

PROPOSED NEW CONTENT  
MOPS 2020

**SECTION B**  
**Organization**

**23** In 2020, where were decisions to **use independent contractors, leased workers, and purchased services** for the following categories made for this establishment?

*Select all that apply*

	Only at this establishment	Only at headquarters	Both at this establishment and headquarters
Cleaning and janitorial services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation, logistics, and distribution services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Payroll and human resource services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manufacturing activities .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**25** In 2020, who decided **what type of data** to collect for this establishment?

*Select all that apply*

	2020
Managers at this establishment .....	<input type="checkbox"/>
Production workers at this establishment .....	<input type="checkbox"/>
Engineers at this establishment .....	<input type="checkbox"/>
Managers at headquarters or other establishments .....	<input type="checkbox"/>
Government regulations or agencies .....	<input type="checkbox"/>
Consultants (including systems integrators) .....	<input type="checkbox"/>

**SECTION C**  
**Outsourcing**

**26A** In 2020, how much did this establishment spend on labor costs and purchased services in each of the following categories?

*Estimates are acceptable. Report in \$1,000s.*

Category	Own Employees	Independent contractors	Temporary staff and leased workers	Other purchased services
Cleaning and janitorial services .....				
Food services .....				
Security services .....				
Transportation, logistics, and distribution services .....				
Payroll and human resource services .....				
Manufacturing activities .....				

**26B** In 2020, for the largest expenditure category in (26A), how many workers did your establishment engage in full-year, full-time units?

For example, if your establishment engaged one full-time independent contractor for six months, enter 0.5 under "Independent Contractors."

*Estimates are acceptable.*

Category	Own Employees	Independent contractors	Temporary staff and leased workers	Other purchased services
[Restate the largest expenditure category in response to (26A)] .....				

PROPOSED NEW CONTENT  
MOPS 2020

**27** In 2015, how much did this establishment spend on labor costs and purchased services in each of the following categories?  
*Estimates are acceptable. Report in \$1,000s.*

Category	Own Employees	Independent contractors	Temporary staff and leased workers	Other purchased services
Cleaning and janitorial services .....				
Food services .....				
Security services .....				
Transportation, logistics, and distribution services .....				
Payroll and human resource services .....				
Manufacturing activities .....				

**28** In 2022, how much do you predict this establishment will spend on labor costs and purchased services in each of the following categories?  
*Estimates are acceptable. Report in \$1,000s.*

Category	Own Employees	Independent contractors	Temporary staff and leased workers	Other purchased services
Cleaning and janitorial services .....				
Food services .....				
Security services .....				
Transportation, logistics, and distribution services .....				
Payroll and human resource services .....				
Manufacturing activities .....				

**29** In 2020, when this establishment considered whether to rely on its own employees or use independent contractors, leased workers, and/or purchased services for the following categories, which factors were important in driving the decision?  
*Select all that apply*

Category	Lower cost	Higher quality	Greater flexibility	Other (please specify)
Cleaning and janitorial services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Food services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Security services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transportation, logistics, and distribution services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Payroll and human resource services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manufacturing activities .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PROPOSED NEW CONTENT  
MOPS 2020

**SECTION D**  
**Data, Decision Making, and AI**

**30** In 2020, how much of the information retained at this establishment for each of the following functions was stored in a digital format?

*Select one for each row*

<b>Functions</b>	None	Up to 50%	More than 50%, but not all	All	Function not performed at this establishment
Production scheduling and monitoring .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality control .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment failure and maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental or safety compliance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design of new products or services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales forecasting .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supply chain management and logistics .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer information and support .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation and management of employee performance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**31** In 2020, to what extent did this establishment use descriptive summaries or graphics of digital information to support each of the following functions?

Digital data is often summarized for use in decision making. This approach does not rely on statistical or algorithm-based analysis, and commonly focuses on describing features of data such as the range, mean or median, variance, and frequency breakdowns by category. Examples include pie and bar charts, line graphs, and other visual summaries.

*Select one for each row*

<b>Functions</b>	None	Up to 50%	More than 50%, but not all	All	Function not performed at this establishment
Production scheduling and monitoring .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality control .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental or safety compliance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design of new products or services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales forecasting .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supply chain management and logistics .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer information and support .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation and management of employee performance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# PROPOSED NEW CONTENT MOPS 2020

**32** In 2020, to what extent did this establishment **use predictive analytics** to support each of the following functions?

Predictive analytics are statistical or algorithm-based models that provide forecasts in areas such as demand forecasting, production planning, or human resources management. Do not include algorithms that can learn and update without human intervention (artificial intelligence algorithms).

**Select one for each row**

<b>Functions</b>	None	Up to 50%	More than 50%, but not all	All	Function not performed at this establishment
Production scheduling and monitoring .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality control .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental or safety compliance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design of new products or services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales forecasting .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supply chain management and logistics .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer information and support .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation and management of employee performance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**33** In 2020, to what extent did this establishment **use artificial intelligence** to support each of the following functions?

Artificial intelligence is a branch of computer science and engineering devoted to making machines intelligent. Intelligence is that quality that enables an entity to perceive, analyze, determine response, and act appropriately in its environment. Include algorithms that can learn and update without human intervention.

**Select one for each row**

<b>Functions</b>	None	Up to 50%	More than 50%, but not all	All	Function not performed at this establishment
Production scheduling and monitoring .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality control .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental or safety compliance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design of new products or services .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales forecasting .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supply chain management and logistics .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer information and support .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation and management of employee performance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**34** In 2020, to what extent did this establishment **use the following technical applications of artificial intelligence** in manufacturing activities?

**Select one for each row**

<b>Applications</b>	No use	Testing, but not using in manufacturing activities	Up to 50% of manufacturing activities	More than 50% of manufacturing activities, but not all	All manufacturing activities	Don't know
Machine vision .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech recognition .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Predictive maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virtual prototyping .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial robots .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automated guided vehicles (AGV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Augmented reality .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendation systems .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fraud detection or risk analysis (anomaly detection) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# PROPOSED NEW CONTENT MOPS 2020

**35** In 2015, to what extent did this establishment use the following technical applications of artificial intelligence in manufacturing activities?

**Select one for each row**

Applications	No use	Testing, but not using in manufacturing activities	Up to 50% of manufacturing activities	More than 50% of manufacturing activities, but not all	All manufacturing activities	Don't know
Machine vision .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech recognition .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Predictive maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virtual prototyping .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial robots .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automated guided vehicles (AGV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Augmented reality .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendation systems .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fraud detection or risk analysis (anomaly detection) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**36** In 2020, to what extent did the following factors affect the use of artificial intelligence at this establishment?

**Select one for each row**

Applications	Prevented use	Delayed use	Made use less effective or more difficult	No effect	Accelerated use	Don't know
Level of AI expertise or skills at this establishment .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of AI expertise or skills at headquarters .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount or type of data available .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT infrastructure .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immaturity of AI technology .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty identifying business use cases to which AI can be applied ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncertainty about government regulations or industry standards .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manager attitudes towards AI .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production worker attitudes towards AI .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION F Background Characteristics

**50** When preparing your financial statements in 2020, did your firm retain an external Certified Public Accountant?

**Select one**

Yes - To conduct an audit

Yes - To conduct a review

Yes - To conduct a compilation

No (If no, SKIP to (53))

Do not know (If do not know, SKIP to (53))

**51** In 2020, did the auditor visit this establishment in association with the firm's audit, review, or compilation?

**Select one**

Yes (if yes and response to (50) was either "to conduct a review" or "to conduct a compilation", SKIP to (53))

No (If no, SKIP to (53))

Do not know (If do not know, SKIP to (53))

PROPOSED NEW CONTENT  
MOPS 2020

52

Which of the following activities did the auditor conduct at this establishment?

**Select all that apply**

- Inventory control tests
- Employee control tests
- Expense control tests
- Cash management tests
- Accounts receivable control tests
- Materials control tests
- Other (*please specify*)

## Draft Definitions and Instructions

**Own Employees** are full- and part-time employees of your establishment whose payroll is reportable on Internal Revenue Service Form 941. When reporting expenditures on Own Employees, include payroll and the cost of fringe benefits. Include paid sick leave, paid holidays, and paid vacations during the year.

**Independent Contractors** are non-employee workers who provide labor services to your establishment on a one-shot, occasional or recurring basis. Most payments to independent contractors are reportable on Internal Revenue Service Form 1099-MISC.

**Leased Workers** are staff obtained from temporary help services firms and employee leasing firms who perform labor work for your establishment.

**Purchased Services** are services that your establishment purchases from an outside company. Examples include food catering, security services, delivery and transport services, janitorial services, payroll processing, and computer hardware maintenance.