Performance Excellence Track: Sneak Preview and Executive Overview

Our Panel today:

Kerri Alderman
VP Industrial Engineering, UPS
https://www.linkedin.com/in/kerri-alderman-9955734a/

Thomas Davis,
Director, Performance Services, Duke University Health System
https://www.linkedin.com/in/thomas-davis-pe-mba-53b7026/
Agenda

11:00-11:05  Scott Tee-up (About CISE and the Track)

11:05-11:15  Thomas—Healthcare and Life Sciences needs and opportunities for ISE’s in the 20’s

11:15-11:25  Kerri—Supply Chain Challenges, Opportunities & Innovations for the ‘roaring 20’s’

11:25-11:35  Scott—Organizational/Operational Excellence and Analytics Perspectives and Points of View

11:35-11:50  Q&A, Dialogue prompted by audience

11:50-12:00  What’s ahead and more on IISE Conference in New Orleans the 21st-23rd of May
INSTITUTE OF INDUSTRIAL & SYSTEMS ENGINEERS

Council on Industrial & Systems Engineering

Senior Leaders of the ISE function in Great Organizations—Thought Leaders in our Profession

COUNCIL ON INDUSTRIAL & SYSTEMS ENGINEERING
Purpose: To learn, grow, serve, contribute to the higher good. Leverage this affinity group to optimize ISE impact in member organizations and also to support the successful evolution of our profession and professional society.

History: over 40 years young as an ‘affinity group’ of ISE Professional Leaders.

Vision: Sustain being a viable, relevant and affiliated group with our Professional Society. Be comprised of a broad, comprehensive spectrum of ISE Leaders from all segments of Industry.

Engagement:
• Monthly calls—member sharing, planning and preparation for our get togethers
• Two physical meetings, Spring and Fall—Fall is benchmarking at member sites and with an ISE Department.
What CISE is about?
And...

Disciplines of a Learning Organization

1. Systems Thinking
   - Comprehend and address the whole and examine interrelationships between parts
   - Deeply ingrained assumptions, images, generalizations that influence how we act. Ability to reflect in and on actions.

2. Mental Models
   - Continually clarifying and deepening our personal vision
   - Personal Mastery

3. Shared Vision
   - With vision, people excel and learn not because they are told to but because they want to.

4. Team Learning
   - Process of aligning and developing capacities of a team to create results they truly desire to see.
And.....
CISE Fall 2022 in Ann Arbor: Consumers Energy and GM benchmarking and UofM IOE Dept.
Operational & Performance Excellence Track

Scott Sink--Track Organizer/Coordinator

Session Chairs:
Healthcare/LifeSciences:
Thomas Davis and Victoria Jordan

Supply Chain Management:
Kerri Alderman and Eleke Okpabi

Organizational & Operational Excellence and Analytics:
David Poirier and Scott Sink

Plus Service Systems Engineering and Capstone Senior Design Finalists Presentations

5 Special Sessions specifically designed for Practicing ISE Professionals, Young Professionals, Students head to Industry
Who We Designed the Track for:
- Industry Practitioners
- “ISE” function Leaders and Managers
- Young Professionals
- Students

Reasons to Attend:
- Critical, hot topic sessions
- Benchmarking, learn from best in class organizations
- Networking and recruiting opportunities
- Effective, Efficient, High quality and value Learning and Development
- Actionable takeaways to Engineering Value for your Business
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>Sunday, 8-9:20</td>
<td>Service Systems Engineering Innovations Final Four Presentations</td>
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<td>Sunday, 9:30-10:45</td>
<td>Keynote—Rick Echevarria, VP and GM of Security Sales, Intel</td>
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<td>Sunday, 11:00-12:20</td>
<td>Challenges and Opportunities for ISE’s in Healthcare and LifeSciences</td>
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<td>Sunday, 12:30-1:50</td>
<td>Lunch Break and time to visit Exhibitors</td>
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<td>Sunday, 2:00-3:20</td>
<td>Reengineering Supply Chains with ISE Innovations</td>
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<td>Sunday, 3:30-4:50</td>
<td>Organizational/Operational Excellence and Analytics: Best Practices</td>
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<tr>
<td>Sunday, 5:00-6:20</td>
<td>Leadership and Student Mixer and Outstanding ISE Capstone Sr Design Poster Competition</td>
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Engaging 80-minute sessions led by thought leaders and designed to optimize your ability to interact and contribute.
Industry Practitioner Leadership and Student Mixer

We also want to help you grow your personal and professional networks and what better way to do it that at an Annual, International Conference filled with ISE Peers from across many different Organizations. You can accelerate your high quality “Linkedin’s” rapidy with our help!!

On Sunday evening, you’ll be invited to our Annual “Leadership and Student Mixer” and after the first day of great professional development sessions be able to ‘mix and mingle’ 1on1 and in small groups.

The chart on right says higher effort higher value, we make it low effort and Higher Value by providing and facilitating the opportunity to meet great, successful talent in our field from across the World, literally.
Outstanding Capstone Sr Design Award Competition

<table>
<thead>
<tr>
<th>ISE Annual Conference</th>
<th>Outstanding ISE Capstone Senior Design Project 'Final Four'</th>
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<tbody>
<tr>
<td>Seattle 2022</td>
<td>Sunday, 22 May</td>
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<tr>
<td>Performance Excellence Track</td>
<td>8-6: Posters on Display in Quinault Room</td>
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<td>5-6:45 Leadership Mixer, Finalists Acknowledged Quinault</td>
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<td></td>
<td>Monday, 23 May</td>
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<td>8:00-9:20 am Capstone Finalists Presentations, Room 501</td>
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<td>7:30-9:30 pm 1, 2, 3, 4 Announced at H&amp;A Banquet</td>
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- **6th year for the award**
- Founded and Sustained Sponsorship by CISE, Scott and Beatrice Sink, Va Tech ISE, Oklahoma State IEM and Ohio State ISE
  - **Annual Sponsors:** Arkansas, Ga Tech, Texas A&M (2022)
- Poster Showcase on Sunday 8-5 (Judging 5-6 pm during the leadership mixer)
- Leadership Mixer 5:00-6:30 Finalists will be announced.
- Finalist Presentations Monday, first session. (8-9:20)
- Winner Announcement at the Honors and Awards Banquet Monday evening.

Thank you to our 'founding' and sustaining sponsors

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**ISE Annual Conference**

**Seattle 2022**

**Performance Excellence Track**

**Outstanding ISE Capstone Sr Design Award**

Participate in the ISE Capstone Showcase on Sunday and vote for the top 5 from the top 20 Capstone Projects in the Academic Year 2021-22.

Then, on Monday morning, come hear in-depth about the top four projects you voted for on Sunday.
Outstanding Capstone Sr Design Award Competition

Elite 9 (Bold)
1. NC State
2. Arkansas
3. Clemson
4. Ohio University
5. Washington
6. Northern Illinois
7. Ga Tech
8. Va Tech
9. Oklahoma
10. Wichita State
11. Iowa State
12. Cal Poly
13. Dalhousie
14. West Virginia
15. Louisville
16. Texas A&M

Will be announced at the Honors and Awards Banquet tonight
Outstanding Capstone Sr Design Award Competition

Outstanding ISE Capstone Senior Design Project 'Final Four'

Sunday, 22 May
8:00-9:20 a.m. Capstone Finalists Presentations, Room 501
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## Rubric for the Award

### Award Committee

CISE Members from GM, John Deere, Meta, UPS, Disney, Boeing, Emory Healthcare, Duke Healthcare, Intel, The Poirier Group, ...........

### The Specific Criteria we Examine

1. Did the Project Make a Difference, get to DONE?

2. Measure(s) of Success clear, explicit, well measured and evaluated?

3. Project utilized an appropriate blend of ISE BOK principles, methods, tools (ABET)

4. Quality, Professionalism, Story clarity of poster, presentation and oral delivery.
See the top 20 project posters/presentations and participate in selecting the top 3
CISE Perf Excellence
Session Participants

- David Poirier, CEO, The Poirier Group [https://www.linkedin.com/in/poirierdavid/]
- Victoria Jordan, VP Quality, Emory Healthcare [https://www.linkedin.com/in/victoria-jordan-800371106/]
- Eleke Ukpabi, VP Eng & Strategy, Ruan [https://www.linkedin.com/in/elekeukpabi/]
- Kerri Alderman, VP Industrial Engineering UPS [https://www.linkedin.com/in/kerri-alderman-9955734a/]
- Joan Tafoya, Director-Global Data Center Ops, Meta [https://www.linkedin.com/in/joantafoya/]
- Scott Sink, CISE Facilitator and Member [https://www.linkedin.com/in/dscottsink/]
- Tiffany Sargent, Chief Technologist for Cloud, Intel [https://www.linkedin.com/in/tiffanysargent/]
- Yves Belanger, SVP Supply Chain, Sobeys [https://www.linkedin.com/in/yvesbelanger/]
- Chris Kelling, Mgr. IE and Eng Design, John Deere [https://www.linkedin.com/in/chris-kelling-43ba6313/]
- Renee Thiesing, Promito [https://www.linkedin.com/in/renee-thiesing/]
- Thomas Davis, Dir. Perf Services, Duke Healthcare [https://www.linkedin.com/in/thomas-davis-pei- mba-53b7026/]
- Gabe Burnett, Dir and Chief Eng of IE, Boeing [https://www.linkedin.com/in/gabriel-burnett-768a6a4/]


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11:50-12:00  What's ahead and more on IISE Conference in New Orleans the 21st-23rd of May
Our Design Intent
Healthcare and LifeSciences
Needs and Opportunities for ISE’s in the 20’s

Thomas Davis, Director, Performance Services, Duke Health System
Victoria Jordan, VP, Quality, Emory Healthcare
Scott Sink, Senior Advisor, The Poirier Group

21 May
11:00-12:20 pm
Strand 12B
Session Plan
Sunday 21 May

You get to hear from Thought Leaders and Be Thought Leaders too!!

11:00  Tee-up and Team Intro
11:05  Foundation Laying—sharing points of view and perspectives
11:25  Task for the Facilitated Breakout sessions
11:45  Breakout group sharing (5 minutes each) Metalogue
12:20  Lunch Break

The Agenda in all three of our Sessions on Sunday is identical.
Fundamental Questions we want to tee up and Discuss

What’s the Vision for Healthcare and Life Sciences? Future State Characteristics, Requirements and how will ISE contribute?

Current State Characterization. (Healthcare today and how is ISE contributing?)

Gaps that exist and how ISE can help close those gaps.

Migration strategies and plans to close those gaps; roles and contributions for ISE’s.
CISE and Healthcare and LifeSciences

Fall 2012—CISE meets in Columbus and gets insights to OSU Med Center Management Engineering Program.

Fall 2017—CISE meets in Toronto and gets insights into University Health Network (Digital, Lean, and Human Factors Engineering Initiatives)

Fall 2019—CISE meetings in Atlanta and got insights into Tiered Huddles and Quality at Emory Healthcare. We did a great Webinar on this with Victoria Jordan (CISE member).

Webinars on Flow Workshops at OSU University Hospital East and an upcoming one by UHN Toronto, Michael Caesar (July 14)

And, a webinar/case study on the design, development and deployment of a BPI program at MDS (Global Life Sciences).
Patient Flow and Throughput Efficiency

- Vital to organizational success

- Measured using LOS, Excess Days, and Internal and External Benchmarking

- ISE processes, tools and techniques used to reduce LOS, i.e. Lean thinking, multi-disciplinary rounds,
Healthcare Today

Labor shortages persist and labor supply will likely never return to pre-pandemic levels

- Imperative to understand organizational trends regarding employee turnover.

- Use of IE tools to map hiring cycles to forecast hiring needs for both licensed and non-licensed roles.

- Key to have robust processes and controls in place to manage non-clinical labor + contracted labor.
Negative cost pressures are driving focus around organizational priorities

• Post pandemic health systems are experiencing negative operating margins forcing decisions around staffing and work redesign.

• IE’s have an opportunity to bring order to competing challenges, i.e. quality of care, financial pressure, workforce management, and patient experience.

• Work redesign to improve the efficiency of how care is delivered by lowering costs and improving outcomes.
Lean Management Systems are foundational for any healthcare organization

- Development and implementation of a Tiered Huddle system to quickly highlight and escalate needs related to all facets of the business to the appropriate leadership level.

- Growing a culture of respect, humble inquiry, and learning to create problem solvers at all levels of the organization.

- Empowering those closest to the work to see and solve problems using an A3 framework.
Hospitals are very complex 'systems', Healthcare systems even moreso.....

Hospital Flow as a System
IMPLEMENTATION SCIENCE

- Impactful delivery of solutions benefiting the health system
- Portfolio, Program & Project Management
- Lean SixSigma & Quality Improvement
- Agile & Scrum Approaches
- Business Analysis
- Process Engineering
- Change Management
- Benefits Realization & Value Measurement
An example is the Healthcare Analytic Adoption Model

DATA SCIENCE
Knowing • Understanding • Changing in a digital world

Capability and capacity in Data Science enabling personalized medicine, predictive modelling and operational efficiency

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Level 7: Personalized medicine: Integration of genomic, familial, text, and patient self-reported data used for predictive modeling, preventive care and wellness management.

Level 6: Waste elimination: The focus is on maximizing quality and minimizing costs of production. Complex modeling and forecasting is readily available. Data from ACC partners and claims is integrated with patient specific cost and claims data and used to identify and eliminate variability & waste in the system, to drive the process.

Level 5: Cultural data literacy: Permanent technical and clinical improvement teams prepared for top 10 conditions; at least 60% of employees have access to KPIs actionable to their role. Analytics are embedded in the EMR to affect clinical & financial improvements at the point of care.

Level 4: Evidence-based population management: Patient registries for at least the top 10 patient conditions within the organisation, supporting acute & chronic condition management, measurement of clinical guideline adherence and clinical research.

Level 3: Automated external reporting: Vocabulary and other reports such as Value-based Purchasing (VBP), ANS, accreditation/ regulatory such as JCAHO, JCAHO, STS, HEDIS. Adherence to industry standard vocabularies are required at this level.

Level 2: Automated internal reporting: Key performance indicators, highly interactive dashboards and reports that allow for effective hospital and clinic management and business modeling are available.

Level 1: Vocabulary, metadata, & data governance: Searchable metadata repository, data dictionaries aligned with standardized naming and data types. Data governance & stewardship processes in place.

Level 0: Core data integration: As a minimum – EMR Level 3 data. Revenue Cycle, Financial, Costing, Supply Chains, and Patient Experience integrated into a single data warehouse.

Source: Healthcare Analytic Adoption Model 2016 Health Catalyst
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11:50-12:00  What’s ahead and more on IISE Conference in New Orleans the 21st-23rd of May
Extended Enterprise Supply Chain Management: Innovations and ISE Opportunities

Kerri Alderman, VP, Industrial Engineering, UPS
Eleke Ukpabi, VP, Solution Engineering and Strategy, Ruan
Yves Belanger, Sobey’s
Scott Sink, The Poirier Group

21 May
2:00-3:20 pm
Strand 12B
Agenda

2:00  Tee-up and Team Intro

2:05  Foundation Laying—sharing points of view and perspectives

2:25  Task for the Facilitated Breakout sessions

2:45  Breakout group sharing (5 minutes each)

3:05  Wrap up

Current State Characterization for Supply Chain Management.

Gaps we and you see.

Migration strategies and plans to close those gaps and ISE roles and contributions.
Q1 2023 Theme—Supply Chain Management

- January—Supply Chain Leadership Insights for the 20’s: Perspectives and Points of Views (Jim Tompkins)
- January—Best Practice Case Studies: Peavey Industries and Supply Chain BPI (Scott with Peter Hunter)
- February—Supply Chain Management 4.0 Strategies and Methods for 2023 (Jared Frederici)

We’ll build off our SCM Series earlier this year....

120+ on-demand Professional Development Webinars in 10 categories of Performance Excellence

Just for you!!

Click here to go to the IISE Perf Excellence Website page
Principle of SYNERGY
The attitude of sharing a collective aptitude towards a higher altitude

Teamwork | Quality | Execution | Impact
Purpose – People – Process – Platform – Praise

Simulate current supply chain dynamics
Optimize for best performance
Leverage real-time operation inputs
Visualize change impact to supply chain
Evaluate results against the business model

"Business Value Creation is a product of systemic alignment between People, Process, Technology and Strategy"
ISE impact on SCM
MACRO TRENDS

1. Supply chain areas with highest outsourcing
   - Distribution & logistics: 42%
   - Manufacturing: 37%
   - Finishing: 29%
   - Packaging: 23%
   Source: Supply Chain Digest

2. Technologies that are becoming a priority in the supply chain industry
   - Data analysis: 41%
   - IoT: 39%
   - Cloud computing: 39%
   - Info security: 31%
   - Predictive analytics: 29%
   - Apps: 25%
   - 3D printing: 22%
   - Robotics: 22%
   - Drones: 20%
   - Mobile production units: 19%
   Source: GEODIS

3. Extent of supply chain visibility among organizations
   - Limited visibility: 62%
   - Extended visibility: 17%
   - Visibility is only on production: 15%
   Source: GEODIS

Sources: Witte Econometrics, FTR, Bureau of Labor, Bureau of Economic Analysis, GEODIS, Supply Chain Digest, Gartner, Transportation Intelligence
...additional reflections to increase impact

- Communication: Creating a shared understanding and the necessary **conditions for alignment**
- Alignment: Driving the synergy required to rapidly translate **strategy into reality**
- Visibility: Creating a clear link between plans, actions and **results that drives accountability**
- Accountability: Taking responsibility for the results I produce
- Discipline: Having the perseverance to **always follow through**

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<th>Information</th>
<th>Knowledge</th>
<th>Wisdom</th>
<th>Power</th>
<th>Leadership</th>
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<td><em>Data are sets of figures and records within a time frame.</em></td>
<td><em>Information constitutes patterns in the data demonstrated through a time period.</em></td>
<td><em>Knowledge is information that can be acted upon at any given point in time.</em></td>
<td><em>Wisdom is knowledge applied with insight over time.</em></td>
<td><em>Power is wisdom espoused with prudence to effect change at an opportune time.</em></td>
<td><em>Leadership is harnessing that power to ensure the right things are done right at the right time.</em></td>
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What we’ve learned, how we’ve progressed

The term "Lean manufacturing" was coined in 1991 and many of its principles were formalized in "The Machine That Changed the World" by James P. Womack, Daniel T. Jones, and Daniel Roos of MIT and in "Lean Thinking" (1996) by the same authors.

For the better part of 20 years the focus was on business process, value streams—inside the enterprise.

Gradually we recognized that it’s the extended value stream that is important, going beyond the boundaries, spanning boundaries.

Much of the real value in Supply Chain Management comes from expanding beyond in-bound, out-bound, and warehousing. Extending upstream to ‘producers’ and downstream to ‘store-ops’, e-commerce, etc.
Supply Chain – State of the Industry

Expect disruptions. Things are not going back to normal. New “Normals” are forming. Headwinds of a recession are already impacting Supply Chain decisions and planning.

Rising Demand for Third-Party Logistics
Drivers:
- Rising demand from e-commerce
- Global supply chain complexity increasing
- Reduction in physical locations and connected Ecomm ecosystems

Increasing Transportation Costs
Drivers:
- Overall Inflation
- Wage increases and worker safety regulation
- Rising fuel costs due to war in Ukraine

Advancing Technologies
Drivers:
- New technology in hybrid/electric vehicles
- Advanced warehouse management software
- Industry 4.0/IoT driving operational efficiency

Rising Complexity – Need for Visibility
Drivers:
- Global overproduction
- Increased e-commerce demand
- Residual disruptions by COVID-19
- Push for deglobalization

Organizations need to be equipped to make interventions at different phases in the end-to-end Supply Chain, leveraging different techniques, based on relative maturity.
Change is the new normal. Some relief at the ports but long term ripple effects on manufacturing are impacting up a number of industries (long range bullwhip effect)

The Transportation industry is faced with capacity issues everywhere.

**OCEAN FREIGHT**
Continued port backlogs and reduced capacity in available ships. Some relief but long term impacts

**AIR FREIGHT**
Reduced freight capacity because of COVID related passenger flight decline and spill over from shortage of ocean freight options

**TRUCKING**
Driver shortages and blockages because of protests, weather and border related delays. Spot market variance across the board

Source: IBISWorld
TPG Client Set & SME
Assessing Supply Chain Maturity

We can often romanticize “models” – there are many good ones to assess maturity available but you must fit to your organization type

This is one of many maturity models. 1-5 often follows “Blooms Taxonomy”. Visualizing the “end-to-end” and assessing maturity are first steps.

| Source: McKinsey |  |  |

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<tr>
<th>SC strategy</th>
<th>Planning</th>
<th>Physical flow</th>
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<tbody>
<tr>
<td><strong>Data</strong></td>
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Very high maturity | High maturity | Medium maturity | Low maturity | No maturity | Score
Not so long ago, “Predictive” was #5...

The most advanced supply chains can run largely digitally, predicting with high degrees of accuracy disruptions, and putting mitigation plans/strategies in place autonomously.

Source: IDCEurope
Supply Chains vary widely based on what needs to occur for the physical product (or service!). The flow starts with the input supplies; the conversion (manufacturing/packaging); the storage and/or fulfillment; and the end user.
Optimizing the performance of a supply chain is typically aligning multiple decision points with the corporate strategy and customer requirements.

- **Raw Material**
- **Components**
- **Packaging Items**
- **Product Sourcing**
- **Imported Materials**
- **Bought-in Parts**

**Manufacturing**
- Capacity
- Equipment

**Network Planning**
- Location and Blend of Warehouse/DC/Depot
- Type and Size of Storage
- Materials Handling Equipment

**Production**
- Sub-Assembly
- Work-in-progress

**Packaging & Unitization**
- Packaging
  - Protective Elements
  - Handling Systems
  - Unit Load and # of Options

**Finished Goods Inventory Warehouse**
- Depots
- Distribution Centres

**Inventory Management**
- What to stock
- Where to stock
- How much to stock

**Transportation Management**
- Mode of Transportation
- Type of Delivery
- Load Planning and Route Scheduling

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**Demand and Supply Planning**
- Forecasting
- Control Procedures
- Sourcing – price, location

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**THE POIRIER GROUP**
Retail and Manufacturing Supply Chains vs. Services

Retail and traditional manufacturing Supply Chains focus on getting the product to the end customer. Typically the same physical SKU will be at multiple stages in the supply chain and constantly flowing with the goal to be on shelf BEFORE the customer but not too early. Notice the nuances of a service based supply chain.

Critical Success Factors for Retail/Manufacturing is product FLOW as demand can be forecasted but often volatile.

Critical Success Factors for Service Systems is visibility to PEOPLE and how they interact with services & technology within the broader value chain.

The type, location, and ownership of the outlets has an impact on all upstream capacity needs and service levels.
Agenda

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11:50-12:00  What’s ahead and more on IIESE Conference in New Orleans the 21st-23rd of May
Organizational & Operational Excellence and Analytics

David Poirier, CEO, The Poirier Group
Scott Sink, Senior Advisor, The Poirier Group
Thomas Davis, Director, Performance Services, Duke Healthcare System
Debbie Nightingale, Distinguished Professor, UCF

21 May
2:00-3:20 pm
Strand 12B
Fundamental Questions we want to tee up and Discuss

What’s the Vision for Organizational and Operational Excellence, Business Process Improvement, Integrated Systems Engineering?

Current State Characterization for Op Ex and Analytics.

Gaps we see.

Migration strategies and plans to close those gaps.
Q4 2022 Theme—Org/Op Excellence in Turbulent Times

- September—Insightful Leadership: Surfing the Waves to Organizational Excellence (Jim Tompkins)
- September—Creating Improved Operational Excellence in Times of Economic Uncertainty and Challenges (David Poirier & Jim Dobson)
- December—Planning to Improve Productivity in Disruptive Economic Times (Scott Sink)
We’ll build off our Op Ex/Analytics Series past and just ahead

120+ on-demand Professional Development Webinars in 10 categories of Performance Excellence

Operational Analytics

Operational Analytics

Operational Analytics: You Can’t Manage What You Can’t or Won’t Measure
Operational Analytics: The Analyst and Decision/Action Support Role
Operational Analytics: The Data Management Role
Operational Analytics and AI: People, Process, and Technology
Operational Analytics: IIE Certificate Program Overview
Operational Analytics: Creating “AHA” Moment Visualizations
The Role of Data and Information (Engineered Management Systems) in Periods of Major Disruption
Operational Analytics: New Frontiers for ISEs
Operational Analytics: Sustainable Visual Measurement Systems
Operational Analytics for Integrated Lean Sigma Process Improvement Projects Part IV
Operational Analytics for Integrated Lean Sigma Process Improvement Projects Part III
Operational Analytics for Integrated Lean Sigma Process Improvement Projects Part II
Operational Analytics for Integrated Lean Sigma Process Improvement Projects
A Framework of Best Practices for Delivering Successful Artificial Intelligence Projects

[ Back to top ]

Operational and Business Process Excellence

Operational and Business Process Excellence

Some organizations integrate Business Process Excellence perfectly. Others need a well-designed program. We’ll show you how to jump-start a great Op Ex Program.

Click here to go to the IISE Perf Excellence Website page

Using Behavior Management Principles and Methods to Accelerate BPI Benefits Realization
Strategic Performance Improvement Planning in Periods of Economic Disruption
Business Process Improvement: Picking the Right Projects, Best Practice Portfolio Management in Times of Economic Challenge
Business Process Improvement Portfolio Management: Picking the Right Projects to Drive Enterprise Value Better and Faster
Achieving Resilient Organizational Excellence in the Face of Continuing Disruptions
Agile Operational Excellence/Business Process Improvement
IISE Annual Conference 2022: The Performance Excellence Track Detailed Preview
The New Industrial Engineering: Integrated Systems Engineering and Management Systems Engineering
Building Performance Management Systems: Sharing Lessons Learned
Business Process Management 4.0 – Glimpses of What’s Ahead
Engineering Social Service Systems
Operational Excellence: Creating Strategies and Migration Plans for Large-Scale Improvement Initiatives
Operational Analytics: Measuring What Matters to Drive Improved Results

Presenter Today

D. Scott Sink, Ph.D, P.E.
IISE Global Perf Excellence Coordinator
CISE Facilitator

Agenda:

- Organizational System Performance Measurement Foundations
- Measuring what Matters (how do we know/decide?) 2 case examples
- Breaking out of the Data Rich, Information Poor—Swimming in seas of data situation
- DONE looks and feels like this...
- IISE’s Operational Analytics Certification Program

17 November 2022
Operational Analytics: Data Management Role

MODERATED BY

D. Scott Sink, Ph.D., P.E.
Adjunct Prof, Va Tech
Global Perf Excellence Webinars
Team Lead, IIEE

Jared Frederici, Sr. Consultant
The Poirier Group

Webinars that Matter in Times of Turblence
16 March 2021
Operational Analytics: The Analyst Role

Webinars that Matter in Times of Turbulence

16 March 2021

Jared Frederici, MBB
Sr. Consultant
The Poirier Group

MODERATED BY

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Ben Amaba, Ph.D., P.E.
CTO
IBM

Matheus Scuta
Product Mgr Analytics and Tech Integration
Ford

Alex Monahan
OR Engineer
Intel

IIESE Annual Conference & Expo 2021
Virtual Conference
May 22 – 25, 2021
Operational Analytics: The Analyst Role

Creating AHA Moment Visualizations

MODERATED BY

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Peter Murphy, BB
Consultant
The Poirier Group

Alex Monahan
OR Engineer
Intel

Webinars that Matter in Times of Turblence
8 July 2021
Creating Improved Operational Excellence Resilience in the Face of a Steady Stream of Disruptions

Regardless of your business situation in the post pandemic and current economic situation, here are some ‘Insightful Leadership’ to help you enhance your Productivity Improvement Efforts.

Links to get to YouTube version and Blog

The Poirier Group YouTube Channel
The Poirier Group Insights
The New Industrial and Systems Engineering spans the full spectrum of Business Process Management Endeavors.
Operations Analysis

The abundance and growth of machine data, which can include anything from IT machines to sensors and meters and GPS devices, is another major driver of big data solutions. In its raw format, many organizations are unable to leverage machine data. Yet disregarding this data means that organizations are making business decisions based only on a subset of available information. Leveraging machine data and combining it with existing enterprise data enables a new generation of applications that are able to analyze and gain insight from large volumes of multi-structured machine data—which in turn improves business results.

What do you need to succeed?

Get the Context
- Overcome complexities to perform advanced analysis and provide context across different data sets.

Get Insights From Analytics
- Release intelligence trapped in your data, allowing agile interpretation and action.

Capture a Complete View
- Access large volumes of machine, operational and transactional data and combine with other enterprise data.

THE RESULTS

Empower the C-Suite
- Reassure decision makers that they are acting with full knowledge & understanding of all available data.

Improve Reliability
- Perform root cause analysis on data to more easily identify and preempt system failures, keeping customers happy.

Speed Operations
- Help departments proactively minimize the problems and bottlenecks that stymie the flow of operations.

Monitor & React
- Visualize streaming data to monitor the end-to-end infrastructure and deliver real-time alerts.

Learn more at IBM.com/BigData
Moving from Ad Hoc, Process Maturity Level 1 with Operational Analytics to PML’s 3-5 as appropriate.

A nice picture for Op Analytics I think...
Operational Analytics, done right, minimizes latencies and enhances ability to drive more rapid benefits realization.

Reduce the cycle times on each step in this implicit process.

Executing the Analytics Triangle effectively enables more rapid decisions and actions and positions for more rapid benefits realization.
Predictable Results from ‘Insightful Leadership’?

A Transformation that Dave played an integral role in...

Built to Last Data
No Time for Muddle....it’s a time for “Triple-Loop Learning”
How can you do this really fast?
### Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:00-11:05</td>
<td>Scott Tee-up (About CISE and the Track)</td>
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<tr>
<td>11:05-11:15</td>
<td>Thomas—Healthcare and Life Sciences needs and opportunities for ISE’s in the 20’s</td>
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<tr>
<td>11:15-11:25</td>
<td>Kerri—Supply Chain Challenges, Opportunities &amp; Innovations for the ‘roaring 20’s’</td>
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<tr>
<td>11:25-11:35</td>
<td>Scott—Organizational/Operational Excellence and Analytics Perspectives and Points of View</td>
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<tr>
<td>11:35-11:50</td>
<td>Q&amp;A, Dialogue prompted by audience</td>
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<tr>
<td>11:50-12:00</td>
<td>What’s ahead and more on IISE Conference in New Orleans the 21st-23rd of May</td>
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<td>Time</td>
<td>Event</td>
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<tr>
<td>Sunday, 8-9:20</td>
<td>Service Systems Engineering Innovations Final Four Presentations</td>
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<tr>
<td>Sunday, 9:30-10:45</td>
<td>Keynote—Rick Echevarria, VP and GM of Security Sales, Intel</td>
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<td>Engaging 80-minute sessions led by thought leaders and designed to optimize your ability to interact and contribute.</td>
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<tr>
<td>Sunday, 11:00-12:20</td>
<td>Challenges and Opportunities for ISE's in Healthcare and LifeSciences</td>
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<tr>
<td>Sunday, 12:30-1:50</td>
<td>Lunch Break and time to visit Exhibitors</td>
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<td>Sunday, 2:00-3:20</td>
<td>Reengineering Supply Chains with ISE Innovations</td>
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<tr>
<td>Sunday, 3:30-4:50</td>
<td>Organizational/Operational Excellence and Analytics: Best Practices</td>
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<tr>
<td>Sunday, 5:00-6:20</td>
<td>Leadership and Student Mixer and Outstanding ISE Capstone Sr Design Poster Competition</td>
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Hope to see you there....

Click here to get to IISE New Orleans Conference Landing Page
We also want to help you grow your personal and professional networks and what better way to do it than at an Annual, International Conference filled with ISE Peers from across many different Organizations. You can accelerate your high quality “Linkedin’s” rapidy with our help!!

On Sunday evening, you’ll be invited to our Annual “Leadership and Student Mixer” and after the first day of great professional development sessions be able to ‘mix and mingle’ 1on1 and in small groups.

The chart on right says higher effort higher value, we make it low effort and Higher Value by providing and facilitating the opportunity to meet great, successful talent in our field from across the World, literally.
And, Just Ahead.....

5 June—Why it Matters: Reflections on Practical Leadership  John White, Chancellor Emeritus, University of Arkansas

Register for John White Webinar

June and July Offerings for you..

An Analytics Mini-Series:

• 13 June--Revisiting the Improvement Cycle-- Plan, Do, Study, Adjust
• 14 July, Best Practice Case Study—Data and Analytics at University Health Network, Toronto
• 27 June--Creating Meaningful, Insightful Organizational/Operational Scorecards and Dashboards

Capstoned by a Feature Article in the ISE Magazine in August.
Integrated Master Plan

Current Reality

- Value Proposition not explicit
- Not managing Positioning
- Different segments of members
- No plans for the year
- Involvement and engagement not managed
- Pipeline of members dry
- Industries missing, not represented on group
- Entropy setting into the group

Dec 2022

- Value Proposition clear, explicit, compelling, visible
- CISE is well positioned in ‘marketplace’
- Alignment of Purpose, Values, and Objectives and key results
- Demand exceeds ‘seats’ on Council, organizations and individuals aspire to be in Council
- Making a visible, clear, acknowledged Difference for members, member companies, IISE, the Profession

What do we want to work on, improve, start, continue, stop....

- Value Proposition Developed
- Positioning Fixed
- CISE Speaker Bureau Established
- CISE owns Global IISE Webinars that Matter as part of Thought Leadership Initiative and Mission
- Member Pipeline Management Process PML 4
- Thought Leadership plan for the S in IISE
- Fall Meeting Design and Execution Process is 10/10
- CISE has significantly impacted Conversion Rates
Examples of additional ways to serve IISE

1. Ensure that industry ISEs are being recognized through IISE Honors & Awards.
   • It’s important that excellence in industry is recognized and some of our highest awards (such as
     Captains of Industry) don’t even require IISE membership. Make nominations. Serve as
     judges. Write letters of recommendation. Drum up nominations among your peers.

2. Serve in IISE leadership roles, on the Board of Trustees, on Operating Boards, within IISE technical
   groups (societies and divisions), etc.

3. Lead conference efforts.
   • IISE struggles to stay relevant to ISEs in industry and having CISE members and their companies
     represented at IISE conferences would help reach ISEs in industry. And it doesn’t have to be the
     Annual Conference. Our other three conferences (Lean Six Sigma, Healthcare Systems, Applied
     Ergonomics) are all focused more on industry. Having CISE members serving as program chairs,
     keynote speakers, or simply speakers would make the events more valuable to ISEs in industry.

4. Write articles for ISE Magazine or IM Magazine.
   • In particular, ISE Magazine goes out to every IISE member. Most of our members work in
     industry. Reading about advancements in the companies of the CISE members would make the
     magazine more valuable.

5. Help IISE’s new Director of Continuing Education, James Swisher, identify relevant topics and
   speakers for new continuing education courses.
   • Our training is strong in the areas of lean and six sigma. But we haven’t done a good job
     developing other courses that appeal to industry. CISE members would be an excellent group to
     advise him on topics and speakers that their companies would find of interest.
Examples of additional ways to serve IISE

6. **Promote IISE to colleagues.**
   - CISE members are well-respected and widely recognized. They have extensive networks. Personal messages promoting membership, conferences, training, etc. and telling personal stories about how IISE is valuable to them would really help IISE. Our reach beyond our current membership is limited and even if we do reach out, messages are seen as “sales” pieces (which they are). A recommendation from a respected colleague would be much more valuable.

7. Serve as **mentors for the Young Professionals group** within IISE as well as reaching out to student groups and serving as mentors.

8. **Formally commit as corporate partners with IISE.**
   - Several companies represented by CISE have corporate alliances, but some do not. The partnerships are formal ways of ensuring that others within your companies are engaged with IISE. They can include membership, sponsorship, conference participation, training, advertising, etc. Our corporate partnerships are a key way we reach ISEs working in industry. And ensure that the connection between IISE and the company goes beyond a sole stakeholder. Too often, our alliances are based on a single personal relationship and when that person retires or leaves the company, the alliance dissolves. Seek to establish continuity.

9. **Help develop and lead webinars or podcasts for IISE.** These are usually very industry-based and are a very valuable service to our members.

10. **Reach out to student chapters at alma maters.**
    - Speak to student groups extolling IISE membership beyond graduation. Maybe even financially support the first year of professional membership for graduates’ of alma maters.