Retaining Best and Brightest IT Talent

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How to identify and develop young IT talent in your organization

You can't retain them unless there is a path to the top.

You have to grow them.

Take Home Message

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- You have to grow them.
- There must be opportunity.
- IT ≠ Programmer.
- You can't retain them unless there is a path to the top.

There is always a well-known solution to every human problem—neat, plausible and wrong

H. L. Mencken, *Prejudices: Second Series, 1920*

Outline

- What is IT?
- Obligatory Numbers
- What sort of person goes into IT?
- Anecdotal Evidence
- Recommendations

Misconception: IT = CS

Source: National Priorities documents

NSF and DHS

What Is IT?

- Computing, networking, HCI and information management of reliable, complex, distributed systems.
- Innovative approaches to the integration of data, models, communications, analysis and/or control systems, including use in prediction, risk-assessment and decision-making.

What Is IT (cont'd)

- Interactions and complex interdependencies of information systems and social systems.
- Computational modeling or simulation.

Who Should Be Involved In IT?

- Look at the four axes:
  - Integration: psychology, business, techies.
  - Data integration: C^3, visualization, math.
  - Social systems: social sciences.
  - Simulation: business, STEM.
- Computers are ubiquitous! Everyone is in IT!

Misconceptions: Growth Market

Gartner Group

Stamford, CT

Gartner Predicts by 2010

- IT organizations split into technology, information, business processes.
- 60% of IT workers will assume business-facing roles (vis-à-vis technology).
- 10-15% of workers will leave profession.
- 40% fewer workers in IT.
- IT will be demystified—everybody knows.

Threats to IT Workers

- Global Sourcing
- IT Automation
- Consumer IT savvy
- Business Reconfiguration
- Lack of Continuing Professional Development
- IT integration into entire business model

Misconceptions: Opportunities

Web Job Search Engines

Shear Numbers: Companies

Category	SC	GA	NC
BS	603K	1.3 M	1.2M
STEM	117K	267K	326K
Work	38K	86K	94K
R&D	$1.1G	$2.8G	$5.0G
Private	$781M	$1.6G	$3.7G
High Tech	4,119	13,110	10,887

Category: Jobs	SC	CA
IT	328	4496
Engineering	65	1675
Design	44	881
Management	43	768
Consultant	0	281
Professional	28	268
Finance	0	257
Quality Control	0	233
Customer Service	0	229
Business Dev	26	218

Data Points

- The Greenville IT Professional Association (GITPA) seems moribund. No meeting listed since June, 2005.
- The South Carolina Software Developers Association has not responded to browser.

Summary: IT professionals are very mobile and the jobs are elsewhere

Misconception: Higher Education Prepares IT Workers

Points

- There's more to IT than IT. Is there a path to the top? No one goes to Clemson to be a cubicle rat.
- Universities teach disciplines, but IT is interdisciplinary.
- You need problem solvers, not problem-causers. How long does it take to get IT person trained?

Getting Kids into IT

- *Wow* comes before the *why?* Give them rich application flavor.
- Make tangible and relevant. Motivate IT careers over techie approaches.
- Give kids a chance to solve a problem and make a real difference. That hooks them.

Recommendations

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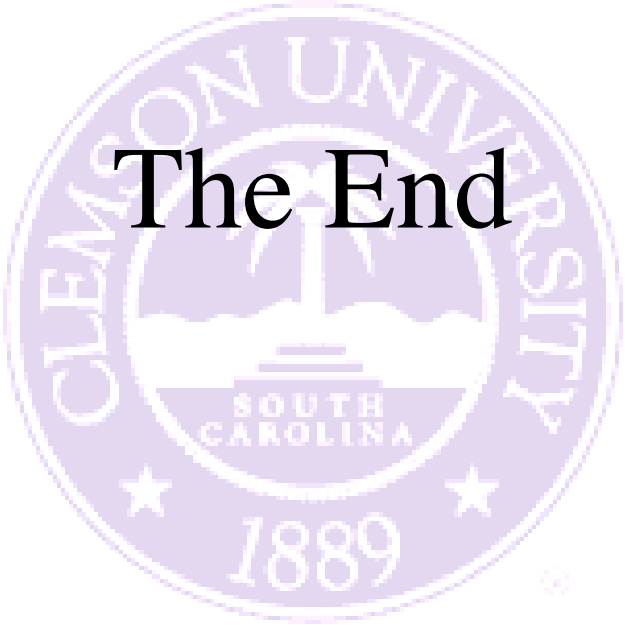
- We’re all in this together. Get involved with the K-to-Gray education.
- K-12 needs to have a stronger science, math, and computer classes
- Students need more real experiences.
- Invest in the students: IT workers are incredibly mobile. Give them a career path.



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