start-ups have shown the largest growth in employment with a 105% CAGR between 2007 and 2010

The IDM sector is still predominantly driven by the Small and Medium Enterprises (SME) companies that covered 68% of total IDM sector establishments. Large companies accounted for 12.3% and start-ups accounted for 19.7% of the IDM sector establishments. Start-up companies showed the largest growth from 2007-2010 at 63%.

	Start-up	SME	Large
2007–2010 CAGR	63%	8%	9%

Figure 6: Employment distribution by size

	Start-up	SME	Large
Share of total 2010 %	6%	50%	44%
Share of total 2007 %	1%	50%	49%



	Start-up	SME	Large
2007–2010 CAGR	105%	22%	18%

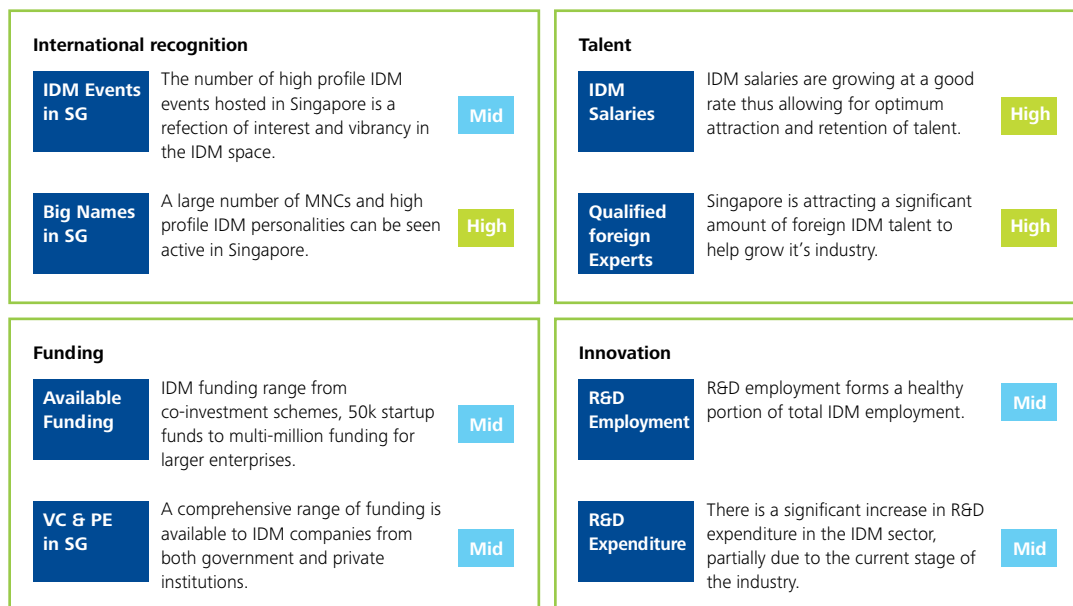
Reflecting the trend of VA by company size, IDM sector employment followed suit with Large and SME establishments constituting 44% and 50% respectively of total employment. Start-up companies have seen the largest growth in employment at 105% from 2007-2010.

One of the key points noted during the Study was that, although SME VA growth was comparably lower than start-ups and large companies, the SME rate of employment grew the highest at 50% from 2009-2010. This trend can be attributed to two main factors. Firstly, due to the need for developing new products to stay on top of the competition, SMEs increased their talent base for R&D requirements to keep pace with the rapidly changing landscape of the IDM sector. The second factor that explains the trend is that, as SMEs attempt to expand into overseas markets, VA growth has been dampened as SMEs employ a wider talent pool to capture and understand the climate in the markets they are trying to enter. Unlike large MNCs who have the resources to reach their audiences on a global scale, smaller players in the market need all the capabilities of their manpower to monetize and market their goods for overseas markets.

Vibrancy within the Singapore IDM sector

Vibrancy within the IDM sector has been attributed to the abundance of funding by both private and public means. Many investors within this industry view Singapore as a means of tapping into the wider regional markets. The increasing numbers of global companies that have based their headquarters in Singapore, in addition to the high standards of living, are key to attracting and retaining top IDM talent.

Figure 7: IDM Vibrancy Dashboard



Attracting global large best-in-class companies and at the same time nurturing local companies has been the key components of the IDMPO's growth plan. Large global enterprises represent a good mix of both outside-in view and inside-out view — ensuring the appropriate mix of capital, technology, and talent availability.

Some Singapore IDM companies have also received multiple international awards and recognitions in recent times: a few notable examples are shown in Figure 8 below.

Figure 8: International recognition for Singapore IDM companies

Award	Description	Companies
International Recognition		
Red Herring 2010: Top 100 Global award	Technology industry's most prestigious awards in the global business region	Kai Square
CES 2011: People's Choice Award	Razer's Switchblade wins the 2011 CNET CES People's Choice Award	Razer
CES 2010: Best of Innovations Award	Award for most innovative consumer electronics (CE) products at the Consumer Electronics Show (CES) in Las Vegas	MoSoNex won for Social Networking Application
GMIC 2010 Innovation Award	Innovation Show is an annual showcase of cutting-edge mobile-internet-based innovations from around the world	2C2P
Industrial/Local Recognition		
CNNgo.com	Voted as one of 11 must-have iPhone travel applications by CNNGo.com, a division of CNN	buUuK
Nokia's Calling All Innovators award	International Nokia Application Developer Competition	2C2P
Kongregate Award	GAMBIT wins the Kongregate Award at Indie Game Challenge	GAMBIT
Mochis Flash Game Awards 2010	GAMBIT's Snap Escape is a finalist at Mochis Flash Game Awards 2010	GAMBIT
Gartner Award 2010	MosoNex was recognized by Gartner Group as a "Cool Vendor in Consumer Mobile Cloud Services"	MoSoNex
Emerging enterprises 2010 award	KAI Square WINS 3rd Emerging Enterprise Awards. Organized by The Business Times and OCBC Bank.	Kai Square



Convergence driving performance at subsector level growth

The phenomenon of the convergence of the Telecommunications, Media and Technology sector is expanding rapidly. Taking a detailed view by the subsector level, the trend clearly highlights its impact:

Figure 9: Subsector convergence



Rich Media Publishing subsector:

- IPTV services: SyQic, provider of interactive TV services, has operations throughout Southeast Asia through partnerships with some of the largest telcos like Maxis and HuaWei.

Mobile Media subsector:

- Mobile social networking: Mozat, provider of mobile social network and community services, reached over 13,000,000 users globally in 2010.
- Localized online content services: buUuk, online provider of interactive content on F&B outlets expanded across all South ast Asian countries

Virtual Worlds & Games subsector:

- Edutainment: Playware Studios Asia Pte Ltd., provider of educational interactive applications, is providing content globally.



2008 Registered Users: 2,500,000	➤	2010 Registered Users: 13,000,000
Countries Served: 10		Countries Served: 50
Offices: Singapore		Offices: Singapore, China

Mozat has increased its registered users and staff by more than 5 times since the start of its R&D project in Aug 2008. Mozat has signed up 9 partner telcos & handset manufacturers, mostly focused in the Middle East and ASEAN region, with an addressable market of over 180 million subscribers.

Figure 10: VA (CAGR 25.8%)

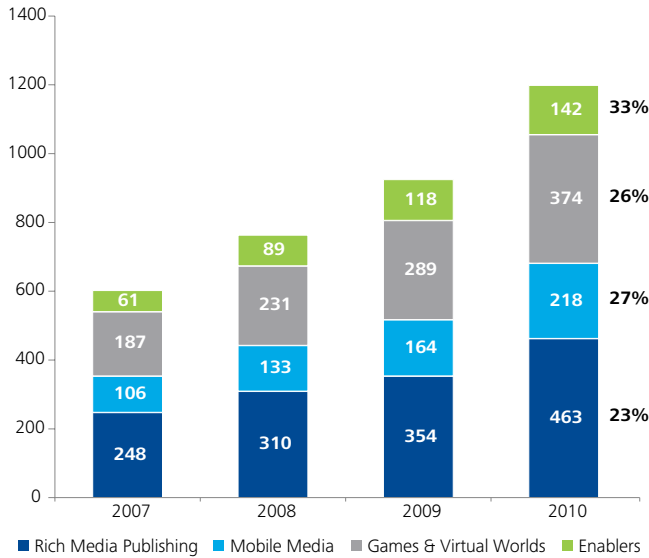
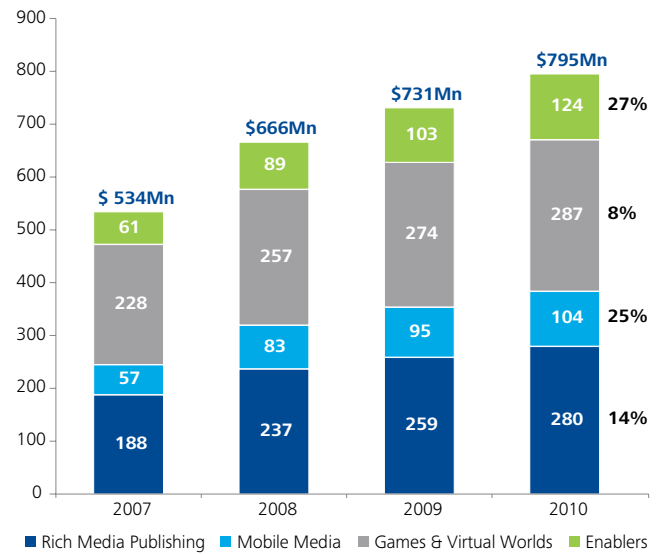


Figure 11: Establishments (CAGR 14.2%)



Note: Numbers are in SGD Millions

The Rich Media Publishing subsector was the highest contributor of VA in 2010 with a share of 23% (\$463 M). Within this subsector, Interactive Television and Film were the main drivers comprising of 33% (\$173 M) of Rich Media Publishing VA. With the growth of Smart TVs in Singapore, Interactive Television and Film will continue to be the driving force within this subsector.

Games and Simulations subsector constituted the largest number of establishment with a total of 287 companies (i.e. 36% of total IDM establishments) in 2010 which grew at 8% CAGR between 2007-2010. This growth has been fuelled by the increase in the number of start-ups within this service line that specialize in animation and interactive games development.

From 2009-2010, Mobile Media witnessed the highest growth rate of 27%. This strong growth was due to the 35% VA growth rate in Interactive Mobile and a 23% growth in Pervasive Computing Media. Growth in the Mobile Media subsector stems from Singapore's high penetration rate of smart phones, and the increasing number of interactive mobile applications such as mobile social media networks applications, in addition to higher spending activities on interactive mobile application downloads.

Within the Enablers subsector, the number of establishments grew the highest from 2009-2010 at 20%. Such strong growth is largely due to the establishment of companies supporting the enablement of multi-platform delivery services, either on TV, Mobile or PC.

Figure 12: Revenue (CAGR 22%)

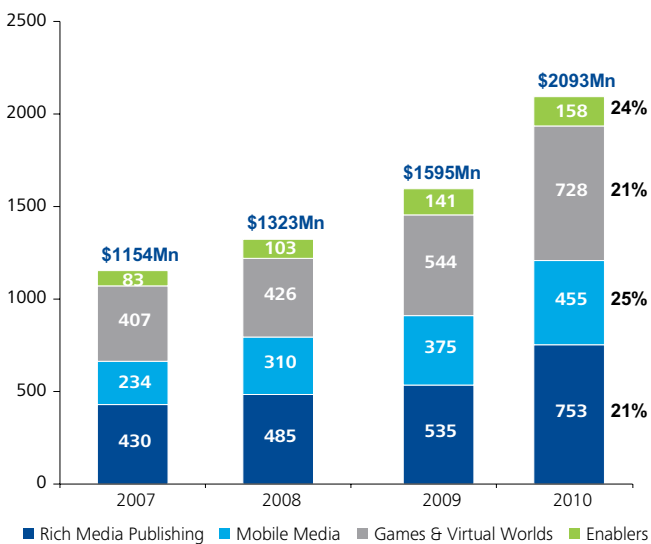
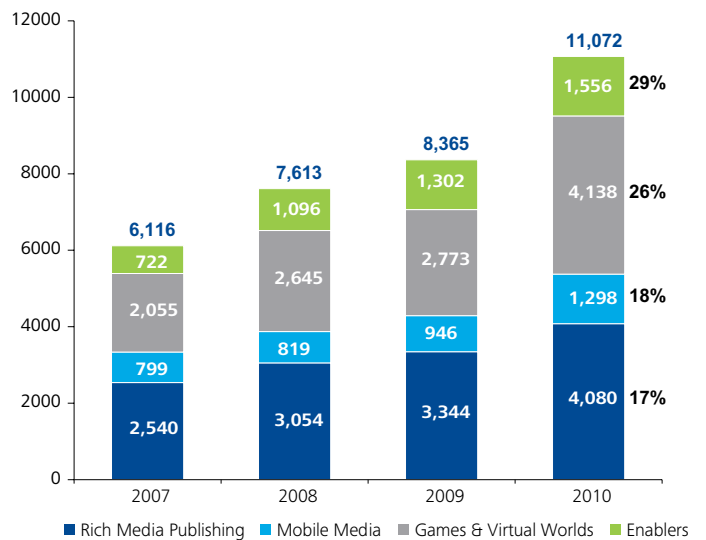


Figure 13: Employment (CAGR 21.9%)



Industry Concerns

- The key concern is the lack of standardization due to fragmented nature of the IDM industry
- Players can capitalize on the convergence and interoperability between various consumer technologies.

As part of the 2011 Study, key concerns of IDM companies surrounding the industry were clearly highlighted. The major challenge of the industry that was brought to attention was where companies should focus their talent base due to a fragmented industry caused by the lack of standardisation. As a result of multiple competing standards in technologies such as Near Field Communications (NFC), M-Commerce, Location-Based Services and Mobile Advertising, scarce resources across companies are stretched thin. Smaller companies are forced to choose which areas to concentrate in, which in turn has led to decreased interoperability between products. The lack of standardization in the industry has also fuelled manpower difficulties as a result of companies being unsure of which direction to drive their talent base.

However, the interoperability of the mobile industry also brings opportunities to companies. In fact bigger companies in Singapore view the convergence and interoperability between various consumer technologies as the next big thing. For example, interoperability in the mobile industry offers opportunities in purchasing where the sight of consumers tapping their mobile devices to pay for transport trips, shopping purchases, and other contactless services could soon be seen as a norm. StarHub, EZ-Link and DBS have already begun trials for an interoperable mobile NFC infrastructure and mobile payment services here in Singapore.

One of the key issues that was reiterated by companies in this year's study was the need for knowledge transfer opportunities by global experts in the industry. Sharing of ideas and experiences by top entrepreneurs in the world remains fundamental to propelling growth and innovative ideas in Singapore's IDM sector. In addition, government assistance in bringing companies together to collaborate on projects also remains vital to nurturing the growth of the IDM sector.

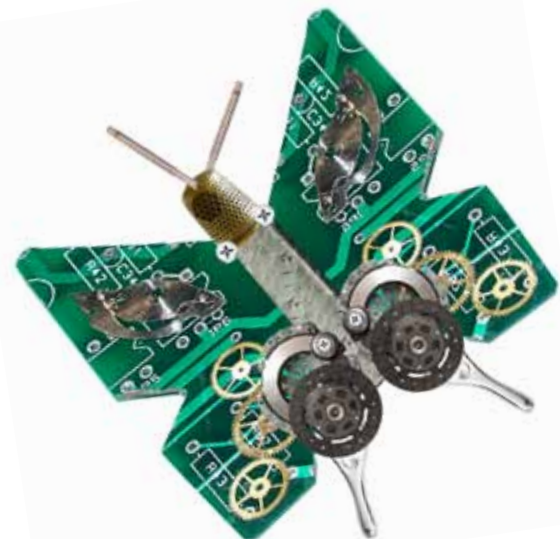
Moving Forward

One of the key trends that was noted by companies in this year's study was the convergence and interoperability between various consumer technologies. For example, technology is now much more adaptive and little modifications need to be made as new trends come to the forefront. Singapore's unique position in the Southeast Asia region also provides bountiful opportunities for regional expansion. In addition, the IDM ecosystem and infrastructure in Singapore remains one of the most stable, with countless opportunities for improvement.

Over to 2011

The Interactive Digital Media landscape in Singapore is evolving rapidly, and as a result, established value chains are being challenged and disrupted by new players, new technologies and business models. The impact of this change is being felt across traditional industries like print, publishing, radio, TV & film, and in digital industries like gaming, mobile, internet and ecommerce.

The continued double digit year-on-year growth rates that are being witnessed in the VA and Employment contributions of the IDM sector to Singapore's GDP is expected to continue for the foreseeable future. Local companies have been the biggest beneficiaries of this growth, with homegrown establishments constituting more than 2/3rd of the industry VA and Employment. The future outlook is highly optimistic, and favorable government programs like the IDMPO Program, are expected to contribute significantly to the growth of this increasingly strategic industry in Singapore.



Find out more

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