

STRATEGIC
CHALLENGES IN
**R&D Talent
Management**

Meeting Summary



Liquid Talent: Tools to Embrace a More Fluid Workforce



Recruiting and Retaining Early Career Tech Talent



Career Paths for Innovation

2017 MEMBER SUMMIT OCTOBER 2-5 OMNI HOTEL FORT WORTH, TX

Please share with your team



Creating Innovation Leadership Solutions
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Opening Keynote

GE Digital's Talent Management Journey - Heather Whiteman, Head, People Strategy, Analytics & Operations, GE Digital

- “Digital Industrial” – This is a skills game – you need to inject digital tech skills into your workplace now
- It's not about job titles and positions we had in the past. It's about talent and skills
- Employees don't define competition for talent, the market does
- New approaches to hiring digital talent resemble Fantasy Sports recruiting -- Fill specific team gaps
- Learning in a digital workforce must be distributed, scalable, democratized, and personalized

How GE is transforming talent for the digital world:

- Acquire – hire talent from tech industry to fill capability gaps
- Grow -- focus on best talent and how to grow them
- Transform -- upskill current talent by providing clarity on what defines “good”
- Build -- through leadership programs and entry level talent
- Restructure – work in ways that drives productivity gains & increases tech capability level



Career Paths for Innovation

Steve Moskowitz (Integris); Steven Perri (Eastman Chemical)

- Number one characteristic of a “perfect” CTO - Ability to articulate vision
- ‘Intellectual curiosity’ and ‘self-disciplined nature of a scientist’ are both highly valued in a CTO. BUT these can also be limitations when not paired with soft skills of broad vision, interpersonal savvy, ability to leverage others and integrate information.
- CTOs in the future need to be more external facing and able to communicate both with the executive team and outside clients/stakeholders
 - Being able to pivot and adjust message accordingly is critical

How does one distinguish between an “innovation leader” and just a “leader”?

- CULTURE – ability to change direction of company, moving from short-term to long-term vision, etc.
- Assumption of deep technical knowledge in addition to business know-how
- The ability to remind the organization of the possible future of technology and impact on the business in the long term

Marcie Zaharee (MITRE Corp); Stewart Mehlman (SKM Direction); Susan Neylon (ITECS)

Survey of 400 people

- Early and later career professionals mostly want similar things:
 - Traditional package is still important: salary, 401k, healthcare
 - Flexible and remote working is critical
 - Professional development & training opportunities are very important
- Biggest differences with Early Careers:
 - Quicker rotation through projects and roles
 - Continuous feedback
- Physical work environment not important

John Deere Campus Party Case Study

Alex Foessel, John Deere

Campus Party (Sao Paulo, Brazil) is a technology event representing “the future of technology”a young “geeks” festival (7 days, 24 hours) with significant diversity in the Campus Party ecosystem that enables creativity and innovation.

Participants:

- Partners included Universities, Brands, Communities, Public Institutions, Media partners
- “Campuserios” included Influencers, Entrepreneurs, Students, Innovators, Geek community, Talent

John Deere hosted a Hackathon with two primary motives:

- How will Millennials respond to a historically “traditional” company
- Will they be interested in the Agricultural business?

The results were beautiful... the winning team solved a real problem, delivering a real algorithm and user interface – in 36 hours!

Event press coverage helped to highlight John Deere as an innovation thought leader



Career Agility: A New Paradigm

Dan Ward, MITRE Corp.

- Careers should go where the employee wants to go, not where someone else thinks they should go.
 - The traditional career ladder has largely been replaced by a something more akin to a metro system map. There are many places a person can go, and getting where they want to go may require the employee to develop completely new skills.
- Employees are responsible for managing their own careers. They must find growth experiences that inspire and engage them.
- Companies must provide resources to help employees understand what they are good at doing and what they want to do for the company, without trying to force them into roles requiring skills that they don't have or want to develop.
- Finally, companies must help employees understand that moving around the organization is a demand-pull system. Business needs create demand for specific roles and pull the most qualified people into those roles.
- Check out MITRE's "Keep Moving Forward" video: <https://youtu.be/dCTZPyyt67I>

Lean Startup In Large Orgs

Research Report Out - Jim Euchner (Goodyear); Norm Golm (Regal Beloit); Peter Koen (Stevens Institute)

Lean applied in incremental innovations:

- Successful innovation starts with the customer
- Customers may lead you to business that don't match your business model
- To deliver new business models requires new practices and often new partners
- Learning through disciplined experiments required
- Conducting the experiments requires managing the relationship to the performance engine

Lean applied in transformational innovations:

- Majority of companies are implementing parts across the company
- Organizational structure and senior management commitment to transformational innovation is most critical success factor

Developing & Monetizing

Long-Term Vision for R&D Research Report Out - Kent Young (Sherwin Williams); Terry Rosensteil (USG); Pam Henderson (NewEdge)

Most companies aren't happy with their long-term strategy process.

Characteristics of organizations which are more satisfied with their process:

- Use a longer (5+ years) time frame
- View R&D as future focused

Managers are more satisfied with funding availability (23%) than with strategy process to determine what to fund (13%). This reflects a struggle to define and identify the right opportunities. Often due to lack of granularity of corporate strategy.

Leaders who have a better strategy process tend to communicate strategy and decisions better and more widely through organization.

Key needs identified from surveys and interviews were:

- Developing a robust long-term strategy process
- Improved ability to secure funding based on strategic needs
- Better method to define opportunities
- Ways to quantify value of work
- Methods to communicate strategic decisions to the larger organization

IRI/RTI Trends Initiative

Jeff Cope, Tim Culver (RTI)

IRI and RTI announced a new partnership: SPRING= Sourcing PRedictive Insights for New Growth. We will select current, and analyze trends and their impact on innovation leadership and provide a range of opportunities to access and apply them:

- Presentations at a fall conference, Springboard, at RTI facilities
- Specialized workshops to explore scenarios these trends present for your industry
- Customized consults with individual companies on a specific impact a trend will have on your organization

Megatrends are global, sustained macro-economic forces that:

- are impossible to reverse
- significantly influence future
- have far-reaching implications

How will we identify, understand, and leverage trends? Start with a very wide aperture and use a series of filters to narrow the focus and move to action:

- Influences → Insights → Implications → Impacts



Trends Interactive Exercise

Jeff Cope, Tim Culver (RTI)

In a live polling exercise, participants were asked to submit their views on when some mega trends will impact their company.

Impact of Shifting Workforce

- Attendees felt impact was either now or within 2 years . Biggest impact on people (first) and performance (distant 2nd)

Globalization & Growth + Digital & Mobile Society – this trend relates to urbanization and age of smart everything.

- Live poll indicated it will have implications in 5+ years, but half say either now or within 2 years
- Most notable impact in processes (45%), planning and strategy (27%)

Science & Technology Development + Knowledge and Connected Economy - This trend includes merging of ubiquitous computing, full time

connectivity, experiences reality-enhanced;

- Live poll – nearly half (46%) say this is already happening
- Biggest impact in processes (operations etc.), followed by performance planning third

Holland Award Address

Biomimicry: Streamlining the Front End of Innovation for Environmentally Sustainable Products - Thomas Marting (GOJO Industries); Emily Kennedy (University of Akron)

- “Best Paper” published in RTM in 2016
- Biomimicry is defined as innovation through emulation of biological forms, processes, patterns, and systems
- Biomimicry process:
 - Problem definition
 - Function specification
 - Biological model identification
 - Extraction of design principles
 - Concept generation & refinement
- Follow up research indicates
 - Biomimicry could influence intrinsic motivation
 - Increased novelty of ideas
 - Increased elegance of ideas
 - Increased use of positive emotion words
- Read the article at: <http://www.iriweb.org/RTM-biomimicry>

IRI Business Meeting

IRI leaders announced new changes coming soon in IRI.

- A New Name – IRI is keeping its acronym but will rebrand as The Innovation Research Interchange
- New Value Proposition – We'll focus on three domains of innovation leadership to enable our member companies to perform at the leading edge of innovation:
 - Individual learning – improve skills of team members
 - Organization learning – improve performance of innovation team leaders and teams
 - Strategic learning – identify & understand the impact of the external environment on innovation
- [Watch this video](#) and download information on what is coming soon!



Interactive Breakouts

The following interactive breakout sessions were held:

Liquid is About More Than Talent – Dorit Nevo (Lally School of Management)

HR Network: Talent Management Deep Dive

- Roundtable on Talent Management - Ivan Kerley (Crown Holdings)
- Organizational & Leadership Practices of a Networked Corp – Debra France (W.L. Gore)
- Roundtable: Managing the “Dual Career Ladder” in R&D

Research Working Sessions

The following research working groups were in session:

Adding Sustainability to the NPD Toolbox – Debbie Kalish (Ingersoll Rand); John Taylor (Schneider Electric); Larry Schwartz (IP Business Tech Solutions); Amy Costello (Armstrong Flooring)

Product Design for Mass Customization – Charlie Wartgow (Harley-Davidson); Mark Zhuravel (TCS); Pushpa Manukonda (John Deere); Tim Simpson (Penn State)

Biologically-Inspired Design Deep Dive

- BID Case Study: U of Akron PHD Student Partnerships – Dan Dietz (JM Smucker); Emily Kennedy (University of Akron)
- BID Case Study: Kimberly-Clark & Georgia Tech – Clay Bunyard (Kimberly-Clark); Michael Helms (GA Tech)
- BID Next Steps

Brilliant Failures – Marcie Zaharee (MITRE); Stewart Mehlman (SKM Direction); Preeti Chandra (Praxair); Joel Schall (Henkel); LeeAnn Cochran (Battelle)

Growth Outside the Core – Sridhar Ranganathan (Kimberly-Clark); Ted Farrington (Kalypso); Gene Slowinski (Rutgers University)

Recommendations for Follow Up

Use this space for your own personalized action items

Key Take-Aways, Quotes and Implications for our Organization:

- 1.
- 2.
- 3.

Key Follow-Up Action Items for our Organization:

- 1.
- 2.
- 3.

Note: IRI is a member-driven organization and would like to address your key issues and topics. Please provide any request for topics and suggestions for future speakers, research areas, or article topics to Mallory Smith, smith@iriweb.org.

↑ STRATEGIC CHALLENGES IN
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Thank you Industry Partners

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Thank you Industry Partners



KALYPSO



Upcoming Meeting

Upcoming Meetings

Spring Networks Conference – March 5-7, Denver, CO

CTO Forum - May 9-10, Boston Scientific, Maple Grove, MN

Shaping Innovation Leaders – June 2-8, 2018, Kellogg School of Management, Northwestern U., Evanston, IL

2018 Annual Conference - June 4-7, Atlanta, GA, Co-located with NSF's SBIR II Conference

CTO Forum – Date TBD, PepsiCo, Purchase, NY

Brown Bags

Generally the First Friday of Each month. Check Events on www.iriweb.org for complete listing.

Regional Meetings

[Cleveland-Akron, OH](#), October 19, Host: Goodyear

Chicago, IL – April 17

Call for Session Proposals

Share your experiences within the innovation community!

2018 Annual Conference | June 4-7 | Atlanta, GA

Submit your session proposal by December 1, 2017

Breaking Boundaries

What's now. What's next.

www.iriweb.org/annualconference