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
Take Home Message

• 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

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: C³, 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

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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.
The End