IDAHO DIVISION OF CAREER TECHNICAL EDUCATION SUPPLY CHAIN MANAGEMENT FUTURING PANEL REPORT

AUGUST 2, 2023



MBA Research and Curriculum Center Futuring Panel Report

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Introduction and Project Overview

On August 2, 2023, the Idaho Division of Career Technical Education (IDCTE) partnered with MBA Research and Curriculum Center to convene a Futuring Panel with supply chain management and logistics executives and professionals from the Boise metropolitan area. The panel was conducted at IDCTE in Boise. This panel was assembled to support the further development of supply chain management content standards and to initiate business and industry partnerships for IDCTE in this career area. Panel participants also reviewed and validated a list of current Idaho content standards in the areas of business management and marketing.



During the panel proceedings, supply chain management professionals provided their perspectives and expertise on:

- Definitions for supply chain, supply chain management, and logistics terminology
- How work is organized within the supply chain management (SCM) industry
- Trends shaping SCM workforce development needs in Idaho
- Review and validation of current curriculum standards in SCM and a gap analysis
- Broad topics generation for inclusion in an SCM program of study
- Review of Idaho CTE Standards in business management and marketing
- Validation of ethical leadership traits as they relate to SCM careers
- Ethics and ethical dilemmas specific to SCM career areas
- Credentials and certifications of value in the SCM industry
- Professional development recommendations used by the panelists

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The panel participants included professionals working in one or more of the following areas:

- Planning
- Sourcing
- Making/Manufacturing
- Delivering/Returns/Logistics
- Enablement

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Definitions Discussion

Panel participants were asked to review, discuss, and respond to the following definitions. We recorded their feedback for possible adjustments to our current working definitions for supply chain, supply chain management, and logistics.

Supply Chain

Definition for review: The network of organizations, activities, and technologies involved in creating a product and delivering it to the consumer.

Feedback from panelists:

The consistent feedback on the supply chain definition above is to change the word "consumer" to "customer"; add the word "people" prior to "organizations"; and add "or service" after "product." They added that supply chain companies have internal and external customers and that the word *customer* works for both customer and consumer. But the word *consumer* only means one thing.

A <u>revised</u> definition for supply chain might be: "The network of <u>people</u>, organizations, activities, and technologies involved in creating a product <u>or service</u> and delivering it to the <u>customer</u>."

"We don't deliver to the consumer; we deliver to the customer (Kroger, Walmart, Target, Albertsons) We're a B2C company. The consumer goes to the customer to get the product."

—Kimberly Smith, Chobani

Additional feedback on the SCM definition was provided in the online survey:

- "Companies deliver to other companies, not necessarily the end consumer."
- "A product or service"
- Not consumer, but "customer"
- Add "people" before "organizations."
- Yes, this is supply chain, and it's the strategic deployment of the supply chain to deliver to the customer and deliver on the business strategy.
- Customer, not consumer
- May be more universal if the term customer was utilized instead of consumer.
- I would use the term "end user" instead of consumer.

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- The network of people, organizations, activities, and technologies involved in creating a product and delivering it to the customer.
- Change from consumer to customer.
- Customer not consumer

Supply Chain Management

Definition for review: The process of overseeing the flow of products, information, and finances from raw materials to finished products.

Feedback from panelists:

Participants agreed on the idea of adding the word "technology" to the supply chain management definition and specified that technology does *not* flow but it supports the flow of product by enabling it.

"You have information in the definition; also add technology.

Tech plays an integral part in supply chain management."

-Richard Coe, Melt Organic

Participants also agreed on adding the words, "cost, quality, services, and safety/people." This feedback echoes what has been shared in previous panels regarding this definition.

"Add in quality; this is an important piece."

—Shawn Mocaby, Sensata Technologies

"SCM can involve a great extent of services."

-Mark Robb, Oracle

"The safety of people is an important aspect of supply chain management. The pillars that we use to measure success are cost, quality, services (delivered on time and in quantity), and safety (people). SCM involves finding the fastest way, the most economical, the safest, and with the highest quality."

—Kim Smith, Chobani

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A <u>revised</u> definition for supply chain management might be: "The process of overseeing the flow of products, services, information, and finances from raw materials to finished product delivery, managing cost, quality, and safety, enabled by technology."

Additional feedback on the SCM definition was provided in the online survey:

- Services, quality, technology
- More than overseeing, it is defining the strategy and executing it.
- The key here is not to ever find a point of 'stasis.' We should have verbiage that includes or alludes to the concept of 'continuous improvement.' If you have the gift process today, you may not tomorrow. If you are efficient today, you may not be relative to tomorrow. Ongoing improvement and monitoring are paramount.
- "*Raw materials to finished product delivery"
- *...enabled by technology
- Add in the word "services" after products. SCM involves services in addition to products.

Logistics

Definition for review: The coordination of the movement and storage of products throughout the supply chain.

Feedback from panelists:

Participants agreed on the word "materials" instead of "products." They also mentioned "timely" be inserted and that the definition include reference to partners or 3PLs.

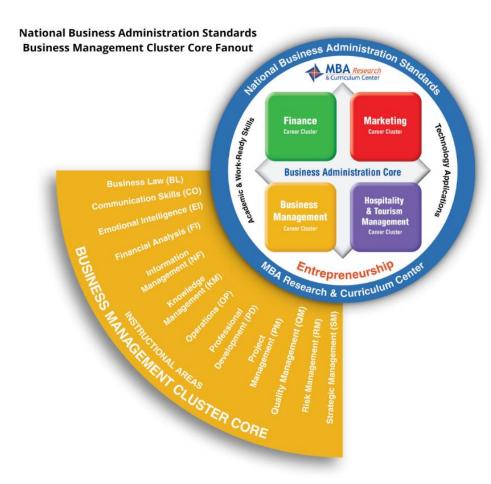
A <u>revised</u> definition for logistics might be: "The timely coordination and optimization of the movement and storage of materials throughout the supply chain, possibly partnering with third parties (3PLs) for some or all of the order fulfillment cycle."

The following feedback on the logistics definition was provided in the online survey:

- *Materials* instead of products
- Perhaps insert the word "timely" between "The coordination."
- The coordination and optimization...
- Need verbiage to account for partners or contract companies. It's not myopically focused on internal supply chain and needs to account for 3PLs or other partners explicitly.
- Change "products" to "materials."

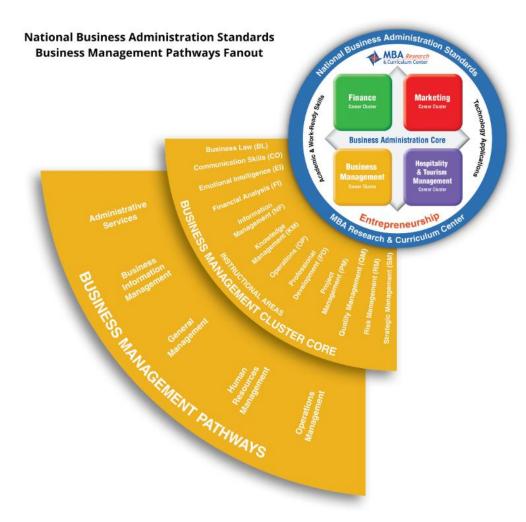
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How Work is Organized in Supply Chain Management Careers



Currently, within the National Business Administration Standards, supply chain management performance indicators (skill and knowledge statements) are positioned in the business administration core, the business management cluster, and the operations management pathway.

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Participants agreed that the supply chain management skills and knowledge generally fall into the business management cluster and operations management pathway. Later in the trends discussion, *end-to-end supply chain management* was noted as a trend that is overtaking or replacing the historical role of operations management in some companies. We heard similar remarks in prior supply chain management panels this year.

MBA Research defines a pathway as meeting the following criteria:

- Presence of a discrete, core body of knowledge
- Existence of a career ladder
- Extent of professional certification and training
- Existence of professional associations
- Critical mass in terms of numbers of jobs

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The following is a summary of the discussion regarding supply chain management qualifying as a pathway within business management.

Can SCM be its own pathway? Maybe.

Is there a discrete core body of knowledge? Yes.

Is there a career ladder? Yes.

Is there a critical mass in terms of jobs? The group confirmed there is incredible growth and demand for positions in this field, particularly around technology enablement.

Are there professional associations, certifications, and training? Yes.

Professional associations offer continuing education/certifications:

- ASCM: Association of Supply Chain Management
- CSCMP: Council of Supply Chain Management Professionals

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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 Idaho.

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

Trend Categories

Cultural: The major elements of culture including material culture, language, aesthetics, education, religion, attitudes, values, and social organization

Environmental: 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)

Global/Political: The impact of a political ideology (e.g., capitalism, socialism, communism), nationalism, stability, and international relations on business

Governance: 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.

Regulatory/Legal: 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

Technological: The direct and indirect impact of technology on any aspect of business, from strategy to operations to tactics

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Trends List

Top Supply Chain Management Trends

- The acceleration of technology to support business intelligence is giving rise to the digital supply chain.
 - o Optimization skills and understanding are the foundation of SCM.
 - o Data integration efforts increase; standardization is needed across the industry.
 - Automation's use and applications are growing.
 - Cybersecurity needs are growing.
- Environmental, social, and governance (ESG) rules and regulations are driving changes in compliance, logistics, and the value stream.
- Remote work continues to impact communication and relationship-building throughout the supply chain.

Additional SCM Trends

- The technical competency and business analytics skills needed for all SCM roles has risen dramatically.
- Global and economic instability has caused a shift away from lean supply chains to resilient supply chains.
- End-to-end supply chain is usurping operations management.

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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, Idaho teachers have free access to all MBA Research LAP modules via their <u>MBA Learning Center account</u> (login required). Simply search in Commons for the LAP titles that you would like to use. Don't have an account set up? <u>Contact MBA Research</u> to get started.

Trend: The acceleration of technology to support business intelligence is giving rise to the *digital supply chain*.

Key Points of Discussion

Optimization tools: Optimization is the foundation for supply chain management with the goals of faster operations and increased accuracy to drive revenue and profitability. Optimization tools provide visibility and transparency for faster decisions, better customer service, and retention. Participants noted that new candidates are lacking optimization tool (software) experience and understanding. Excel is still widely used in small companies because of its capabilities, low-cost, and integration with other systems but its accuracy depends on manual updating making it vulnerable to human error and capacity.

"Everyone is looking for a single digital source of truth, end-to-end, to be able to make better decisions."

—Lee Goodwin, Boise Cascade Company

Data integration: There is a drive for data integration across data sources (silos) within organizations and for standardization across the entire industry. The use of software and technology to improve and enhance business functions (optimization) is increasing the need for data integration. Large companies (\$2B or more) are trying to reduce the technical depth and the number of data integrations necessary to manage the supply chain.

"We're all disaggregated, even in how we are dealing with trying to standardize data integrity."

—Soleil Fortin, Danone

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Automation: Automation's use and application in supply chain is expanding. One type of automation is Robotic Process Automation (RPA). A participant shared an example of RPA, saying, "A bot opens this file, goes over there; opens another file. Our feed bot can access multiple different data sources, batch the tasks, and then it runs overnight. It's like an Excel Macro that's not limited to Excel."

Cybersecurity: As the dependence on data and tech grows, so does the need for more cybersecurity. The "Internet of Things" (IoT) contributes to this risk as more objects or devices are embedded with technologies that exchange data with other connected devices over the internet. Essentially, this exchange of data creates opportunities and vulnerabilities for cyber criminals to exploit. And as connections increase, the amount of data at risk increases proportionately, giving criminals greater access and ability to create larger disruptions to the supply chain.

"There is an increased risk to data security whenever you're bringing in a lot of new technology, the data is at risk of being breached."

-Mark Robb, Oracle

Related Technology Skills

- Adaptability with the evolution of technology
- Big picture thinking
- Critical thinking or theoretical knowledge: Understanding data sources
- Data analytics: Create/source/visualize data
- Excel: Ability to write formulas
- Languages of programming and computation: SQL, Python, R
- Lean management skills: 5S, Six Sigma
- Microsoft Office Suite
- Microsoft Teams and Zoom for remote work
- Programming: Understanding foundational coding

Skills Specific to Automation

- Automate repetitive things (organizing/prioritizing/doing more with less)
- Math and predictive skills: Recognizing patterns and trends
- Mechanical engineering background
- Problem-solving skills
- Robotics

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Understanding programming

Curriculum Resources

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

- LAP-OP-303: Top of the (Supply) Chain (Nature of Supply Chain Management)
- LAP-NF-003: TECH-tastic (Technology's Impact on Business)
- LAP-NF-110: In the Know (Nature of Information Management)

Trend: Environmental, social, and governance (ESG) rules and regulations are driving changes in compliance, reverse logistics, and the value stream.

Key Points of Discussion

Reverse logistics and circular logistics: One example of reverse or circular logistics was of a company asking customers to break down boxes after shelving food in a grocery store and to return them to the plant for reuse.

Environmental focus: There is a strong focus now on the environment and this includes reducing the heavy reliance on animals to create food products. Reducing animal farming lowers the methane output of animals. Two participants in the panel were working at "plant alternative" companies. All attendees agreed that reducing their company's carbon footprint is a critical goal not only from a compliance standpoint but because customers are demanding it.

Planning and sourcing are clashing with government and environmental requirements: Consumer behavior and demand are not always aligned with government regulations or what is needed for the environment.

There is a revenue stream with ESG factors: One participant described a revenue stream for his company collecting all their return bags and other raw materials to resell. "It's a 7-figure revenue stream, so ESG regulations have driven a good business solution." They're also diverting all the blue surgical wrap, turning it into bricks, and returning it to the customer for reuse. Some refer to this as the circular supply chain.

ESG and compliance: Some international companies lack the technology to comply with ESG regulations. Publicly traded companies need to capture and document to prove compliance and there is a lot of demand from customers for the data and analytics that demonstrate compliance. Essentially, those looking at compliance (auditors, consumers, customers, inspectors, etc.) all want more transparency.

Corporate compliance governance roles (and sometimes teams/departments) are increasing to address this need: Responsibility includes reducing a company's carbon footprint. Lee Goodwin of Boise Cascade explained that they recently purchased their first electric truck: "We know the government regulation is coming on emissions and we're starting this process now

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with electric trucks but there are challenges. We're aiming for converting about 10% of our fleet."

- Cost of electric trucks is high (\$500K per truck)
- Driving range is 125 miles
- Charging stations are still limited
- E-truck weighs double, creating weight limits on freight

Related Skills

- Critical thinking
- Decision-making
- Data mining: How to capture and access the necessary data
- Data visualization
- Marketing
- Research: Regulation changes/knowledge/tracking/understanding how government regulations are written
- Technical writing

Curriculum Resources

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

- LAP-EC-016: Regulate and Protect (Government and Business)
- LAP-PD-017: Weigh Your Options (Decision-Making) (FREE, COURTESY OF THE DANIELS FUND)
- LAP-PD-077: No Problem (Demonstrating Problem-Solving Skills) (FREE, COURTESY OF THE DANIELS FUND)

Trend: Remote work continues to impact communication and relationshipbuilding throughout the supply chain.

"We are in a gray area right now between no longer being in person and not yet being effective in communicating with remote tools."

—Patrick Bockey, o9 Solutions, Inc.

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Key Points of Discussion

In the years of COVID-19 and beyond, remote workers for logistics, supply and demand planning, sourcing, and procurement continue to work remotely and there is no sign of these roles returning to the office. Participants agreed that this has created an overall shift in culture that has negatively impacted communication and that cultural norms and expectations are not yet in place for new employees.

"We haven't laid the ground rules for business etiquette because everyone seems to be waiting for the next shift. Will there be a return to the office for everyone or is this the new normal?"

—Kim Smith, Chobani

Comments

- Employees need skills to communicate effectively in writing, via Zoom, presenting, and on the phone.
- Microsoft Teams: Sometimes employees have challenges with the basics.
- Generational differences: Younger workers resist picking up the phone but they're better with remote tools.
- Lack of urgency in younger workers

Participants stressed that relationship management is critical in supply chain and is at the heart of maintaining customers, suppliers, vendor negotiations, and can directly impact a company's ability to deliver. The example shared was of a supply disruption with sunflower oil from Ukraine. Due to a great relationship with a supplier who saw supplies were running short, the oil was held for the company, enabling them to avoid a major disruption to their product line.

Related Skills

- Adaptability
- Effective communication via a range of modes: speaking, phone, remote tools, writing
- Relationship management
- Remote work skills

Curriculum Resources

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

LAP-OP-443: Deliver the Goods (Concept of Supply Chains)

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- LAP-EI-006: Go With the Flow (Demonstrating Adaptability) (FREE, COURTESY OF THE DANIELS FUND)
- LAP-EI-037: Can You Relate? (Fostering Positive Working Relationships) (FREE, COURTESY OF THE DANIELS FUND)
- LAP-EI-021: Make the Honor Role (Acting Responsibly) (FREE, COURTESY OF THE DANIELS FUND)

Important Traits of Supply Chain Management Professionals

Participants shared the following additional traits that contribute to the success of SCM professionals in the workplace.

- **Big-picture thinking:** "We need breadth and depth; you need to know who your handoffs are, who it's coming from, and who it's going to."
- **Desire to solve problems:** More than just the ability to solve problems, or the skills to step through problem-solving models, participants stressed that employees in SCM who thrive tend to have a natural curiosity or inclination toward problem-solving.
- Organizational skills: Participants noted that Indeed has organizational skills assessments that they require of candidates in the hiring process.

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Additional Trend Identification and Discussion

Trend: The technical competency needed for all SCM roles has risen dramatically, leaving a shortage of qualified workers.

Key Points of Discussion

There is a major gap in technically skilled workers. Offshoring is happening with India, South America, and Asia to fill these roles. Technical competency is not unique to the IT field; it is now necessary in all roles. Patrick Bockey of o9 Solutions states, "It's rare to find a job posting without SQL as a job requirement. Business analytics skills are also critical; companies are looking for workers who can source, store, access, and translate what is in the system."

Trend: Global and economic instability has caused a shift from lean supply chains to resilient supply chains.

Key Points of Discussion

Prior to COVID-19, companies were buying in small quantities and distributing as needed. Now big companies have switched back to buying in bulk to safeguard supplies with storage and buying practices changing across supply chains. It's critical to have more than one option for procurement as well as more than one storage area.

Shawn Klucken of Chobani shared that it's not unusual to be negotiating with suppliers now who are three or four layers down in the chain due to global economic instability or volatility.

Trend: End-to-end supply chain—the integration of the supply chain from supplier to customer—is starting to overtake operations management.

Key Points of Discussion

Participants shared that due to the drive for integration of the supply chain, more departments are now involved in the end-to-end process, causing operations to no longer be the pillar of SCM. "Engineering, quality control, process times, plants, it's now SCM doing comprehensive analysis of all these different areas because they're involved in looking at the data and optimizing the process."

Related Skills

- Adaptability
- Effective communication
- Relationship building
- Negotiation
- Project management

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Emerging Occupations in Supply Chain

Chief Supply Chain Officer

Soleil Fortin of PLANeT Foods noted that "C-suite roles for SCM professionals is an enabler for supply chain to be better understood within organizations." Other participants agreed, saying that chief supply chain officer is an emerging occupation.

Standards Validation Process

Validation of Skill Statements (36 performance indicators)

Panelists validated a list of existing performance indicators (PIs)—knowledge and skill statements—within the national standards for supply chain management. The PIs will serve as the foundation in the development of new curriculum resources.

The following table illustrates the compiled feedback from the validation process.

Supply Chain Management Performance Indicators	Critical	Recommended	Not Needed
1. Explain the concept of supply chain (OP:443)	91%	9%	0%
2. Explain the benefits of supply chain collaboration (OP:444)	82%	18%	0%
3. Explain the impact of supply chain on business performance (OP:477)	91%	9%	0%
4. Describe the impact of technology on supply chain management (OP:478)	100%	0%	0%
5. Describe supply chain networks (OP:479)	45%	55%	0%
6. Discuss global supply chain issues (OP:480)	45%	55%	0%
7. Discuss the nature of supply chain management (OP:303)	36%	64%	0%
8. Explain the nature of order cycle time (OP:299)	55%	45%	0%
9. Describe the relationship between supply chain management and operations management (OP:304)	73%	27%	0%
10. Describe supply chain management strategies (OP:305)	36%	64%	0%
11. Use supply chain performance measures to evaluate achievement of goals (e.g., perfect order fulfillment, inventory turnover, cash-to-cash conversion cycle, fill rate) (OP:498)	73%	27%	0%
12. Evaluate risk factors and trends affecting supply chain systems (e.g., sustainability, geopolitical	55%	45%	0%

	volatility, cyber security, artificial intelligence, automation) (OP:499)			
13.	Identify supply chain process improvement opportunities (OP:500)	82%	18%	0%
14.	Evaluate supplier performance and compliance (OP:501)	64%	36%	0%
15.	Implement supply chain management strategies (OP:306)	55%	36%	9%
16.	Describe the relationship between procurement and operations management activities (e.g., strategic sourcing, supplier relationship management, supply chain management) (OP:486)	73%	18%	9%
17.	Describe transportation modes (OP:505)	55%	36%	9%
18.	Explain the scope of domestic and global transport systems (OP:506)	27%	64%	9%
19.	Explain the impact of transportation costs on business performance (e.g., cost elements) (OP:507)	55%	36%	9%
20.	Describe trends in international distribution systems (OP:508)	9%	91%	0%
21.	Describe the nature of channel intermediaries for foreign markets (e.g., customs brokers, shipping agents, freight forwarders) (OP:509)	18%	55%	27%
22.	Explain international transportation and delivery system elements (OP:510)	0%	73%	27%
23.	Develop transportation plans (OP:511)	27%	64%	9%
24.	Assess transportation processes (OP:512)	36%	64%	0%
25.	Describe the nature and scope of reverse logistics (OP:513)	27%	46%	27%
26.	Explain the impact of import and export requirements on supply chain design (e.g., documentation requirements, handling requirements, trade policies, customs regulations) (OP:514)	36%	46%	18%
27.	Manage transportation plans (OP:515)	27%	55%	18%
28.	Improve transportation processes (OP:516)	27%	64%	9%
29.	Assess the impact of product packaging requirements on logistics (OP:502)	27%	46%	27%
30.	Review product packaging to improve supply chain efficiency (OP:503)	27%	46%	27%

31. Align product packaging with organizational objectives (OP:504)	27%	55%	18%
32. Explain career opportunities in operations and supply chain management (PD:189)	55%	27%	18%
33. Describe certifications for supply chain management professionals (PD:345)	9%	64%	27%
34. Identify continuing education courses or programs available to enhance operations- and supply chain management skills (PD:266)	9%	91%	0%
35. Identify professional association opportunities for operations and supply chain management professionals (e.g., educational opportunities, networking, conferences, newsletters, publications) (PD:267)	9%	82%	9%
36. Utilize operations- and supply chain management publications (e.g., books, periodicals, newsletters) to update skills (PD:268)	0%	82%	18%

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Gaps in the Standards and Broad Topics Generation

Following the validation process, we asked participants to identify gaps in the existing standards and to generate a broad list of topics to be included within a high school business pathway for supply chain management. This information will be used to create additional SCM PIs if needed.

Gaps in the SCM Standards Reviewed

New Product Intro and Product Life Cycle Management

A few participants noted that new product intro (NPI) and product life cycle management/maintenance were not covered in the SCM standards that they reviewed.

"These standards are focused on volume, production, and maintenance; there's also the product life cycle maintenance involving new product intro (NPI) and ramp. The survey focuses on the period after the ramp, but NPI is just as important as managing the volume."

—Shawn Mocaby, Sensata Technologies

Broad Topics Generation

- Change management
- Data analytics
- Data management
- Execution: Managing time, schedules, and safety
- Financial acumen: Cost accounting, risk management
- Forecasting
- Manufacturing management
- Materials management (tactical) and procurement (strategic)
- Negotiation/contracting
- Operations management PIs are missing continuous improvement
- New product intro (NPI) and product life cycle management
- Order management: Order cycle and placing it into production schedules
- Professional development/leadership/mentorship
- Sales and Operations Planning (S&OP): 12–18 months out and 3–5 months out
- Supply and inventory management

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Review of Idaho CTE Standards

Focus group participants reviewed the Idaho Business Management and Marketing Standards and indicated the Performance Standards they felt were essential skills in supply chain management professions. The left side column of each set of standards indicates the number of panelists who indicated a Performance Standard as essential.

IDAHO MARKETING PROGRAM STANDARDS

Essential	CONTEN	T STANDARD 1.0: BUSINESS FUNDAMENTALS
	Perform	ance Standard 1.1: Fundamental Business Concepts
1	1.1.1	Define and describe the marketing concept.
1	1.1.2	Explain the impact of marketing on the consumer.
2	1.1.3	Explain the diverse set of activities involved in marketing.
1	1.1.4	Compare and contrast marketing strategies for products, services,
		ideas, and persons.
	CONTEN	T STANDARD 2.0: ECONOMIC SYSTEMS,
	INDICAT	ORS/TRENDS, AND INTERNATIONAL CONCEPTS
	Perform	ance Standard 2.1: Fundamental Economic Concepts
3	2.1.1	Distinguish between economic goods and services.
2	2.1.2	Explain the concept of economic resources.
2	2.1.3	Describe the nature and scope of economics and economic activities.
	2.1.4	Distinguish between the forms of economic utility.
8	2.1.5	Explain the principles of supply, demand, and equilibrium.
3	2.1.6	Compare and contrast the relationship between scarcity, trade, and production.
4	2.1.7	Explain how quantity demand, quantity supply, and elasticity affect price.
1	2.1.8	Describe economic concepts that relate to and affect marketing decisions.
	Perform	ance Standard 2.2: Fundamental Economic Systems
	2.2.1	Explain the types of economic systems.
	2.2.2	Explain the concept of private enterprise.
4	2.2.3	Explain the nature of competition.
2	2.2.4	Explain how and why government plays a role in a market economy.
1	2.2.5	Compare and contrast the fundamental economic systems with its
		relationship between government and business.
	Perform	ance Standard 2.3: Basic Economic Indicators/Trends

2.3.1	Explain the concept of productivity.
2.3.2	Describe the nature of current global economic events and how they
	influence marketing decisions.
2.3.3	Explain measures used to analyze economic conditions.
2.3.4	Determine the impact of economic cycles on business activities.
2.3.5	Explain the economic impact of interest rate fluctuations.
Perform	ance Standard 2.4: International Marketing and Trade
2.4.1	Explain the nature of international marketing and trade.
2.4.2	Identify the impact of cultural and social environments on world
	marketing and trade.
2.4.3	Evaluate factors that influence a nation's ability to trade.
2.4.4	Define the purpose of the major trade alliances between countries.
2.4.5	Explain how scarcity and surplus influence trade between two or more
	countries.
CONTEN	T STANDARD 3.0: ETHICS IN MARKETING
Perform	ance Standard 3.1: Code of Ethics
3.1.1	Describe how and why different cultures have different ethical
	systems.
3.1.2	Explain the importance of trust for the successful conduct of business.
3.1.3	Differentiate between ethics and government relations.
3.1.4	Give examples of how unethical behavior leads to governmental
	regulations.
3.1.5	Identify ethical considerations relating to marketing and product
	development.
3.1.6	Determine how patents, copyrights, and trademarks are used to
	combat unethical behavior.
3.1.7	Illustrate how unethical behavior can lead to fraudulent behavior.
CONTEN	T STANDARD 4.0: EXTERNAL FACTORS TO BUSINESS
Perform	ance Standard 4.1: External Factors that Impact Business
4.1.1	Explain how government regulations influence marketing decisions.
4.1.2	Describe how the economy influences marketing decisions.
4.1.3	Recognize how the environment influences marketing decisions.
4.1.4	Provide an example for how special interest groups influence
	marketing decisions.
4.1.5	Analyze how cultural differences influence marketing decisions.
4.1.6	Synthesize how technology influences marketing decisions.
4.1.7	Evaluate how competition influences marketing decisions.
	2.3.2 2.3.3 2.3.4 2.3.5 Perform 2.4.1 2.4.2 2.4.3 2.4.4 2.4.5 CONTEN Perform 3.1.1 3.1.2 3.1.3 3.1.4 3.1.5 CONTEN Perform 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.1.6

	CONTE	NT STANDARD 5.0: PRODUCT/SERVICE MANAGEMENT
	Perform	ance Standard 5.1: Product Life Cycle
5	5.1.1	Describe how new products/services are conceived, developed, and test marketed.
7	5.1.2	List the stages of the product life cycle and identify the stage in which
		a product is located.
	Perform	nance Standard 5.2: Product Packaging and Branding
3	5.2.1	Name the common elements of a product's packaging.
4	5.2.2	Explain the various functions of packaging and why each is important.
1	5.2.3	Identify the qualities of effective branding.
1	5.2.4	Differentiate between brand name and generic products.
	Perform	ance Standard 5.3: Product Mix and Extensions
2	5.3.1	Define the nature of a product mix in a particular company.
1	5.3.2	Identify product mix decisions that must be made in order to
		successfully market the product or service.
3	5.3.3	Explain the advantages and disadvantages of product line
		diversification (i.e., extending product lines and adding new ones).
2	5.3.4	Define industrial or consumer product categories and provide
		examples of products that fit each category.
2	5.3.5	Explain the need for comprehensive marketing of the extended
		product such as warranty, service, contract, etc.
	CONTEN	IT STANDARD 6.0: PRICING
	Perform	ance Standards 6.1: Roles of Pricing and Pricing Strategies
2	6.1.1	Identify the various objectives of pricing.
5	6.1.2	Identify the factors that will influence product price.
	6.1.3	Identify various pricing policies and the circumstances in which each is
		applicable.
4	6.1.4	Explain the use of break-even analysis to determine price.
2	6.1.5	Calculate product price using a variety of methods.
	6.1.6	Calculate a break-even point using cost and price information.
1	6.1.7	Explain the relationship between price and perceived quality.
2	6.1.8	Describe how economies of scale attained through mass production
		affect pricing strategy.
	CONTEN	IT STANDARD 7.0: PLACE/DISTRIBUTION
	Perform	ance Standard 7.1: Distribution Processes and Plans

1	7.1.1	Explain how channel management is related to other marketing activities.
2	7.1.2	Explain the nature of channel member relationships.
3	7.1.3	Explain the nature of channel strategies.
6	7.1.4	Describe how distribution channels are selected.
8	7.1.5	Describe inventory control systems and how they are selected.
9	7.1.6	Discuss a typical order fulfillment process.
9	7.1.7	Assess inventory control methods in order to minimize costs and meet
		customer demand.
9	7.1.8	Identify sources of inventory loss and describe how to minimize
		shrinkage.
	CONTEN	T STANDARD 8.0: PROMOTIONAL MIX
	Perform	ance Standard 8.1: Advertising
	8.1.1	Identify the various mediums available for advertising.
	8.1.2	Demonstrate the basics of the design process in graphics.
	8.1.3	Describe the elements of an effective advertisement.
	8.1.4	Identify the factors that determine media selection.
	8.1.5	Explain how research can be used in the advertising process (e.g.,
		pretesting, post testing).
	8.1.6	Describe the roles of advertising in the creative process.
	8.1.7	Explain how changing technology affects advertising.
1	8.1.8	Develop an advertising budget.
	Perform	ance Standard 8.2: Sales Promotion
1	8.2.1	Choose appropriate sales promotion tools for a particular product or
		service.
	8.2.2	Compare and contrast the alternative forms of sales promotion.
1	8.2.3	Describe the factors used to determine the proportion of the
		promotional budget that should be allocated to sales promotion vs.
		advertising.
	8.2.4	Describe how marketers combine trade and consumer promotions in
		developing effective promotional programs.
	8.2.5	Distinguish between visual merchandising and a display.
	8.2.6	Prepare merchandise for display and instructions for its maintenance.
	8.2.7	Critique the layout of a local department store in terms of ease of
	_	entry, traffic flow, display space, and customer conveniences.
	8.2.8	Create a themed display.
	Perform	ance Standard 8.3: Public Relations

I		Identify the various forms of public relations activities used by	
	8.3.1	marketers.	
	8.3.2	Critique public relations activities being used by marketers.	
	8.3.3	Differentiate between public relations activities (which are largely	
		controllable) and publicity (which is largely uncontrollable).	
	8.3.4	Discuss ways in which companies can manage unfavorable publicity.	
	Perform	ance Standard 8.4: Personal Sales	
1	8.4.1	Explain the importance of personal selling in a company's operation.	
1	8.4.2	Demonstrate the steps involved in the selling process.	
	8.4.3	Describe the qualities necessary for success as a sales manager.	
2	8.4.4	Identify the roles played by people involved in the purchase or use of the product (i.e. buyer, influencer, user).	
	8.4.5	Evaluate a variety of sales approaches (e.g., order-getting vs. order-taking).	
4	8.4.6	Describe how sales forecasting contributes to business success.	
1	8.4.7	Identify the various types of sales personnel and their functions.	
	8.4.8	Analyze customer's rational and emotional buying motives and	
		decisions.	
1	8.4.9	Analyze various products to identify the features and benefits of each.	
	CONTEN	IT STANDARD 9.0: RETAIL MANAGEMENT	
	Performance Standard 9.1: Retailing Support Activities		
	9.1.1	Define cash, credit and debit card, and layaway sales transactions.	
3	9.1.2	Define returns, exchanges, and allowances.	
1	9.1.3	Describe the use of technology in the selling function.	
1		0,	
1	9.1.4	Demonstrate how to create a sales invoice.	
1	9.1.4 9.1.5	7	
2		Demonstrate how to create a sales invoice.	
	9.1.5	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice.	
	9.1.5 9.1.6	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale.	
	9.1.5 9.1.6 9.1.7	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer,	
	9.1.5 9.1.6 9.1.7	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer, giving proper change to customers, and calculating discounts).	
	9.1.5 9.1.6 9.1.7	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer, giving proper change to customers, and calculating discounts). IT STANDARD 10.0: MARKET RESEARCH	
	9.1.5 9.1.6 9.1.7 CONTEN	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer, giving proper change to customers, and calculating discounts). IT STANDARD 10.0: MARKET RESEARCH Tance Standard 10.1: Market Research Project	
	9.1.5 9.1.6 9.1.7 CONTEN Perform 10.1.1	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer, giving proper change to customers, and calculating discounts). IT STANDARD 10.0: MARKET RESEARCH Tance Standard 10.1: Market Research Project Identify the steps in the market research process.	
2	9.1.5 9.1.6 9.1.7 CONTEN Perform 10.1.1 10.1.2	Demonstrate how to create a sales invoice. Compute the sales tax on a sales invoice. Explain the miscellaneous charges that may be part of a sale. Demonstrate proper cash control procedures (balancing cash drawer, giving proper change to customers, and calculating discounts). IT STANDARD 10.0: MARKET RESEARCH Cance Standard 10.1: Market Research Project Identify the steps in the market research process. Explain the purposes for conducting market research.	

	CONTEN	IT STANDARD 11.0: MARKET CHARACTERISTICS
	Perform	ance Standard 11.1: Marketing Segmentation
1	11.1.1	Differentiate between the consumer market and non-consumer market.
1	11.1.2	Describe various methods of market segmentation.
1	11.1.3	Explain the marketing potential of multiple segments.
	11.1.4	Identify a target market for a given product or service.
	11.1.5	Explain why market segmentation is important to the achievement of market goals.
1	11.1.6	Explain the marketing strategies used to reach a given target market.
	Perform	ance Standard 11.2: Market Positioning
2	11.2.1	Explain how the characteristics of a given product or service contribute to a company's competitive advantage.
6	11.2.2	Identify why manufacturing locations are often close to the market served.
4	11.2.3	Determine extended product features that give a product a competitive advantage.
1	11.2.4	Contrast a domestic and international marketing plan for a given product or service.
	CONTEN	IT STANDARD 12.0: MARKETING PLANS
	Perform	ance Standard 12.1: Components of Marketing Plans
2	12.1.1	Explain why market planning is essential for organization and product success.
1	12.1.2	Identify the steps involved in the development of a marketing plan.
1	12.1.3	Explain how the marketing plan addresses all elements of an organization's marketing activities.
6	12.1.4	Differentiate between strategic and short-term tactical planning.
2	12.1.5	Demonstrate the ability to develop a marketing plan.
	CONTEN	IT STANDARD 13.0: E-MARKETING
	Perform	ance Standard 13.1: Concepts, Strategies, Language, and
	Systems	to Convey Ideas and Information
1	13.1.1	Define digital marketing.
	13.1.2	Describe the benefits of digital marketing.
	13.1.3	Compare and contrast digital marketing to traditional marketing.
1	13.1.4	Discuss how technology changes customer behaviors.

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	13.1.5	Explain how digital media and multimedia are used in marketing strategies.
	13.1.6	Specify required elements needed in social media content designed for
		marketing campaigns.
	13.1.7	Provide examples of how organizations use online media platforms as
		effective marketing tools.
1	13.1.8	Identify important metrics required for effective e-marketing.
	13.1.9	Identify legal and ethical considerations in digital media and e-
		marketing.
	13.1.10	Explain other key terms and concepts related to digital marketing
		including: SEL, Google analytics and Adwords, link strategies, e-mail
		campaigns, mobile marketing, electronic signatures, and server-based
		computing.
	CONTEN	IT STANDARD 14.0: FINANCING AND FINANCIAL ANALYSIS
	Perform	ance Standard 14.1: Nature And Scope of Financing
	14.1.1	Explain the nature and scope of financing a marketing campaign.
	14.1.2	Analyze the need for banking relations.
		Identify and analyze the risks associated with obtaining business
	14.1.3	credit.
	14.1.4	Explain the advantages and disadvantages of the use of bank and/or
		store cards for business transactions.
	14.1.5	Explain loan evaluation criteria used by lending institutions.
	14.1.6	Complete business or personal loan application package.
	14.1.7	Complete a personal budget and set financial goals.
	14.1.8	Explain the legal considerations for credit use.
	Perform	ance Standard 14.2: Financial Resources
6	14.2.1	Explain the time value of money.
	14.2.2	Project the total cash needed to start a business.
4	14.2.3	Determine the differences between marginal costs and sunk costs.
4	14.2.4	Recommend records needed for the daily operation of a planned
		business.
1	14.2.5	Prepare pro forma financial statements for a planned business.
4	14.2.6	Understand the role of financial ratios in decision making.
4	14.2.7	Determine the financial condition of a business based on its financial
		records.
6	14.2.8	Identify potential threats and opportunities to protect a business's
		financial well-being.

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4	14.2.9	Estimate project costs and return on marketing investment (ROMI).
2	14.2.10	Explain the financial implications of product cannibalization.

IDAHO BUSINESS MANAGEMENT PROGRAM STANDARDS

Essential	CONT	ENT STANDARD 1.0: FUNCTIONS OF MANAGEMENT	
Count	Performance Standard 1.1: Planning Function		
8	1.1.1	Explain what planning is and why it is done.	
8	1.1.2	Demonstrate the ability to set priorities.	
8	1.1.3	Apply the decision-making process to a business application.	
8	1.1.4	List the steps in problem solving.	
7	1.1.5	Define the role of strategic planning in a business.	
7	1.1.6	Identify factors involved with a strategic plan.	
5	1.1.7	Describe the process involved in developing a budget.	
7	1.1.8	Evaluation and measurement strategies for the effectiveness of plan	
		implementation.	
6	1.1.9	Explore company values, vision, and mission statement.	
	Performance Standard 1.2: Organizing Function		
4	1.2.1	Explain the importance of organizing for the business.	
3	1.2.2	Explain how the organizing function relates to using various resources	
		to accomplish strategic goals.	
4	1.2.3	Explain the advantages and disadvantages of centralization and	
_	_	decentralization.	
2	1.2.4	Describe how the organization provides for accountability through	
6	1.2.5	authority and responsibility.	
7	1.2.5	Demonstrate ability to delegate responsibilities.	
		Develop procedures for efficient workflow.	
7	1.2.7	Prepare an agenda and conduct an orderly meeting.	
_		mance Standard 1.3: Directing Function	
5	1.3.1	Identify the need for leadership.	
6	1.3.2	Identify leaders.	
6	1.3.3	Describe leadership qualities (e.g., personality traits) of effective	
	404	leaders.	
3	1.3.4	Compare and contrast alternative leadership styles and the	
2	125	appropriate style for a given situation.	
3	1.3.5	Compare and contrast the leading/directing function to other management functions.	
4	1.3.6	Describe management's role in stimulating innovation and creativity.	
4	1.3.0	Describe management's role in sumulating innovation and creditivity.	

	Performance Standard 1.4: Controlling and Evaluating Functions		
2	1.4.1	Define the control function and discuss how to apply it to one's life.	
4	1.4.2	Discuss why the control function is used in business.	
2	1.4.3	Determine the controlling strategy to be used for a given business situation.	
3	1.4.4	Determine alternative actions when goals are not being met in a specific situation (e.g., changing goals, changing strategies).	
7	1.4.5	Prepare managerial reports about production, personnel, equipment, and operational costs.	
2	1.4.6	Evaluate job applicants based upon interviews.	
	CONTENT STANDARD 2.0: FINANCIAL DECISION-MAKING		
	Performance Standard 2.1: Internal and External Financial		
	Staten	nents	
3	2.1.1	Describe why financial statements are important.	
6	2.1.2	Analyze and interpret data on financial statements.	
	Performance Standard 2.2: Financial Data in Planning		
7	2.2.1	Distinguish between short- and long-term plans.	
4	2.2.2	Describe how a sales forecast can be a short- or long-term plan.	
	Perfor	mance Standard 2.3: Funding Sources	
	2.3.1	Identify traditional sources for securing financing.	
	2.3.2	Compare and contrast traditional and nontraditional sources for securing financing.	
1	2.3.3	Identify the relationships among price, market share, and profitability.	
	CONT	ENT STANDARD 3.0: COMPETITIVE ANALYSIS AND	
		MARKETING STRATEGIES	
	Perfor	mance Standard 3.1: Business Competition	
2	3.1.1	Identify ways businesses compete with one another (e.g., quality, service, status, and price).	
3	3.1.2	Define market share.	
2	3.1.3	Compare and contrast various forms of competition (e.g., pure competition, oligopoly, monopolistic).	
2	3.1.4	Describe how various laws impact competition (e.g., Sherman Act, Robinson-Patman).	
	Performance Standard 3.2: Competitive Advantage		
6	3.2.1	Calculate the return on investment when given a set of financial data.	
3	3.2.2	Describe ways to increase market share.	

8	3.2.3	Analyze relative competitive strengths and weaknesses using appropriate tools [e.g., strengths, weaknesses, opportunities, threats (SWOT)].	
	Perfor	mance Standard 3.3: Internal Comparisons and External	
		rch Services	
3	3.3.1	Explain the purposes of external research services and explain why businesses use them for competitive purposes.	
2	3.3.2	Explain the purposes of internal research services and why businesses use them (e.g., consumer affairs, consumer panels, and marketing research).	
1	3.3.3	Describe why an ongoing analysis of customer satisfaction is necessary for attaining competitive advantage.	
	CONTENT STANDARD 4.0: HUMAN RESOURCE MANAGEMENT		
	Performance Standard 4.1: Employee Development		
6	4.1.1	Explain why orientation and ongoing training are needed for successful employee performance.	
5	4.1.2	State why professional development is a shared responsibility between the business and the individual.	
4	4.1.3	Identify different types of orientation and training needed.	
5	4.1.4	Explain the relationship of continuous training to professional development.	
4	4.1.5	Identify the benefits of other forms of employee development (e.g., workshops, conferences, course work, and professional associations).	
5	4.1.6	Determine preventive actions for office communication problems.	
6	4.1.7	Describe diversity and explain why it matters (e.g., social media).	
	Performance Standard 4.2: Evaluation		
5	4.2.1	Explain the need for employee evaluation.	
4	4.2.2	Explain how employees are evaluated.	
4	4.2.3	Identify the consequences to employees of positive or negative performance appraisals.	
4	4.2.4	Describe the procedures used in the evaluation process and why they are needed.	
4	4.2.5	Design an evaluation system.	
4	4.2.6	Describe the legal implications of using performance appraisals to terminate or demote employees.	
4	4.2.7	Choose appropriate action in solving problems involving violation of business principles.	
	Performance Standard 4.3: Recruiting and Selection		
3	4.3.1	Identify recruiting sources of new employees.	

3	4.3.2	Identify methods used to recruit and select employees.
4	4.3.3	Complete a job application form.
5	4.3.4	Describe legislation affecting the selection process and why it is
		important (e.g., affirmative action, right to privacy).
4	4.3.5	Identify common selection tools and determine why they are used
		(e.g., interview, tests, reference checks).
3	4.3.6	Develop a job description and determine how it will be used in the recruiting process.
	Perfor	mance Standard 4.4: Labor Contract Implementation
2	4.4.1	Describe the common elements of a labor contract.
2	4.4.2	Outline the procedures involved in the grievance process.
2	4.4.3	Discuss the role of human resources personnel in the collective
		bargaining process.
	Performance Standard 4.5: Compensation, Promotion, Benefits,	
	and In	centives
4	4.5.1	Identify benefits available to all employees.
4	4.5.2	Explain the methods used to compensate employees (e.g., wages,
		salary, commission).
4	4.5.3	Identify various career paths available to employees.
4	4.5.4	Calculate wages paid under various compensation methods.
4	4.5.5	Describe policies and procedures used to manage compensation (e.g.,
	_	company performance, benchmarking, and profit sharing).
4	4.5.6	Establish criteria for promoting employees.
4	4.5.7	Describe the relative merits and possible disadvantages of internal
	D (promotion vs. hiring from outside.
		mance Standard 4.6: Separation, Termination, and
	Transi	
5		Define the concept of downsizing and why it occurs.
3	4.6.2	Describe programs available to assist displaced employees.
5	4.6.3	Discuss how internal and external factors can affect downsizing (e.g.,
	4.6.4	economy, competition, government regulations).
4	4.6.4	Identify the consequences of downsizing on the individual, the
2	4.6.5	company, the economy, and society. Discuss whether a company has a responsibility to provide retraining
	4.0.5	programs and severance packages for displaced workers.
	Perfor	mance Standard 4.7: Labor Legislation
1	4.7.1	Describe how the workplace has changed as a result of labor
-	,	legislation (e.g., drug testing, ADA, sexual harassment, safety).
	<u> </u>	(-0,1-0,1-0,1-1)

		skills.	
9	6.1.1	Discuss the importance of time management, both professionally and personally, including the consequences of poor time management	
0		mance Standard 6.1: Time Management Skills	
		CONTENT STANDARD 6.0: GENERAL MANAGEMENT SKILLS	
	CONT		
6	5.3.5	Describe the effects of group dynamics on group decision making and consensus building.	
		Design an organizational chart.	
6	5.3.4	modified. Design an organizational chart	
3	5.3.3	Analyze organizational charts and determine how they need to be	
4	5.3.2	Discuss the interrelationships of a variety of organizational models (e.g., line, line and staff, functional).	
3	5.3.1	State the advantages and disadvantages of the team concept to the organization.	
	Perfor	mance Standard 5.3: Organizational Models	
		employee stock ownership programs).	
2	5.2.3	Identify variations of basic ownership forms (e.g., franchises,	
2	5.2.2	Compare and contrast the forms of business ownership.	
3	5.2.1	Identify and provide examples of basic ownership forms.	
	Perfor	mance Standard 5.2: Business Ownership	
4	5.1.3	Differentiate between tall and flat organizational structures.	
		between them.	
4	5.1.2	Describe line vs. staff departments and the authority relationship	
6	5.1.1	Identify the levels of management.	
	Perfor	mance Standard 5.1: Basic Organizational Structures	
	CONTENT STANDARD 5.0: ORGANIZATIONAL STRUCTURE		
		pertinent to employees.	
7	4.8.4	Explain the importance of timely communication of information	
	1.0.5	telecommunication methods.	
6	4.8.3	Differentiate among the various electronic and non-electronic	
7	4.8.2	employees (e.g., formal and informal). Demonstrate the effective use of various communication methods.	
4	4.8.1	Describe the methods used by management to communicate with	
_		mance Standard 4.8: Internal Communications	
		profitability.	
2	4.7.4	Discuss the effect legislation has had on company productivity and	
2	4.7.3	Discuss the viability of specific labor legislation.	
	7.7.2	legislation.	
1	4.7.2	Describe why the workplace has changed as a result of labor	

5	6.1.2	Perform a personal time management analysis for a given period of time.	
5		Develop a time management plan using cases and simulations.	
	6.1.3		
	Perfor	mance Standard 6.2: Technology in Management	
8	6.2.1	Describe the role of technology in the overall management process.	
7	6.2.2	Use current technology in various facets of the managerial process.	
	Performance Standard 6.3: Networking Skills		
6	6.3.1	Describe the advantages of networking in order to achieve personal and professional advancement.	
3	6.3.2	Identify available resources inside and outside of the school useful for making professional contacts (e.g., career development centers, business schools, alumni, business leaders).	
4	6.3.3	Develop liaisons with community and professional organizations using strategies such as internships, volunteer work, and membership in organizations.	
5	6.3.4	Demonstrate a knowledge of professional organizations.	
	Performance Standard 6.4: Entrepreneurial Thinking		
4	6.4.1	Define the entrepreneurial way of thinking and describe why it is	
_		important (e.g., opportunity recognition).	
2	6.4.2	Use the entrepreneurial way of thinking in one's own life.	
3	6.4.3	Apply the entrepreneurial way of thinking to solving managerial problems.	
	CONT	ENT STANDARD 7.0: KNOWLEDGE OF ETHICS	
	Perfor	Performance Standard 7.1: Ethics in Decision-Making	
5	7.1.1	Describe a personal code of ethical behavior.	
7	7.1.2	Explain the importance of trust for the successful conduct of business.	
7	7.1.3	Give examples of how unethical behavior results in higher prices for consumers (e.g., insurance fraud).	
6	7.1.4	Describe how and why different cultures have different ethical systems.	
4	7.1.5	Explain the difference between ethics and governmental regulations.	
4	7.1.6	Describe a business code of ethical behavior.	
3	7.1.7	Give examples of how unethical behavior leads to governmental regulations.	
5	7.1.8	Determine appropriate action in situations requiring application of business ethics.	
2	7.1.9	Explain the law of precedent in the legal system.	

5	7.1.10	Discuss legislation related to technology with a focus on electronic transitions, computers, and the internet.			
	Perfor	Performance Standard 7.2: Code of Ethics			
4	7.2.1	Identify ethical considerations resulting from technological advances (e.g., computer snooping or hacking).			
4	7.2.2	Identify ethical considerations resulting from increasing international competition (e.g., dumping goods on the market at below-cost prices; and trading with countries where unfair labor practices, bribery, and human rights violations exist).			
4	7.2.3	Identify ethical considerations resulting from increasing business positioning with politicians (e.g., should gifts, lobbying, and honoraria be given to political leaders for business gain?)			
6	7.2.4	Identify ethical considerations involving employer/employee relationships (e.g., poor working conditions, hours wasted on the job, employee theft).			
2	7.2.5	Identify ethical considerations affecting consumers (e.g., false advertising, shoplifting).			
7	7.2.6	Select the best ways to handle confidential information.			
7	7.2.7	Examine the role of social responsibility in decision making.			
	Performance Standard 7.3: Social Responsibility				
5	7.3.1	Define social responsibility.			
5	7.3.2	Identify ways in which a business organization demonstrates social responsibility.			
6	7.3.3	Identify ways in which a business organization demonstrates social responsibility toward its internal and external stakeholders.			
4	7.3.4	Discuss the impacts resulting from business organizations being socially responsible toward their internal and external stakeholders.			
6	7.3.5	Recognize the long-term impact of practicing social responsibility.			
4	7.3.6	Identify government regulations that have resulted from social irresponsibility.			
	CONTI	ENT STANDARD 8.0: GOVERNMENT REGULATIONS AND			
	SOCIA	L RESPONSIBILITY			
	Perfor	mance Standard 8.1: Government Regulations			
3	8.1.1	Compare the relative merits of having more vs. less government regulation of business.			
3	8.1.2	Identify the effects regulation has had on specific industries (e.g., long-distance telephone service).			
4	8.1.3	Compare specific government regulations and their impact on doing business both domestically and internationally.			

		-			
5	8.1.4	Identify the regulating responsibilities held by various government agencies (e.g., FTC, USDA, CPSC).			
3	8.1.5	Discuss how business influences government regulation (e.g., through lobbying).			
	Perfor	mance Standard 8.2: Community Involvement			
2	8.2.1	Discuss why the definition of "community" (e.g., local area, regional area, national, international) differs among businesses.			
4	8.2.2	Identify specific ways in which a company can help its community (e.g., jobs, taxes, contributions to special community projects).			
3	8.2.3	Explain the pros and cons of various levels of community involvement by a business.			
	CONT	ENT STANDARD 9.0: FUNCTIONS OF ORGANIZED LABOR			
	Performance Standard 9.1: Roles of Organized Labor and its				
	Influences				
3	9.1.1	Describe the history of the labor movement and why unions were organized.			
2	9.1.2	Describe the collective bargaining process including the use of mediators and arbitrators.			
2	9.1.3	Describe legal strategies used by labor and management to gain competitive advantage in contract negotiations (e.g., strikes, boycotts, layoffs, lockouts).			
2	9.1.4	Identify federal legislation which has affected organized labor and management and explain its effect.			
2	9.1.5	Explain why the participation of workers in labor unions has changed.			
2	9.1.6	Describe illegal strategies which have been used by labor and management to gain competitive advantage (e.g., wildcat strikes, secondary boycotts, preventing workers from forming unions).			
2	9.1.7	Describe the changing provisions for the labor contract and reasons for such changes.			
2	9.1.8	Describe the process involved in forming and operating a labor union.			
	CONT	ENT STANDARD 10.0: OPERATIONS MANAGEMENT			
	Perfor	mance Standard 10.1: Operations Management Principles			
	and Pi	rocedures			
8	10.1.1	Describe the importance of maintaining close working relationships with external suppliers.			
8	10.1.2	Identify the factors considered when selecting suppliers (e.g., quality, price, reliable delivery).			
7	10.1.3	Identify sources for raw materials and parts, both domestic and international.			

7	10.1.4 Compare and contrast the production of parts internally vs.				
		procurement from external sources.			
	Performance Standard 10.2: Managing Inventory				
8	10.2.1	Identify the problems associated with having too much or too little			
		inventory.			
7	10.2.2	Apply methods used to count and inspect incoming inventory.			
7	10.2.3	Identify the basic forms of inventory carried by a manufacturing firm (e.g., materials and parts, work in process, finished goods).			
7	10.2.4	Identify appropriate situations in which a Just-In-Time inventory system can and should be used.			
6	10.2.5	Development of a system for maintaining inventory system can and			
6	10.2.6	should be used. Develop a system for maintaining inventory control (e.g., receiving,			
0	10.2.0	tracking, securing, reordering).			
	CONTI	CONTENT STANDARD 11.0: POSITIVE CUSTOMER RELATIONS			
	Performance Standard 11.1: Positive Relationships to Enhance				
		any Image			
4	11.1.1	Evaluate the nature of positive customer relations.			
5	11.1.2	Demonstrate a customer service mindset.			
3	11.1.3	Apply business policies to respond appropriately to customer inquiries.			
2	11.1.4	Explain management's role in customer relations.			
	Performance Standard 11.2: Resolving Conflicts to Encourage				
	Repeat Business				
3	11.2.1				
2	11.2.2	Formulate solutions to customer/client complaints.			
		mance Standard 11.3: Brand Promise			
2		Describe a company's brand promise.			
1	11.3.2	Determine ways of reinforcing a company's image through employee			
	_	performance.			
		mance Standard 11.4: Customer Relationship Management			
4	11.4.1	Discuss the nature of customer relationship management.			
3	11.4.2	Explain the role of ethics in customer relationship management.			
3	11.4.3	Describe the use of technology in customer relationship management.			
	CONTI	ENT STANDARD 12.0: PROJECT MANAGEMENT			
	Perfor	Performance Standard 12.1: Project Plan			
7	12.1.1	Prepare and critique a project plan.			
7	12.1.2	Explain the importance of organizing the implementation of the plan.			

8	12.1.3	Explain the various resources available to accomplish the goal of plan implementation.
5	12.1.4	Describe the elements of project delegation.
6	12.1.5	Describe how proper implementation of human resources provides accountability by delegating authority and responsibility.
7	12.1.6	Implement the plan.

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Business Ethics/Ethical Leadership

MBA Research and Curriculum Center and the <u>Daniels Fund</u> 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 Idaho 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	67%	33%	0%
2. Recognize and overcome personal biases and stereotypes	100%	0%	0%
3. Assess personal strengths and weaknesses	33%	67%	0%
4. Assess personal behavior and values	44.5%	44.5%	11%
5. Demonstrate honesty and integrity	89%	11%	0%
6. Demonstrate responsible behavior	89%	11%	0%
7. Demonstrate fairness	67%	33%	0%
8. Assess risks of personal decisions	44%	56%	0%
9. Take responsibility for decisions and actions	100%	0%	0%
10. Build trust in relationships	78%	22%	0%
11. Describe the nature of ethics	67%	33%	0%
12. Explain reasons for ethical dilemmas	67%	33%	0%
13. Recognize and respond to ethical dilemmas	78%	22%	0%
14. Explain the use of feedback for personal growth	67%	33%	0%
15. Show empathy for others	89%	11%	0%
16. Exhibit cultural sensitivity	100%	0%	0%
17. Explain the nature of effective communications	89%	11%	0%
18. Foster open, honest communication	100%	0%	0%
19. Participate as a team member	78%	22%	0%
20. Explain the concept of leadership	56%	44%	0%
21. Explain the nature of ethical leadership	67%	33%	0%
22. Model ethical behavior	100%	0%	0%
23. Determine personal vision	33%	67%	0%

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24. Inspire others	11%	89%	0%
25. Develop an achievement orientation	100%	0%	0%
26. Enlist others in working toward a shared vision	44%	56%	0%
27. Treat others with dignity and respect	89%	11%	0%
28. Foster positive working relationships	89%	11%	0%
29. Assess long-term value and impact of actions on others	78%	22%	0%
30. Set personal goals	22%	78%	0%
31. Follow rules of conduct	78%	22%	0%
32. Make decisions	67%	33%	0%
33. Demonstrate problem-solving skills	100%	0%	0%

Additional Recommended Leadership Traits

- Recognize unethical behavior.
- Ability to have crucial conversations when ethics breaches or perceived breaches occur

Additional Comments

- "Companies should sponsor annual ethics and compliance training."
- "My Recommended selections were based on the word 'personal.' Not sure if that was personal but still professional, or entirely personal (away from work)."
- "Always be learning—the landscape is ever-changing. Be an ally."

Discussion on Ethics in the Workplace

Have the conversation: When asked if everyone is working in an environment where they can talk about ethics, everyone said, "Yes."

Participants noted that there is a difference between business ethics and one's own personal ethics. Employees need a strong set of personal ethics developed to respond to the ethical dilemmas and decision-making they will encounter in business and the workplace. In most of the following examples of ethics, the answer was to have the conversation.

"You have to talk about it. There are business rules and standards that need to be followed, and government rules that are black and white, and then the rest (90%) needs to be discussed."

-Mark Robb, Oracle

Ethics in business relationship development: Participants shared that there are gray areas in business relationship development and the accepting of gifts. It's important to abide by

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company policies and be ethical if it seems someone is trying to "buy" your company's business with gifts.

Ethics in purchasing: The example given was an employee seeing a lack of demand for a product and having to decide whether to buy it, knowing that it will most likely need to be trashed. The ideal option is to take time to get feedback from a supervisor or boss before purchasing.

Ethics in quality control: Another example of ethical decision-making involved quality control. If someone became aware of a quality problem in a food product (the example was baby food), it's important to take responsibility and speak up. They explained, "Yes, there will be waste, and it will involve a loss of cash, but you need to be agile in your morals and have the discussions."

Ethics in offshoring: Most big companies have some offshoring, referred to as "low-cost geography." The ethical questions center around which company will work in their preferred time zone when dealing with 3rd or 4th time zones. Are you meeting in an equitable manner or does the low-cost country always suffer? This is true for warehouse work as well.

"Are you considering that a low-cost country may need to work in 3rd and 4th shifts to meet a deadline to get a product out? Are they being adequately compensated for that?"

—Shaun Klucken, Chobani

The importance of humanizing the supply chain: There was much discussion about recognizing that the supply chain is made up of people. "It's easy to not view SCM as people. It's important to humanize the supply chain (e.g., use the word, *drivers* as opposed to *resources*)." This is particularly important for warehouse and production workers who need to be onsite compared to other roles that can work from home. The disconnect can cause onsite workers to feel (literally and figuratively) unseen.

Procurement and equitable RFPs:

"When doing procurement (RFPs) is there clear measurement criteria to the correct vendor(s)? You must remove those biases to have a straightforward RFP so that everyone has an equitable chance to gain the business."

-Mark Robb, Oracle

Mark Robb added that "you can build your own tool to remove that bias by ensuring very strict scores and weighting—make it black and white. Personal bias will still exist but being strict with the RFP will make it more equitable for everyone."

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Certifications of Value Discussion

Certifications and Professional Development Used by Industry Professionals

We asked participants to share important certifications, training, and professional development that they recommend or that their companies support for employees.

Top SCM Certifications

- CPIM: Certification in Production and Inventory Management
- CSCP: Certified Supply Chain Professional

Both the CPIM and CSCP are available from the <u>Association for Supply Chain Management</u> (ASCM). Participants noted that employers use these certifications as screening tools and tiebreakers in the hiring process. Sometimes they are required to work on government contracts. They are also used as learning and development initiatives in companies. 60% of onthe-job employees hold certificates. They said it helps primarily with getting in the door and is a good motivator for a candidate, but does not replace on-the-job training. They need to be renewed regularly to stay active.

Professional Development Recommendations

- Association Memberships and Journal Subscriptions
 - Agriculture Transportation Coalition
 - Association for Supply Chain Management
 - o Idaho Manufacturing Alliance
 - o National Industrial Transportation League
- Idaho Business and SCM Publications
 - o Freight Waves
 - o Idaho Business Review
 - Supply Chain Brain
 - Supply Chain Dive
- LinkedIn: Connect and network with fellow professionals; follow thought leaders.
- <u>LinkedIn Learning</u>: Many employers offer subscription access.
- LOKAD: Quantitative supply chain software
- Tour plants at large or new companies.
- Work portfolio: Maintain a history of your work; include examples of problems, artifacts, and resolutions.

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Related Certifications and Standards

- Automotive Industry Standards
- Master's degree in business analytics from a university
- <u>MicroMasters Program (MITx) in Supply Chain Management</u> (Advanced technical and technology; five graduate-level courses)
- Microsoft Excel certifications
- Project Management Professional (PMP), via Project Management Institute
- Scrum Master Certification via Scrum Alliance

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Observations and Recommendations

Based on feedback from Idaho Supply Chain Management Futuring Panel participants, MBA Research and Curriculum Center recommends that the Idaho Division of Career Technical Education consider the following:

Recommended Course Sequence for a Supply Chain Management Concentration

We recommend that Idaho utilize MBA Research and Curriculum Center's National Business Administration Standards to help define, support, and further strengthen curriculum in the Business Management Cluster and Operations Management Pathway. MBA Research continues to conduct secondary research on supply chain management and will finalize a listing of SCM-specific performance indicators by early 2024.

The list of supply chain management performance indicators validated by SCM professionals is in Addendum A.

Students need a foundation of general business and management concepts and skills prior to immersing themselves in SCM coursework. Consider offering the following course sequence to help students move progressively toward a mastery of concepts in business and supply chain management:

Course 1: Business & Marketing Essentials

Course 2: Introduction to Management

Course 3: SCM-specific Course*

Course 4: SCM-specific Course

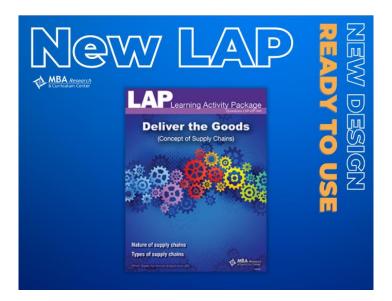
Learning Activity Packages Available for Supply Chain Management

In the build-up to creating the supply chain management course guide, MBA Research has released three Learning Activity Packages (LAPs) this year. An additional LAP is scheduled for completion in the coming months.

NOW AVAILABLE:

^{*}MBA Research is currently developing a supply chain management course guide that will be available for the 2024–25 school year.

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LAP-OP-443: Deliver the Goods (Concept of Supply Chains)

In this LAP, students will learn about the different activities and roles within the supply chain, such as suppliers, manufacturers, and supply chain managers, as well as types of supply chain models and how different designs meet the needs of different businesses.

• LAP-OP-303: Top of the (Supply) Chain (Nature of Supply Chain Management)

This LAP introduces students to the essential functions and activities within supply chain management (SCM). It also explores emerging trends within SCM, including changes in technology, the evolving workforce, and growing consumer demand.

LAP-OP-477: Chain Reaction (Impact of Supply Chains on Business Performance)

This LAP introduces students to the impact that effective supply chains can have on business performance. It discusses the basics of supply chains, details the characteristics of an effective supply chain, and outlines how effective supply chains benefit businesses and their customers.

COMING SOON:

• LAP-OP-677: The Supply Chain Standard (Ethics in Supply Chain Management)

Projected release: March 2024 (FREE, COURTESY OF THE DANIELS FUND)

Topics and Recommended Skills Across Panels

Drawing from SCM Futuring Panels in three states (OH, KY, and ID) and one virtual panel this year, certain topics and related skills emerged across all four panels. We recommend incorporating these core topics and skills into an SCM concentration or program of study.

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Communication and remote work skills: Supply chain management panelists emphasized that communication in all forms is incredibly important and valuable to success in this field. Relationship building and communication are critical in vendor negotiations, problem-solving, continuous improvement, and risk management, to name a few areas. We recommend several Communications LAPs in the teacher pull-out section of the report. Additionally, a recent Action Brief is available on the emerging trends in workplace flexibility.



We recommend pairing this <u>Action Brief</u> with the following performance indicators and lesson modules:

- HR:547 Manage flexible work arrangements (SP)
- EI:006 Demonstrate adaptability (CS) LAP-EI-006
- EI:037 Foster positive working relationships (CS) LAP-EI-037

Data science: Technology and the use of data are infused throughout all aspects of supply chain management. The need for these skills is in high demand and on the rise. The following topics were discussed across all SCM futuring panels:

- Al programming: Understanding foundational coding
- Application programming interface (API) for "warehousing" documents in the cloud
- Automation: Robotics and robotic process automation (RPA)
- Block-chain understanding
- Data analytics: The ability to create, source, and visualize data
- Data/database management and cyber security

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• Industry 4.0: Using technology to move toward integration and visibility and to improve accuracy across all aspects of the supply chain

Environmental, social, and governance understanding: Compliance, reporting, carbon footprint, sustainability, reverse/circular logistics

Lean management: Lean Six Sigma skills

Math and finance skills: A math or finance background is good for demand planning/forecasting, using optimization tools, understanding and creating formulas, and reading system bias that exists in technology.

Microsoft Office suite and computer literacy: MS Excel, PowerPoint, and Teams were all cited as specific programs that are used regularly in SCM careers and business in general. Additionally, SCM employees need to be well-versed in general computer literacy, not just familiar with standalone apps.

Project management: Project management is viewed as a subset of SCM as it is temporary and has a timeframe with deadlines and finite goals. In contrast, SCM is broader in that it involves the *ongoing activities* that support top-line business profits and aims to lower bottom-line business costs.

Resources from Post-Secondary in Kentucky

In preparation for the SCM Futuring Panel in Kentucky earlier this year, MBA Research and Kentucky Department of Education staff met with supply chain management department leads from Northern Kentucky University (NKU) and Eastern Kentucky University (EKU). The following resource from EKU was shared as a high-level overview of SCM concepts and definitions. MBA Research utilized the book as one point of reference in the LAP development process.

We would recommend this resource for teachers to gain a broad overview of the foundational concepts of supply chain management, particularly if they are new to teaching this topic area. Consider purchasing copies from Kendall-Hunt Publishing for teachers to gain a broad overview of foundational SCM concepts.

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Supply Chain Simplified by Dr. James Kirby Easterling (2022)

Additional Suggestions and Resources

Idaho Division of Career Technical Education staff did a wonderful job of connecting with business executives at the Supply Chain Management Panel. MBA Research encourages you to continue to leverage the connections made with the attendees and engage them with students and teachers to maximize learning experiences designed to prepare students for careers in supply chain management.

Encourage Idaho educators to utilize State's Connection: Idaho, as a member of the MBA Research consortium, has access to resources in the State's Connection portal. State's Connection is a place for teachers and state leaders to access Action Briefs, MBA Research Bookmarks, classroom project ideas, Curriculum Builder tools, and more. Users are required to register for the site. Learn more about State's Connection and the benefits it offers here.

MBA Research and Curriculum Center is proud to partner with the Idaho Division of Career Technical Education, and we are available for consultation at any time to discuss these recommended resources.

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Thank You and Recognition of Contributors

Futuring Panel Participants

MBA Research and the Idaho Division of Career Technical 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 to hear directly from business and industry about what's going on in the workplace. Thank you for your time and commitment to Idaho workforce development and business administration education.

- Shaun Klucken, Inventory Manager, Chobani
- Kimberly Smith, Director, New Product Development, Chobani
- Madeline McConnell, Senior Director, Operations & Supply Chain, Good PLANET Foods
- Soleil Fortin, Senior Manager Co-Manufacturing Operations, Danone
- Richard Coe, Director of Supply Chain, Melt Organic
- Jason Ater, Strategic Sourcing Manager, Albertsons
- Eric Rush, Senior Manager, Business Transformation, Micron Technology
- Lee Goodwin, Division Transportation Manager, Boise Cascade Company
- Patrick Bockey, Supply Chain Project Leader, o9 Solutions, Inc.
- Shawn Mocaby, Supply Chain Manager, Sensata Technologies
- Mark Robb, ERP Principal Solution Engineer, Supply Chain, Oracle

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Idaho Partnership



MBA Research and Curriculum Center would like to acknowledge our strong partnership with and support from Idaho Division of Career Technical Education (IDCTE), a member of the MBA Research and Curriculum Center consortium. Shauna Williams, IDCTE business and marketing consultant, representative to the MBA consortium and MBA Research board member, made this opportunity possible by collaborating with MBA Research staff every step of the way. In addition, our sincere appreciation goes out to all IDCTE staff who supported the day's events including Dr. Clay Long, Idaho State Administrator, who welcomed everyone and shared Idaho's SkillStack platform.

Idaho Division of Career Technical Education

- Chet Andes, Assistant Director of Program Quality
- Breanna Gibson, Administrative Assistant for Business and Marketing
- Dr. Clay Long, Idaho State Administrator
- Gina Lyman, CTSO Manager: BPA & DECA
- Adrian San Miguel, Chief Program Officer
- Shauna Williams, Program Quality Manager: Business and Marketing Education

MBA Research and Curriculum Center

- Holly Atha, President/CEO
- Stephanie King, Director of Business Engagement
- Rick Mangini, Executive Vice President

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Addendum A

Supply Chain Management Curriculum Standards

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Supply Chain Management Curriculum Standards

Supply chain management performance indicators appear in multiple locations within the National Business Administration Standards. Some are in the Business Administration Core, which means that everyone in business needs to know the basics of supply chain. Other performance indicators appear in the Business Management Cluster Core, meaning that all individuals in business management need to know a bit more about supply chain management. And finally, a sizable number of performance indicators are located in the standards for the Operations Management Pathway.

Business Administration Core

Instructional Area: Operations

Performance Element: Understand supply chain management role to recognize its need in business.

Performance Indicators:

OP:443 Explain the concept of supply chain (CS)

Objectives:

- a. Define the term supply chain.
- b. Identify common supply chain members.
- c. Explain types of supply chain activities.
- d. Describe supply chain flows (e.g., product, information, finances).
- e. Discuss the purpose and goals of supply chain.
- OP:444 Explain the benefits of supply chain collaboration (SP)

Business Management Cluster Core

Instructional Area: Operations

Performance Element: Understand supply chain management role to recognize its need in business.

Performance Indicators:

• OP:477 Explain the impact of supply chain on business performance (SP)

Objectives:

- a. Discuss the impact that an efficient supply chain has on customers (e.g., better customer experience, faster delivery times, lower prices, increased customer satisfaction, greater customer loyalty, etc.).
- b. Describe the impact that an efficient supply chain has on a business's profitability and cash flow (e.g., lower costs, higher profits, etc.).
- c. Explain how an efficient supply chain can impact business operations (e.g., less confusion, less duplication, less waste, improved efficiencies, faster production cycle, greater flexibility, better quality control).

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- OP:478 Describe the impact of technology on supply chain management (SP)
- OP:479 Describe supply chain networks (SP)
- OP:480 Discuss global supply chain issues (SP)
- OP:303 Discuss the nature of supply chain management (SP)

Objectives:

- a. Define the term supply chain management (SCM).
- b. Explain the purpose of supply chain management.
- c. Describe elements of supply chain management (e.g., planning, sourcing and procurement, production, inventory management, distribution).
- d. Discuss supply chain management's role in developing an integrated supply chain.

Operations Management Pathway

Instructional Area: Operations

Performance Element: Conduct supply chain management activities to coordinate the movement of

materials, information, and funds into an organization and the movement of

finished products/services out of an organization.

Performance Indicators:

- OP:299 Explain the nature of order cycle time (SP)
- OP:301 Describe the nature of inter-organizational supply chains (SP)
- OP:304 Describe the relationship between supply chain management and operations management (SP)
- OP:305 Describe supply chain management strategies (SP)
- OP:498 Use supply chain measures to evaluate achievement of goals (SP)
- OP:499 Evaluate risk factors and trends affecting supply chain systems (e.g., sustainability, political volatility) (SP)
- OP:500 Identify supply chain process improvement opportunities (SP)
- OP:501 Evaluate supplier performance and compliance (SP)
- OP:306 Implement supply chain management strategies (SP)

Performance Element: Understand purchasing activities to obtain business materials and services.

Performance Indicators:

• OP:486 Describe the relationship between purchasing and operations management activities (e.g., strategic sourcing, sustainability, supply chain management) (SP)

Performance Element: Evaluate transportation strategies to improve the performance and competitive advantage of the organization.

Performance Indicators:

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- OP:505 Describe the transportation modes (SP)
- OP:506 Explain the scope of domestic and global transport systems (SP)
- OP:507 Explain the impact of transportation costs on business performance (e.g., cost elements)
 (SP)
- OP:508 Describe trends in international distribution systems (SP)
- OP:509 Describe the nature of channel intermediaries for foreign markets (e.g., distributors, agents) (SP)
- OP:510 Explain international transportation and delivery system elements (SP)
- OP:511 Develop transportation plans (SP)
- OP:512 Assess transportation processes (SP)
- OP:513 Describe the nature and scope of reverse logistics (SP)
- OP:514 Explain the impact of import and export requirements on supply chain design (e.g., documentation requirements, handling requirements) (SP) (SP)
- OP:515 Manage transportation plans (MN) (SP)
- OP:516 Improve transportation processes (MN) (SP)

Performance Element: Assess product packaging to improve supply chain

Performance Indicators:

- OP:502 Assess the impact of product packaging requirements on logistics (SP)
- OP:503 Review product packaging to improve supply chain efficiency (SP)
- OP:504 Align product packaging with organizational objectives (MN)

Performance Element: Evaluate transportation strategies to improve the performance and competitive advantage of the organization.

Performance Indicators:

- OP:505 Describe the transportation modes (SP)
- OP:506 Explain the scope of domestic and global transport systems (SP)
- OP:507 Explain the impact of transportation costs on business performance (e.g., cost elements)
 (SP)
- OP:508 Describe trends in international distribution systems (SP)
- OP:509 Describe the nature of channel intermediaries for foreign markets (e.g., distributors, agents) (SP)
- OP:510 Explain international transportation and delivery system elements (SP)
- OP:511 Develop transportation plans (SP)
- OP:512 Assess transportation processes (SP)
- OP:513 Describe the nature and scope of reverse logistics (SP)
- OP:514 Explain the impact of import and export requirements on supply chain design (e.g., documentation requirements, handling requirements) (SP)
- OP:515 Manage transportation plans (MN)
- OP:516 Improve transportation processes (MN)

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Instructional Area: Professional Development

Performance Element: Participate in career planning to enhance job-success potential.

Performance Indicators:

- PD:189 Explain career opportunities in operations and supply chain management (SP)
- PD:345 Describe certifications for supply chain management professionals (SP)

Performance Element: Explore professional development opportunities to enhance operationsmanagement skills.

Performance Indicators:

- PD:266 Identify continuing education courses or programs available to enhance operations- and supply chain management skills (SP)
- PD:267 Identify professional association opportunities for operations- and supply chain management professionals (e.g., educational opportunities, networking, conferences, newsletters, publications) (SP)
- PD:268 Utilize operations- and supply chain management publications (e.g., books, periodicals, newsletters) to update skills (SP)