Panel: Systems Engineering Degrees and Certificates ~ What Is The Right Mix for Industry and Government

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Systems Engineering Acquisition Workforce* by Birth Year

Source: AT&L Acquisition Workforce DataMart, Dec 2011

*Excluded: 222 personnel with unknown Birth Year
Growing Great Engineers

• **Depth**
  – Extensive expertise and experiences in one or more engineering disciplines and in one or more product domains

• **Breadth**
  – Awareness of and appreciation for other functional areas
  – Understanding of system life cycle and processes
  – Knowledge of other engineering disciplines and how they integrate into a system solution
  – Knowledge of product domains

• **Leadership**
  – Ability to motivate and inspire individuals and teams
  – Comfort in dealing with complexity
  – Focus on underpinning decisions with data
  – Capability to make tough technical decisions
### Four Distinct Generations Across the SPRDE-SE/PSE Acquisition Workforce*

<table>
<thead>
<tr>
<th>MILLENNIALS</th>
<th>GENERATION X</th>
<th>BABY BOOMERS</th>
<th>WWII / SILENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-31 yrs old</td>
<td>32-47 yrs old</td>
<td>48-66 yrs old</td>
<td>67 yrs and older</td>
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</tbody>
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#### Work Culture to Thrive In:

- **Millennials**: Positive, Flexible, Collaborative, Respectful.
- **Generation X**: Flexible, Results-oriented, efficient, informal/fun, opportunities for development.
- **Baby Boomers**: Advancement, Recognition, Team Orientation, Vision/Mission, Non-hierarchy.
- **WWII / Silent**: Stable, Secure, Respectful, Clearly Defined Roles, Clear Direction.

#### You'll Be Challenged While Having Fun!

- Connect actions to personal goals
- Opportunities for professional growth
- Personal satisfaction

#### Forget the Rules! Do It Your Way!

- Good Schedule
- Time off

#### Your Experience Is Respected

- Seeing how to make a difference
- Making a difference
- Connect actions to the overall good of the organization
- Loyalty to employer/customer
- Good schedule/ reasonable hours

#### De-Motivators:

- Job doesn't meet expectations
- Lack of development opportunities
- Repetitive/Boring job
- Inadequate IT work environment
- Condescension
- Inability to get ahead w/out becoming managers
- Lack of development opportunities
- High Stress environments
- Schmoozing / Incompetence
- Acronyms/corporate speak
- Inefficiencies
- Burnout
- Not feeling like a contributor
- Lack of interest in them
- Political incorrectness
- Sports/war metaphors

#### How to Reward:

- Awards/Certificates
- Tangible evidence of credibility
- Free Time
- Upgraded Resources
- Development Opportunities
- Results for their resumes
- Personal Appreciation
- Promotion
- Recognition
- Status Symbols
- Tangible symbols of loyalty, commitment and service

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Source: AT&L Acquisition Workforce DataMart, Dec 2011
Systems Engineering Challenges

Source: AT&L Acquisition Workforce DataMart, Dec 2011

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Systems Engineering: Critical to Program Success

Innovation, Speed, and Agility

http://www.acq.osd.mil/se