New Zealand TRADE & ENTERPRISE

ICT market in Taiwan

1.0 MARKET STRUCTURE

1.1 Background

Taiwan is a significant player in the global ICT industry, with a well-established production pipeline, strong R&D capability and experienced engineers. Taiwan manufactures 99% of the world's motherboards, 93% of the world's cable modems, 87% of the world's notebook computers, 77% of the world's LCD monitors and 70% of the world's PDAs.[1]

Close cooperation between the public and private sectors has been very important to the industry's success. Public funding for R&D has helped create a strong knowledge base and provided trained manpower for the industry.

Recently, Taiwan has moved on from being solely a traditional OEM/ODM manufacturer and now recognises the importance of also promoting local brands. Acer, Asus, BenQ, Mitac and HTC are examples of brand names that have now become established internationally.

1.2 Market size and growth

The Taiwan ICT market largely comprises the following:

- Information software
  - computer software
  - embedded software
- Network communications
  - data network equipment
  - mobile phone
  - PDA
- LCD panels
  - large size LCD
  - S/M size display panel
- IC Design
  - microchip design
  - microchip manufacture
- Information hardware
  - notebook PC
  - desktop PC
  - server
  - motherboard
  - CDT/LCD monitor
  - Optical Disk Drive (ODD)
  - Digital Signal Controller (DSC)

Table 1 Taiwan ICT Industry Statistics 2007/2008 and 2009 forecast (US$ billions) [2]

	Info. Software	Communications	LCD Panel	IC Design	Info. Hardware	Total
2007	6.8	22.1	33.4	44.1	102.8	209.2
2008	7.8	23.7	35.2	40.8	115.6	223.1
2009	9.1	23.7	36.1	40.2	124.6	233.7

Taiwan's ICT industry has continued to hold its strength in manufacturing during the past five years but prior to 2007 the industry output value always increased by more than 10% annually.

2008 was a difficult year. With the credit crunch hitting the global economy, the ICT industry did not perform to the level of the previous few years. While the statistics above show some growth, it has been less than what was achieved prior to 2007.

2009 forecasts indicate a possible recovery but more time will be needed to regain high growth.

1.3 Main ICT regions in Taiwan

1.3.1 Hsinchu Science Park (HSP)

- The government has invested approximately US$1.7 billion in the park's infrastructure and administration since 1980. This is the first high-tech industrial park in Taiwan
- 396 high-tech companies are located in the 770 hectare park
- More then 120,000 people work in HSP; 80% of them engineers
- Turnover in 2008 was approximately US$42 billion, a 5% increase from 2007

1.3.2 Southern Taiwan Science Park (STSP)

- Two locations, one in Tainan county and one in Kaohsiung county
- STSP covers 1,600 hectares. It's establishment in 2000 was part of the government's "Green Silicon Island" project
- 157 high-tech companies are located in STSP with approximately 53,000 employees
- Turnover in 2008 was approximately US$16.3 billion, a 3.4% decrease from 2007

1.3.3 Central Taiwan Science Park (CTSP)

- Located in Taichung county, established in 2003
- 85 high-tech companies located in STSP
- Turnover in 2008 was approximately US$9.8 billion, a 3% decrease from 2007

1.3.4 Nankang/Neihu Software and Science Park

- Located in Taipei city
- Before 2000, the area was dedicated to light industrial manufacturing, then converted into a high-tech related industry centre
- Approximately 3,000 companies are located in the area, with approximately 100,000 employees
- Turnover in 2008 was approximately US$55 billion, a 5% increase from 2007

1.4 Known factors influencing growth rate

- Taiwan’s ICT market growth is very dependent on sustained demand from major international customers based in the United States, Europe and other developed countries.
- The credit crunch and resulting economic downturn in 2008 impacted on the industry dramatically in terms of the decrease in product demand from major international customers.
- As the global economy improves, so Taiwan's market growth should strengthen
- Other more positive factors include:
    - New product development from OEM/ODM projects.
    - Local demand increasing as the recovery from the economic downturn takes place.
    - Better awareness and recognition of Taiwanese ICT product brands internationally.

2.0 COMPETITIVE ENVIRONMENT

2.1 Major players in the market

2.1.1 Information software

Cyberlink (www.cyberlink.com/) provides the best example of the software industry in Taiwan. The company’s focus is mainly on consumer software. Products such us PowerDVD and PowerDirector are very popular among PC users.

Taiwan is also known for its anti-virus software through companies like Trend Micro (www.trendmicro.com.au/au/home/).

2.1.2 Communications

D-Link (www.dlink.com/) is representative of the leaders in Taiwan’s communication sector. The company has successfully built a strong brand image, and D-Link has become one of the most popular trademarks in the global communications market.

Taiwan produces a mobile phone every 0.26 seconds mostly doing OEM/ODM. Compal Communications (www.compalcomm.com/) has been contracted by Nokia and Sony/Erickson, with production of around 48 million pieces annually.

The smart phone brand “HTC” manufactured by High Tech Computer Corp. (www.asia.htc.com/asia/index.html) has been launched successfully in Europe. This is a good example of an innovative international product with a Taiwanese brand.

2.1.3 LCD Panel

This industry largely comprises what is known as “the Five Tigers” as follows, ranked by production capability:
- AU Optronics (www.auo.com)
- Quanta Display (www.qdi.com.tw)
- ChiMei Electronics (www.chimei.com.tw/en/index.asp)
- HannStar Display (www.hannstar.com)
- Chunghwa Picture Tubes (www.cptt.com.tw/)

2.1.4 IC Design

MediaTek (www.mtk.com.tw/index.php) and
Novatek (www.novatek.com.tw/) are examples of Taiwan’s IC design industry.

2.1.5 Information Hardware

Most activities in the information hardware sector are from contract OEM/ODM manufacturing. Major notebook PC producers include Compal Computers (www.compal.com/index_En.htm) and Quanta Computers (www.quanta.com.tw/).

With the increasing importance of Taiwanese brands, however, Acer (www.acer.com) and Asus (www.asus.com) have become established names globally in notebooks and desktop PCs. BenQ’s LCD TV (www.benq.com) is distributed worldwide.

2.2 Marketing channels

There are three different types of channels:
- B to B components
  It is recommended that components suppliers conduct business direct with the end-users.
- B to B finished products
  Companies are recommended to provide finished products through an experienced local agent/distributor. Taiwan companies prefer to do business in this way if the supplier is from offshore.
- B to C finished products
  Here it is advisable to work through an experienced local agent/distributor with strong channels to market and after sales service.

2.3 Gateway to China

Taiwan is well positioned as a gateway to China not just because of common cultures, languages and blood ties. Importantly, Taiwanese investment and commercialisation skills have contributed a lot to the development of the mainland’s ICT industry. Some facts include:

- Between 1991 and 2007, Taiwan's government approved 35,682 specific investments totalling US$58 billion in mainland China. The top three mainland industries in which Taiwan invested between 1991 and 2007 were:
  - Computer, electronic & optic products: 15% of total investments
  - Electronic components: 15%
  - Power equipment: 9%

In May 2008 a new government took over in Taiwan. Under the leadership of Ma Ying-jeou a policy of developing closer links with mainland China is being developed. Direct flights between the two economies have resumed after more than 50 years; there is greater cooperation on financial regulation, and Taiwan will open to direct Chinese investment in services, manufacturing, property and infrastructure during 2009. A significant development flowing from this will be the purchase by China Mobile of 12% of Taiwan's Far EasTone Telecommunications, the first Chinese investment into Taiwan since 1949.

3.0 REGULATORY OVERVIEW

3.1 Duties/Taxes

Customs regulations are administered by the Directorate General of Customs which is under the Ministry of Finance. Tariffs are based on the Harmonised System (HS Code)/CCC Code (Commodity Classification of the Republic of China Code).

Most duties are ad valorem (per cent), calculated on the basis of the transaction value. The term "transaction value" means the price actually paid or payable for imported goods sold from the exporting country to Taiwan. (Ministry of Finance, Taiwan)

Most ICT items are under HS Code heading 85. For more details of "Consolidated List of Commodities Subject to Import Restriction and Commodities Assisted by Customs for Import Examination", please visit
http://fbfh.trade.gov.tw/rich/test/indexfhE.asp

3.1.1 Total Import Tax includes the following:

Import Customs Duty + Commodity Tax + Trade Promotion Charges + Business Tax

Import Customs Duty = Duty-paying Value (DPV) x import tariff

Commodity Tax = (DPV + import customs duty) x applicable collection rate

Trade Promotion Charges = DPV x 0.0415% (when total amount is under NT$100 it is exempt from the charge)

Business Tax for imported goods = (DPV + import customs duty + commodity tax) x 5%

Note: import tax is levied on CIF value

For more information about the Customs Act, please visit:
http//eweb.customs.gov.tw/lp.asp?ctNode=6484&CtUnit=720&BaseDSD=7

3.2 Regulatory and Licensing Restrictions or Difficulties

The importation of ICT related products are not restricted by quantity. However, in some cases, products should be tested and approved/certified by the appropriate authorities prior to import.

4.0 RECOMMENDED STRATEGIES

4.1 Tactical recommendations on market entry

- For the OEM/ODM industry, it is critical to understand the following when developing market strategy:
  - where your product should be positioned in the market
  - your product's competitive advantages against the competition
  - industry trends, and where new product opportunities are
  - the critical importance of maintaining a consistent supply of products

- Visit the market
  Visits to Taiwan are essential to understand the competitive environment and to build relationships with potential partners. Timing your visit to coincide with a trade fair can help develop your network quickly and bring some good insights.

- Use capable and reliable distributors
  Successful entry to the Taiwan market will require an effective distributor with good connections in the industry.

- Optimise the opportunity to leverage the message of New Zealand's innovative and creative environment.

- Seek the assistance of New Zealand Trade and Enterprise for market research, connecting with potential partners in-market, and promotional advice.

4.2 Recommendations on long term strategic issues for exporters to consider

ICT is a rapidly changing field and it is important to maintain good relationships with local partners and networks to keep up to date with market trends and developments.
It is advisable to seek advice on IP protection.

5.0 DIGITAL CONTENT - AN EMERGING INDUSTRY DERIVED FROM ICT

5.1 Background

The digital content industry is a key area of focus for the Taiwan government in its strategy of supporting leading edge growth industries following the maturity of much of its ICT industry. Digital content is also considered a barometer for the continued development of the knowledge-based economy and transfer of resources from traditional industries into high value-added industries to improve the overall competitiveness of Taiwan.

The government has cited digital content as a key sector for economic growth, under the "Two Trillion and Twin Stars” Development Plan administered by the Ministry of Economic Affairs (MOEA). This is supported by the formation of the Digital Content Industry Promotional Office (DCIPO) under the MOEA responsible for industry development and promotion, and the Digital Content Institute (DCI), under the Institute for Information Industry (III), responsible for industry training and skill development.

The industry revenue was approximately US$12.4 billion in 2008 and consists of the following main sectors:
- digital games
- computer animation
- e-learning
- mobile application services
- network services
- content processing software
- digital audio and video

The revenue in 2009 is expected to grow at least 10%.

New Zealand Trade and Enterprise sees particular opportunity for New Zealand digital content companies in Taiwan because New Zealand's creativity and technical ability is recognised as complementary to Taiwanese capability.

5.2 Marketing channels

5.2.1 Digital games companies

Game companies in Taiwan are interested in potential co-development and distribution opportunities. NZ companies are advised to present their creative ideas to help explore potential partners’ interest.

5.2.2 Computer animation

Taiwan companies are seeking co-production partners or looking to work with NZ companies as service providers. NZ companies should communicate with the studios directly.

5.2.3 E-learning

E-learning companies are dealing directly with the end-users. NZ companies should communicate with the local leading e-learning providers for potential collaboration opportunities.

5.2.4 Mobile applications

Mobile applications companies in Taiwan have established good distribution channels through local telecom carriers and mobile phone manufacturers. It is advisable for NZ companies to work through an experienced mobile applications company.

5.3 Gateway to China

Most Taiwan digital content companies have a presence in China. They usually work with local distributors or agents, but some have established branch offices.

Chinese animation studios work with Taiwanese studios as service providers or co-production partners. Low labour costs and the large market size are the main attraction for these relationships.

5.4 Regulatory overview

Digital content was first recognised by the Taiwan government as an industry of opportunity in 2003 and is still an emerging market in Taiwan. There are no particular restrictions on international companies entering the market or forming partnerships.

There are no import duties for software related products. A withholding tax of 20% is payable on income earned in Taiwan. GST of 5% is payable on all goods and services.

5.5 Tactical recommendations on market entry

- New Zealand is perceived in Taiwan as having strong capabilities and offering considerable potential for collaboration with the Taiwanese digital content industry
- Visits to Taiwan are essential to understand the competitive environment and to start establishing relationships with potential partners. Timing your visit to coincide with a trade exhibition can help develop your network quickly and bring some good insights.
- Communicate with local contacts regularly to be aware of new trends and developments.
- Seek the assistance of New Zealand Trade and Enterprise for market research, connecting with potential partners in-market, and promotional advice.

5.6 Market resources and relevant exhibitions

Digital Content Promotional Office (DCIPO) www.nmipo.org.tw/Eng/
Digital Content Institute (DCI) www.dic.org.tw
Taiwan Digital Content Industry Online Directory www.digitalcontent.org.tw/eng/guidebook.php
Taipei Game Show, February http://tgs.tca.org.tw/
Digital Taipei 2009, September (Website is unavailable; for more information please contact NZTDC)

6.0 MARKET RESOURCES AND CONTACTS

6.1 Government and Organisations

The Bureau of Foreign Trade, Ministry of Economic Affairs
http://eweb.trade.gov.tw/

Ministry of Economic Affairs (MOEA)
www.moea.gov.tw/

Office of Committee for Information Industry Development (MOEA)
www.ociid.org.tw

Committee of Communications Industry Development (MOEA)
www.commuication.org.tw

6.2 Trade events

Computex
Held in June every year in Taipei
www.computextaipei.com.tw/

Taipei Computer Applications Show
Held in July/August every year at the Taipei World Trade Centre
http://www.biztradeshows.com/trade-events/taipei-computer-applications.html

Taipei International Electronics Show
Held in October every year at the Taipei World Trade Centre
www.taitronics.org/taipei/

Broadband Taiwan
Held in October every year at the Taipei World Trade Centre
www.broadbandtaiwan.com.tw/

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[1] Institute for Information Industry, July 2007
[2] These statistics were sourced from the following websites:
www.itis.org.tw/rptDetail.screen?rptidno=457278346
www.eettaiwan.com/ART_8800563906_617723_NT_d3722272.HTM
www.eettaiwan.com/ART_8800563749_480702_NT_5d216bdb.HTM
www.eettaiwan.com/ART_8800563409_480102_NT_09c5ad0c.HTM
http://pro.udnjob.com/mag2/it/storypage.jsp?f_MAIN_ID=96&f_SUB_ID=324&f_ART_ID=45135