

APICS INSIGHTS AND INNOVATIONS

# ENHANCING PROJECT MANAGEMENT



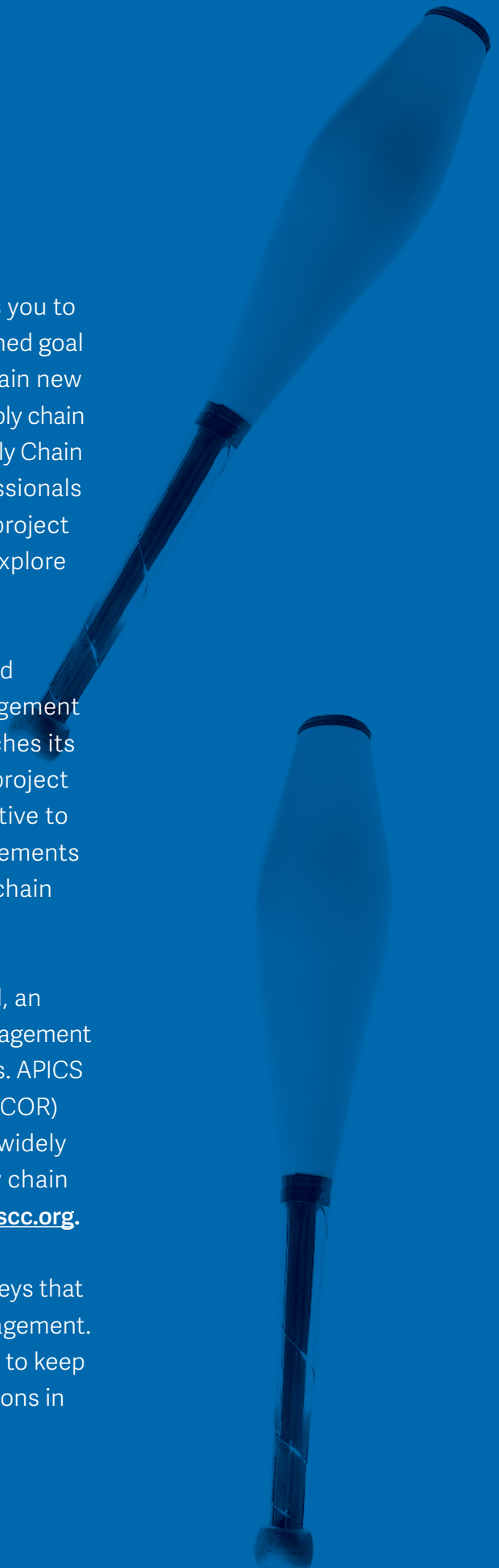
## ABOUT THIS REPORT

Supply chain project management is a process that allows you to coordinate resources and activities in order to deliver a defined goal within a set timeframe, budget and scope. In an effort to gain new insights into project management best practices among supply chain and operations management professionals, the APICS Supply Chain Council conducted a survey of APICS members and professionals to determine how often individuals practice supply chain project management in addition to other responsibilities, and to explore project management challenges and innovations.

Project management is a good way to create structure and predictability from complexity. Multifaceted project management is required to ensure that a defined supply chain task reaches its finish on time, on budget and within scope. Supply chain project management has a scope, both internal and external, relative to the organization. As a specialty, it serves the unique requirements of projects that span the dynamic relationships of supply chain participants located inside and outside organizations.

This report was developed by APICS Supply Chain Council, an organization that advances supply chain and operations management and innovation through research, education and publications. APICS SCC maintains the Supply Chain Operations Reference (SCOR) model, the supply chain management community's most widely accepted framework for evaluating and comparing supply chain activities and performance. **For more information, visit [apicsscc.org](http://apicsscc.org).**

APICS SCC research reports are based on practitioner surveys that explore trending topics in supply chain and operations management. They include survey results, analysis, tips and best practices to keep you and your organization informed of insights and innovations in supply chain and operations management.



# ENHANCING PROJECT MANAGEMENT

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### Additional Resources

These programs and publications provide resources and detailed information about the topic.

[APICS Risk Management Certificate Program](#)  
[apics.org/risk](https://apics.org/risk)

A full version of this report is available free to APICS Supply Chain Council affiliates and sponsors and APICS members. Log in to the website to access additional analysis and insights on this topic. If you aren't an APICS member, join APICS today. Nonmembers may also purchase the full report.

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# ENHANCING PROJECT MANAGEMENT

A person in silhouette, wearing a hat and gloves, is juggling two flaming torches. The background is a warm, orange-hued sunset or sunrise sky. The person's arms are extended, and the torches are in motion, creating a dynamic and visually striking scene.

## Project management:

The *APICS Dictionary*, 14th edition, defines project management as “the management system that enables business imperatives and strategic goals to be accomplished.” If growth is a goal, for example, projects are developed to introduce new factors affecting customer behavior. Project management is the methodology by which goals are assigned and resources and plans are developed and monitored to achieve these goals.

## EXECUTIVE SUMMARY

Project management is an important and sometimes weighty responsibility. It is an essential area and function, but one that lacks visibility and maturity in many organizations. APICS SCC conducted a survey of supply chain and operations management professionals in order to:

- Determine where practitioners stand in terms of supply chain project management.
- Evaluate how often professionals practice supply chain project management in addition to other responsibilities.
- Explore areas professionals find challenging and whether those challenges reveal insights into developing best practices.

### Project management trends revealed by APICS SCC research

As the APICS SCC research survey results were analyzed, clear trends in project management emerged. The research showed that a majority of industry professionals are experienced in supply chain project management, but that they still face significant challenges related to project management. Our results revealed the following four trends:

- Practitioners don't know whether supply chain projects are completed on time, on budget and/or within scope. Practitioners' lack of knowledge about project completion may have a number of causes: lack of management-perceived need, lack of organizational project management skill and support, and possible organizational behavior and teamwork that fail to adequately prioritize communication of project outcomes.
- Significant numbers of practitioners work on projects—sometimes large and complex projects—with little backup in terms of training or staff that specialize in project management. This is a potential gap in management strategy that may impair achieving supply chain excellence.
- Successfully completed supply chain projects, even major projects, are often not formally recognized. Project participants across the supply chain may not be aware of the project outcome, which creates unnecessary uncertainty or even continuation of project-related practices that are no longer needed.
- Few project management tasks are overly difficult. Many tasks are only moderately difficult, such as scoping, tracking, anticipating and following up. However, the combined magnitude of these tasks creates a challenging responsibility.

## KEY FINDINGS

Supply chain project management creates order and predictability among otherwise complex and variable requirements. The tactics, resources and changes that must occur become specific and measurable in advance. Those same tactics organize communications and behaviors along a predictable timeline. Supply chain project management enhances the best of a supply chain professional's skill, including forecasting, soft skills, planning and risk management. This combination builds strategic and advanced management experience and positions the professional for a higher management position and more successful career path.

Successful supply chain project management turns ideas into practical endeavors. For example, a high-level requirement to "merge two software platforms into one" becomes a formal plan that considers strategy in terms of organizational behavior, priorities, risks, resources and visibility. It holds accountable those who must deliver. It helps prevent silos from forming. This enhances the capability of the organization to succeed at complex projects.



## Questions for discussion

**Has your organization developed a project management strategy that improves weaknesses and makes full use of strengths?**

**Look at the survey results and determine your areas of strength and weakness. Would you have answered a survey question with a higher or better score than the average? It may be indicative of a strength.**

**Would you have answered a question with a lower than average score? Work on improvement in this area.**

**How would you have expected your organization, in general, to answer the same questions? Comparing your organization to the survey results may suggest team and organization-level improvements to consider.**

## Key topics in supply chain project management

- Survey data points to the continued need for developing great project integration. Technically, a project may meet success metrics on the surface but remain in its own silo—failing to deliver benefits to the wider organization and supply chain. Success metrics should consider how well the project deliverables have become integrated into the sponsoring organization and its supply chain. When integration is successful, future projects can build on past accomplishments rather than reinventing themselves in a new silo. This remains a challenge for a significant number of organizations.
- While practitioners have experience in supply chain project management, levels of formal training or best practices education vary. This suggests that experience gained in an organization with low project management maturity may not be comparable to experience based on actual best practices or the mature practice of supply chain project management. Within a supply chain, project participants may continue to have different expectations.
- Communication and many other soft skills remain integral to supply chain project management, even with improved tools and technologies. Just as a modern supply chain tracks the flow of products, finance and data with technology, human interaction and relationships remain critical. Building trust, expectations and confidence in project plans and forecasts depends primarily on interpersonal skills. Put another way, survey data verifies that supply chain projects are frequently stressful. Stress strikes at a personal level among project team members. Soft skills are necessary for this type of challenge.

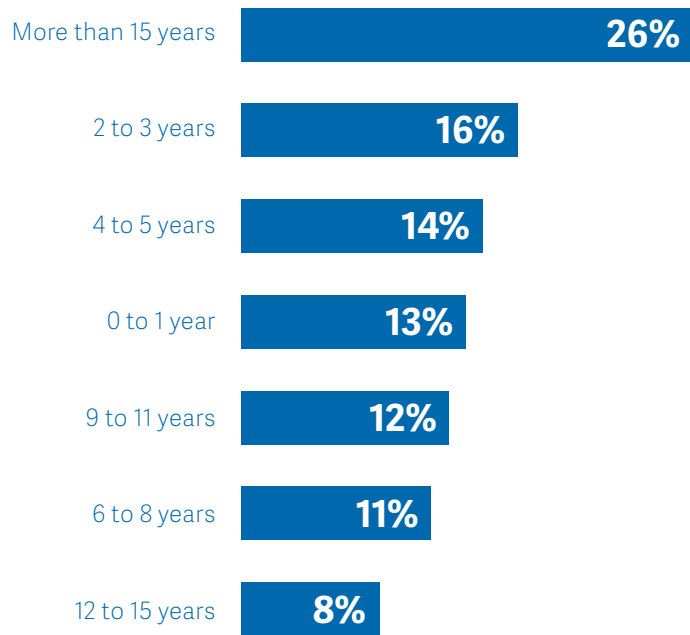


## Project management best practices

- **Realize** that the resources most critical to successful project completion typically are already heavily loaded with other tasks. This means a supply chain project manager must look for and account for the risk of an overextended resource. The manager must also seek to clearly establish project priority with management should a conflict occur with this resource, as well as define and set realistic alternatives and project expectations should a resource fail to deliver as expected
- **Anticipate** execution challenges with training, skills, tools and practices that support project execution. Execution appears to be the most challenging phase of supply chain project management, so counteract these challenges early.
- **Spend** sufficient time in project initiation and planning to ensure an optimal execution phase. Don't skip tasks and steps in early phases at the cost of later execution that may already be challenging.
- **Respond** to scope creep and budget creep quickly. Excess scope and budget demands appear suddenly, not gradually. This means a professional must keep a constant watch for these pressures and respond to them quickly, protecting the approved project plan. Failure to do so may cause the project or project team to go over budget and out of its scope constraints.

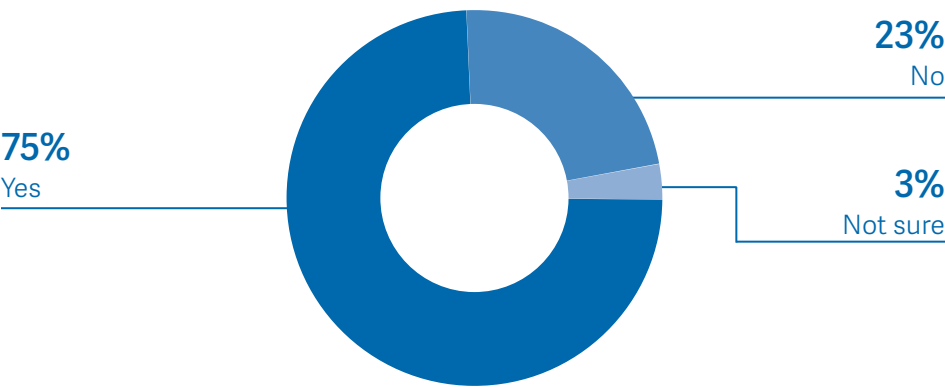
**Experience implementing or practicing project management**

Respondents were asked how many years of experience they have implementing or practicing project management.



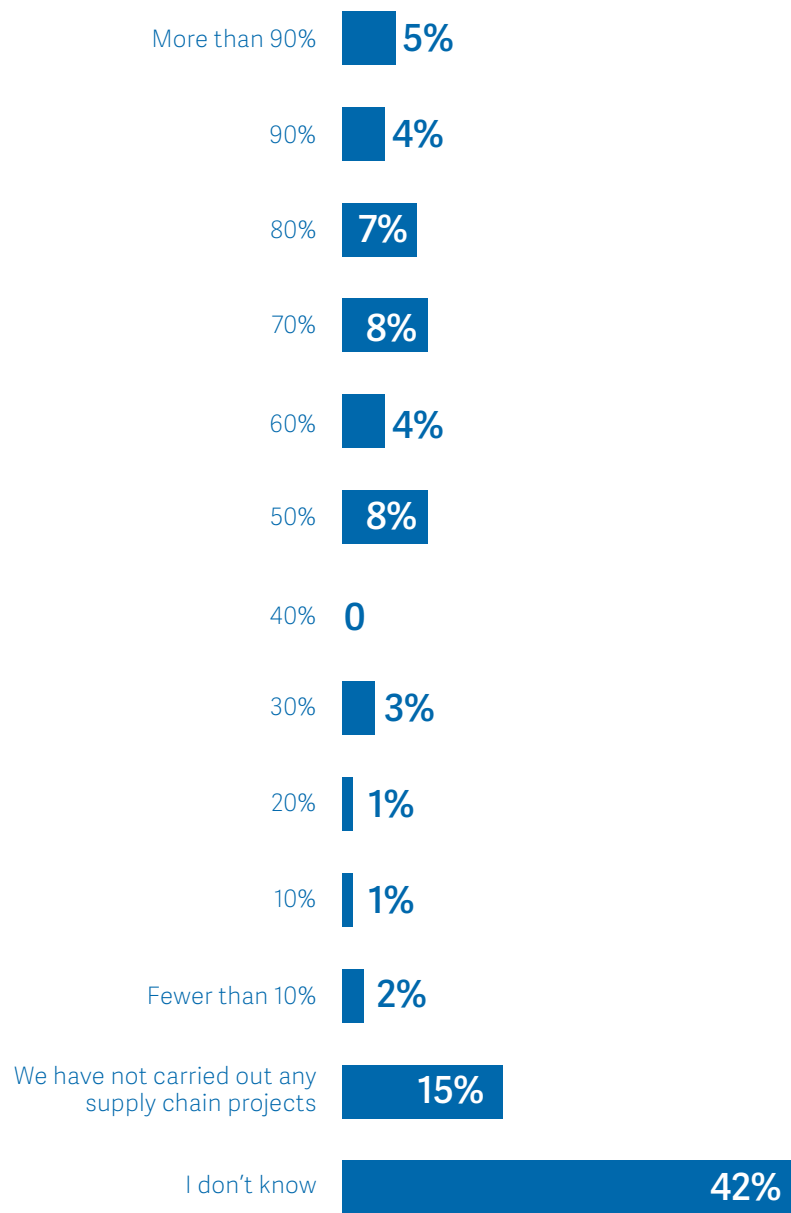
**Project management skills**

Respondents were asked if they have participated in a supply chain project that incorporated project management skills within the last 12 months. (Participation examples included enterprise resources planning, implementation and supplier selection.)



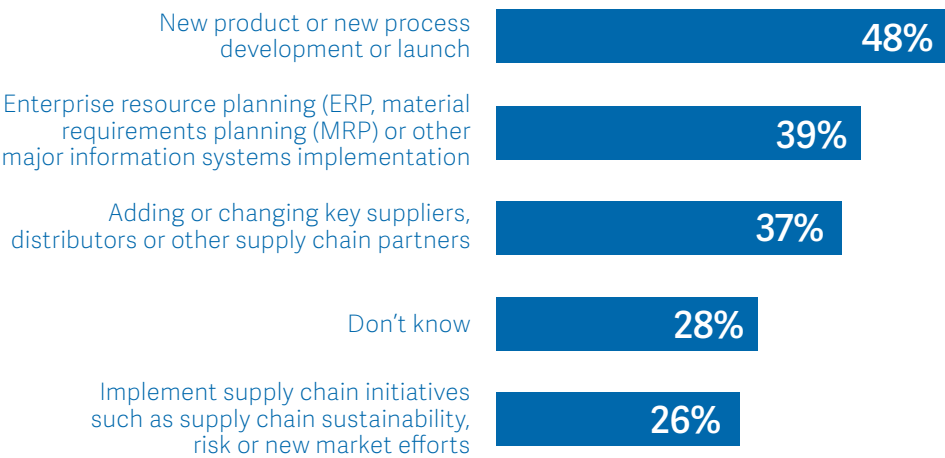
Successfully completed supply chain projects

Respondents were asked what percentage of the time supply chain projects are completed on time, on budget and within scope for their business units.



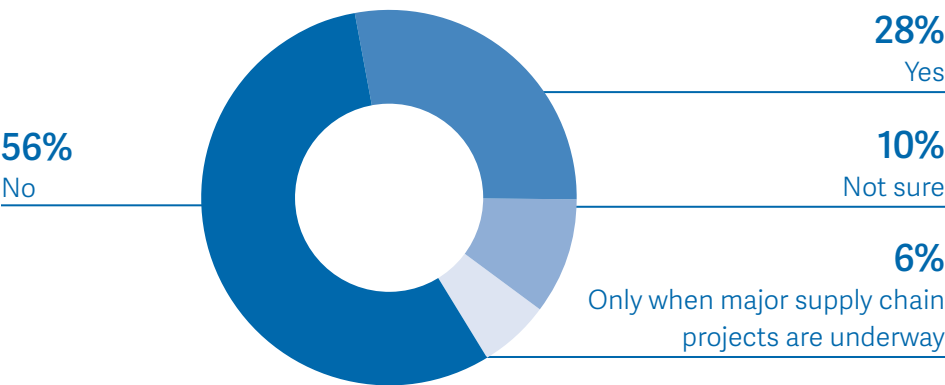
Future supply chain projects

Respondents were asked if their organizations plan to undertake or complete any of the following projects over the next three years.



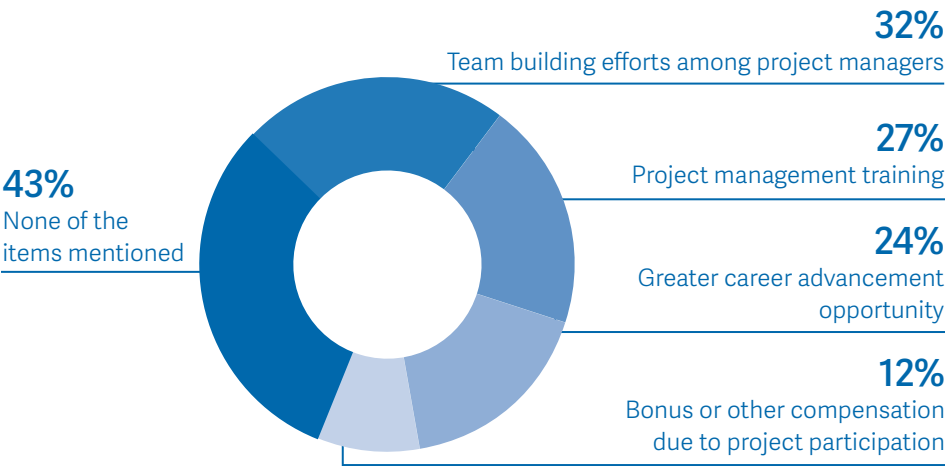
Businesses with supply chain project manager

Respondents were asked if their departments or business units have a full-time supply chain project manager.



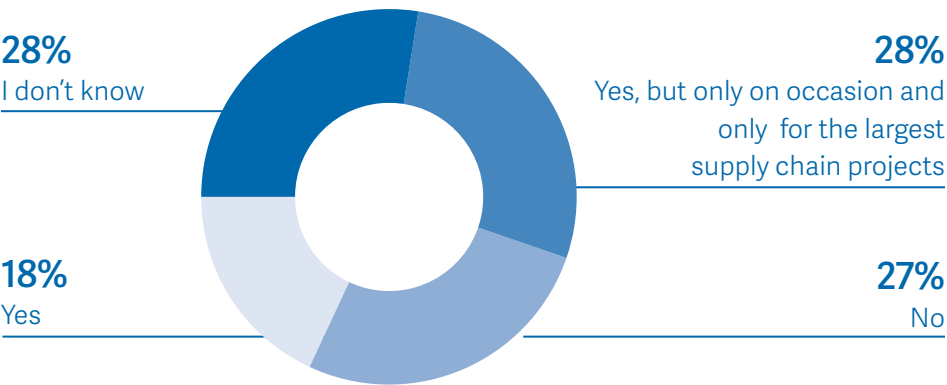
Experience with supply chain projects

Respondents were asked if those who serve on supply chain projects tend to experience any of the following.



Formal recognition of completed major supply chain projects

Respondents were asked if, in general, their teams or business units formally recognize completion of major supply chain projects.



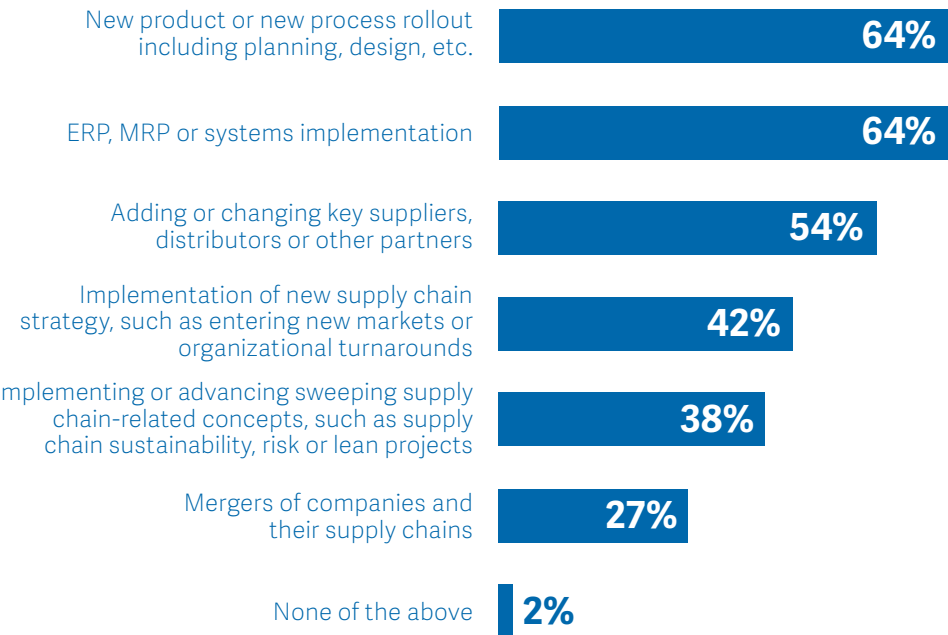
Amount of stress correlated with one’s role in supply chain projects

Respondents were asked how stressful their roles in supply chain projects are.

No stress	2	3	4	5	6	7	8	9	Extreme stress	N/A
0	1%	5%	6%	13%	14%	29%	21%	6%	5%	1%

Supply chain project involvement

Respondents were asked in which of the following supply chain projects they have been involved in the past three years.

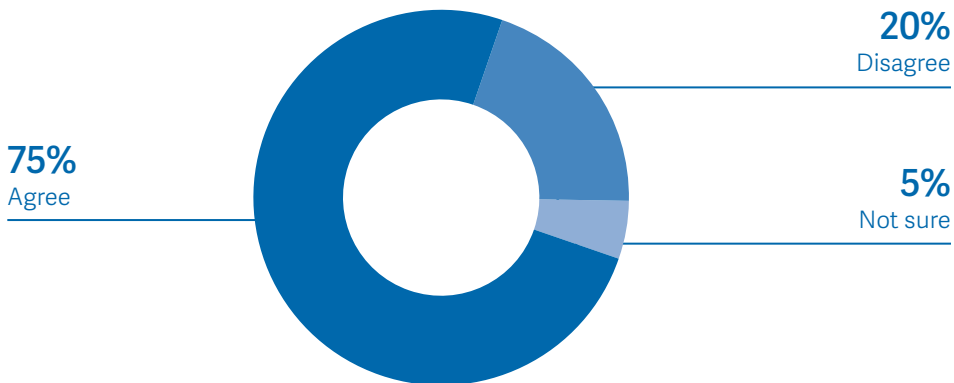


## Project management tasks

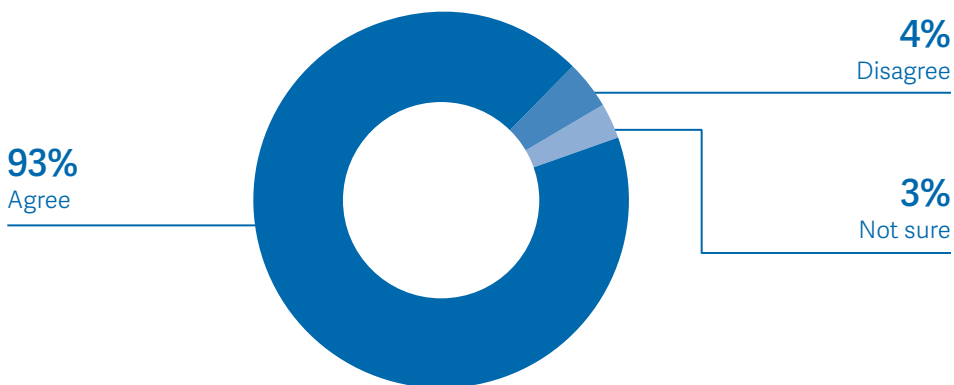
Respondents were asked to evaluate their experiences regarding suggested project management tasks by indicating the extent to which they identified with the following statements.

### 1. Experience with Project Management Tasks

Watch project budget and scope carefully every day. Excess budget demands and scope creep increase quickly, not gradually.

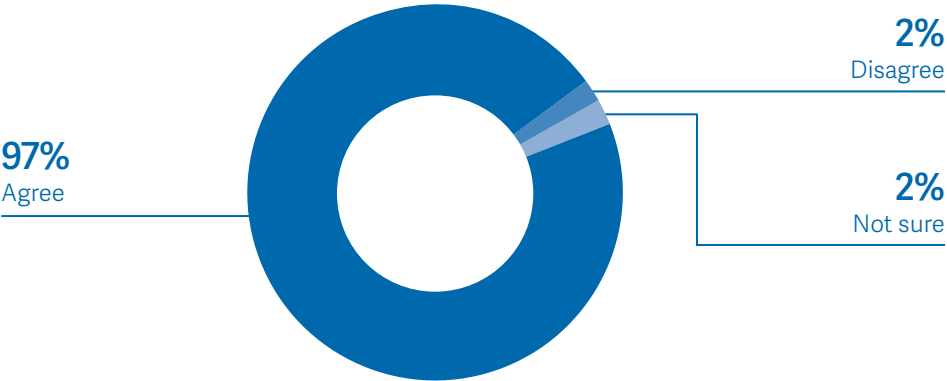


Be ready for sudden resource constraints; for example, a key team player leaves, a natural disaster occurs or a vendor fails without warning. (Often those who perform the most critical tasks are already heavily tasked and risk causing sudden delay or failure.)

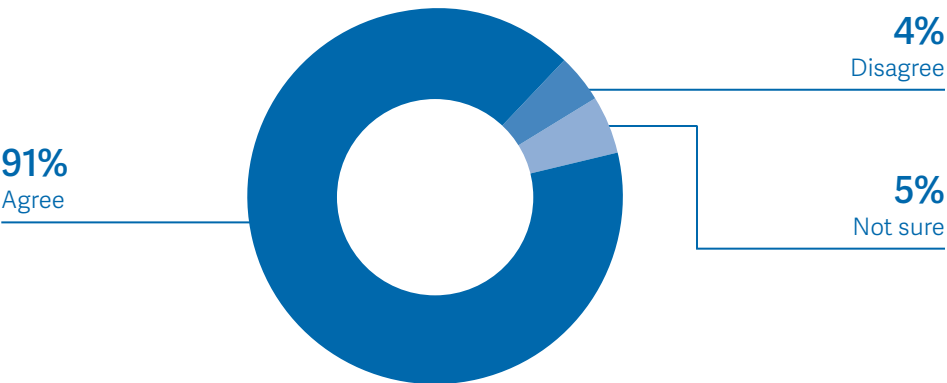




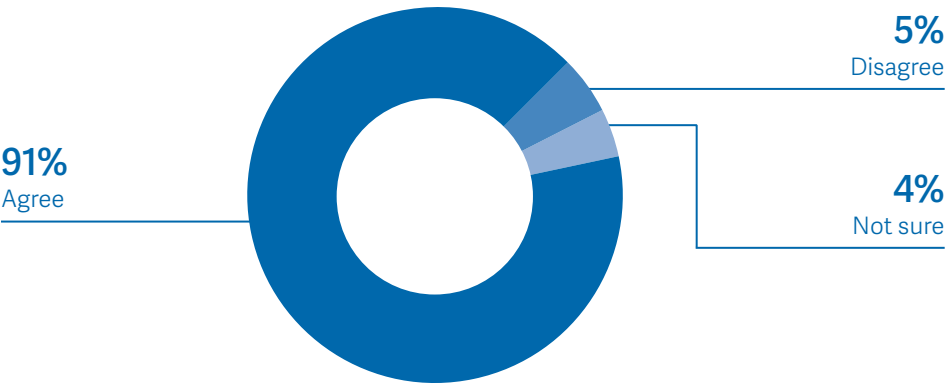
Project estimates and forecasts are never 100 percent accurate. Don't bet against inaccuracy in your estimates and forecasts. Manage risk every day, week or month as needed.



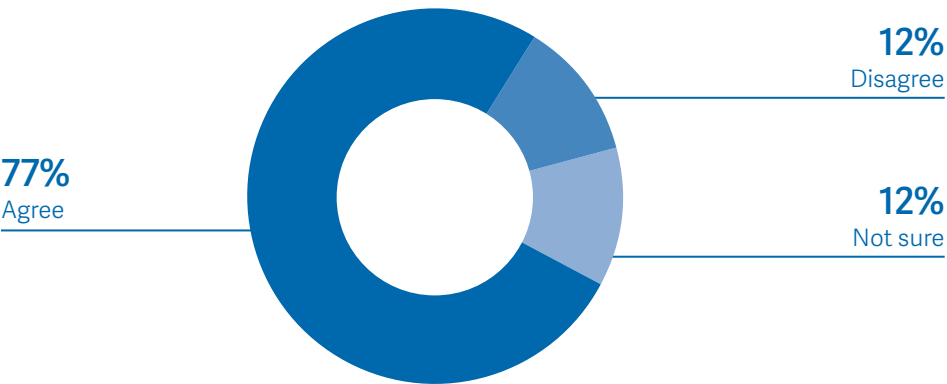
Spend time and effort on team building. This is money well spent when you consider the alternative to the project.



Manage your supply chain projects to enable a smooth handoff to someone else. These projects create visibility and allow easy project turnover if you are pulled off a project and need to hand off the project to another individual.

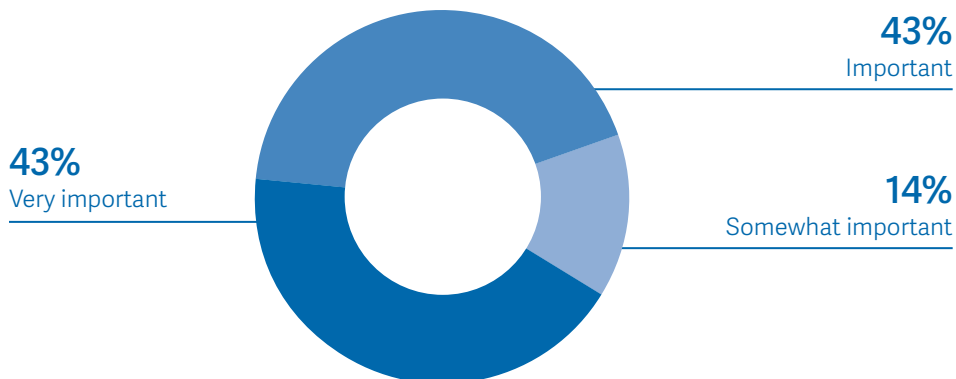


Find or develop a supply chain project management guide or playbook with senior management support. Don't keep reinventing the wheel. Supply chain project procedures, budgeting and organizational project management maturity do not benefit as they should without such a resource.

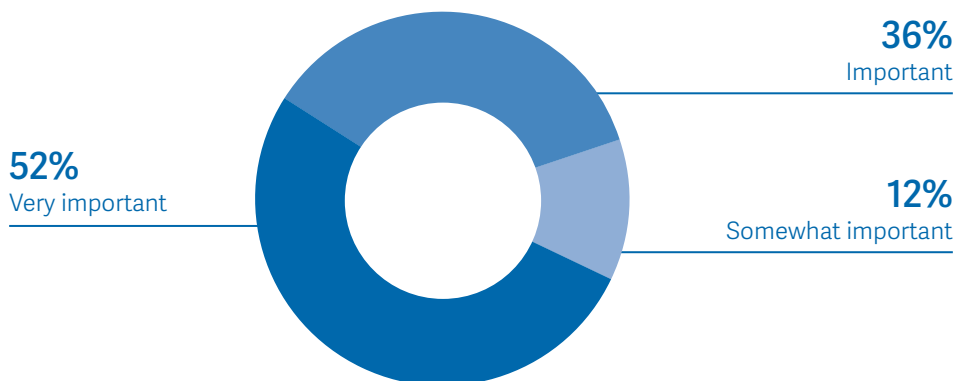


## 2.Importance of Project Management

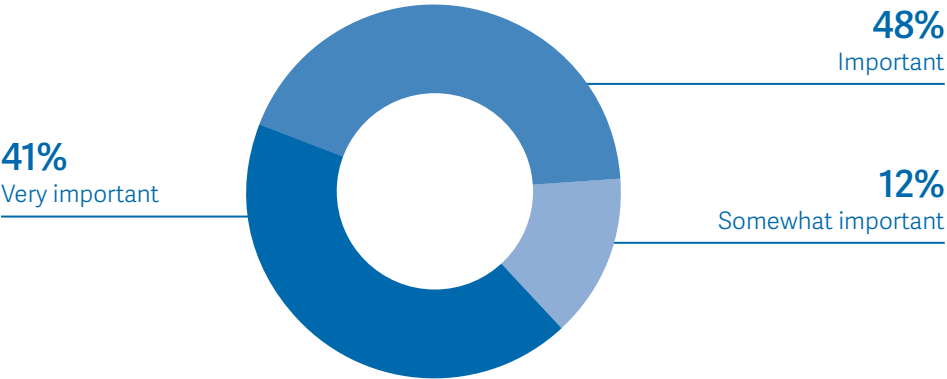
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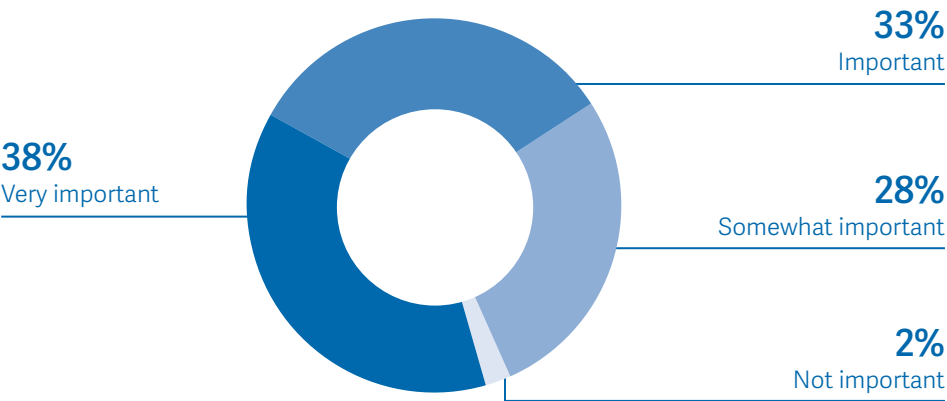
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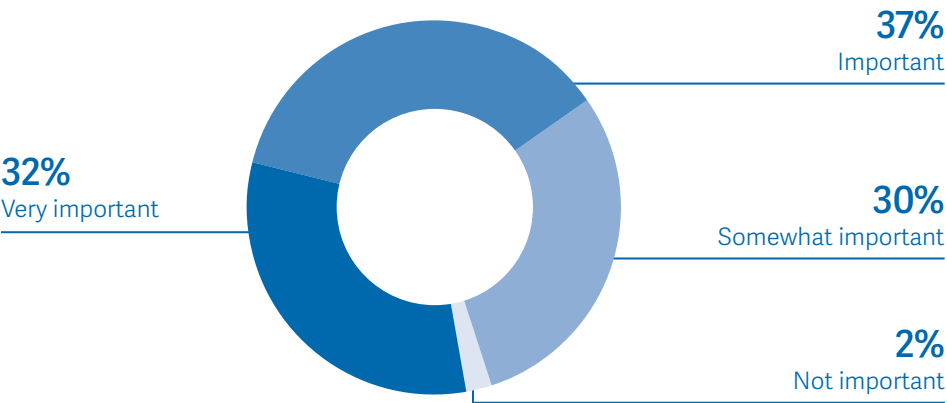
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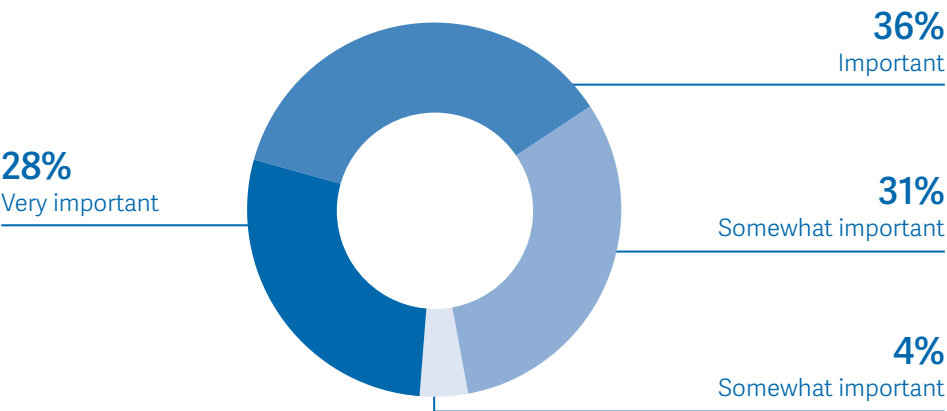
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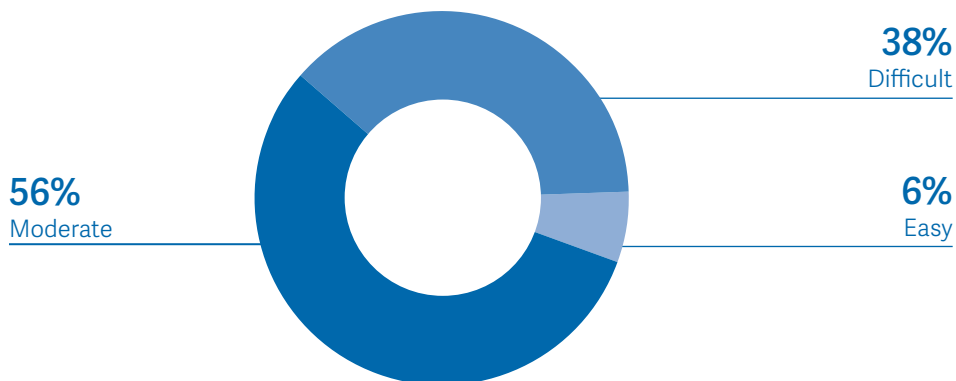


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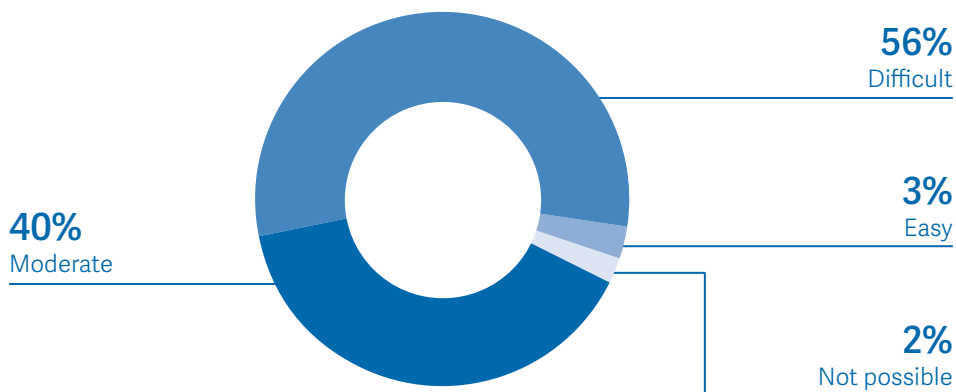


### 3. Implementation Ease/Difficulty

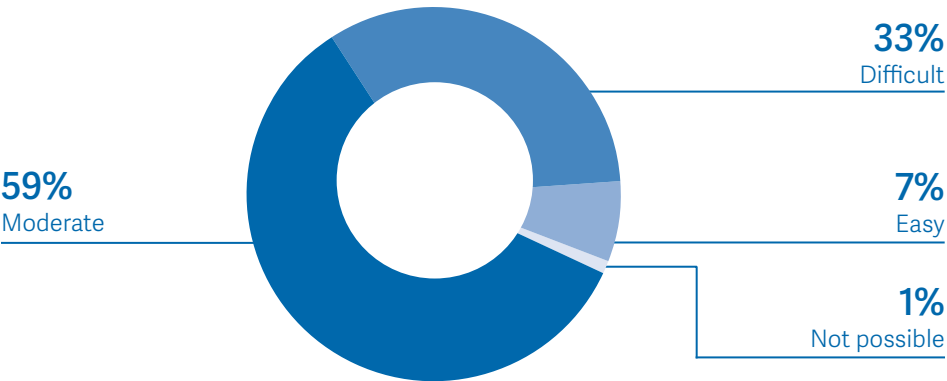
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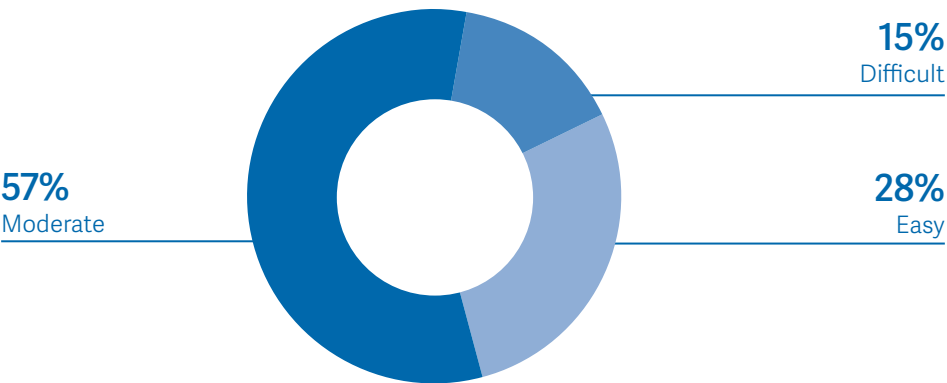
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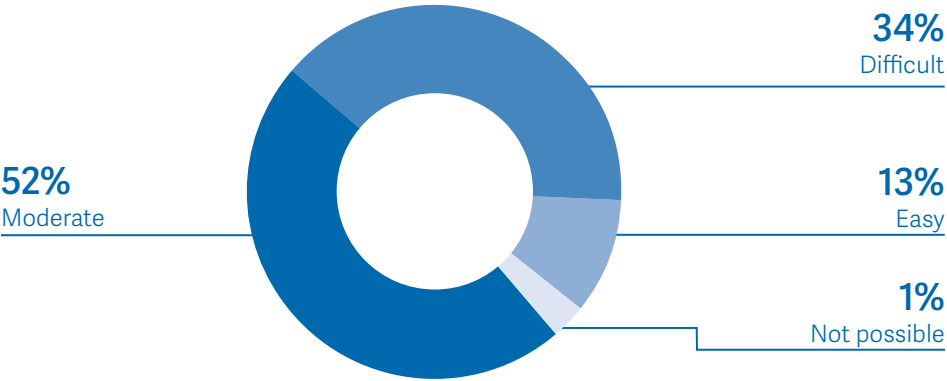


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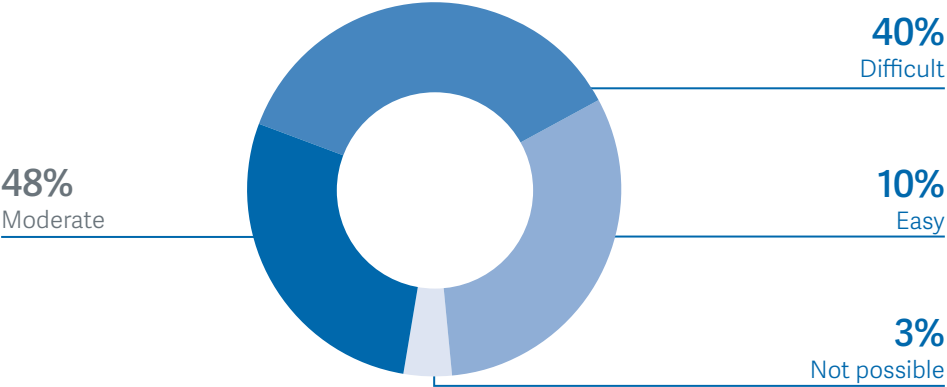




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#### 4. Challenging Processes

Respondents were asked, of the five process phases, to rank them in order of which phase is the most challenging to successfully complete.

##### Initiation

Least challenging	2	3	4	Most challenging
27%	24%	22%	16%	12%

##### Planning

Least challenging	2	3	4	Most challenging
3%	17%	26%	29%	25%

##### Execution

Least challenging	2	3	4	Most challenging
1%	5%	3%	35%	36%

##### Monitoring and Control

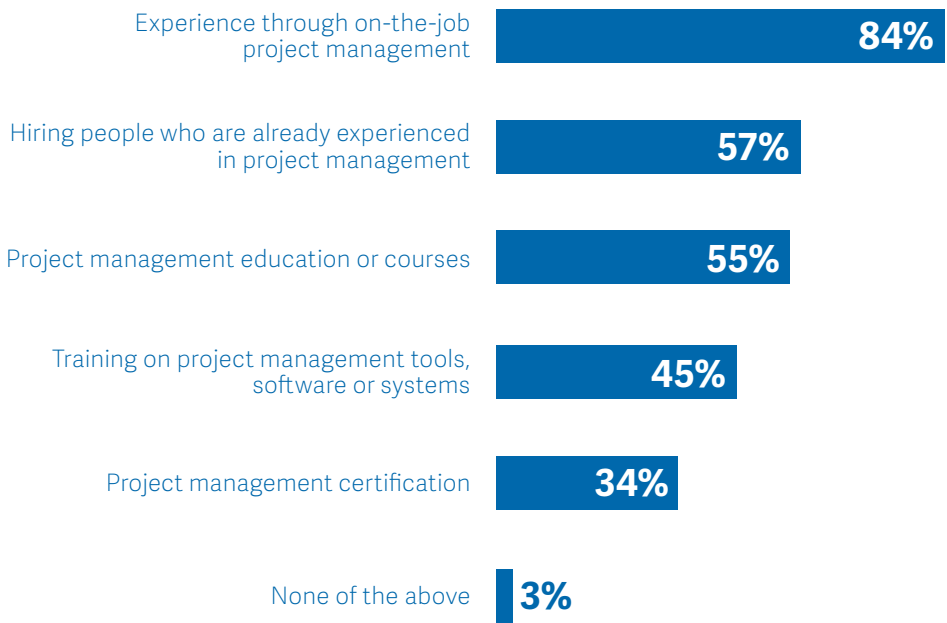
Least challenging	2	3	4	Most challenging
1%	14%	35%	36%	13%

##### Closing

Least challenging	2	3	4	Most challenging
29%	20%	25%	17%	10%

**How project management skills are acquired**

Respondents were asked how people in their organizations acquire supply chain project management skills.



# RESPONDENT PROFILE

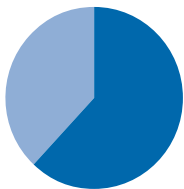
Survey respondents are fairly evenly represented in years of experience in project management.

>1/2

of respondents reported they do not have a department or business unit with a full-time supply chain project manager. Ten percent are unsure if they do or not.



indicated they have participated in a supply chain project that incorporated project management within the last 12 months



62% of respondents indicated significant stress in their role in a supply chain project.

12,500

members and customers were invited by APICS to participate in the survey in November 2012. The survey results reflect an approximate 5 percent margin of error at a 95 percent confidence level.

84%

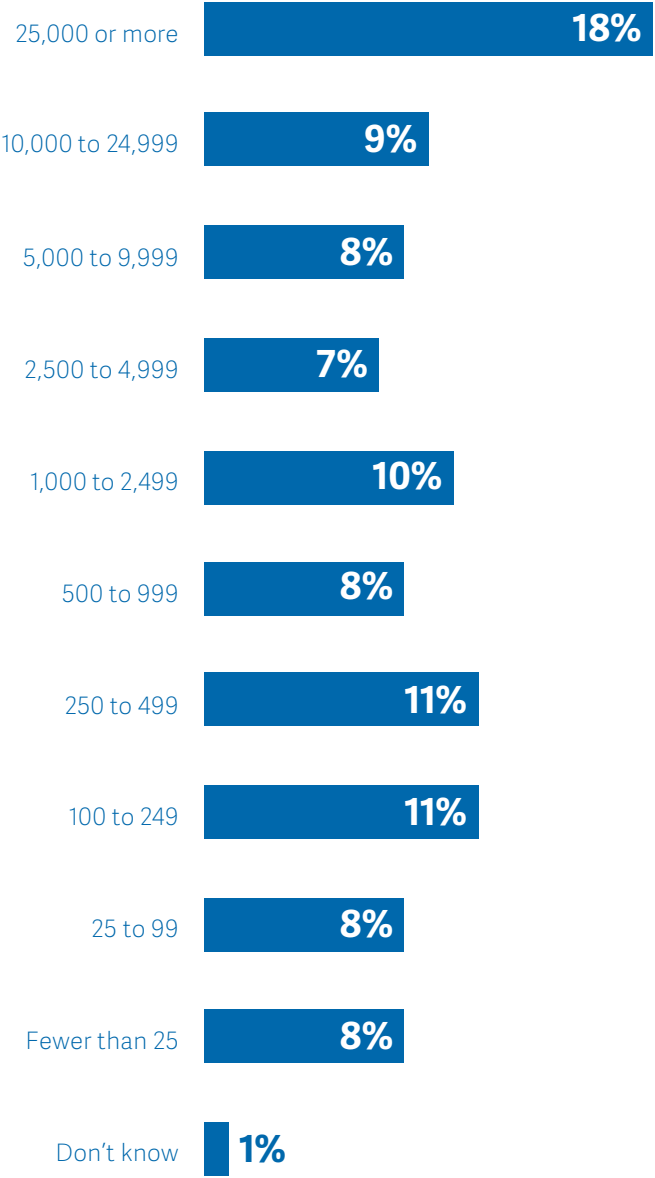
of respondents said their organization helps employees acquire supply chain project management skills through on-the-job project management experience, while 57 percent of organizations hire people who are already experienced in project management .

~22%

of respondents work at organizations that employ between 100 and 499 employees, and 17 percent of respondents work at organizations with 25,000 or more employees.

**Number of employees in company**

Respondents were asked how many employees their company has.



# GLOSSARY



## GLOSSARY

### **Critical path**

Critical path is the longest sequence of activities through a network. The critical path defines the planned project duration.

### **Project**

An endeavor with a specific objective to be met within predetermined time and dollar limitations and that has been assigned for definition or execution.

### **Project costing**

An accounting method of assigning valuations that is generally used in industries where services are performed on a project basis. Each assignment is unique and costed without regard to other assignments. Examples are shipbuilding, construction projects and public accounting firms. Project costing is opposed to process costing, where products to be valued are homogeneous.

### **Project life cycle**

In project management, a set of project phases (objectives definition, requirements definition, external and internal design, construction, system test, and implementation and maintenance), whose definition is determined by the needs of those controlling the project.

### **Project Management Body of Knowledge (PMBOK®)**

All the knowledge within the project management profession; this includes all published and unpublished material, knowledge that rests with practitioners and academics and practices that range from traditional to innovative. Access the PMBOK.

### **Project management**

The use of skills and knowledge in coordinating the organizing, planning, scheduling, directing, controlling, monitoring and evaluating of prescribed activities to ensure that the stated objectives of a project, manufactured good or service are achieved.

### **Project management team**

In project management, the personnel assigned to a project who are directly involved in management activities.



**Project network**

A diagram showing the technological relationships among activities in a project.

**Project plan**

In project management, a document that has been approved by upper management that is to be used in executing and controlling a project. It documents assumptions, facilitates communication and documents the approved budget and schedule. It may exist at a summary or a detailed level.

**Project production**

Production in which each unit or small group of units is managed by a project team created especially for that purpose.

**Project risk management**

In project management, a systematic process of controlling project risk. It includes maximizing the likelihood and effect of positive events and minimizing the likelihood and effect of negative events.

**Project scope**

In project management, the work required to create a product with given features and options.

**Project summary work breakdown structure**

A work breakdown structure that is developed down to the subproject level of detail. *See: work breakdown structure.*

**Project team**

An inclusive term incorporating the workers assigned to the project, the project managers and sometimes the project sponsor.

**Project team directory**

A list of team member names, roles and communication information.

**Work breakdown structure**

In project management, a hierarchical description of a project in which each lower level is more detailed.

## **APICS Supply Chain Council Research**

For more insider information explore APICS Supply Chain Council research topics at [apicsscc.org](http://apicsscc.org).

### **Reports are available on:**

- Chronic disruption
- Project management
- Remanufacturing
- Risk management
- Supply chain strategy
- Sustainability
- And other topics

If you have comments or questions,  
contact [askapics@apics.org](mailto:askapics@apics.org).

## ABOUT APICS SUPPLY CHAIN COUNCIL

APICS SCC is a nonprofit organization that advances supply chains through unbiased research, benchmarking and publications. APICS SCC maintains the Supply Chain Operations Reference (SCOR) model, the supply chain management community's most widely accepted framework for evaluating and comparing supply chain activities and performance. APICS SCC enables corporations, academic institutions and public sector organizations to address the ever-changing challenges of managing a global supply chain to elevate supply chain performance. APICS SCC is part of APICS, the premier professional association for supply chain and operations management.

Visit [apicsscc.org](http://apicsscc.org) to learn more.