Workforce Development in the Supply Chain
Presented By: Rod Pickens
Supply Chain Revolution...

Already Underway

- Autonomous Technology
- Sustainability and Decarbonization
- Exponential growth of Digitalization
- Big Data
- IoT
- Need for Transparency, Efficiency, Safety, and Visibility
- Artificial Intelligence
- Robotics
- Blockchain
- E-commerce
Easter Parade in New York City

Where is the car?  Where is the horse?
Digital Transition

Smart Terminals and Automated Guided Vehicles (AGV’s)

Where are the workers?
Transitions

Teleoperations

The operation of a machine, system, robot or vehicle from a distance

Decarbonization

Reduction in use of diesel cargo handling equipment (electric / hydrogen options)

Autonomous Operations

The ability of a system to sense the state of its environment, analyze the data it senses to find operational problems or changing resource demands
Benefits

How smart-port technologies can improve operations

- **Infrastructure**
  Monitor health and status of critical port and terminal infrastructure

- **Cargo handling**
  Enhance productivity by optimising cargo operations

- **Intermodal traffic**
  Co-ordinate vehicle movement to improve traffic flow between ports and cargo destinations

- **Customs and collections**
  Streamline the sharing of cargo and customs information and documents

- **Safety and security**
  Control port access and provide detection and early-warning systems

- **Energy and the environment**
  Reduce energy consumption and monitor environmental impact
Digital Technologies

Digital technologies are disrupting the supply chain, but they are also providing important new solutions for transportation inefficiencies and logistics challenges.

Technology is creating new digital models that enhance transparency, safety, and sustainability while giving customers better, faster, and cheaper supply chain solutions.
Future Employees

The type of employees are we looking for in this 4th Industrial Revolution

- Technically skilled
- Leaders and decision makers
- Adaptable with good inter-personal skills
- Problem solvers
- Effective communicators

Qualified candidates will be sought after driving up both costs and expectations for employers
How can your organization best resolve its potential skills gaps?

- Only reskilling: 3.0%
- Mainly reskilling: 41.0%
- Equal mix hiring and reskilling: 40.0%
- Mainly hiring: 15.0%
- Only hiring: 1.0%

From a McKinsey survey of 197 private-sector organizations.
Reskilling / Training

Investing in people who are invested in your company

Continuous training and learning opportunities through an employee’s career to evolve their skills to keep up with the technological revolution

- In-house training classes or tuition re-imbursement
- Apprenticeships
- Mentoring
- Internships with high schools, vocational schools and community colleges
Internship and Apprenticeship

Internship Program

• Partner with local high school - New Era Academy and Youth Works to provide summer work internships for 4 Baltimore City HS students. Paid employment for 25 hrs/week through a grant with Under Armour

• College interns over summer and winter breaks

Apprentice Program

• Currently 6 apprentices in training and development to become successful Operations Supervisors.

• Key is finding and developing the right candidates
Apprenticeship for Supervisors

Program details

21 Credits of college instruction in the TDML program (Transportation, Distribution and Maritime Logistics) at our local community college

Partnering with other successful Managers and Supervisors for mentoring, coaching and development

Educational workshops and seminars with our training partners
- Fred Pryor seminars
- American Management Association workshops
- Microsoft self-learning modules
Automation and digitization is transforming transportation, ports, and the supply chain. Continuous and focused workforce development is critical to attract and retain the best employees.

Hiring great talent is only half the battle. Keeping them engaged long term is just as important.
Baltimore Apprentice Program

Thank You

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