

KENTUCKY DEPARTMENT OF EDUCATION  
**SUPPLY CHAIN MANAGEMENT AND LOGISTICS**  
**FUTURING PANEL**  
MAY 23, 2022

**REPORT PULL-OUT SECTIONS**  
TRENDS, RELATED SKILLS, & CURRICULUM RESOURCES  
BUSINESS ETHICS/ETHICAL LEADERSHIP  
CERTIFICATIONS OF VALUE

# Kentucky Department of Education

## MBA Research and Curriculum Center Futuring Panel Report Pull-Out Sections

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### Project Overview

On May 23, 2023, the Kentucky Department of Education (KDE) partnered with MBA Research & Curriculum Center to convene a Futuring Panel with supply chain management (SCM) and logistics executives and professionals from areas across Kentucky. The panel was conducted in Frankfort at the department's Office of Career and Technical Education. This Futuring Panel was assembled to support the development of a supply chain management pathway for KDE, including four courses and possible certifications, and to initiate business and industry partnerships for KDE in this career area. It was facilitated to provide insight into SCM trends and issues that are impacting workforce needs today and in the years to come.

The supply chain management and logistics panelists represented one or more of the following areas:

- Planning
- Sourcing
- Making/Manufacturing
- Delivering
- Returns/Reverse logistics
- Enablement

### Trends Discussion

Panelists were asked to identify trends that are affecting or changing the way they do business or how they plan for the future. Group facilitators stressed the importance of identifying trends evident in the supply chain management and logistics industry, specifically in Kentucky.

We encouraged executives to think about trends from a business perspective rather than from an educational/teaching perspective. Participants were given six general categories to consider as they identified trends.

### Trend Categories

<b>CULTURAL:</b>	The major elements of culture, including material culture, language, aesthetics, education, religion, attitudes, values, and social organization
<b>ENVIRONMENTAL:</b>	Any forces that impact how businesses interact with the environment and use their natural resources (e.g., fresh water, air, living organisms, metal ores, oil, most forms of energy)
<b>GLOBAL/POLITICAL:</b>	The impact of a political ideology (e.g., capitalism, socialism, communism, nationalism), stability, and international relations on business
<b>GOVERNANCE:</b>	Factors that impact the principles and standards that govern business decision-making and business oversight. Governance refers to all processes and decisions that seek to define actions, grant power, and verify performance
<b>REGULATORY/LEGAL:</b>	The full breadth of laws, rules, and regulations that businesses are subjected to by governing bodies, whether through civil or common code, domestic or international law, or governmental entities, agencies, or jurisdictions
<b>TECHNOLOGICAL:</b>	The direct and indirect impact of technology on any aspect of business, from strategy to operations to tactics

### Top Trends List

- Automation's ability to help businesses deliver quality products and services to customers on time, at a low cost
- Increase in global economic uncertainty and the need for geopolitical awareness
- Changes in organizational communication and an increase in employee-focused leadership and initiatives
- Building flexibility and security into the network to adapt to rapid change – mesh network
- Being able to source, digest, analyze, and communicate multiple streams of data and tie it back to business strategy
- Rebranding supply chain management to obtain, retain, and promote supply chain talent

## Top Trends, Related Skills, and Curriculum Resources

In addition to identifying the top trends, we asked business participants to share the skills needed in the workplace to successfully address the trends. Immediately following each trend and its related skills, teachers will find curriculum resources that are applicable to teaching the skills.

As a reminder, Kentucky teachers have free access to all MBA Research LAP modules via their [MBA Learning Center account](#) (login required). Simply search in Commons for the LAP titles that you would like to use. Don't have an account set up? [Contact MBA Research](#) to get started.

### **Automation's ability to help businesses deliver quality products and services to customers on time, at a low cost**

<b>Related skills and technology needs:</b>
<ul style="list-style-type: none"> <li>• Computer background and skills (material requirements planning (MRP) and enterprise resource planning (ERP) systems; SAP, JDE, advanced Excel skills)</li> </ul>
<ul style="list-style-type: none"> <li>• MS Excel based is needed for all resource processing and automotive</li> </ul>
<ul style="list-style-type: none"> <li>• SharePoint, SQL needed</li> </ul>
<ul style="list-style-type: none"> <li>• Microsoft Suite</li> </ul>
<ul style="list-style-type: none"> <li>• Business Objects—data management system</li> </ul>
<ul style="list-style-type: none"> <li>• PowerBI—“fancier Excel” being taught at NKU in lieu of Business Objects</li> </ul>
<ul style="list-style-type: none"> <li>• Basic computer understanding includes ability to use a computer, not just ability to use apps</li> </ul>
<ul style="list-style-type: none"> <li>• Mechanical background—knowing how to relate to and work with automation (repair/maintenance/cross-checking)</li> </ul>
<ul style="list-style-type: none"> <li>• Systems integration: ERP/MRP/etc. and critical thinking about systems and how they interrelate; knowing how to cross-check and test the automation functionality</li> </ul>
<ul style="list-style-type: none"> <li>• Communication skills—knowing where to go to ask questions</li> </ul>

<b>Curriculum Resources</b>
Resources to facilitate learning about this trend are available in the following LAP modules:
<ul style="list-style-type: none"> <li>• LAP-NF-003 TECH-tastic (Technology's Impact on Business)</li> </ul>
<ul style="list-style-type: none"> <li>• LAP-NF-110 In the Know (Nature of Information Management)</li> </ul>
<ul style="list-style-type: none"> <li>• LAP-OP-443 Deliver the Goods (Concept of Supply Chain)</li> </ul>

### **Increase in global economic uncertainty and the need for geopolitical awareness**

<b>Related skills:</b>
• Low-cost counter sourcing
• Ability to recognize price vs. value
• Risk assessment/risk management
• Understanding how to calculate total cost (total-cost model)
• Microsoft Suite
• Determining readiness to market
• Facility/Ability to adapt to change
• Cost analysis and market benchmarks for negotiations to determine if it's time to purchase
• Training for cross-functionality in accounts payable and receivable and how departments work together to maximize outcomes

<b>Curriculum Resources</b>
Resources to facilitate learning about this trend are available in the following LAP modules:
• LAP-SM-075 Prepare for the Worst; Expect the Best (Nature of Risk Management)
• LAP-EC-903 Be Resourceful (Economic Resources)
• LAP-EC-104 Stretch Your Boundaries (The Global Business Environment)

### **Changes in organizational communication and an increase in employee-focused leadership and initiatives**

#### **Related skills:**

- Leadership
- Employee retention
- Creating a flexible workplace
- Diversity, Equity, and Inclusion knowledge and understanding
- HR changes
- Pay-per-shift app

#### **Curriculum Resources**

Resources to facilitate learning about this trend are available in the following LAP modules:

- LAP-EI-140 More Than Just Talk (Effective Communication)
- LAP-EI-909 Lead the Way (Concept of Leadership)
- LAP-EI-064 Culture Club (The Nature of Organizational Culture)
- LAP-HR-493 Take the Lead! (Leadership in Organizations)

**Building flexibility and security into the network to adapt to rapid change**

**Related skills:**

- Analytic skills
- Ability to see the big picture and connect dots
- Information technology: basic understanding of sourcing data (knowledge of SQL, light coding)
- Base knowledge of ERP/MRP systems
- Understanding how information flows between companies
- Forecasting/Demand analyst

**Curriculum Resources**

Resources to facilitate learning about this trend are available in the following LAP modules:

- LAP-SM-075 Prepare for the Worst; Expect the Best (Nature of Risk Management)
- LAP-EI-062 Make It a Win-Win (Negotiation in Business)
- LAP-MP-013 Futurecast (The Nature of Sales Forecasts)
- LAP-OP-443 Deliver the Goods (Concept of Supply Chain)

### **Being able to source, digest, analyze, and communicate multiple streams of data and tie it back to the business strategy**

*“Obviously, this is data analytics, but there are two big pieces: relate it back to a business strategy. You can get people who can analyze data, but being able to tie it back to something relative from a business perspective is important. The other piece is sourcing. It’s important to be able to source data from multiple sources and tie it into one source and be able to communicate that out.”*

Eric Rossi, Valvoline Global

#### **Related skills:**

- Data analytics
- Communication and soft skills
- Storytelling with data
- Adaptability with ambiguity
- End-to-end business knowledge

#### **Curriculum Resources**

Resources to facilitate learning about this trend are available in the following LAP modules:

- LAP-EI-140 More Than Just Talk (Effective Communication)
- LAP-EI-006 Go With the Flow (Demonstrating Adaptability)
- LAP-EI-092 Embrace the Unknown (Developing a Tolerance for Ambiguity)

### Rebranding supply chain management to obtain, retain, and promote supply chain talent

#### Related skills:

- Leadership skills
- Coaching
- Ability to provide and receive feedback
- Work with and attract diverse populations
- Ability to be visionary

#### Curriculum Resources

Resources to facilitate learning about this trend are available in the following LAP modules:

- LAP-EI-060 Vision Quest (Enlisting Others in Vision)
- LAP-EI-909 Lead the Way (Concept of Leadership)
- LAP-EI-041 Bring Out the Best (Coaching Others)
- LAP-EI-903 Grin and Bear It (Using Feedback for Personal Growth)
- LAP-OP-443 Deliver the Goods (Concept of Supply Chain)
- LAP-OP-303 Top of the (Supply) Chain (Nature of Supply Chain Management)

## **Business Ethics/Ethical Leadership**

MBA Research & Curriculum Center and the [Daniels Fund](#) have formed a partnership to promote the teaching and learning of business ethics at the high school level. As part of our research to help strengthen our curricula and instructional materials in the business-ethics realm, and to learn firsthand about issues in business ethics within workplaces, we asked Kentucky supply chain management panelists to review and rank the importance of ethical leadership traits, suggest additional ethical leadership traits, and talk about ethics generally within their career area.

### **Ethical Leadership Traits Validation**

The traits are listed in the order that panelists reviewed and validated them.

Ethical Leadership Traits	Critical	Recommended	Not Needed
1. Describe the nature of emotional intelligence	87.5%	12.5%	
2. Recognize and overcome personal biases and stereotypes	81%	19%	
3. Assess personal strengths and weaknesses	69%	31%	
4. Assess personal behavior and values	56%	44%	
5. Demonstrate honesty and integrity	94%	6%	
6. Demonstrate responsible behavior	94%	6%	
7. Demonstrate fairness	87.5%	12.5%	
8. Assess risks of personal decisions	69%	31%	
9. Take responsibility for decisions and actions	75%	25%	
10. Build trust in relationships	80%	20%	
11. Describe the nature of ethics	56%	44%	
12. Explain reasons for ethical dilemmas	75%	25%	
13. Recognize and respond to ethical dilemmas	87.5%	12.5%	
14. Explain the use of feedback for personal growth	69%	31%	
15. Show empathy for others	81%	19%	
16. Exhibit cultural sensitivity	75%	25%	
17. Explain the nature of effective communications	69%	31%	
18. Foster open, honest communication	87.5%	12.5%	
19. Participate as a team member	75%	25%	
20. Explain the concept of leadership	62%	38%	
21. Explain the nature of ethical leadership	75%	25%	
22. Model ethical behavior	87.5%	12.5%	
23. Determine personal vision	44%	50%	6%
24. Inspire others	50%	50%	
25. Develop an achievement orientation	31%	69%	
26. Enlist others in working toward a shared vision	69%	31%	
27. Treat others with dignity and respect	87.5%	12.5%	
28. Foster positive working relationships	81%	19%	
29. Assess long-term value and impact of actions on others	69%	31%	

30. Set personal goals	50%	50%	
31. Follow rules of conduct	75%	25%	
32. Make decisions	81%	19%	
33. Demonstrate problem-solving skills	81%	19%	

### Additional Recommended Leadership Traits

- Decision-making skills
- Ability to overcome bad decisions, to move on to a better decision
- Understand your audience
- Communication skills and teamwork—don't work in a silo
- When managing a team, work with your team members to help them set their own goals; follow up on their progress

### Additional Comments

- How do we communicate in a more efficient manner?
- Give and seek feedback to continuously improve as an individual and as an organization.

### Discussion on Ethical Leadership

Participants were asked what ethical principles are especially important in SCM and why.

#### Continuously give and seek feedback.

- Have regular meetings and talk about specifics. Speak with direct-reports daily and do annual performance reviews. Going into a performance review should not be a time for surprise. This is critical for employee retention today.
- Give details when someone meets or exceeds expectations. Being specific is important to young people, not just, "You're doing great."
- Create employee coaching and mentoring opportunities.

**Have empathy;** recognize contributions and successes before asking for modifications.

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*"Empathy and recognition are key for this generation of employees."*

Bill Cox, Clark Material Handling Company

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**Knowing the right thing to do** and being able to properly advise on *what* to do.

**Teach how to have difficult conversations.** Example: If a worker takes longer breaks than allowed; having that discussion followed by disciplinary action is necessary. Be respectful and take the emotion out of the discussion.

## Credentials and Certifications Worksheet

**Are credentials/certifications necessary in your career area?**

- **Yes:** 37.5% (6/16 participants)
- **No:** 62.5% (10/16 participants)

**Identified credentials and certifications relevant in the SCM field:**

Certification / Credential	Required?	If required, at what stage?	Does your company provide support for employees to obtain credentials?	What type of support is offered?
APICS /CPIM	1 Just nice to have 1 No	1 No defined time frame	2 Yes	2 Pay differential 1 Advancement
APICS/CSCMP	1 No	1 No defined time frame	1 Yes	1 Pay differential 1 Advancement
ASCM (APICS Material Positions)	1 No 1 Recommended for advancement	1 No defined time frame	1 Yes	1 Time away from work for class/study 1 Other: Pay materials/lump-sum payment
Bachelor's Degree (SCM concentration preferred)	3 Yes 1 No 1 Recommended for advancement	3 Before employment	3 Yes 1 No	2 Pay differential 2 Advancement 3 Other: Lump-sum payment; 5k yearly paid school; Pay for college education
Certified Management Accountant	1 Just nice to have	1 No defined time frame	1 Yes	1 Advancement 1 Time away from work for class/study 1 Other: Cover costs of classes, study materials, and tests
CPF (Certified Professional Forecaster)	1 Recommended for advancement	1 First 2 yr of employment	1 Yes	1 Advancement 1 Time away from work for class/study 1 Costs of classes, study materials, and tests
CSCP	1 Recommended for advancement	1 Before advancement	1 No	

## Kentucky Department of Education

### MBA Research and Curriculum Center Futuring Panel Report Pull-Out Sections

HS Diploma	1 Yes	1 Before employment	1 Yes	
ISM-CPSM Certified Professional in Supply Chain Management	1 Yes 1 No 1 Recommended for advancement	1 Within 4 yr	1 Yes	1 Time away from work for class/study 1 Other: Lump-sum payment
Lean Six Sigma Certifications	1 No 1 Recommended for advancement 2 Nice to have	1 First 1–2 yr of employment 3 No defined time frame	3 Yes 1 No	1 Pay differential 2 Advancement 2 Time away from work for class/study 2 Other: internal mentors; costs of classes, study materials, and tests
MBA	2 Nice to have 1 Recommended for advancement	3 No defined time frame	2 Yes 1 No	1 Pay differential 1 Other: \$/semester
Microsoft Office (Excel)	4 Yes 1 Recommended for advancement	3 Before employment 1 Before advancement 1 No defined time frame	2 Yes 2 No	1 Time away from work for class/study
PMP (Project Management Professional)	1 No	1 No defined time frame	1 No	1 Pay differential 1 Advancement
SHRM/PHR	1 Recommended for advancement	1 Before advancement	1 Yes	1 Pay differential 1 Advancement 1 Time away from work for class/study

### Thank You and Recognition of Contributors

#### Futuring Panel Participants

MBA Research and the Kentucky Department of Education would like to thank the participants of the Supply Chain Management Futuring Panel who spent the day sharing their expertise with us. Panel participants presented their own views based on their professional experiences, and not necessarily those of their companies.

We are always grateful to meet with and hear directly from business and industry professionals about what's going on in the workplace. Thank you for your time and commitment to KY workforce development and business administration education.

Mindy Antonchak, Director, Supply Chain,  
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Andrew Brown, Director of Operations,  
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Greg Breyer, Director, Supply Chain, East  
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## Kentucky Partnership

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- Tom Thompson, Director, Division of Student Transition and Career Readiness
- Connie Witt, FBLA State Adviser

### Special Guests

MBA Research would also like to thank the following special guests of the Kentucky Department of Education who attended the Futuring Panel as observers. A special thank-you to Dr. Kirby Easterling (EKU), who provided extensive support with business participant recruitment, and to Mark Thackeray (NKU), who provided additional feedback and resources related to curriculum development. Thank you also to Callie Miracle at the Kentucky Chamber of Commerce, Cassie Grigsby at the Kentucky Retail Federation, and Dr. Bruce Manley at the Bluegrass Community & Technical College.

#### Postsecondary Observers:

- Dr. James Kirby Easterling, Program Director and Assistant Professor, Global Supply Chain Management, College of Business, Eastern Kentucky University
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#### Kentucky Association Observers:

- Cassie Grigsby, Senior Vice President, Operations and Development, Kentucky Retail Federation
- Callie Miracle, Talent Pipeline Management Project Manager, Kentucky Chamber of Commerce

### **MBA Research & Curriculum Center**

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- Rick Mangini, Executive Vice President