

Vietnam: medical medical device industry

Solidiance examines the current market and implications for growth





Solidiance examines the current market and implications for growth

Since Vietnam's admission to the World Trade Organization (WTO) in January 2007, the country has seen numerous and diverse changes that have propelled it into double-digit growth.

Structural reforms, political stability, competitive cost advantages and one of the youngest demographics in Asia have all combined to transform Vietnam into one of the fastest-growing economies in the world.

This paper seeks to highlight emerging market opportunities, key players, challenges and implications for the emerging medical device industry in Vietnam.

By 2010, we aim to increase investments to strengthen healthcare facilities for emergencies, diagnosis and treatment. We are pumping in more than US\$ 1 billion towards realizing this objective..

Dr. Nguyen Quoc Trieu - Minister of Health, Vietnam



Solidiance examines the current market and implications for growth

Vietnam's medical device industry

Market on steroids!

In April 2008, Vietnam's Ministry of Health announced long-awaited plans to revamp the country's healthcare infrastructure, thus signaling a new era for a system that was otherwise starved of funds and a damp prospect for medical device manufacturers.

The plan outlined a budget of nearly 17 trillion VND (equal to roughly \$1.1 billion USD) to build and upgrade hospitals across the nation, equipping 1,200 hospitals and medical institutes with a total of 190,000 beds by the end of 2010, to be followed by a further 250,000 beds in 1,300 additional establishments by 2020.

Hanoi, Hue and Ho Chi Minh City are the three cities that will immediately benefit from the five-year socio-economic development plan (2006 – 2010) that aims to upgrade and develop medical centers and hospitals. Steps are also being taken to upgrade rural districts in need of quality preventive and diagnostic healthcare infrastructure.

The proposed investment in healthcare facilities opens up a myriad of opportunities across the entire healthcare ecosystem, particularly for suppliers of medical devices and equipment. Global players such as GE, Abbot, and Philips – who have already established themselves in Vietnam – stand to gain from these emerging ventures.





Solidiance examines the current market and implications for growth

Healthcare budgets approval

Positive ripple effect to benefit the entire healthcare value chain

With a population of nearly 84 million, Vietnam has witnessed escalating urban growth, with the major centers of Ho Chi Minh City and Hanoi experiencing growth rates of 1.3% per year. However, this growth is not confined to the city; the need to improve healthcare facilities in rural areas is equally pressing, as shown by the country's poor ratio of hospital beds per head (see chart).

Additionally, changes in lifestyle have raised the number of cardiac disease cases in the country, while other, mundane diseases — such as measles, tuberculosis and polio — continue to threaten a population that cannot afford mass immunization. that the country still cannot afford to cure. According to research from the Center for Disease Control and Prevention (CDC), around 31% of non-accidental deaths are cardiovascular-related, while an estimated 16.3% of the northern population have been diagnosed with heart disease. Indeed, Ho Chi Minh City alone has 9,000 patients waiting for heart operations.

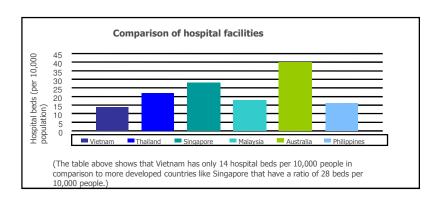
This triggers an immediate need for a wide range of medical equipment, particularly with regard to replacing old and outdated diagnostics equipments with more sophisticated devices to ensure patients are diagnosed and treated more effectively.

In the short- to mid-term, doctors foresee a need for upgrading a broad range of medical devices and services, including sophisticated radiology equipments, operation theaters and emergency units, as well as building more hospitals.



The government will be funding new hospitals in Vietnam and especially with the overload of patients at the central and provincial level, we expect the construction of at least one hospital in each province.

Dr. Hoang Hoa Hai, Chief of the Training Department -Cho Ray Hospital, Ho Chi Minh City



The recent healthcare budget approvals have triggered a positive spectrum of hospital development across both central and provincial levels, reflecting the overall sentiments in both rural and urban areas.



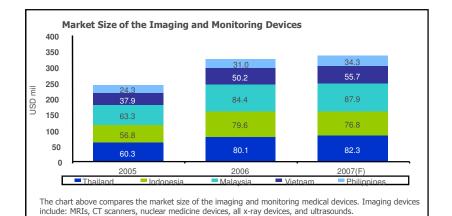
Solidiance examines the current market and implications for growth

Imaging and Monitoring Devices market

Small in size - Big on Growth

Global players – such as GE, Philips and Siemens – have already begun to assert themselves in the Vietnamese market, alongside prominent Japanese brands like Hitachi and Toshiba, both through alliances and partnerships as well as subsidiaries.

While Vietnam's medical device market is relatively small in comparison to its ASEAN counterparts, Vietnam stands out as the only country predicting double-digit growth (CAGR of 10.7% up until 2010).



Vietnam is one of the fastest growing economies in Southeast Asia and will play a central role in GE's growth strategy for the region.

Jeff. R. Immelt, Chairman and CEO - GE





Solidiance examines the current market and implications for growth

Fait accompli

At present, Vietnam's market in imaging and monitoring medical devices is dominated by global brands, particularly those from the EU and US.

While local firms manufacture less sophisticated items such as syringes, plastic gloves, bandages, drips and masks, local production of advanced imaging equipment in Vietnam is rare. However, joint venture entity SHIMADZU Vietnam Hi-Tech Co. Ltd. - a joint venture between METECH & SHIMAZDU Corporation-Japan Schmidt – assembles X-Ray machines, ultrasound apparatus, high-tension cables and ultrasound probes.

With nearly 120 employees, an ISO 9001:2000 quality certification and state-of-the-art facilities in Hanoi, SHIMADZU is catering to hospitals throughout the country.

However the vast majority of medical equipment used in hospitals and medical centers is still imported from elsewhere, as state-owned and private hospitals prefer to buy trusted, known brands. While the government has tried to expand local production, these existing brands have shown little interest in investing in such projects, given their own status as market leaders.

	2002	2003	2004	2005	2006	Annual Growth Rate
Imports	166	180	193.5	210	230	10%
Local Production	2	3	3.5	4	4.5	11%
Total Market	168	183	190	214	234.5	10%
Imports from US	33.2	40.5	48	52.6	58	10%

International suppliers from the USA, Japan and Germany make up most of the market share, with European brands like Philips and Siemens dominating the market. Other, less well-known brands from France, Italy and Spain have also made inroads into the Vietnamese market, albeit with less success as firms are unsure of their quality, reliability, and advanced technology.

US brands, such as GE, are focusing on aggressively building networks and infrastructure to strengthen their businesses.



The Vietnamese health care space is witnessing a lot of changes over the short term. We are closely tracking the developments and foresee a potential market upsurge in the mid- to long-term across the whole healthcare ecosystem.

> Mr. Anh Tuan Tran, Territory Manager - Core DI, GE Health care Technologies, Vietnam



Solidiance examines the current market and implications for growth

Case Study: GE Vietnam



Early Entrant Poised for Long Term Growth

GE has been active in Vietnam since 1993, with business driven predominantly by GE Infrastructure, GE Industrial and GE Aviation. GE Healthcare and GE Energy are emerging businesses, focused on establishing manufacturing facilities. While industry sources refer to substantial growth in revenues across businesses, GE's recent investment in manufacturing facilities and its numerous community development activities only affirms GE's long-term plans for Vietnam.

Open office in Ho Chi Minh City; forms local partnerships

Establishment of the GE money representative office in Hanoi

1993

2001

2003

2006

2008

Representative office in Hanoi in 1993

GE Vietnam Ltd, a 100% GE capital investment that offers a wide range of after-sales services in the fields of medical, electrical and energy equipment GE money receive Finco Licence from State Bank of Vietnam

GE Entity	Business Highlights
GE Energy	 Supplying hydro turbines and generators for Song Hinh, Ham Thuan and Quang Tri hydro power plants, steam turbines and generators for Pha Lai 2 coal-fired power plant and 2X9FA for Phu My 2.2 Combined Cycle Power Plant. Supporting global growth in power generation, GE Energy (NYSE: GE) is investing approximately US\$50 million to build its first manufacturing facility near the seaport city of Hai Phong, will produce components for GE's diverse portfolio of power generation equipment. The components produced in Vietnam will be sent to the company's manufacturing and service facilities around the globe for use in finished products. Construction of the new facility is scheduled to begin by the end of 2007 and the facility is projected to be operational by the end of 2009. When fully operational, the facility is expected to employ more than 400 people.
GE Money	Received Finco license from State Bank of Vietnam on June 20, 2008.
GE Aviation	• 16 out of 48 aircrafts of Vietnam Airlines fleet are using GE engines including Boeing 777 and Airbus 320. Pacific Airlines has 06/06 aircrafts powered by GE engines and 01/06 leases by GECAS (GE Commercial Aviation Services).
GE Healthcare	Providing state-of-the-art medical equipments for big national and international hospitals such as Friendship Hospital, Viet Duc Hospital, FV Hospital and Thanh Hoa Province Hospital.



Solidiance examines the current market and implications for growth

The Real McCoy

Since joining the WTO in January 2007, Vietnam has eliminated duties on nearly 91% of medical equipment, although calls for a more open, reliable and friendly market still remain. The effects of this agreement are yet to be felt by the medical community according to surveys conducted with suppliers and distributors in Vietnam. In order to be competitive, domestic distributors have to be relied upon as foreign companies cannot set up shop there by themselves.

For international companies the challenge is to source and connect with reliable local distributors in order to do business there. The business environment places a vast emphasis on networking and close relationships as issues such as corruption and red tape can constitute problems. Consumers also require a degree of aftersales service, which dictates that the company be represented not only in central cities but also in more rural areas.

This can pose a problem for international suppliers, as providing such services in rural areas further emphasizes the need for close contacts and relationships with end-users and purchasers.

The number of private hospitals – including those owned by foreign investors – is expected to rise sharply this year in light of the government's pledge to attract more investment into the healthcare sector.

The Ministry of Health's aggressive push into inviting private hospitals as well as wholly owned subsidiaries further affirms the government's desire for growth across the healthcare industry. Recent news from the Ministry reports 22 hospitals being recently established, including 10 by foreign investors of which two were wholly foreign—owned ventures.

Furthermore, given the relative difficulty of funding and

in a bid to attract more investment from the private sector, the government is creating a lending bank whereby investors could borrow up to 50% of the total capital requirement for a private hospital from public credit sources.

Also, in a move to define and adhere to quality standards, the Ministry plans to implement an evaluation strategy for both public and private hospitals to refer patients to appropriate facilities for complicated treatments and to facilitate admission for health insurance holders.

The government's overall efforts – in terms of funding, setting quality guidelines and flexible investment options – clearly indicate its willingness to open up the market to global players.

66

The Vietnamese market is witnessing a transition in the way business is conducted. The business climate is definitely "investor friendly" and abundant with partners willing to collaborate with international players. However, one needs to understand the details and be able to tap into native intelligence to manoeuvre towards successful deals.

William Gray, Paralegal - Baker & McKenzie LLP, leading global law firm, Ho Chi Minh City



Solidiance examines the current market and implications for growth

Winning the Vietnam Market

What it takes beyond the obvious?

As well as offering an exciting market opportunity, Vietnam also has its own store of challenges – in particular the current economic turmoil. Analysts are quick to highlight Vietnam's turbulent stock market (down nearly 60% since January), nose-diving house prices, high rates of inflation (25%) and spiraling trade deficit, all of which are expected to be short-term "market correction symptoms". Moreover, Vietnam still lags behind China in terms of labor cost advantages and scale, despite the immense investment pipeline by major industries in the long—term.



With an economy that is gradually liberalizing and a strategic position in Southeast Asia, Vietnam is catching up fast as an investment hot spot and a force to reckon with.

The opportunities are phenomenal... say for example in healthcare, the government has only spent 20% of its promised US \$ 1 billion funds for medical equipment until Dec 2008.

With nearly 620 clinics expected to benefit from this plan through 2010 – there are immense opportunities for global corporations to strike good deals and succeed...

Damien Duhamel, Managing Director - Solidiance



Solidiance examines the current market and implications for growth

Key trends that will redefine the Vietnam market

1. Rapid change in demographics and health expenditure – a warning signal for an impending shift in disease patterns

In 2004 Vietnam's national census records showed that 29% of the population were under the age of 15, whereas only 9% were older than 60. However, these figures have changed since 2005, radically, as a result of changes in life expectancy and birth rate.

Also, while the healthcare expenditure per capita is still relatively low, it is increasing very rapidly, from \$17.8 USD per capital in 1998 to £32.2 USD in 2005. This calls for a whole new approach towards combating prevalent diseases, building adequate drug marketing strategies and revaluating present hospital facility planning to accommodate emerging patient profiles.

2. Local partnerships — critical for market penetration, customer acquisition and after sales efforts.

Multinational companies aiming to succeed in Vietnam should focus on local partnerships and attempt to localize trans-national innovative practices, not to mention improvisations and adaptations necessary to have a flavour of Vietnamese approach towards consumers.

3. Lack of trained manpower – gains prominence, especially for healthcare equipment manufacturers.

Both in and beyond Vietnam, there is a growing deficit of trained healthcare professionals; there simply are not enough staff to cope with the growing demand for medical attention. An optimized training budget is crucial to train local people to make the most of investments in new equipment and facilities.

4. Open Innovation – need of the hour

There is an urgent need to devise innovative and collaborative approaches in tandem with local practices in order to achieve market success. This will entail answering the two key questions:

- How do we create flexible new products and services while localizing the professionalism of the distribution forces and customer service to establish the trust factor?
- How to strike profitable alliances with the entire healthcare ecosystem –includes, universities, hospitals and pharmaceutical companies initiatives necessary to help one succeed in the long innings of an emerging Healthcare market like Vietnam.

Vietnam is the latest and key emerging market in the Asia/Pacific region. Companies and investors with the zeal to succeed, the right market approach and strong execution capabilities will stand to benefit significant rewards in the long-term.



Solidiance examines the current market and implications for growth

Solidiance is a marketing and innovation strategy consulting firm with focus on growth in Asia Pacific. We are devoted to working side-by-side with our clients to outpace the competition, close gaps in growth and deliver breakthroughs in performance and profitability. Our Asia focus provides our clients with a better understanding of intrinsic regional issues.

To subscribe to further white papers and to learn more about Solidiance please visit: www.solidiance.com

Mark Lee - Principal Consultant

Mark is a Principal based in the Singapore office with more than eight years of consulting experience. Mark has a strong focus on quantitative based projects. Previous roles include being regional manager for Synovate Business Consulting in Singapore, handling projects for MNCs across Asia, focused predominantly on the banking and healthcare industries. Mark managed most survey-based projects for MNCs where he advised international companies on market entry, customer segmentation prioritization and growth strategies. He also has ample experience in qualitative research, having managed various multi-country projects that required a combination multiple approaches in order to customize results to meet the clients' needs. Having worked for five years in the M&A team of a Korean Conglomerate in Spain, Mark also has vast experience with mergers and acquisitions in Europe, Asia and Africa. Mark is fluent in Korean, English and Spanish. He holds a BS in mechanical engineering, from the Worcester Polytechnic Institute (United States) and a MBA from the University of Rochester.

China

Suite 801 Hong Kong Plaza 283 Huaihai Road Central Shanghai 200021 Tel: +86 21 5168 8905 asia@solidiance.com

Bhaskar Raj – Senior Strategy Consultant

Bhaskar has more than six years of experience across various research and strategy consultancy for global fortune clientele. Previously he was practice head in Health Sciences & Government at Deloitte where he led multi-stakeholder advisory projects across wide areas. His advisory and consulting projects have helped Fortune 100 corporations and US Federal agencies design potential revenue-enhancing opportunities and established new models for market entry, innovation and profitability. He was also involved in leadership and business development initiatives. Prior to Deloitte, Bhaskar was the lead consultant for the Chemicals, Materials and Foods Industry vertical of Frost & Sullivan, based out of the USA. He has led projects across regions, advising core clients in market entry strategy, evaluating investment opportunities and providing strategic marketing input for annual business planning exercises. Bhaskar holds an MBA from Bharathidasan Institute of Management (BIM), Trichy (India) and a B.Tech in Chemical and Electrochemical Engineering from Central Electro Chemical Research Institute (India).

Singapore

Suite 17-01 High Street Center 1 North Bridge Road Singapore 179094 Tel: +65 6408 8208 asia@solidiance.com

