

# Vietnam's Tech Boom

A look inside Southeast Asia's Silicon Valley.

BY ROB MARVIN



**M**ore than four decades after choppers lifted the last U.S. troops back across the world, Vietnam's Da Nang Hi-Tech Park hums with activity. The park, one of several established as part of Vietnam's 2020 IT Master Plan, houses offices and factories for a growing number of international IT and software companies, hardware manufacturers, and infrastructure plants powering the central Vietnamese city at the heart of a tech boom.

Today's Vietnam—with a population of over 93.5 million and a median age of 30.3 years old—is defined by a growing population of young coders, engineers, entrepreneurs, and students driving economic growth and technological innovation. For them, the country's war-torn past is a history lesson, not a memory.

VIETNAM

Vietnam barely had any IT companies 15 years ago, but now there are close to 14,000 IT businesses spanning hardware, software, and digital content. The Vietnamese government sees the tech sector as the linchpin of the country's economic growth, according to Long Lam, CEO of QuangTrung Software City (QTSC), Vietnam's largest software park. It has heavily invested in infrastructure and passed economic policies encouraging both domestic and international entrepreneurs to start businesses.

From Vietnam's northern capital of Hanoi to the coastal city of Da Nang to Ho Chi Minh City (HCMC, formerly Saigon) in the south, regional universities churn out hundreds of well-trained IT and software engineering graduates each year. Many are recruited right out of school by companies like Cisco, Fujitsu, HP, IBM, Intel, LG, Samsung, Sony, and Toshiba. More and more graduates also choose to seek venture capital (VC) funding to launch startups.

Hung Q. Nguyen, CEO, president, and cofounder of software testing company LogiGear, said these young IT professionals represent the first generation of Vietnam's middle class. "Young people in Vietnam are hungry," said Nguyen. "The market there is really hot, and this generation now has enough money to buy a home and get an apartment. It's quite a tremendous change in the country."

Nguyen grew up in Vietnam but left to attend school in the U.S. He settled in Silicon Valley, later cofounding LogiGear in 1994. In the mid 2000s, when looking to outsource internationally, Nguyen chose to go home. LogiGear opened research and design facilities in HCMC and, over the next decade, expanded to more than 500 employees there, moving a large chunk of its operations to a new Da Nang facility in 2014.

Along with many other Western-educated expats returning to Vietnam, Nguyen has become an ambassador of sorts of the country's business potential.



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**AT THE TOP**

Long Lam is the CEO of QuangTrung Software City, the largest software park in Vietnam.



Challenging the traditional view of Vietnam's sole use as a cost-effective outsourcing location, LogiGear was one of the first companies to launch employee training programs, guest lecture at universities, and collaborate with other companies to form The Vietnam IT Outsourcing Organization (VNITO), a community aiming to collectively shape the perception of Vietnam as a thriving hub for the entire spectrum of IT.

In Vietnam, IT is a blanket term encompassing any products and services related to computing and Internet technology, including software, hardware, enterprise, networking, and telecommunications.

In Da Nang in particular, Nguyen saw modern infrastructure and a wealth of capable engineers waiting for an opportunity. "Nothing is like Silicon Valley, with its elements on innovation, first-movers, and world-changing technology," said Nguyen. "But this country is very vibrant, very forward-looking. The workforce itself doesn't yet know quite what it's like to do business the way the West does but, from the perspective of a tech hub, Vietnam has a lot of potential."

## DA NANG: THE CENTRAL METROPOLIS

Da Nang is Vietnam's fourth-largest city, a tourist location known more for its beach resorts and fire-breathing Dragon Bridge than its tech sector. Yet, after heavy government investments in a new \$60 million airport and a \$93 million highway system (according to Bloomberg), the city's infrastructure is far more suited for large-scale economic growth than the older, more crowded Hanoi and HCMC.

IBM agreed. In 2012, the company selected Da Nang as one of 33 cities worldwide to receive IBM's Smarter Cities Challenge grant, a \$50 million, three-year program to revamp the city's infrastructure around economic development, sustainability, transportation, and urban planning. IBM's Da Nang initiatives, deployed in 2013, focus on optimizing water quality and



### DA NANG

Top: The LogiGear offices in Da Nang.  
Bottom: A view of Da Nang at night.







public transportation through real-time, Big Data processing and predictive analytics. “Da Nang is emerging as a fast-growing and well-planned city, which I think put them in a perfect position to experience new economic development initiatives,” said Tan Jee Toon, general manager of IBM Vietnam.

IBM has had offices in Hanoi and HCMC since 1994 and opened its Da Nang office in 2012. The company is entrenched in Vietnam’s banking and finance industries, of which Toon said 60 percent are customers. IBM has also led a governmental and private sector push toward cloud computing in the country. Toon said Da Nang is the Vietnamese city best suited for international IT expansion, whereas the atmosphere in Hanoi around government and state-owned enterprises is more conservative. HCMC, he said, is more commercially driven and dominated by small and mid-sized enterprises (SMBs).

Despite the company’s optimism toward Da Nang, IBM’s Smarter Cities initiative has faced bureaucratic hurdles. For example, though IBM’s Intelligent Operations Center and its Intelligent Water Solution were deployed in 2013, the projects are still in their initial phase. The largest obstacle, Toon said, is funding. The city’s government is seeking further loans and public-private partnership investments to realize the vision of the initial Smarter Cities blueprint and complete the shift toward becoming an environmentally and economically sustainable city, according to Toon.

Beyond its infrastructure initiatives, IBM has hedged its bets in Da Nang and in Vietnam’s future by tapping into the country’s educational pipeline. Along with LogiGear and dozens of other companies operating in Da Nang, Hanoi, or HCMC, IBM offers career training and internship programs as part of its partnerships with IT universities.

Vietnam’s university system parallels its cities. The three largest IT universities in the country are the Da Nang University of Science and Technology, the Hanoi University of Science and Technology, and the Ho Chi



Minh City University of Science and Technology. Each regional school graduates engineers that are recruited directly into the local workforce. “We provide the most engineers in IT for Central Vietnam,” said Dr. Binh Nguyen, director of the IT department at Da Nang University of Science and Technology. “Last year we graduated 250 students and we now have 30 PhD students. Most students choose software engineering. All students do internships at companies for between two and five months, and last year 50 percent of the interns were recruited.”

As Dr. Nguyen explained, the entire curriculum and university experience are geared toward developing directly applicable workforce skills in students through programming courses, lectures on emerging technologies, and communication and language classes in English and Japanese. Each year, the university invites approximately ten companies for a week of lectures, interviewing, and recruiting.

Vietnam’s universities are competitive. The Da Nang University of Science and Technology’s IT Department admits only 250 students a year (out of more than 2,000 applicants), chosen based upon the results of a national standardized competition. Dr. Nguyen said most of his students come from poor, hardworking, central Vietnamese families. “IT workers are an in-demand resource,” said Dr. Nguyen. “Some of my students work for big companies. Some created small companies of around ten or 20 employees. We are also developing a new incubator program next year for students in IT. We want them to develop the right skills. The problem in Vietnam is everyone wants to go to university.”

But once the newly graduated engineers are out in the working world, starting their own companies is surprisingly easy, as new businesses in Vietnam are exempt from taxes for the first eight years. Vietnam is also now a member of the World Trade Organization



**SILICON VIETNAM**  
Top: Dr. Binh Nguyen, director of the IT department at Da Nang University of Science and Technology. Bottom: The LG offices in Ho Chi Minh City.



(WTO), protecting the intellectual property (IP) rights of its companies. Last year, Dr. Nguyen invited Finnish entrepreneurs to lecture his students on launching startups.

Dr. Nguyen is another expat and was one of Da Nang University's first IT department graduates back in 1997. After earning his PhD in France, he returned to teach and ultimately became the dean. "I came back because my family lives here," he said. "I find that Da Nang is a beautiful city. Da Nang is a new city. Capital of the center. It's less crowded and polluted than Hanoi and HCMC, and there are beautiful beaches. Most importantly, people can find jobs."

### **HCMC: THE SOUTHERN TECH HUB**

As fast as Da Nang's tech sector is growing, Vietnam's more vibrant startup atmosphere is located 850 kilometers south in HCMC. The culture and community began taking shape in 2010 at hackathons and start-up boot camps organized, in part, by Dr. Vu Duong, the first director of the John Von Neumann (JVN) Institute located within Vietnam National University, HCMC.

Duong's self-described mission is to build Vietnam's next generation of entrepreneurs and technologists. Duong, who holds a Master's degree in engineering and a PhD in artificial intelligence from France's École Nationale des Ponts et Chaussées, runs the JVN Institute's entrepreneurship program. In a building where the walls are used as blackboards for brainstorming sessions and where an academic environment centered around freedom of ideas is encouraged, Duong teaches a small group of postgraduate students each year about how to think up and create innovative technologies—and then build successful businesses around them.

Duong envisions the eager and capable younger generation as an example of Vietnam's startup potential to a business sector that is largely still conservative.



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### **LEADER OF THE PACK**

**Vu Duong, of Vietnam National University in Ho Chi Minh City, is teaching his students how to think creatively and build businesses wisely.**





“The tech community in Vietnam is developing a startup culture, and that’s the truth,” said Duong. “Today, the number of hackathon and startup boot camps amounts to quite a few every month in the large cities of Vietnam. However, the Silicon Valley–like mentality is not yet there. They still prefer to not take too many risks. Only those who have been introduced to innovation and entrepreneurship are likely more adventurous to lead startups.”

Guest lectures at the JVN Institute include an entrepreneur boot camp taught by Tom Kosnick, Stanford University’s Fenwick and West Consulting Professor, and ex-Googler Thuc Vu, who will oversee a new master’s program in innovation, leadership, and entrepreneurship next year.

JVN Institute’s entrepreneurship graduates launch two or three new startups a year according to Duong. For example, language flash card company BlueUp VN was founded in 2011 and received funding from a major Vietnamese tech investor. Inbound Marketing Partners was founded in 2013 by two JVN students and provides online marketing and content automation services. Sentifi, cofounded by Duong’s assistant, applies data analytics to finance. Others are developing Web services, games, and apps focused on e-commerce, social media, and more.

For the moment, HCMC’s startup culture is concentrated on the local market and apps that appeal to Vietnamese users to better their quality of life. Vietnam’s young app developers and entrepreneurs are motivated by the desire to help their country realize its cultural, economic, and technological potential—the same reason Duong, Dr. Nguyen, and LogiGear’s Nguyen returned home in the first place.

“Vietnam is quickly becoming an investment and tech hub for local and international enterprises, and HCMC is at the heart of this transformation,” said Jeff Diana, chief people officer at enterprise software company Atlassian. “The industry is still fairly nascent here, but we are starting to see the market mature from either packaging software or outsourcing to a product

environment. This is leading to an increase in startups focused on e-commerce and product development.”

Atlassian expanded research and development operations for its communication and collaboration software into Vietnam in 2013, which Diana said was motivated by the country’s modified educational structure that is producing capable and talented coders. Atlassian’s development center in HCMC began with a team focused on building features for Confluence, the company’s team content collaboration platform. But, in the last two years, it has launched new teams that are focusing on Jira Service Desk and Atlassian’s flagship Jira issue management software.

The company invested in a recruiting campaign called “Gradlassian HackHouse” aimed at local universities, plus a two-week boot camp and developer training for all new hires. Atlassian’s Vietnam Careers page alone shows open positions spanning Android/iOS development, UI/UX design, .NET, Java, front-end development, product management, and more—to be filled almost entirely by local professionals, according to Diana.

Vietnam’s booming tech sector and economic growth over the past five years is set to culminate this October at VNITO, the country’s inaugural Vietnam IT Conference. Organized by QuangTrung Software City and the Ho Chi Minh City Computer Association, VNITO is the Vietnam tech industry’s chance to show itself off to the world.

For four days starting October 14, more than 150 multinational tech companies, more than 200 Vietnamese IT and outsourcing companies, and 20 universities are expected to descend upon the Reverie Saigon hotel in HCMC. Keynotes will include speakers from Gartner, KPMG, HP, LogiGear, Microsoft, and Samsung, as well as several ministers of the Vietnamese government. “I believe that, through VNITO, friends and international partners have the evidence to recognize Vietnam as an attractive, emerging destination for IT companies worldwide,” said QuangTrung’s Long, also the main organizer of VNITO.

VNITO’s figures project the education system graduates 40,000 new graduates a year into the IT workforce and budding enterprise ecosystem. Long predicts that 2015 “is the year the startup wave in Vietnam begins to rise.”



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