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Winning the War for Talent

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Abstract

How do oil companies compete for the short supply of technical talent? Is there another approach to attract and develop the necessary skills across the globe to fill the expanding void of engineers?

In the mid 1990's the explosive growth of information technology signalled a new challenge for many industries; the impending shortage of talent to develop and deploy technology. And the competition for talent isn't just limited to technology companies; competition for top talent starts early when people are planning their lives and continues throughout their lives, regardless of their initial career intentions. The oil industry competes with high tech, financial services and medicine for the best and brightest.

Cisco recognized this challenge and chose a novel approach, one that addresses sustainable economic development, corporate social responsibility and the pursuit of the best and brightest. In 1997 Cisco founded it's first the Cisco Networking Academy. Over the past 10 years over 2 million people have passed through Cisco Network Academies. Today over 9,500 academies span 168 countries admitting 500 students per day. Over 50 percent of the graduates entered the IT world, 71 percent of those went on for additional technology education and 91 percent say they still use the skills acquired in a Cisco network academy on a daily basis.

In this paper we'll explore how the academies are run across a variety of venues and environments. What is the cost and how are alternative funding mechanisms employed? What is the payback? How are governments and other companies supporting and benefiting from the program? What are the critical success factors? How could this model be applied to enhance the global shortage of technical talent facing the oil industry?

How do Network Academies it work?

At the corporate level network academies are run by the corporate affairs organization that is charged with managing relationships with governments and non-governmental organizations. The network academies program is held separate from sales and marketing with a clear mandate to focus on corporate social responsibility. The global program is managed by a small team of 33 people divided up into functional as well as geographic teams. Functional teams provide technical, marketing, research support to the geography teams who manage the delivery of Cisco Network Academies programs to countries.

The instruction itself blends conventional classroom learning techniques with the latest e-learning technology to transcend geographic limitations and ease barriers related to physical challenged, gender, ethnicity, and economic factors. Initially created to prepare students for the associate-level CCNA and professional-level CCNP certifications, the Cisco Networking Academy curriculum has expanded by offering additional courses sponsored by both Cisco and other top IT industry leaders. There are 16 courses within nine curricula covering various IT concepts and skills. Most courses prepare students for industry-recognized certification, which is a welcome addition to any resume.

Online course materials provide convenient access to Networking Academy program resources and classwork for working adults and students. Content is translated in native or local languages. Personalized instruction and valuable hands-on labs

allow students to put their theoretical knowledge into practice. Also, online assessments provide timely feedback so that students can identify proficiencies as well as areas that need improvement.

What is the cost and how are alternative funding mechanisms employed?

The primary cost drivers are the physical locations for the labs and instructor led training sessions. Physical Network Academy locations can be found in leading universities, vocational training centers and privately operated educational facilities. The cost of running a single academy depends on the number of students and scope of the curriculum offered and can run from \$10,000 USD for start up plus operational costs such as instructors, rent and materials.

Funding for this program comes from three sources; the students themselves, government or private investors called sponsors, and Cisco. But the program is based on a commercial model, students need to invest in tuition, investors who manage the network academies balance their ability to invest with the student's to derive student tuition.

Cisco has joined a United Nations-sponsored strategic alliance to help train students in least-developed countries for jobs in the Internet economy. The alliance includes the United Nations Development Fund for Women (UNIFEM), the United Nations Development Program (UNDP), and United Nations Volunteers (UNV). Cisco has also joined the International Telecommunications Union (ITU) Internet Training Centers Initiative to provide students and instructors with greater access to affordable, up-to-date IT training in more than 50 developing countries. Cisco has also collaborated with the Japanese International Cooperation Agency (JICA), the United States Agency for International Development (USAID), and the United States Peace Corps.

Cisco also operates an active sponsor solitation program to link donors with network academy needs. One of the most interesting observations: many of the sponsors are former network academy graduates.

Success Metrics

% of students indicating they

% of students indicating they

pursued more education in IT

% of students indicating the

Networking Academy helped them make IT contacts

% of students that indicated

they were able to get a new

% of students that indicated

they started a business in IT

lob in IT

use Networking Academy skills on a daily basis 91%

71%

78%

50%

29%

Payback?

The benefits of the program are far reaching. Graduates enter into an exciting job market with a certificate in hand that ensures employers a consistent level of networking proficiency. Graduates also gain access to human networking opportunities that are life changing. The program runs a global virtual world where graduates can connect, collaborate and compete with each other.

But let's look at the metrics: this program is life changing. 91% of students use their new skills daily. 71% went on for additional IT education. Some even started their own IT businesses.

Academy investors expect to gain a reasonable rate of return; many of the academies are self-sustaining commercial models. Some are government sponsored. Cisco does not set tuition schedules but does consult with operators to ensure the academy they form is sustainable.

Network Academies also work closely traditional Cisco partners. Where will Cisco

partners get the valuable human resources necessary to grow? By tapping into the network academy program Cisco's partners worldwide gain access to the talent they need to grow their business.

As the world flattens and countries find themselves competing on a global level for investment, a talented workforce that is certified to help enterprises looking to expand, connect and collaborate creates competitive differentiation. Ireland and India became world class examples of attracting foreign direct investment with world class talent and infrastructure. Today countries in the emerging markets, where most of the world's energy is stored in underground reservors, have similar ambitions.

What are the critical success factors?

Focus on the student. It is the student experience that drives the success or failure of an academy program. By virtualizing much of the content and delivery, every student can gain a consistently valuable experience. The instructor led and lab part of the training needs to be led by inspired and inspiring instructors with up to date facilities.

Create an experience that lasts and can span a life time. After they leave the academy, ensure they have a reason to come back. Cisco does this with alumni groups, active programs to engage graduates, such as job boards and virtual worlds. Many of our best instructors are former network academy graduates with a passion to give back.

Keep it commercial but take the marketing and sales out of it. There has to be a commercial business model at the heart of the program, value delivered for value received; students need to invest. Do not run operation as a sales engine. Instead highlight the work with government agencies to get them to invest and recognize the value of the program as a national interest.

Make it easy for students and academies to access the network of academies but keep the standards high. Put the applications and materials on-line. Retain ownership of the certification process to ensure value remains high.

Building partner skills in the organization is essential. Cisco can not deliver network academies on its own, to be successful the company has had to recruit investors, sponsors, educational facilities, and adjacent technology partners. Going it alone is not an option and partnering creates new opportunities for everyone involved.

Could this work for the energy industry?

Why would engineering academies not work? Perhaps a more accurate question is, how are energy companies different from Cisco? Cisco started off with a basic product, ten years ago it was pure networking technology, simple in comparison to today. Today, that technology and the demand for engineering talent has expanded to include virtual and physical security, voice, video, consumer, wireless and industrial technologies. Basic training for geologists and field engineers encompasses complex math, science combining in physics and chemistry required to solve complex probles. Designing an academy program that can provide the building blocks for these subjects and provide a certified graduate at the end who can start a job in the fields is a certain challenge, but is it insurmountable? What company would want to start an academy without a guarantee the graduates would contribute to the company's earnings? Let's look for clues to answer to these questions.

The war for talent is global and not industry specific, countries and industries compete for the best and brightest daily. The energy industry is on the crest of the big crew change, a large wave of employees eligible for retirement. Most of the energy companies and oil field services companies are struggling to hit their recruiting objectives. Boom-bust cycles in the past are partly to blame but the technology sector has had them too. Energy had 1983, technology had 2001.

Energy companies operate in some of the most politically challenging environments. In addition to donating equipment and medical supplies, developing economies can mitigate political risk. Developing expertise provides an economic platform for growth. Developing talent in countries of operation provides organizations with a means to highlight their value to governments, creating goodwill and sustainable development. Developing a lasting experience with academy graduates creates an army of brand friendly decision makers in the future.

Many energy companies have excellent corporate social responsibility programs. But do those programs meet the education, experience and future needs of potential engineers? Do the programs attract the best and brightest to oil field operations and engineering? Do they create life altering experiences that aid in the transformation of people, their companies and the countries they do business in? What role could the society of petroleum engineers play?

As oil companies digitize operations, what new skill sets will they need to attract? Who can they partner with to build those skills and ensure they win the war for talent?

Sources:

http://www.cisco.com/web/learning/netacad/index.html November 22, 2007