

**CONTROL  
ENGINEERING**



Audience Research

**Supervisory Control & Data  
Acquisition Software Report**  
**October 2023**

**CFE Media**  
and Technology™

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# Introduction

## Objective

The Supervisory Control & Data Acquisition Software Study was conducted by *Control Engineering* to obtain insights from automation engineering professionals on purchasing, specifying and upgrading SCADA software.

## Sample

The sample for this study was selected from qualified subscribers of *Control Engineering* media with valid email addresses who are involved in the purchase or specification of SCADA, historian, alarm management or data acquisition systems.

## Methodology

Subscribers were sent an email from *Control Engineering* asking them to participate in this study. The email included a URL linked to the questionnaire.

- Data collected: July 28, 2023, through August 7, 2023
- Number of respondents: 135
- Margin of error: +/-8.4% at a 95% confidence level
- Incentive: Drawing for one \$100 Amazon.com eGift Card

# Summary of Findings

- Fifty-one percent of automation engineering professionals regularly buy, specify or perform system integration with supervisory control and data acquisition (SCADA) software; 30% occasionally and 19% rarely.
- More than half (55%) of respondents generally purchase SCADA software and hardware separately, while 37% bundle them together.
- For 71% of respondents, SCADA software is used to enable automation and control applications. Other uses include to act as human-machine interface (HMI, 47%), to operate mostly process-related applications (45%) and to operate hybrid application (45%).
- SCADA is helping organizations with preventive/predictive maintenance (64%) and avoiding downtime (60%). Thirty-nine percent of respondents see SCADA as a great return on investment.
- The top features respondents desire in their next SCADA software that are nonexistent or inadequate in their current SCADA software are easy data sharing (53%), universal connectivity (52%), easy conversion from prior software (50%), analytics (50%), easy programming (49%) and automated transfer of screen design to other devices (49%).
- According to respondents, SCADA should be upgraded before software is not supported (79%) and/or before unexpected downtime prevented by advanced software (64%). However, only half of respondents report SCADA software being upgraded before software is not supported, and 39% said after software is not supported.
- Key features of SCADA software packages that make an upgrade worth the investment, according to respondents, include built-in communications, easier connections to other devices, software, etc. (67%); better integration with distributed control systems (DCS), process control software or other systems (59%); and analytics (53%).
- Valuable advice to consider when upgrading SCADA includes reducing HMI/SCADA screen cognitive load for the user, using high-performance HMI techniques, and getting help from a SCADA system integrator.
- Siemens, Emerson and GE Digital are the top three suppliers of SCADA software currently used by respondents; however, if given the opportunity to choose, respondents would prefer Siemens, Inductive Automation and Emerson as their top three.

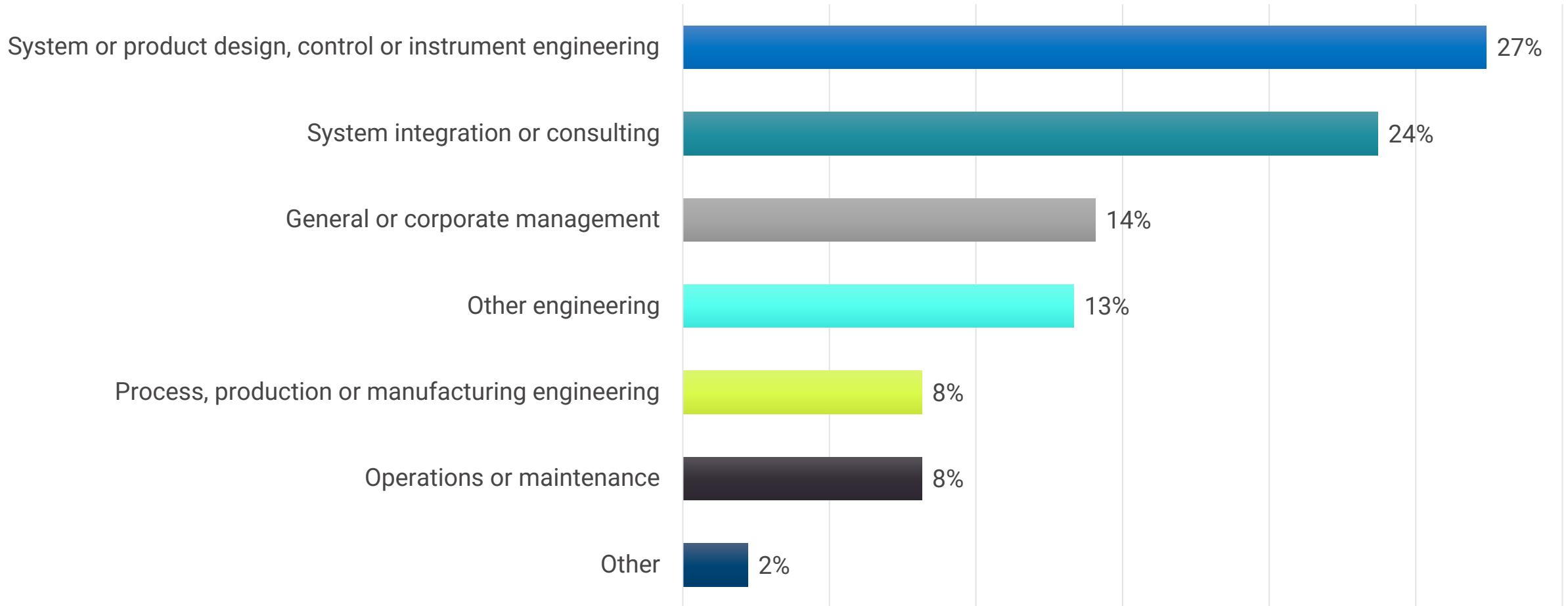


Supervisory Control & Data Acquisition Software Report

# Respondent Background

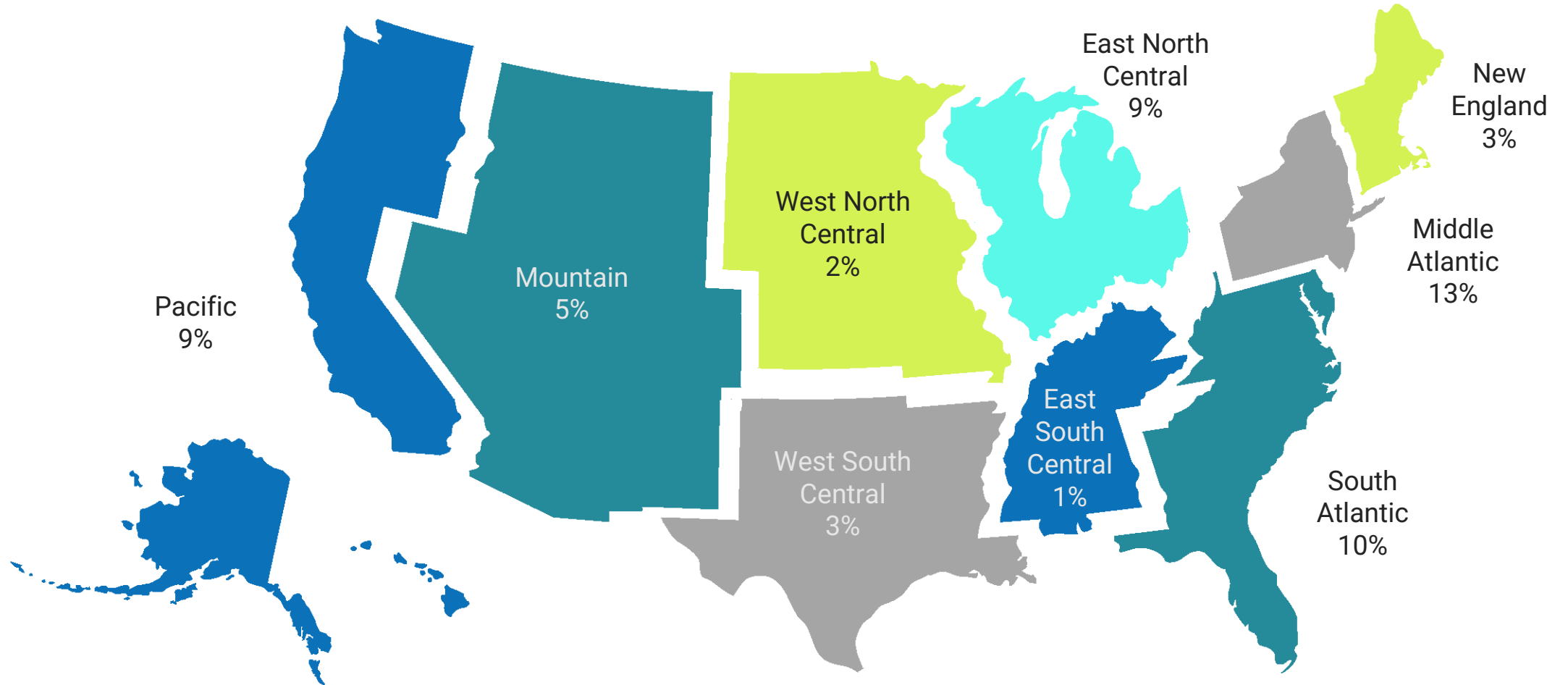
# Primary Job Function

What is your primary job function?



n=135

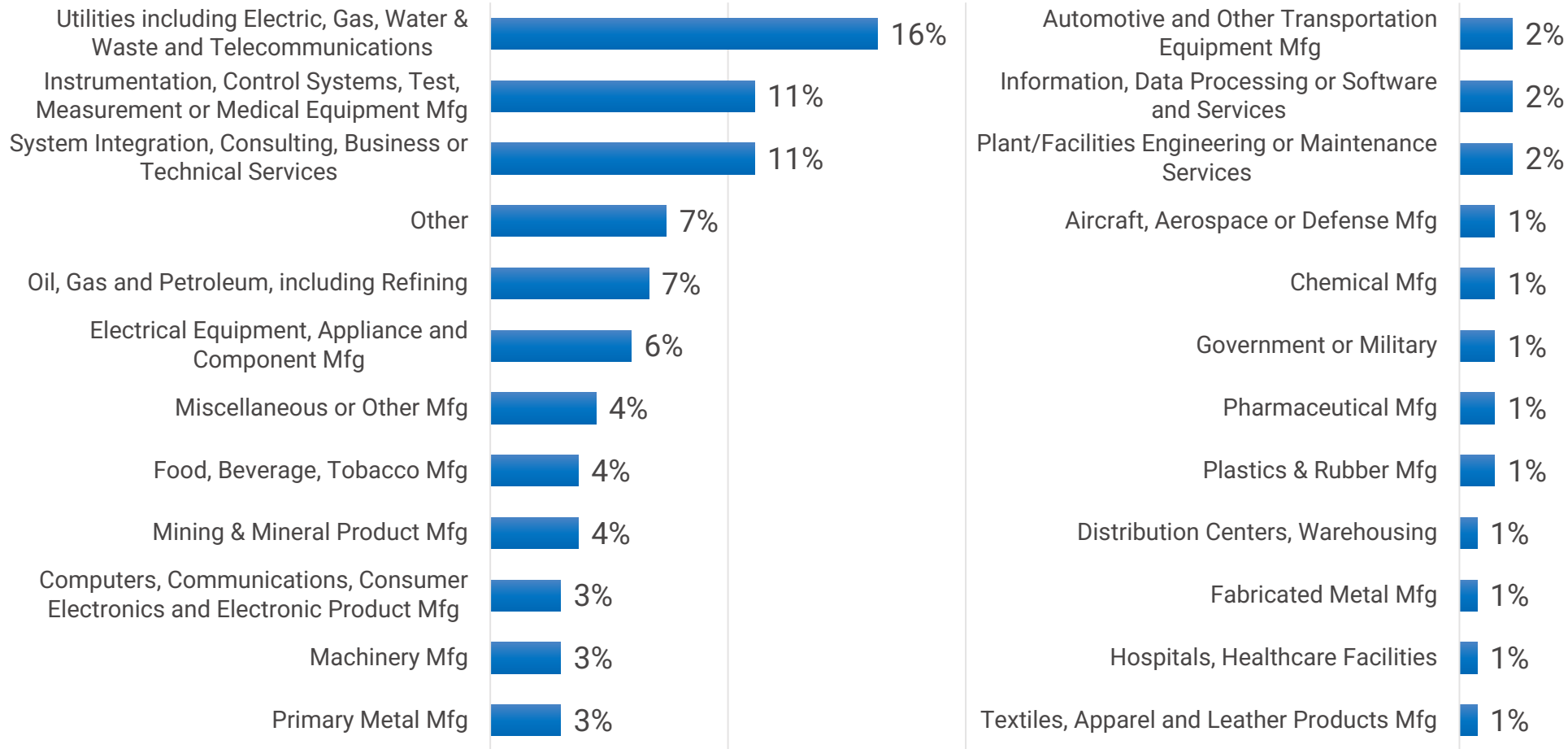
# U.S. Location



n=135

# Primary Business

## What is the primary business at your location?

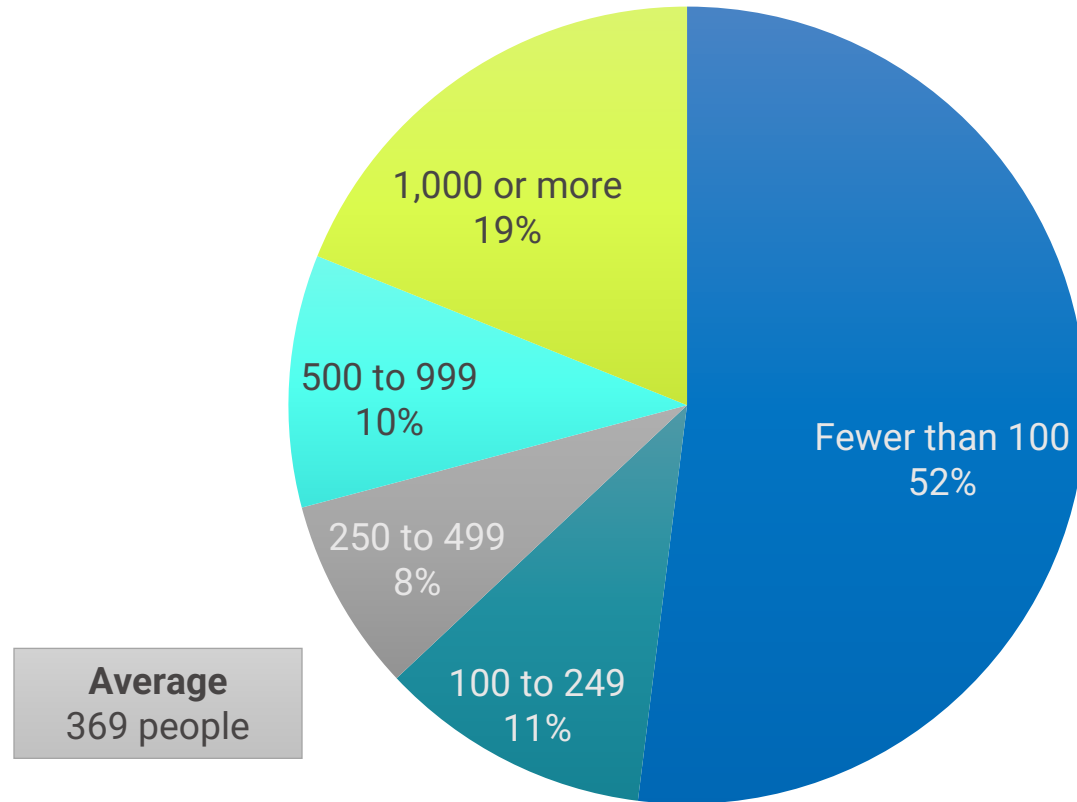


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# Facility Size

How many people work at your location?



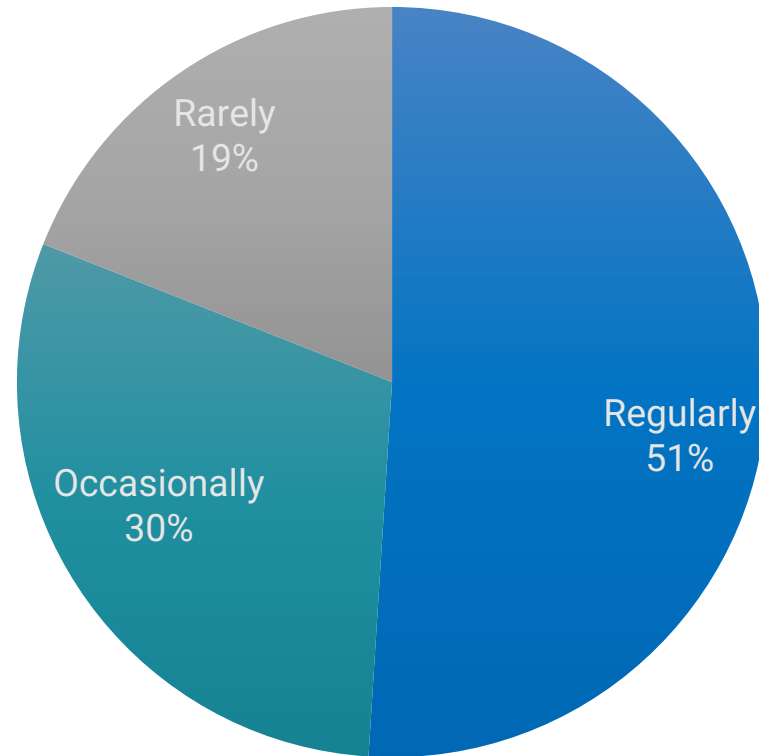
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# Buying & Specifying SCADA Systems

# How Often End Users Are Involved With SCADA Software

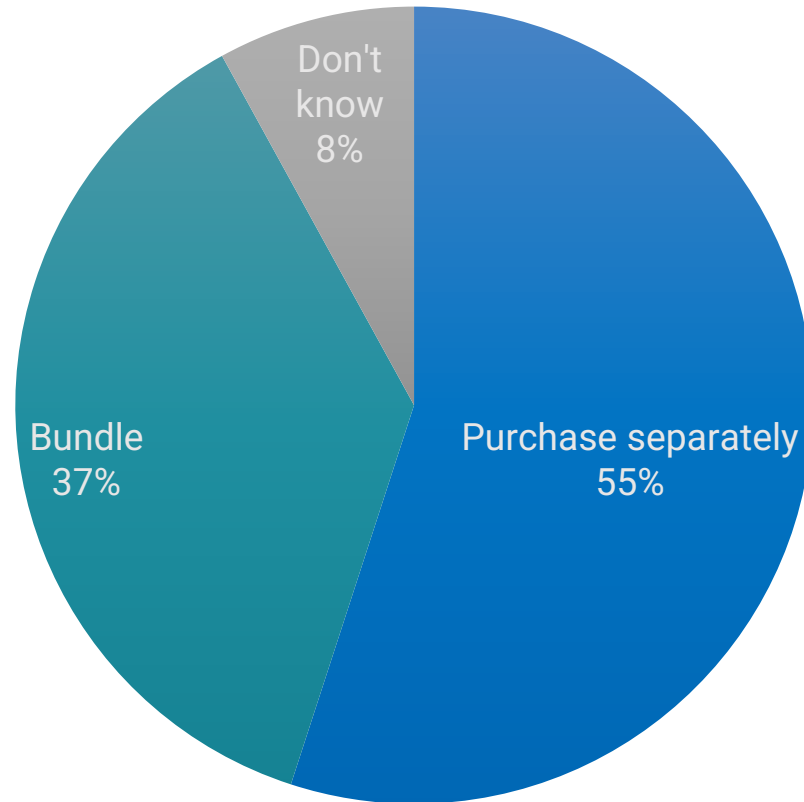
How often do you buy, specify or perform system integration with supervisory control and data acquisition (SCADA) software?



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# How SCADA Software & Hardware Are Purchased

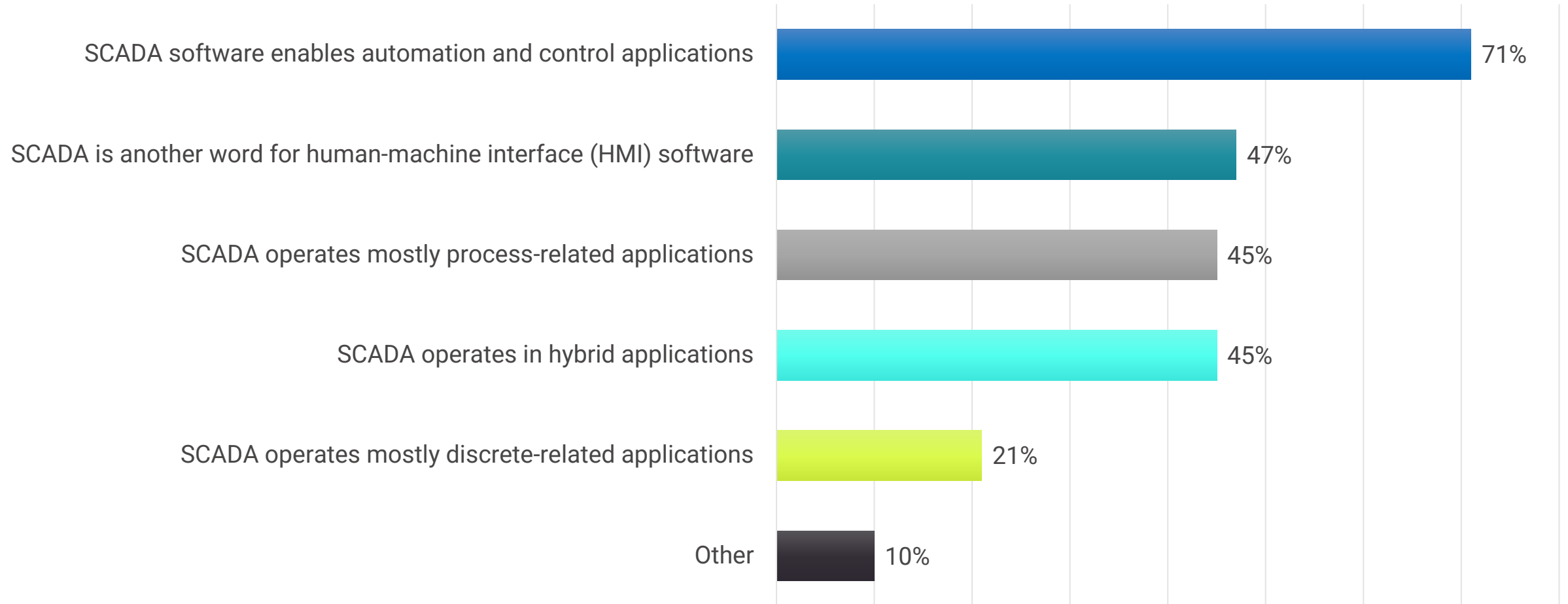
Do you generally bundle SCADA software and hardware or purchase separately?



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# How SCADA is Used

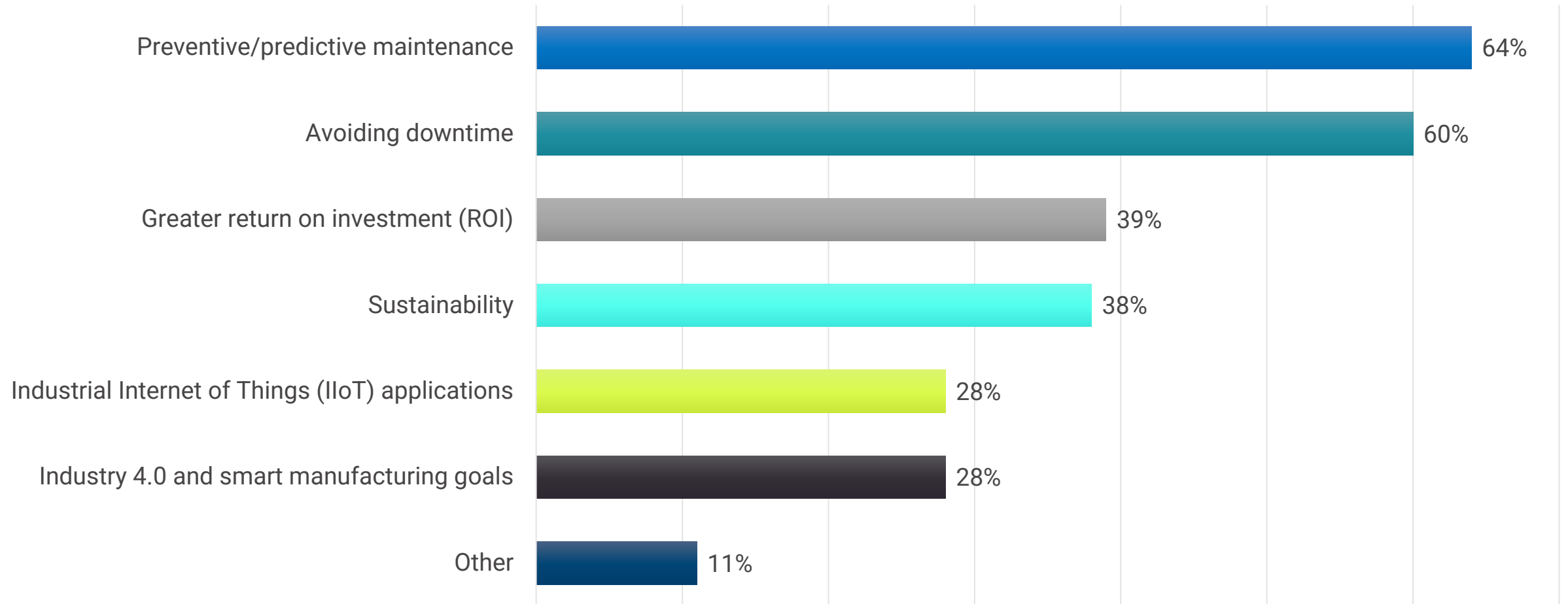
## How do you use SCADA?



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# How SCADA Currently Helps Organizations

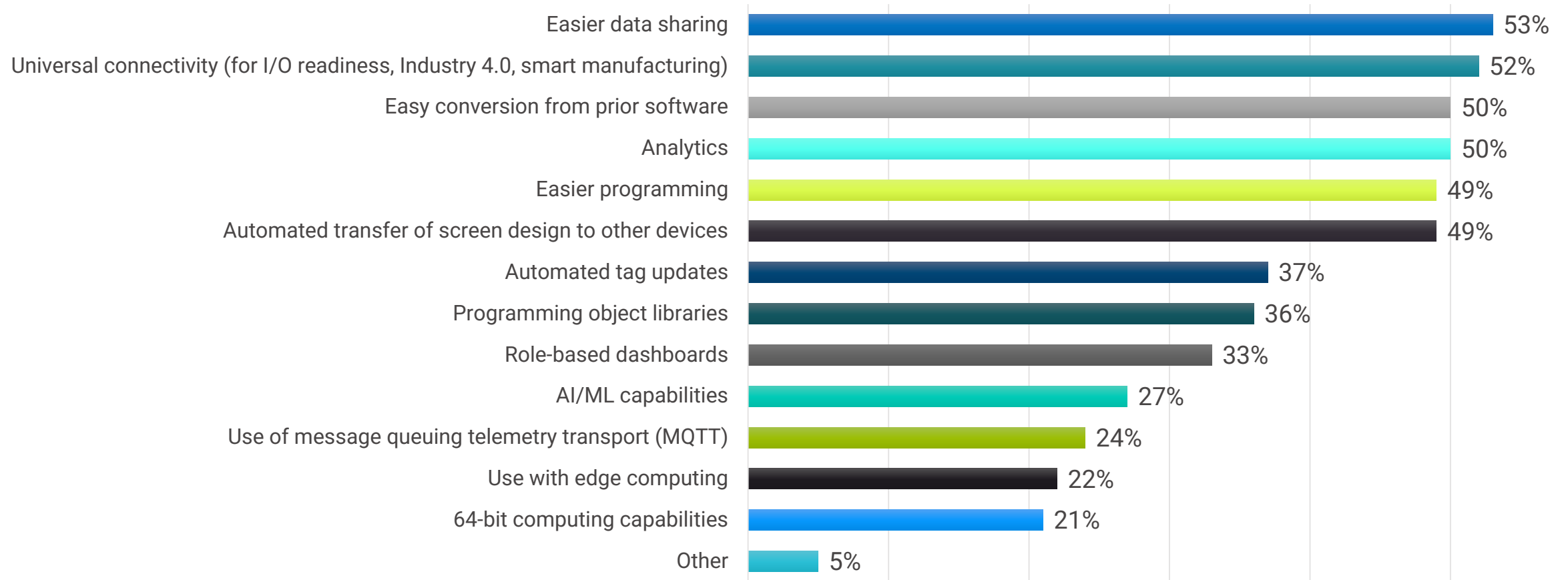
Finish this sentence: "SCADA is helping my organization with..."



n=116

# Desired SCADA Software Features

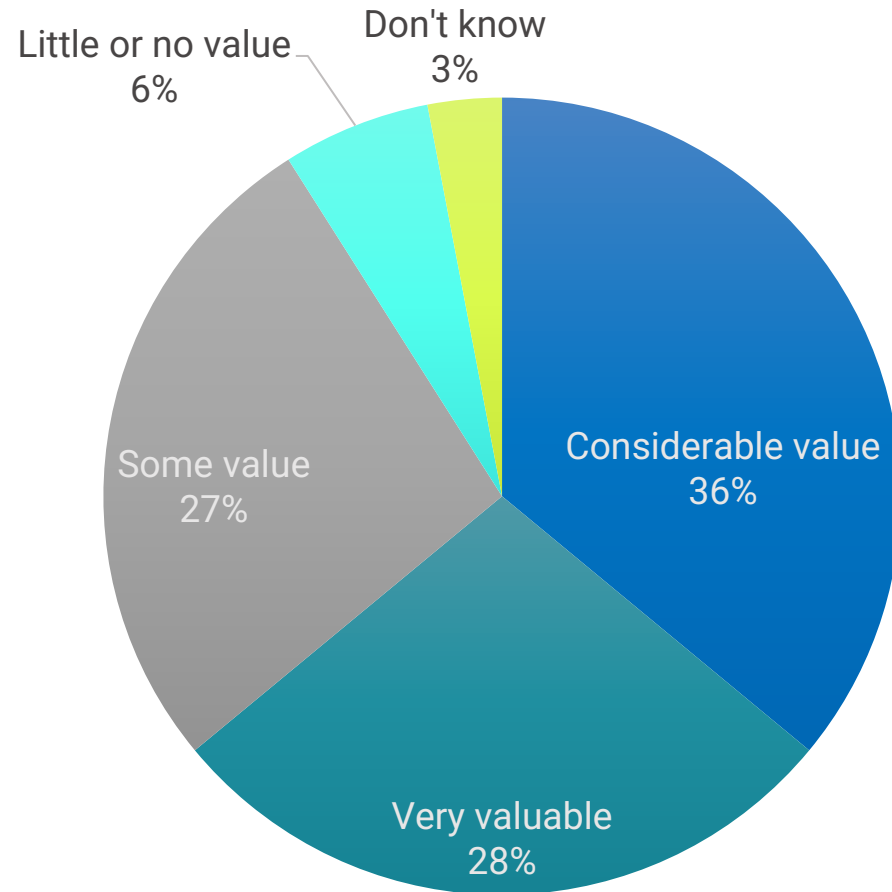
What features do you want in your next SCADA software that you don't have (or are inadequate) in current SCADA software?



n=135

# Value of an Updated SCADA Platform

What value is an updated SCADA platform in upskilling and in efforts to attract new talent?

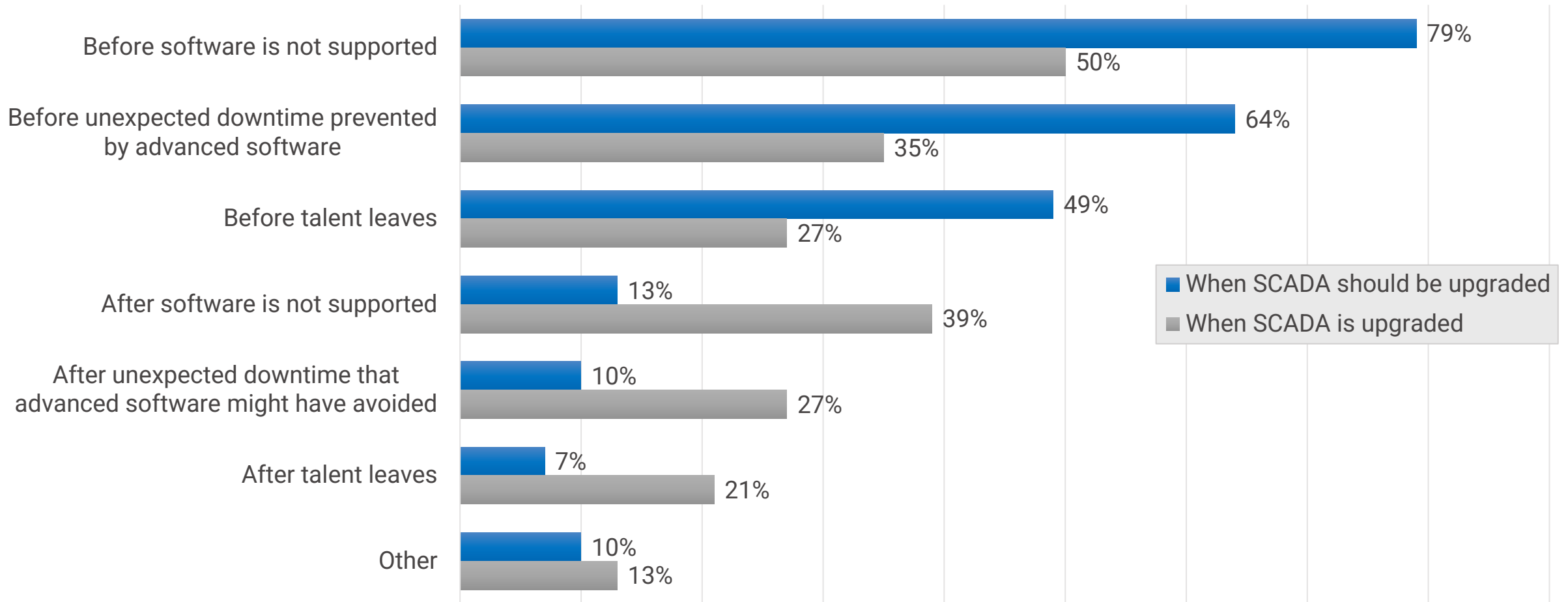


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# Upgrading SCADA

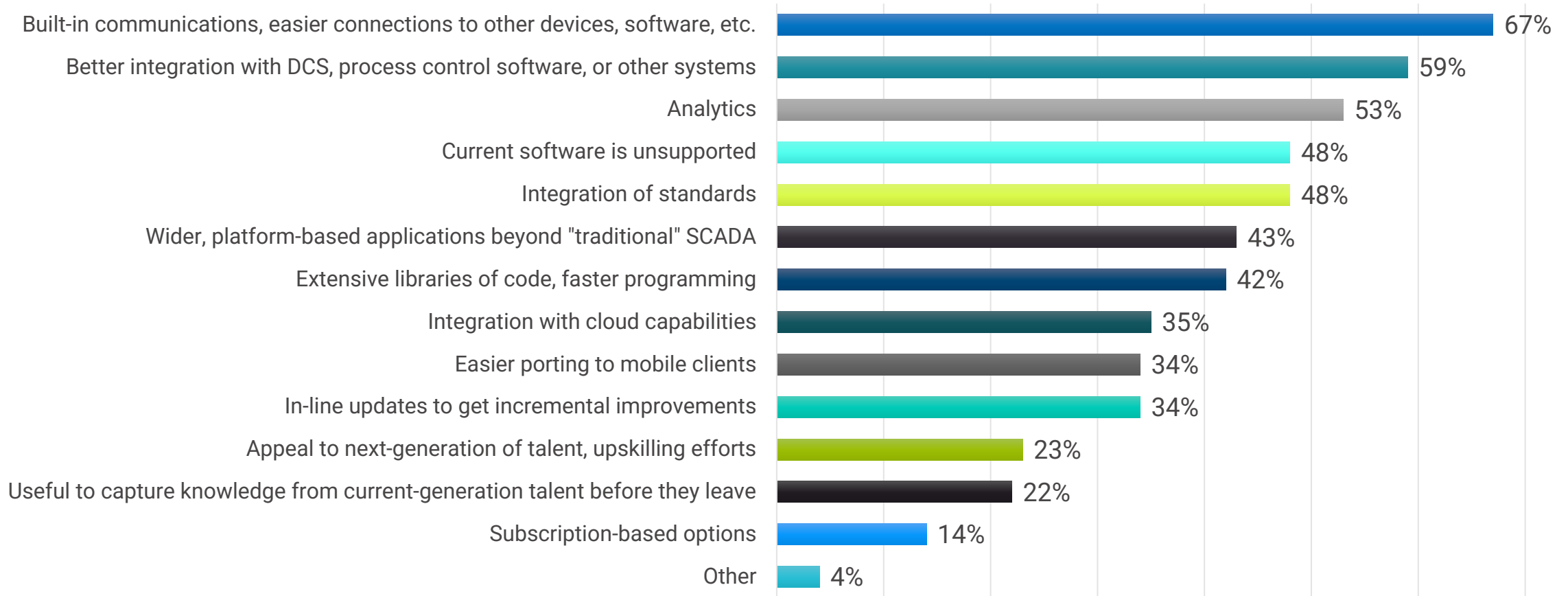
### When should you upgrade SCADA? When do you upgrade SCADA?



n=135

# What Makes a SCADA Upgrade Worth the Investment

**What are key traits, features or justifications of SCADA software packages that make an upgrade worth the investment?**

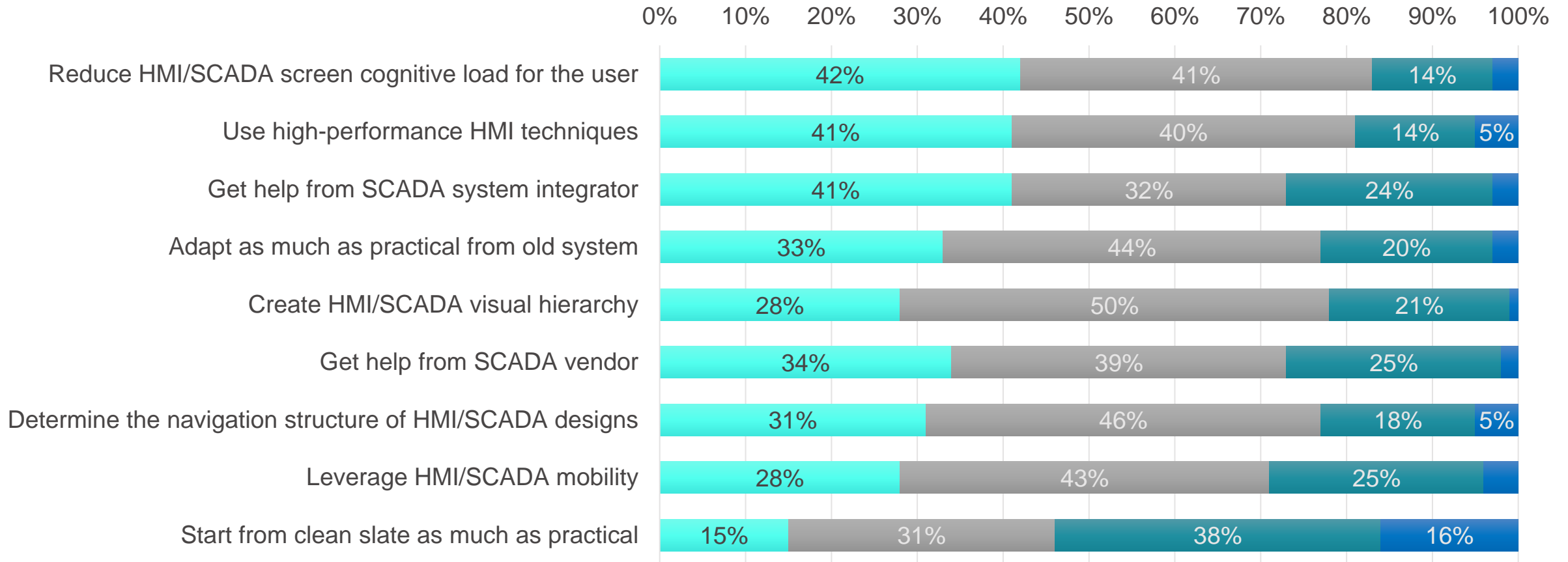


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# Valuable Advice When Upgrading SCADA

Rate the value of the following SCADA upgrade advice in your experiences:

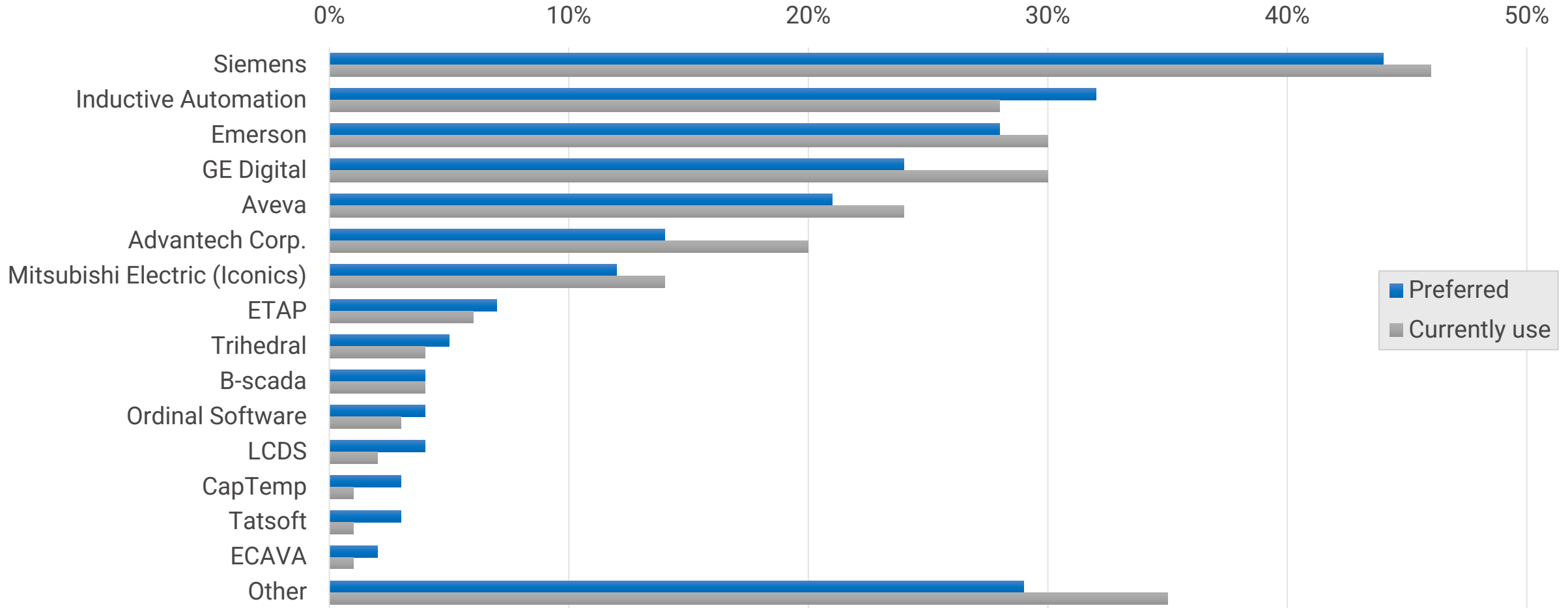
■ 4 - Great value ■ 3 ■ 2 ■ 1 - Little value



n=116

# SCADA Software Preferred vs. In Use

SCADA software/suppliers



n=135

# Additional Resources

Thank you for downloading the *Control Engineering* Supervisory Control & Data Acquisition Software report. Use the links below to access additional information on automation engineering hot topics:

- [AI and Machine Learning](#)
- [Control Systems](#)
- [Digital Transformation](#)
- [Edge and Cloud Computing](#)
- [Industrial Networking](#)
- [Mechatronics and Motion Control](#)
- [Motors and Drives](#)
- [Process Instrumentation and Sensors](#)
- [System Integration](#)
- [New Product for Engineers database](#)
- [Upcoming webcasts](#)
- [On-demand webcasts](#)
- [Ebooks](#)
- [Newsletters](#)

[www.controleng.com](http://www.controleng.com)

The screenshot shows the Control Engineering website homepage. At the top, there is a navigation bar with the logo and menu items: TOPICS, NEW PRODUCTS, ONLINE TRAINING, RESEARCH, RESOURCES, SYSTEM INTEGRATORS, AWARDS, and ADVERTISE. A search bar and a subscribe button are also present. The main content area is divided into sections. The 'FEATURED CONTENT' section includes three articles: 1. 'i3 CONTROL: A Total System for Total Control' with a video thumbnail showing a man in front of a control room. 2. 'How to integrate process, digital technologies to increase petrochemical factory output' with a thumbnail of a control room. 3. 'Weftec Recap: Water safety, efficiency is mission critical' with a thumbnail of industrial equipment. The 'AI AND MACHINE LEARNING' section features an article titled 'Making AI smarter with an artificial, multisensory...' with a thumbnail of a person wearing white gloves. To the right of this article is a graphic showing several STMicroelectronics chips and the text 'life.augmented'.