

**Dr. Peterson**

**Home Depot Board of Directors Strategy Session**

8-10 a.m. Wednesday, Oct. 16, 2013

**How companies can use universities better to drive innovation:**

This week we are celebrating the 10<sup>th</sup> anniversary of Tech Square in Atlanta.

Tech Square currently encompasses eight city blocks and includes a unique complex of academic, retail and research space. This complex is fast becoming one of the most creative and innovative entrepreneurial communities in the Southeast. Our students in the Scheller College of Business benefit from a living laboratory where business and education meld and students have the privilege of participating in business operations of many of the areas most significant companies. It is a crossroads of innovation. Both startups and established companies are attracted to Tech Square, in large part because of the access it provides to some of the brightest and most innovative students in the world. Centergy One houses some 40 startups, many of which employ Georgia Tech students. In addition, the Georgia Department of Economic Development, the Technology Association of Georgia and other partners in economic development and innovation make their home there.

In August AT&T opened a foundry innovation center, one of only four in the world. Last year Panasonic opened an automotive innovation center, hiring students and graduates who are helping to develop the next generation of in-vehicle multimedia infotainment systems. These are just two examples of dozens, attracted in part by access to our intellectual capital. Some of our students have participated in Tech's Flashpoint program, as well as the NSF Innovation Corps, or I-Corps, or have taken advantage of Hypepotamus Atlanta, a startup center located in the Biltmore Hotel that provides free collaborative space for innovators.

Cooperative education: Last year Tech's co-op program celebrated its 100<sup>th</sup> anniversary. It is the largest voluntary program, and one of the best, in the nation. (Notes: since 2009 Tech has had 28 interns and 5 co-ops at Home Depot.) Home

Depot is an Executive Partner with Georgia Tech Career Services. They participate in career fairs. They have interviewed 24 Tech students since Jan. 2013, mostly finance majors. As an executive partner, they have guest speaking opportunities with Career Services, and signage recognition at major events. (Note: in Feb. 2011 Frank Blake gave the third annual Thomas R. Williams Distinguished Lecture in LeCraw Auditorium. It is a special event of the IMPACT speaker series, organized by Tech's Institute for Leadership and Entrepreneurship.)

In 2011 Home Depot became a Corporate Affiliate of Georgia Tech's Denning Technology & Management Program, a collaborative effort of the Colleges of Business, Engineering, Sciences and Computing.

- Student competitions: GE SmartGrid challenge, InVenture (past two winners were well along in the process of getting their inventions to the market before the next year's competition)
- Professional education (trend toward lifetime learning)
- K-12 programs (CEISMC)
- Research partnerships

### **What can Home Depot do better?**

- Encourage innovation (also includes creating an environment where they are sometimes free to fail)
- Value input from employees at all levels (We have 20-year-olds developing newer devices for intubation for surgery, and developing devices to detect pneumonia on the poorest streets of India.)
- Encourage collaboration
- Embrace changing technologies
- Hire innovators and leaders (technology changes rapidly; people must continually adapt)

- And of course, maximize partnerships with institutions like Georgia Tech in everything from research and advanced manufacturing to process improvements and educational opportunities for employees.

### **What are you seeing in the way of changing workforce dynamics?**

This generation (From “Employees of the Future Mindset List, Class of 2017, Beloit College)

- Having a chat has seldom involved talking
- They have never needed to go to their friend’s house so they could study together. (I don’t have any friends whom I’ve never met. Many young adults have hundreds!)
- With GPS, they have never needed directions to get someplace, just an address.
- Java has never been just a cup of coffee.

From Thomas Friedman in his closing talk at (co) lab Atlanta in September: In 2011 he began writing “That Used to be Us”. The first thing he did was to go back to the first edition of “The World is Flat,” which he started in 2004, just to remind himself of what he said. He got it off the bookshelf and tried to look up Facebook in the index, and it wasn’t there. When he was running around saying The World is Flat: we’re all connected:

- Facebook didn’t exist,
- twitter was still a sound,
- the Cloud was still in the sky,
- 4-G was a parking place,
- Linked in was a prison,
- applications were what you sent to college
- Big Data was a rap star, and
- Skype was a typo.

All of that happened in the 7 years after he wrote *The World is Flat* in 7 years. In 7 years, all disguised by 9/11 and subprime crisis, the world's technological plumbing fundamentally changed.

The world is hyperconnected. They can find information at lightning speed, and they can publish.

Home Depot has realized this with your progressive stance on blogging (customers). You realize that people are going to be saying things on the web, and you have embraced it as one of the forms of communication.

This week we are having our biannual Georgia Tech Advisory Board meeting with executives from throughout the U.S., as well as some working abroad. We are looking at the evolving needs of the workforce, and what we can do to prepare students to meet workforce needs. One of the pre-reads was the book *The Trophy Kids Grow Up*—how the millennial generation is shaking up the workforce.” Millennials are those born from 1980 to 2001. While we can't relate to some of the descriptions for many Georgia Tech students, there are a couple that apply.

They're technology focused, connected to cell phones, iPods, laptops or video-game players. Tech students also create technology, including robotics and manufacturing applications. This week Georgia Tech's website features a study that we did jointly with the International Telecommunication Union. The study is the first attempt to measure, by country, the world's "digital natives." The term is used to categorize young people born around the time the personal computer was introduced and have spent their lives connected with technology.

Nearly 96 percent of American millennials are digital natives. Believe it or not, that figure is behind Japan (99.5%) and several European countries, including Finland, Denmark, and the Netherlands. An interesting twist is that when you look at countries

with the highest proportion of digital natives among their country's total population, the U.S. is 6<sup>th</sup>, with 13.1 percent.

- People are more global (43% of Tech students have an undergraduate work or study abroad experience before they graduate.)
- Interdisciplinary backgrounds
- The need for this generation to make a difference.
- Home Depot's integrated approach to disaster relief with local and national nonprofits, and your mobilization of Team Depot volunteers when disaster strikes.
- Or Home Depot being recognized by the EPA earlier this month with the 2013 WaterSense Retail Partner of the Year Award, including more than 202 billion gallons of water in 2012.

At Georgia Tech, we have programs like Engineers without Borders and Ideas to Serve.

Tech students aren't waiting until they graduate to tackle some of society's most pressing challenges.

For example, in a competition hosted by the City of Atlanta and Emory University's Goizueta Business School, a team of Georgia Tech students earned first prize for proposing a system to encourage the adoption of electric vehicles here in Atlanta. They received \$5,000 for their proposal on how to drive demand and to put as many as 50,000 electric cars on Atlanta roads during a 2-year period.

One of those students was Corbin Klett, who graduated in May 2012 with a bachelor's degree in Aerospace Engineering. Corbin also served as our reflection speaker for his commencement. His talk reflected the energy and impact of Georgia Tech students better than I could ever express. He referred to the Strauss-Howe generational theory

is a study that identifies four recurring generational patterns in American history. The report predicted that this would be the “Hero” generation. This generation will reclaim and rebuild broken societal institutions in response to a perceived threat to the nation’s survival. They will ultimately rise up with social activism, collective confidence, civic engagement and servant-leadership. The report said their main contributions will be revitalizing communities and advancing technology. Corbin then talked about fellow graduates—one who developed a device to improve open heart surgery, and one who went to Chile to build a business that brings water into disaster areas, while they were still in school.

We have another student, Nick Selby, whose sophomore speech at freshman convocation this year went viral. His enthusiastic message was “We’re at Georgia Tech. We can do that.”