Interactive Digital Media
Shaping the digital future

A study by Deloitte
2013
Over the years that Deloitte has conducted the Interactive Digital Media (IDM) Flash Study, we have witnessed the digital ecosystem evolve from nascence into the dynamic and vibrant scene that it is today.

Nowhere is this more evident than in the numerous start-ups that have evolved to companies with a regional or global presence. There is also a trend towards consolidation, as several larger companies have begun to acquire smaller ones in order to expand their digital capabilities.

Among the various IDM subsectors, “Enablers” appear to be the most promising, with Value Added (VA) growing five-fold over the period of 2008-2012 at a Compound Annual Growth Rate (CAGR) of 51%. Digital Advertising contributed to approximately 60% of the Enablers subsector VA in 2012, while Analytics grew at the fastest rate of 245%.

More importantly, perhaps, we found that Singapore is also well on its way to establishing itself as the regional hub in the digital space. Its “Singapore Brand” is pivotal for this, as investors tend to view Singaporean companies in a more favourable light in comparison to their peers in the region. Companies themselves, too, benefit from Singapore’s stringent Intellectual Property rights, conducive business climate, efficient tax structure, world-class infrastructure and industry linkages across the region.

Singapore’s IDM sector continues to face the twin challenges of rising costs and talent shortage. Several government-led initiatives such as the enhancement of IDM-related training in local universities and funding schemes to promote IDM start-ups, in conjunction with the existing tax advantages, serve to address these concerns.

Nevertheless, the strong brand that Singapore has built for itself is paying dividends. Companies, investors and talent alike are looking to Singapore as a base from which to capitalise on the upward growth curve of IDM in Southeast Asia’s emerging markets.

We trust that you will find the study insightful and informative as a benchmark of IDM trends as it continues to shape Singapore’s digital future.
Background

Background to the Annual IDM Flash Study
In August 2006, the Interactive Digital Media Research and Development Programme Office (IDMPO) was set up to coordinate a multi-agency strategic IDM Research & Development (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, promote innovation within the media sector, develop a sustainable ecosystem, fuel vibrancy and help pioneer the next generation of Web-based media.

Objectives and approach
In 2013, Deloitte conducted extensive primary research through interviews with key stakeholder groups. The objectives of the study were to size the sector, track the sector’s key indicators and growth, monitor the top performers and “trend-setters”, and point out key market opportunities and challenges facing the sector.

Using a bottom-up approach, direct interviews were conducted with 68 companies, 8 institutes of higher learning (IHLs) and 11 incubators from across the sector, which together represent approximately 80% of the total sector VA. Secondary research was conducted for an additional 140 companies.

The emphasis was to ensure the accuracy of results, while ensuring a conservative estimate of the IDM sector. Only known names of companies in the IDM space have been used for creating the master list of the IDM universe in Singapore and in estimating the number of establishments. The study includes only IDM-related revenues and headcounts involved in IDM-related activities from the companies surveyed. For companies that did not participate in the study this year, Deloitte used conservative values from their annual reports and respective industry growth rates to extrapolate and derive the numbers. Profits for the calculation of VA were calculated using conservative operating margin estimates for companies that only shared total revenue information. For cases with conflicting secondary information relating to industry growth rates, employee headcount numbers, third party investments in companies and the like, the most conservative estimate provided by a reliable source was used.

Sector definition and design
As with previous studies, this study adopted definitions that have been synthesised 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 consists of three key components:
• The core IDM industry includes all sectors involved in creating, publishing, producing, displaying, and distributing IDM-related content; it can be further segmented into Rich Media & Publishing, Games & Simulation, Mobile Media, and Enablers
• The interdependent industries include all sectors engaged in the production, manufacture, and sale of devices and equipment to wholly or primarily facilitate the access or delivery of IDM
• The embedded sector, composed of vertical businesses that are involved in the development and purchase of IDM-related services
In 2013, Deloitte conducted extensive primary research through interviews with key stakeholder groups. The objectives of the study were to size the sector, track the sector’s key indicators and growth, monitor the top performers and “trend-setters”, and point out key market opportunities and challenges facing the sector.
Since its inception, Singapore’s IDM sector has grown substantially and impressively, contributing S$2.06B of VA to the economy in 2012. The IDM sector added S$301M to the national economy over the last year, and sector employment grew by 7% from 2011-2012, despite an overall slowing in Singapore’s economy. In addition, VA increased by 17% during this period, demonstrating continued growth in the sector.

The sector VA has almost tripled since 2008, growing at a CAGR of 28.3% over this period. Since 2008, total sector revenues have grown by approximately 22%, contributing an estimated S$2.96B in 2012.

From 2008-2012, employment in the IDM sector grew at a CAGR of 17.5%, adding a total of 6,897 jobs during this period and resulting in a total sector employment of 14,510. In line with this substantial growth, IDM sector productivity has continued to grow at a steady pace with a CAGR of 9% from 2008-2012, reaching an all-time high of S$142,000. This can be contrasted with ICT sector productivity of S$105,000 to demonstrate the growing importance of IDM to Singapore’s economy.

Figure 2: 2011-2012 IDM sector overview

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Value Add</th>
<th>No. of employees</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>S$2,958M</td>
<td>S$2,064M</td>
<td>14,510</td>
<td>939</td>
</tr>
</tbody>
</table>

15% growth* 17% growth* 7% growth* 9% growth*

Rich media & publishing Mobile media Games & simulation Enablers

Revenue

S$948M S$775M S$587M S$648M

Value Add

S$717M S$382M S$504M S$461M

No. of employees

4,495 2,190 4,819 3,006

No. of companies

328 123 342 146

*Note: numbers refer to year-to-year growth

- Sector VA increased at a 28.3% CAGR from 2008-2012, with a 17% increase over the last year
- From 2008-2012, 6,897 jobs were added by the sector, with employment increasing by 7% over the last year
- Local companies contributed 56% of VA in 2012 and employed 64% of people in the IDM sector
- Foreign companies’ contribution to the IDM sector reached unprecedented levels, demonstrating increased global recognition of Singapore as a regional IDM hub
- SMEs continue to represent the majority (68%) of IDM sector establishments, though large companies contributed to 62% of sector VA
- Many large IDM sector stakeholders identified big data analytics as an emerging market opportunity, reinforced by a VA growth of 245% from 2011-2012
Increased since 2008:

- S$1.3B of VA
- Estimated CAGR 2008–2012: 28%

IDM Productivity

<table>
<thead>
<tr>
<th>Year</th>
<th>IDM Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>S$100,000</td>
</tr>
<tr>
<td>2009</td>
<td>S$111,000</td>
</tr>
<tr>
<td>2010</td>
<td>S$115,000</td>
</tr>
<tr>
<td>2011</td>
<td>S$130,000</td>
</tr>
<tr>
<td>2012</td>
<td>S$142,000</td>
</tr>
</tbody>
</table>

CAGR (2008–2012): 9%

ICT Productivity

<table>
<thead>
<tr>
<th>Year</th>
<th>ICT Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>S$105,000</td>
</tr>
</tbody>
</table>

Increased since 2008:

- 6,897 jobs
- Estimated CAGR 2008–2012: 17%
The 2013 study revealed a distinct advantage that set Singapore apart from the rest of Southeast Asia: the “Singapore Brand”. From an investment perspective, this was evident from the observation that global venture capital firms view Singaporean companies more favorably than companies from other Southeast Asia countries. From an operational perspective, the advantages of being in Singapore are inextricably linked to the long-term benefits of a favorable business climate, efficient tax structure, world-class infrastructure and regional linkages.

Key findings

A favourable business climate
A total of 68 companies, 8 IHLs and 11 incubators were interviewed for the 2013 study, representing approximately 80% of IDM sector VA. These stakeholders have provided valuable perspectives and insights into the motivations of IDM companies which have chosen to locate in Singapore.

The 2013 study revealed a distinct advantage that set Singapore apart from the rest of Southeast Asia: the “Singapore Brand”. From an investment perspective, this was evident from the observation that global venture capital firms view Singaporean companies more favorably than companies from other Southeast Asia countries. From an operational perspective, the advantages of being in Singapore are inextricably linked to the long-term benefits of a favorable business climate, efficient tax structure, world-class infrastructure and regional linkages.

Figure 5: The IDM ecosystem perspective on national advantages

- Rising costs and talent shortage remain a key challenge for IDM companies operating in Singapore
- Singapore is moving away from content creation and towards the skill-heavy aspects of the business
- Investors are concerned with the increasingly stringent immigration laws

Source: Deloitte analysis and company interviews
Key industry concerns
The 2013 study revealed that the two key concerns of the various stakeholders in the IDM sector were the rising costs and a shortage of talent. Primary research shed light on the extent of these concerns, as many companies recounted setting up outsourcing centres in other countries in the region to alleviate the strain caused by high costs of infrastructure and labour. It is increasingly evident that the competitive advantages offered by Singapore are being eroded by the costs associated with the high quality infrastructure and labour. These circumstances suggest that Singapore is becoming more of a regional hub rather than a site for content creation and generation. Indeed, one interactive learning media company commented that “for mass producing, outsourcing is more cost-effective; but for concept design, Singapore is better. In general, Singapore is better for the skill-heavy aspects of business.”

While IDM companies alluded to the small domestic market as a reason for Singapore’s diminishing national advantage, investors in the ecosystem were more focused on the challenges presented by stricter immigration laws.

Figure 6: The IDM ecosystem perspective on market challenges within the sector

Source: Deloitte analysis and company interviews
Deloitte found that Singapore’s talent shortage continues to be a key challenge to the sector, which lacks both technical and creative skills. This shortage has resulted in a poaching culture in the industry, further fuelled by its small size. The increasingly stringent foreign labour laws have exacerbated this situation. In fact, with regard to government policies, the majority of companies mentioned that overseas talent and the consequent knowledge transfer would greatly benefit the ecosystem. This talent shortage combined with overall inflation in the economy has resulted in upward pressure on operating expenses and wages, further diminishing Singapore’s competitive advantage in the region. In addition, the study uncovered that many start-ups encounter market-facing challenges. For instance, there appears to be very little emphasis on marketing, presentation and soft skills which are crucial for securing the support of both customers and investors.

There are several fundamental drivers of the talent shortage. As a reflection of the risk-averse disposition of the general population in Singapore, students and graduates tend to be motivated by job security and, as a result, gravitate towards traditional jobs in the well-established industries. Moreover, candidates are influenced by the negative perceptions of creative industries and, subsequently, lack interest in them. With the rising inflation rates in Singapore, job security has also gained much importance in the eyes of young graduates and professionals trying to cope with the high costs of living, propagating this vicious cycle of rising costs and talent shortage.
This year, Deloitte conducted a series of interviews with IDM investors across the whole spectrum, capturing perspectives on why IDM investors choose to be located in Singapore.

The results showed that:

- While companies in the pre-seed and seed stages enjoyed a significant amount of venture funding support, slightly larger companies that required Series A through IPO support face more challenges in Singapore.
- Several Singapore-based venture capital firms are investing in start-ups in other countries in the region such as Malaysia, Philippines and Thailand taking valuable funding out of the country.
- Government-supported funds form the majority of early stage investees, making the model potentially untenable in the long-run if the government decides to scale down.
Case studies

Innovation is a key determinant of growth in Singapore’s IDM ecosystem. In recent years, IDM companies across subsectors have seen substantial growth and have been able to capitalise on the opportunities in the sector.

- **Local spinoffs from educational institutions**: Educational institutions provide fertile breeding ground for start-ups. Partnerships with governmental agencies are also crucial in ensuring the long-term viability of these firms.

  Quantum Inventions Private Limited (QI) is a spin-off from the Centre for High Performance Embedded Systems (“CHIPES”) in Nanyang Technological University. QI provides Google Maps Singapore with all of its traffic information, and has a longstanding partnership with the Land Transport Authority of Singapore (LTA) for live traffic information.

- **Leveraging on the “Singapore brand”**: Companies were able to leverage on Singapore’s strong international reputation to forge relationships with clients worldwide.

  Tagit is Asia’s leading mobile banking software solutions provider. Founded in 2004, Tagit now has a highly successful track record in designing, developing and deploying industry-specific mobile applications for global clients, including market leaders such as Citibank India, DBS Bank, Maybank, Standard Chartered Bank and UOB Bank.

- **Capitalising on the latest trends**: Increased worldwide focus on the importance of analytics has created an impetus for start-ups to fill this market gap.

  aSpecial Media is an analytics company specialising in online behavioural targeting. Founded in 2012, aSpecial Media has developed proprietary techniques to form a bridge between online audiences, website owners, media agencies and advertisers, building Asia’s largest premium database of the interests of online and mobile users.
Looking ahead

Over the last five years, Singapore has gained recognition as a key hub in the global IDM sector. Healthy growth in both local and global companies, and a strong base of local, regional, and global IDM talent in the country are allowing for unprecedented levels of activity and innovation in the sector.

The IDM landscape now consists of a vibrant and rapidly expanding group of companies that are redefining traditional industry constructs across subsectors as varied as mobile telephony, e-commerce, digital analytics and online & interactive learning.

Growth continues at breakneck speed with year-on-year growth rates consistently maintained in the double digits and close to a thousand high-value jobs added to the economy this year. Strong start-up growth has also further strengthened the confidence that global investors have in the sector.

From being a tiny sliver of the overall media industry in Singapore, IDM has become a fast-growing contributor, accounting for close to 13% of the overall media industry, according to estimates by the Singapore Department of Statistics.

As a sign of increased sector maturity, larger and more established players are looking at inorganic growth avenues to strengthen their digital business units, with companies like SingTel and Singapore Press Holdings at the forefront of this trend. This has led to a spike in mergers and acquisitions activity in the sector in the past year, and consolidation appears imminent. Furthermore, smaller companies in the sector are focusing on cross-border partnerships to help them expand regionally and globally.

Subsectors like big data analytics, interactive learning and mobile/social commerce look to be the most promising in the near future, and significant growth can be expected from companies in these, and other subsectors, in the coming years.

The strong global brand that Singapore’s IDM sector has built for itself is paying dividends, with talent, investors, and companies looking to target the vast potential that exists in this part of the world.

The long-term sector outlook continues to be strong, and opportunities are abundant. The sector has firmly established itself as a strategic priority for the government, and meaningful contributions to the economy can be expected from the sector in the foreseeable future.

Singapore is becoming more of a regional hub rather than a site for content creation and generation.
IDM investor directory

**A2 Partners**
A2 Partners is focused on building and accelerating young companies. By bringing together the A2 Investment Network, A2 Talent Network, and A2 Partner Ecosystem, it enables CEOs and their teams to gain significant leverage when developing their businesses.
Contact: Andrew Shields (andrew.shields@a2.sg)
Website: www.a2.sg

**Crystal Horse Investment**
Crystal Horse Investments (CHI) is founded in Singapore and is mainly involved in angel investments, supporting founders who are passionate about their business ideas, realistic, hardworking, looking for an edge, think out of the box and ethical in their dealings.
Contact: Fiona Ong (fiona.ong@ch-investments.com.sg)
Website: www.ch-investments.com.sg

**Expara IDM Ventures (EIDMV)**
Expara is a venture creation company founded in Singapore in 2003. Launched by Expara in 2007, EIDMV is a business accelerator for interactive and digital media companies, providing pre-seed investments, advisory services, and mentorship for start-ups in Southeast Asia. Its mission is to help build scalable value-innovation-driven ventures.
Contact: Douglas Abrams (dka@expara.com), Rosalind Tan (rosalind@expara.com)
Website: www.expara.com

**Fatfish MediaLab**
Fatfish MediaLab Pte Ltd is a digital incubator run by an experienced industry veteran which focuses on the mobile and e-commerce areas. Fatfish MediaLab is an official appointed incubator of the iJAM funding scheme under MDA that invests in early-stage Singapore-headquartered start-ups.
Contact: Miki Ng (miki@fatfishgroup.com)
Website: www.fatfishlab.com

**FocusTech Ventures (FTV)**
FTV is a private investment firm led by entrepreneurs who have started companies that have since employed thousands of people worldwide and with over $30M in exit value. FTV aims to help aspiring internet, digital media and new generation hardware entrepreneurs build sustainable companies that become category leaders through its resources and network.
Contact: Kelvin Ong (kelvin@focustechventures.com)
Website: www.focusTechVentures.com

**JFDI.Asia Pte Ltd**
JFDI.Asia is an innovation academy. JFDI’s flagship seed accelerator, inspired by Y Combinator and TechStars, takes lean start-ups from idea to investment-readiness in 100 days. JFDI also serves founders via the OpenFrog mailing list, a Core Curriculum seminar series, regular Start-up Clinics, and a co-working community at Block71.
Contact: Hugh Mason (hugh@jfdi.asia)
Website: www.jfdi.asia

**QuestAccelerator**
QuestAccelerator is the incubation arm of QuestVC, China’s leading seed to angel fund for mobile and internet companies with scalability and replicability in vast internet communities. Working closely with start-ups, QuestVC provides a soft-landing platform for China through mentorship, funding and networking opportunities.
Contact: i.JAM Team (ijam@questvc.com)
Website: www.questvc.com

**Ruvento Ventures Pte Ltd (RVT)**
RVT is a legal entity established in Singapore engaging in Business Accelerator Management, focused on the operation and management of RUVENTO’s venture funds.
Contact: Alex Toh (alex.toh@ruvento.com)
Website: http://www.ruvento.com/en/company

**SBI Ven Capital**
SBI Ven Capital is an Asia-focused private equity firm and part of the SBI Group, Japan (one of the largest Japanese private equity firms with more than US$3B assets under management). It provides growth capital to promising companies in the mid-market sector in Asia and companies with a strong Asian angle.
Contact: Tan Kian Hwa (kianhwa.tan@sibivencapital.com.sg)
Website: www.sibivencapital.com.sg
Singapore infocomm Technology Federation (SiTF)
SiTF 123JS (123Jumpstart) is a platform that aims to support startups by providing start-ups with the resources that they require. SiTF 123JS is also an appointed incubator for i.JAM Reload and ACE Startup.
Contact: Joel Tan (joel@sitf.org.sg), Liu Zhen (liuzhen@sitf.org.sg)
Website: www.sitf.org.sg/123jumpstart

SingTel Innov8
Innov8 focuses its investments on technologies and solutions that will lead to quantum changes in network capabilities, next generation devices, digital content services and enablers to enhance the customer experience. It works closely with the ecosystem of leading innovators, developers, government agencies, research and development, and capital providers to bring cutting-edge technologies and solutions to the various markets that the SingTel Group operates in.
Contact: Edgar Hardless (ehardless@singnet.com or innov8@singtel.com)
Website: www.innov8.singtel.com

Vertex Venture Management
Vertex is a wholly-owned subsidiary of Temasek Holdings, investing in emerging companies and leading venture capital funds throughout Greater Asia and the US.
Contact: Han Sang-Uh (shan@vertexmgt.com)
Website: www.vertexmgt.com

Vickers Capital Group
Founded in 2004 by Dr Finian Tan, Vickers Capital Group is an investment house with offices in Shanghai and Singapore. The group manages four funds of proprietary capital focusing on early stage investments in the Asia Pacific market. The group also invests heavily in the IDM space in greater China and Southeast Asia.
Contact: Jeff Chi (jeff.chi@vickersventure.com)
Website: www.vickersfinancial.com

Walden International
Walden International is a leading venture capital firm with over US$2B in committed capital. It has invested in over 400 companies in U.S. and Asia, with more than 80 initial public offerings. Walden is actively investing in online, mobile, social media market sectors. Notable exits include Brandtology, Com2uS, HungryGoWhere, JobStreet and Ndoors.
Contact: Kris Leong (kleong@waldenintl.com)
Website: www.waldenintl.com/asia/index.aspx
Find out more

John E. Goeres
Executive Director
Southeast Asia Industry Leader
Technology, Media & Telecommunications
+65 8233 9412
jgoeres@deloitte.com

Peter Ho
Executive Director
+65 9695 2833
peho@deloitte.com

Mithun Radhakrishnan
Senior Consultant
+65 8381 0841
mrkrishnan@deloitte.com

Por Jian Wei
Consultant
+65 9737 9412
jpor@deloitte.com

Saloni Bhojwani
Analyst
+65 9796 2484
sbhojwani@deloitte.com
Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/sg/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte has in the region of 200,000 professionals, all committed to becoming the standard of excellence.

About Deloitte Southeast Asia
Deloitte Southeast Asia Ltd—a member firm of Deloitte Touche Tohmatsu Limited comprising Deloitte practices operating in Brunei, Guam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam—was established to deliver measurable value to the particular demands of increasingly intra-regional and fast growing companies and enterprises.

Comprising over 250 partners and 6,000 professionals in 23 office locations, the subsidiaries and affiliates of Deloitte Southeast Asia Ltd combine their technical expertise and deep industry knowledge to deliver consistent high quality services to companies in the region.

All services are provided through the individual country practices, their subsidiaries and affiliates which are separate and independent legal entities.

© 2013 Deloitte Southeast Asia Ltd