

Investment Opportunities in the Information Services Industry in Taiwan

I. Reasons to Invest in Information Service Industry

- A. Located at the economic strategic position in Asia, Taiwan serves as a connecting hub to the industries and crucially bridges the Asia emerging market with Europe, America and Japan. Also, it is the priority choice for operation headquarters in Asia Pacific area.
- B. The revenue of Taiwan information service industry continues to grow. In 2013, the revenue reaches NT\$310.9 billion. In addition, the numbers of registered business increase sharply from 8,271 in 2009 to 9,259 in 2013, 11.9% growth.
- C. With competitive advantages in technology and manufacturing industries, Taiwan is the world second largest producer for information hardware. Semiconductor, optoelectronics, information and communication related products from Taiwan take up more than 70% of the global market share. Foreign firms could make good use of Taiwan's capacity as "world's best" parts supplier to establish market development and R&D center in Taiwan, creating innovative products and services. Vendors have the capacity to provide cross-border service by replicating the success experiences, meanwhile using Taiwan as a base to create all sorts of products and services and expand the Chinese market via marketing
- D. The government strongly promotes policies related to technology assistance and counseling, marketing and human resource training. The government actively promotes the development of information service industry, raising Taiwan's development energy in the information services industry, and prompting Taiwan to become "the major global supplier for the information service in the specific field".

- E. Information services industry is included in “Early Harvest List” after ECFA is signed. It helps Taiwan to sustain its role as the gateway for cross-border enterprises to enter China market, meanwhile bringing domestic enterprises to expand their services globally. The cooperation between cross-straits also helps expand China and global market.
- F. Taiwan's information industry clusters have a competitive advantage. The hardware and software vendor clusters that can help manufacturers accelerate product development and testing. There are also many domestic IT hardware and computer industry supply chain, which manufacturers generally have deep experience in manufacturing and technology with R&D center that can work with clients.
- G. Taiwan is the biggest IT hardware supplier in the world, and with the popularization of internet, Taiwan is one of the leading countries that are equipped with the knowledge of specific industrial fields (such as manufacturing, medical, financial, logistics and e-government) In combination with information technology, Taiwan has mature software techniques in specific field.

II. The Analysis of the Structure and Operation Overview of Taiwan Information Services Industry

A. The Structure of Taiwan’s Information Services Industry

The numbers of registered information service industries were 9,259 in 2013, which was 376 more than 2012, and the growth rate was 4.23%. It was the largest increases over the past five years since 2009 (Table 1).

Table 1. The numbers of registered information service industries in Taiwan within the past 5 years

Year	The Numbers of registered Business in Information Services Industry	The Growth Rate of Business (Unit:%)
2009	8,271	0.71
2010	8,576	3.69

Year	The Numbers of registered Business in Information Services Industry	The Growth Rate of Business (Unit:%)
2011	8,627	0.59
2012	8,883	2.97
2013	9,259	4.23

Source: : Business Tax Statistics from Financial Data Center, Ministry of Finance. (2014.05)

B. Overview of the Operation of Taiwan Information Services Industry

Signs of recovery emerge after global financial crisis in 2009, and IT software services market gradually activated. The total turnover of information services industry is NT\$310.9 billion in 2013, which means NT\$18 billion more than NT\$292.9 billion in 2009.

Taiwan Securities & Futures Information Center passed regulations on TWSE/GTSM listed companies in information services industry in 1998. Up to May 2014, there are 50 major listed companies in information services industry in Taiwan, including 13 TWSE listed companies and 37 GTSM listed companies. According to statistical analysis of the revenue, the top service industries is PChome, followed by Systex Corporation, Soft-World International Corporation, Gamania Digital Entertainment and Sysage Technology (as shown in Table 3). The business scale of Top 5 companies reach NT\$58.1 billion, accounting for 49% of the total industry output value.

Table 2. The Output Value of Taiwan Information Services Industry

Year	The Turnover of Information Services Industry (Unit: million in NTD)	The Growth rate of Turnover (Unit:%)
2009	292,869	-4.13
2010	299,566	2.29
2011	311,286	3.91
2012	315,806	1.45
2013	310,872	-1.56

Source: Business Tax Statistics from Financial Data Center, Ministry of Finance. (2014.05)

Table 3. The Revenue of Taiwan's Top Five Information Services Firms

Rank	Stock Symbol	Company	TWSE/GTSM listed	2013Capital (In NT\$100 million)	2012Capital (In NT\$100 million)	The Growth Rate (%)	2013 Net Profit Ratio (%)	2012 Net Profit Ratio (%)
1	8044	PChome	GTSM	163.1	149.6	9.02	3.36	2.62
2	6214	Systemx Corporation	TWSE	156.6	145.4	7.70	5.26	2.05
3	5478	Soft-World International Corporation	GTSM	110.2	107.7	2.32	3.35	2.58
4	6180	Gamania Digital Entertainment	GTSM	82.4	71.2	15.70	0.68	-5.00
5	6112	Sysage Technology	TWSE	75.2	67.9	10.76	2.83	3.02

Source: MOPS, Constructed by the authors in accordance to reviewing

III. Taiwan's Financial Environment is Good for the Development and Investment of Information Services Industry

Taiwan's competitiveness of technology industry relies on excellent high-tech infrastructure and human resource in research and development. Taiwan has become the global supply base for high-tech products. Taiwan's "state of cluster development" was ranked 1st. in "The Global Competitiveness Report 2012-2013" released by the World Economic Forum (WEF). Our government has effectively promoted the formation and development of industrial clusters and encouraged innovation. For instance, 98% of the vendors have stationed in Taiwan's Nankang Software Park and the survival rate for new startups established after two years reaches 80%. According to the EIU, the performance of Nankang Software Park ranks the top among the world.

IV. The government actively promotes Taiwan to become "the major global supplier for the information service in the specific field" in Asia Pacific region

In order to promote the development of information services industry in Taiwan and to urge Taiwan to become the major global supplier for the information service in specific fields in the Asia-Pacific region, our government has made “Information Services Industry” one of the focus industries since 2002. Moreover, the government has enacted related policies to expedite the development of Taiwan’s information services industry. Executive Yuan has passed “Taiwan's Service Industry Development Plan” in 2009, considering information services industry the focus industry under the category of technical services in the emerging services industries. The “Three Industries, Four Reforms program” approved by the Executive Yuan in September 2012, also includes information services industry as one of its key service industry. In 2013, Industrial Development Bureau, Ministry of Economic Affairs has help 200 companies to expand business to U.S., Japan, Mainland China, Southeast Asia and other international market with more than NT\$280 million orders, indicating the internationalization of Taiwan information services industry has made it a industry with great investment value.

V. Three years accomplishment of Bridges Building Project Make Use of the Complementary Advantages of Cross Straits, Creating a Trillion-Dollar Industry for Information Service

a. Motivate “bridges building projects” policy to create the industrial cooperation opportunities in cross straits

China has just passed the “Key Targets of China's 12th Five-Year Plan,” listing three information, technologies and software industries the key promotion targets. China has been actively developing smart cities, smart networks and cloud computing, longing for knowledge and experience that related to applications. Ever since the Industrial Development Bureau, MOEA has been promoting the “Bridges Building Project of cross-straits information service industries”. It shows that cross straits information industries are able to make good use of its complementary advantages. Institute for Information Industry, Information

Service Industry Association of R.O.C. and Taipei Computer Association have established an ongoing and stable platform together. The platform allows more Taiwanese information services firms with excellent technologies and developing capability to share their industrial experiences, products and professional solutions with Chinese firms, creating global business opportunities together.

b. Cooperation of the information service business in cross straits creates trillions of values in the industry

The product output value of Taiwan information service industry was about NT\$270 billion in 2010, and is estimated to achieve NT\$345 billion by 2014. In the face of the vast business opportunities, Taiwan will be able to create a trillion-dollar industry by replicating its output value in China and grabbing 5% of the market share in China market by 2014.

VI. Development Trend and Opportunities of Taiwan Information Service Industry

a. Promote the development project of cloud computing industry and reshape the value chain of information industry

According to the research made by Market Intelligence & Consulting Institute (MIC), Institute for Information Industry, the output value of global Cloud Computing software scale will surpass NT\$ 4.9 billion by the year of 2014, and the compound annual growth rate will reach 45%. And moreover, the output value of Taiwan cloud computing data center will grow NT\$ 13.3 billion, and the compound annual growth rate will reach 28% by 2014. Related applications such as virtualization performance management, analysis of large amounts of data, cloud services management and enterprise mobility management bring business opportunities gradually. MOEA also points out that cloud computing carries tremendous industry efficiency as it is able to bring new experiences on 40 thousands of people, prompt NT\$100 billion of investment, increase 50 thousands of job opportunities and is expected to drive the ICT industrial development. Its end products, computing system and value-added service are worthy of a NT\$1

trillion, creating a new trillion-dollar industry.

b. Computer service is one of the service trade industries in ECFA early harvest list

ECFA's "Early Harvest List" includes eleven plans in service: three financial service sectors (banking, insurance, securities and other financial services) and eight service industries (accounting, auditing and bookkeeping, software implementation and data, research and development, convention, special design, audiovisual services, hospital and aircraft repair and maintenance). Taiwan business are allowed to independently invest in non-financial industries, such as computer service, research, developing service and conference service industry, and the preferential conditions are even better than WTO members such as Korea, Japan, Europe and America, which is definitely a plus for Taiwan enterprise to invest in and enter China market. The annual output value of the information software in China is about NT\$1 trillion. Motivated by ECFA, Taiwan business are able to grab 5% of the market share in China market, which means the output value of information software will reach NT\$345 billion by 2014.

c. By seizing the business opportunities for "The Internet of Things" in China, Taiwan information service industry is ready to run

Early in 2011 when Industrial Economics and Knowledge Research Center (IEK) released "The Top Ten Issues of ICT Industries in 2011" research report, "The Internet of Things" (IOT) has been chosen as one of the new trends. On the 2014 annual meeting of Taiwan Semiconductor Industry Association (TSIA), Morris Chang, the founding Chairman of TSMC, also explicitly pointed out IOT will be the "Next Big Thing." The scope of China market is in the limelight. In China's "Key Targets of China's 12th Five-Year Plan," IOT industry, as one of the most prospective and anticipated industries in the future, is included in the development of next-generation ICT industries under the category of "Emerging Industries of Strategic Importance." In "2010 Report on the Work of the Government," Wen Jiabao, Premier of the State Council of the People's Republic of China formally include IOT industry in emerging industries of strategic importance. IOT industry will definitely become the major focus for China in the future ten years.

VII. Conclusion

Taiwan information services industry converges thirty years of experience and perception, accumulating huge amount of professional knowledge and application foundation in manufacturing, financial, logistics and medical care. Aside from great experience in electronics manufacturing industry, rich experience in developing international markets and quality business management skills, Taiwan also develops many excellent application models in various industries that are utilized in China and global market. Since 2009, the Bridges Building conferences has expanded its scale year by year, bringing about cooperation opportunities for information service industry. China has been entering 12th Five-Year Plan period. Its focus direction and mission for its seven strategic emerging industries have something in common with the “six major emerging industries” promoted by our government, such as the biotechnology industry, green energy industry and “four intelligent industries”, cloud computing, smart EV industry, intelligent building and patent industrialization. It seems that cross straits have similar plan in developing the industrial blueprint and motivating the middle and long term economic transformation. Thus, expanding the cooperation in the industries at all aspects will be the development focus for information service industry.