⚡EUCI CONFERENCE

IMPROVING HUMAN PERFORMANCE IN THE ENERGY INDUSTRY

The Science and Application of Human Performance and Augmented Reality to Enhance Safety and Reliability in the Changing Energy Industry

May 12-13, 2020
Williamsburg Lodge
Williamsburg, VA

POST-CONFERENCE WORKSHOPS
THURSDAY, MAY 14, 2020

The Brain Science Behind Human Performance and Organizational Culture

Learning Activities for HP

Coaching in the Field

Engagement, Matching Mental Models and Multi-Model Learning

Taking Lean to the Next Level with AR apps and eBooks

Basics of AR and eBooks. What Makes a Good Use Case?

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OVERVIEW

As new technologies integrate into the energy industry, human resilience is challenged by the complexity of adapting while maintaining legacy assets. This transition presents opportunities and challenges to the work force. Proven Human Performance strategies and techniques, combined with augmented reality and other emerging technologies, can now be provided to a worker to make him safer and more resilient in the often dynamic and hostile work environments.

The 2020 conference, **Improving Human Performance on the Grid: The Science and Application of Human Performance and Augmented Reality to Enhance Safety and Reliability in the Changing Energy Workforce** will convene thought leaders, developers, and subject matter experts for three days of information sharing and thought leadership. The theme for this year will be science, data, and application. The focus will be on a variety of subject areas—from the psychology of explaining, predicting, and changing human behavior, to technology tools and analytic software that helps drive innovation and solve company inefficiencies. Good Human Performance strategies can help identify problematic patterns, determine the root causes of many challenging issues, and uncover latent errors in the system.

Presentations will cover a wide array of information from both inside and outside of the electrical industry to apply towards all high-risk industries. Join us as we explore case studies and hear talks from leading practitioners who will help illustrate how to set up the right methods for use in your organization.

LEARNING OUTCOMES

- Connect with a multi-industry pool of experts, leaders, and human performance specialists
- Review how technology is "augmenting" worker capability through new tools and resources
- Discuss better systems for worker safety and reliability
- Identify industry best practices on worker safety methods, data analytics, and incident response
- Discover expert insight on how and why people behave the way they do, including patterns of behavior and learning styles
- Identify basics in organizational, human factors, and cognitive psychology

WHO SHOULD ATTEND

This conference is for any professional looking to improve their performance, effectiveness, and attention to detail. Representatives in the fields of safety, performance, and management should attend from any industry where high risk, critical thought is present.

> "*Great content and real-life situations with examples. Very glad I attended and recommend to supervisors in many industries.*"
>
> Maintenance Manager, Portland General Electric

FEATURING RENOWNED SPEAKERS

Mohammed Alfayyoumi
Director of Electric Transmission System Operations Center, Dominion Energy

Dan Arczynski
President and CEO, Index AR Solutions

David Bowman
Founder and CEO, Knowledge Vine

Deveny Bywaters
Training Manager, Knowledge Vine

David Costello
Chief Sales and Customer Service Officer, Schweitzer Engineering Laboratories

Thomas J. (Tom) Galloway Sr
President and CEO, NATF

James R. Golden, Ph.D.
Advisor to the President, William & Mary

Jason Handley, P.E.
Director – Smart Grid Technology and Operations, Duke Energy Corporation

Kevin Harris
Field Engineering Manager, Eversource Energy

RJ Jubber
Sr. Manager District Operations, Evergy

Dr. Michael Legatt
Founder and CEO, ResilientGrid, Inc.

Dr. Jim Lesnick
Neuroscientist, Riverside Health System

David Marx
CEO, Outcome Engenuity

Dr. James Merlo
VP of Operational Excellence, Knowledge Vine

Tom Neary
Co-Founder and CEO, KnowledgeKeeper

Lorne Poindexter
Senior Manager, Innovation Nuclear & Fossil at Ameren Services, Ameren

Riz Shah
Organizational Culture Advisor, Department of Energy

Dr. John J. Simmins
Associate Provost, Alfred University

Scott Sommers
Vice President, Index AR

Dave Sowers
Co-Founder and Vice President, Knowledge Vine

AGENDA

TUESDAY, MAY 12, 2020

8:00 – 8:30 am　　　**Registration & Continental Breakfast**

Conference Chairmen:
James Merlo, Vice President of Operational Excellence, Knowledge Vine
Scott Sommers, Senior Vice President, Index AR Solutions

8:30 – 8:45 am　　　**Logistics, Safety, and How to Get the Most from The Next Three Days**

8:45 – 9:00 am　　　**Welcome**
Dan Arczynski, President & CEO, Index AR Solutions
David Bowman, President & CEO, Knowledge Vine

9:00 – 9:45 am　　　**Keynote: Continuous Improvement Means Just That**
SEL has over 5,000 employees located across the globe, yet they maintain a company climate and culture that is as strong if not stronger than when they were under one roof. From the culture of continuous improvement, to eating lunch together every Friday, SEL sees its employee owners as one of its greatest assets.
David Costello, Chief Sales and Services Officer, Schweitzer Engineering Laboratories

9:45 – 10:30 am　　　**The Wave of the Future: Changing Technology and Changing Workforce**
General Golden touches on two major themes: changing technology and the changing workforce. He explains the confluence of the two occurring in today's age, and the challenges and implications that come along with that confluence.
BG Jim Golden (R), Sr. Counsel to President, William & Mary

10:30 – 11:00 am　　　**Networking Break**

11:00 – 11:30 am　　　**A Case Study in The Digital Worker and the Transformations in Workplace**
This presentation will discuss the research McKinsey has done on the digital work force transformation and the risks and opportunities this presents to all employers. Are you ready?
McKinsey & Company

11:30 am – 12:15 pm　　　**Creating a Just Culture**

David will help us understand the concept of a Just Culture in the workplace. All too many times we look at every personnel problem as a nail and management is the hammer. David will help us understand when to use what leadership strategy when we are faced with employee discipline; when to console, coach, or correct the employee. David has put science into the art of leadership and the building of a just culture.
David Marx, J.D., CEO, Outcome Engenuity

12:15 – 1:10 pm　　　**Group Luncheon**

1:10 – 1:45 pm　　　**Department of Energy's Focus on Human Performance**
The Department of Energy has published some seminal work in the area of Human performance. The DOE is very interested in organizational culture and human performance and understand its critical role in job performance.
Rizwan Shah, Organizational Culture Advisor, US Department of Energy

AGENDA

TUESDAY, MAY 12, 2020 (CONTINUED)

1:40 – 2:10 pm   **North American Transmission Forum (NATF) Focus on Human Performance**
The NATF promotes excellence in the reliable operation of the electric transmission system. Their invaluable peer review program shares valuable experience and skills related to human performance, organizational effectiveness, operational excellence, and performance improvement.
Thomas J. (Tom) Galloway Sr, President and CEO, NATF

2:10 – 2:45 pm   **Does Software Keep Us Safe?**
Applying Apple's ecosystem to help. What is the difference between safety and production? Tom presents two autonomous software cases, Boeing and Tesla in the context of safety, production, software, augmented reality and human performance. Similar to the way cars and planes use sensors, humans also are inference machines. Misinterpreted visual, audible and other signals in the presence of hidden hazards while working in error likely situations cause even the most experienced to suffer a serious injury or fatality. In this new 2020's decade craft labor is primed to become the new "connected workforce". The rise of Social, Mobile Analytic and Cloud (SMAC) software has been steadily moving from the home to the office. In the 2020's as teams of craft labor become connected, they will use mobile first software to continuously collaborate in order to protect and keep each other safe while at the same time increasing their productivity.
Tom Neary, President, Knowledge Keeper

2:45 – 3:00 pm   **Afternoon Break**

3:00 – 4:00 pm   **Get Real – The Use of Augmented Reality in Improving Human Performance**
Several utilities will cover their exploration in, and successes achieved to date in the area of augmented reality.
Dr. John J. Simmins, Associate Provost for Research and Economic Development, Alfred University
Jason Handley, P.E., Director, Smart Grid Technology and Operations, Duke Energy Corporation
Lorne Poindexter, Sr. Manager, Innovation Nuclear & Fossil, Ameren
Jamie Campbell, General Manager, Framatome
RJ Jubber, Sr. Manager District Operations, Evergy

4:00 – 4:40 pm   **Luck is Not a Strategy; Human Performance Is**
Risky behaviors plus a little bit of luck can still get good results. How much do we rely on luck to keep us safe? What can we do to eliminate the need for luck? In this session, we will explore the role of luck in keeping us safe, encouraging risky behaviors, and giving us a false sense of comfort. We will also take a look at the big picture role of Human Performance in eliminating the need for luck and how we can know if we are lucky or good.
Dave Sowers, Founding Member and Vice President, Knowledge Vine

4:45 – 5:00 pm   **Recap & Discussion**

5:00 – 6:30 pm   **Networking Reception**

AGENDA

WEDNESDAY, MAY 13, 2020

8:00 – 8:30 am   **Continental Breakfast**

8:30 – 8:40 am   **Logistics & Safety**

8:40 – 9:50 am   **What's In It For Me?**
Leaders from across several industries provide personal and professional insight on what having a strong Human Performance culture does for their companies.
Charley Blizard, President and CEO, AETCO
CLECO Representative
Asplundh
Keith Hutchison, Senior Vice President & Chief Diversity Officer, National Grid US

9:50 – 10:30 am   **The Technology of Situational Awareness**
Mike shows us what is possible in terms of displaying information when you consider the psychology of how people perceive, comprehend, and make decisions based on what they see.
Dr. Michael Legatt, Founder and CEO, ResilientGrid, Inc.

10:30 – 10:50 am   **Networking Break**

10:50 – 11:30 am   **Explain, Predict, and Change Human Behavior**
James will convince you that there is a real science to understanding human behavior. He will explore the strengths and weaknesses of human nature and guide the audience on how to leverage the strengths and how to strengthen the weaknesses.
James Merlo, Vice President of Operational Excellence, Knowledge Vine

11:30 – 12:00 pm   **Human Performance Maturity Model**
How does an organization know where to start, and how to prioritize? Once started, how does an organization learn how to grow these capabilities, and improve in a cost-effective way that manages the important risks? Human Performance Maturity is a framework that bundles the science into an effective company-specific assessment and business decision-making tool.
Dr. Pamela Ey, The Center for Innovative Decision Making

12:00 – 1:00 pm   **Group Luncheon**

1:00 – 1:35 pm   **Human Performance in the DOD**
The department of defense knows that the soldiers, sailors, airmen, and marines are the strength of the American fighting force. The DOD funds research on how to build and maintain good human performance of its people, including the human factors of military equipment design. From aircraft to rifles and from ships to shoes, the American military prides itself on being well equipped with the best human capital in the world.
Representative from the US Army

1:45 – 2:15 pm   **How Data Analytics is Changing Work Culture and Efficiency**
Data Analytics is a strong tool that Exelon is leveraging to train and modernize our workforce. Applying data effectively can fine tune strategy, optimize workers, and "measure twice to cut once."
Brian Hurst, Chief Analytics Officer, Exelon

2:15 – 2:30 pm   **Afternoon Break**

AGENDA

WEDNESDAY, MAY 13, 2020 (CONTINUED)

2:30 – 2:55 pm   **Human Performance in the Control Room**
Directing a technical and professional staff that is responsible for the safe and reliable operation of Dominion Energy's transmission assets demands excellent Human Performance.
Mohammed Alfayyoumi, Director of Electric Transmission System Operations Center, Dominion Energy

2:55 – 3:20 pm   **Improving Performance by Aligning Mental Models**
Using Innovation to process, perform and measure outcomes. Cleaning endoscopes correctly is critical to preventing secondary infections which can have serious outcomes. See how this process was broken down to its component pieces.
Dr. Jim Lesnick, Consultant, Business and Venture Development, Riverside Health System

3:20 – 3:45 pm   **Human Performance Implementing: Building a Culture of HP in the Variable World of Utility Operations**
How do we as operations management take the principals, processes and procedures that HPI is structured around and implement in the variable environment of the Electric Utility Operations world? My journey has brought me to understand that we have to apply the principals in our leadership to build trust around safety. Most importantly we have to create a safe place to learn from errors and mistakes. This presentation will cover some lessons learned and best practices from my experience as a manager in operations in a leading electric IOU.
RJ Jubler, Sr. Manager of Operations, Evergy

3:45 – 4:15 pm   **Using Human Performance Tool Kits to Reduce Errors**
Stop blaming the last guy who touched it and give them some help! Learn how to help workers from committing errors by purposeful application of barriers, both administrative and physical, in the electrical workplace.
Kevin Harris, Manager of Field Engineering, Eversource Energy

4:15 – 4:45 pm   **The Core Four: Fundamental HP Tools for Success**
The Core Four error reduction tools are exceptionally versatile. They are easy to use anywhere, in any situation at work and at home. Skill in using any new tool is built over time, it takes consistent use to be successful. The following are the Core Four error reduction tools: Self Check, Questioning Attitude, Peer Check, and Effective Communication. Deveny's talk will personalize for you what each tool look like to you on the job and where can you use it that you are not doing now.
Deveny Bywaters, Training Development and Delivery Specialist, Knowledge Vine

4:45 – 5:00 pm   **Wrap Up and Call to Action**

5:30 – 7:00 pm   **Networking Receptions**
During the evening networking receptions there will be dynamic demonstrations and conversations, including displays on augmented reality and Error prevention/HP toolkits.

> **"First training I have attended where I felt my way of thinking was challenged."**
>
> Program Manager I, Calpine

> **"Excellent at getting all members engaged. Exercises that are used are great for allowing people to utilize recently learned knowledge."**
>
> Operations Manager, Portland General Electric

POST-CONFERENCE WORKSHOPS

All workshops run on the same day. Purchasing a workshop registration ticket allows you to participate in two workshops of your choosing, one in the morning and one in the afternoon.

The Brain Science Behind Human Performance and Organizational Culture

Many conversations in human performance and organizational psychology often end with "Okay, but why?" Why is that peer checking reduces errors? Why does reducing flashing on your screen reduce threats to situational awareness? Why can workers in some organizations have a questioning attitude, while workers in other organizations can't? The answer to these kinds of questions is usually "because of the brain." This workshop brings together many commonly discussed areas of human performance, bringing in the neuroscience behind why they work.

Instructor:
Michael Legatt, President, ResilientGrid, Inc.

Learning Activities for HP

The fundamentals of Human Performance are one of the most important concepts for individuals to learn when they first start their HP journey. Routinely, employees are smothered to death by PowerPoint briefings and their visceral response is to turn it all off and hope the class ends soon. It doesn't have to be that way! By gaining hands-on experience and being able to make mistakes in a controlled environment, learning Human Performance becomes "stickier". Training on feet, not just in your seat, makes practicing HP concepts exciting and fun. You won't even realize you're learning!

Instructor:
David Sowers, Vice President, Knowledge Vine

Coaching in the Field

Are you a super doer who is now a supervisor? Are you a reluctant coach? Or are you a willing coach but just don't know the first thing about how to coach? Maybe you are a coach, and you welcome an opportunity to be an even better coach?

Based on experience training how to be Informed Executives, Empowered Leaders and Engaged Employees to hundreds of people, we will discuss and practice being an effective coach.

Part of the secret that will be explored in this interactive session is Positive Reinforcement. For many coaches and workers, it's changing the mental model of a lifetime of growing up in a harsh punishment culture. Back in the day, that might have been what it took to keep people safe but today we have standards, human performance processes, and we know more about the neuroscience of human behavior. A punishment culture does not engage employees. A positive reinforcement culture does.

Instructor:
Deveny Bywaters, Training Development and Delivery Specialist, Knowledge Vine

POST-CONFERENCE WORKSHOPS (CONTINUED)

Engagement, Matching Mental Models and Multi-Model Learning

In this workshop, we will share our client engagement experience from developing 34 eBooks and 21 AR apps over a two-year period to restructure multi-year apprentice programs. Critical to our projects' success is client engagement, accomplished by establishing lead points of contact throughout the management structure and connecting with the top SMEs in the field. This engagement is only possible through direct communication, input, and working shoulder-to-shoulder.

Beyond digitizing paper processes, Index uses the principals of Human Performance to find and match mental models between instructors and students. Index's apps and eBooks provide multi-model learning techniques, giving students information in auditory, visual and tactile formats to improve learning time and retention.

Instructors:
Chris Biernacki, Director of Operations, Index AR Solutions
Carlee Snyder, Project Manager, Index AR Solutions

Taking Lean to the Next Level with AR apps and eBooks

Since Toyota executive Taiichi Ohno identified the seven types of waste in production processes and called it Lean, organizations across the globe have attempted to implement Lean Thinking in their operational and training centers. Most organizations have had limited success because they either did not want to make the significant investment to lean out their processes or they did not have the appropriate tools or both! Technology has caught up with Lean! Processes still require thorough examination and documentation to create detailed step-by-step instructions, but these steps can now be captured with photography, videography, 3D modeling, graphic design and delivered to the people training or doing the work in engaging, easy to use mobile augmented reality (AR) apps and eBooks. These enabling technologies drive Lean to the next level and helps users complete training and operational tasks safer and with little to no errors.

Instructor:
Dexter Lilley, Executive VP and COO, Index AR Solutions

Basics of AR and eBooks. What Makes a Good Use Case?

Our experience has shown Augmented Reality (AR) apps, individually and combined with eBooks, have delivered very high ROIs, +100% in most cases. These tools eliminate error rates, prevent process drift, remove learning friction and improve knowledge retention. It is important to understand not every use case is a good fit for AR apps and/or eBooks. Applying these new "best in class" products and technology to the right use case is a key driver to success. Incorrect deployment of these new technologies can be unnecessary and expensive.

Instructors:
John Arczynski, Director of Operations, Index AR Solutions
Zach Korkowski , Project Manager, Index AR Solutions

REGISTER TODAY! CALL **303-770-8800** OR VISIT **WWW.EUCI.COM**

INSTRUCTIONAL METHODS

Case studies, PowerPoint presentations and panels will be used in program.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for the entirety of the conference for continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.3 CEUs for the conference and 0.3 CEUs for each workshop

REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to this event may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

EVENT LOCATION

The event is located at the **Williamsburg Lodge**, 310 S England St, Williamsburg, VA 23185. A room block has been reserved for the nights of May 11-13, 2020. Room rates are US $199. Call **757-220-7976** for reservations. Mention the EUCI event to get the group rate. The cutoff date to receive the group rate is April 11, 2020 but as there are a limited number of rooms available at this rate, the room block may close sooner. ***Please make your reservations early.***

SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event's powerful audience? Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including: Platinum, Gold, or VIP sponsor, Reception host, Networking break host, Tabletop exhibit, Workshop sponsor, Lanyard sponsor, Luncheon host and Breakfast host.

Please contact Aaron Voss at avoss@euci.com or 720-409-0611 for more information.

REGISTRATION INFORMATION

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Greenwood Village, CO 80111
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f: 303-741-0849

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PLEASE REGISTER

◯ **SPECIAL BUNDLE PRICE:** IMPROVING HUMAN PERFORMANCE ON THE GRID CONFERENCE AND TWO WORKSHOPS
MAY 12-14 2020: US $2195
EARLY BIRD on or before APRIL 24, 2020: US $1995

◯ **IMPROVING HUMAN PERFORMANCE ON THE GRID CONFERENCE ONLY**: MAY 12-13, 2020: US $1395
EARLY BIRD on or before APRIL 24, 2020: US $1195

ENERG⚡ZE WEEKLY

Energize Weekly is EUCI's free weekly newsletter, delivered to your inbox every Wednesday. We provide you with the latest industry news as well as in-depth analysis from our own team of experts. Subscribers also receive free downloadable presentations from our past events.

◯ **Sign me up for Energize Weekly**

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

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OR Enclosed is a check for $ _____ to cover _____ registrations.

Substitutions & Cancellations
Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before April 10, 2020 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800.
EUCI reserves the right to alter this program without prior notice.