Interpretive Guidance Project: What We Know

CMMI User's Conference

November 18, 2003

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Topics

- Project Overview and Status
- Preliminary Report Summary
- Questions

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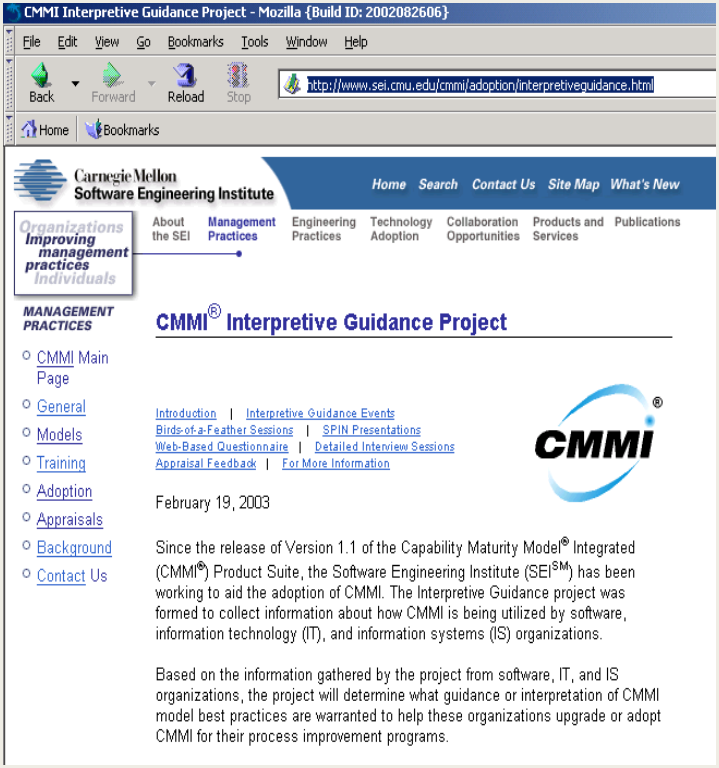
Interpretive Guidance Objectives

To understand and address the issues that software organizations have when using CMMI

To allow current SW-CMM users to more easily upgrade to CMMI

To eliminate as many perceived barriers to CMMI adoption as possible

To make CMMI adoption easy



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Project Status Highlights – Phase I

Phase I activities have been completed.

Collected comments from Birds-of-a-Feather sessions in conjunction with conferences and SPIN meetings

Formed expert group

Received responses from Web-based questionnaire

Received very limited feedback from SCAMPI℠ appraisals

Performed preliminary analysis of issues

Released Interpretive Guidance Preliminary Report (available on CMMI Website)

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Project Status Highlights – Phase II

Purpose is to analyze issues to determine:

- if interpretive guidance is needed
- where interpretive guidance is appropriate
- what form interpretive guidance will take

Phase II activities just getting started.

At a minimum we will

- perform detailed analysis of the issues
- conduct detailed interviews to investigate issue areas further
- meet with groups at SEI to share analysis and to understand how their activities support/address identified issues
- present preliminary data at conferences to make sure that the data is correct and our analysis is accurate
- produce a final report to document our findings and conclusions
  - interpretive guidance for software organizations
  - summary and conclusions from this task

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Preliminary Report

Describes the data-collection activities from both Birds of a Feather (BoF) sessions and Web-based questionnaire efforts

Includes summaries of the data collected through August 2003

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BoF Sessions Attended

CMMI Users Group
ICSPI Conference
New York City SPIN
QAAM/QAI Conference on Managing Software Excellence
PROFES 2002
Acquisition of SW-Intensive Systems
SEPG 2003
Southern California SPIN meeting
San Diego SPIN meeting
bITa Europe Conference
NDIA Transition Workshop
STC 2003
European SEPG Conference
Practical Software Measurement

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Web-Based Questionnaire

Notified ~7,000 people

- 4,000 people with direct internet access
- 3,000 people that the questionnaire was available
- placed an announcement on the SEI Web site

The numbers of responses received for the sections of the questionnaire were:

- 668 Background and Context (required section)
- 587 Global Issues
- 339 Generic Goals and Generic Practices
- 182 Specific Process Areas

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Background

Nine questions were asked to understand the background of the respondent

Some questions were specific to the person filling out the questionnaire

Other questions were providing background information about the organization

Highlights are presented in the following slides

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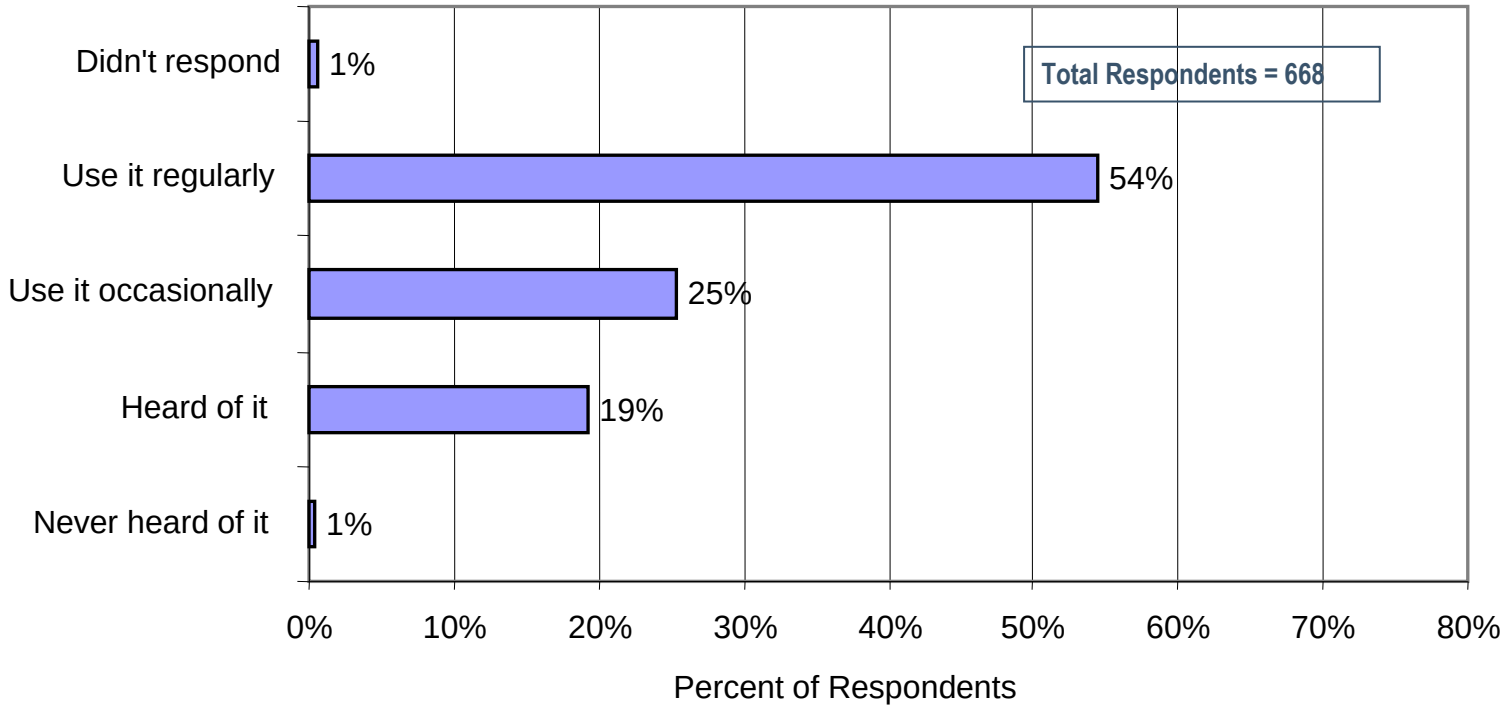
How would you best describe your familiarity with CMMI?



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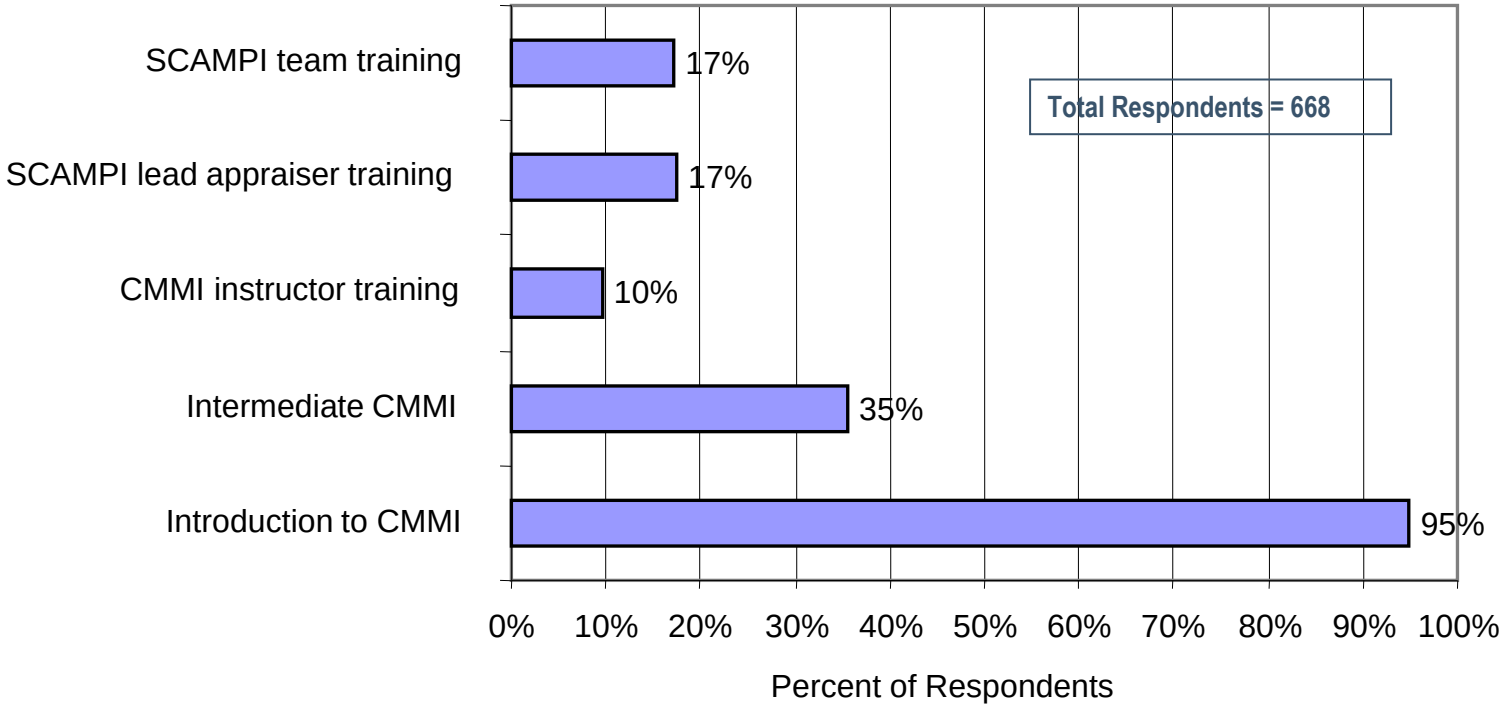
What if any CMMI training have you received?

(Multiple responses were permitted)



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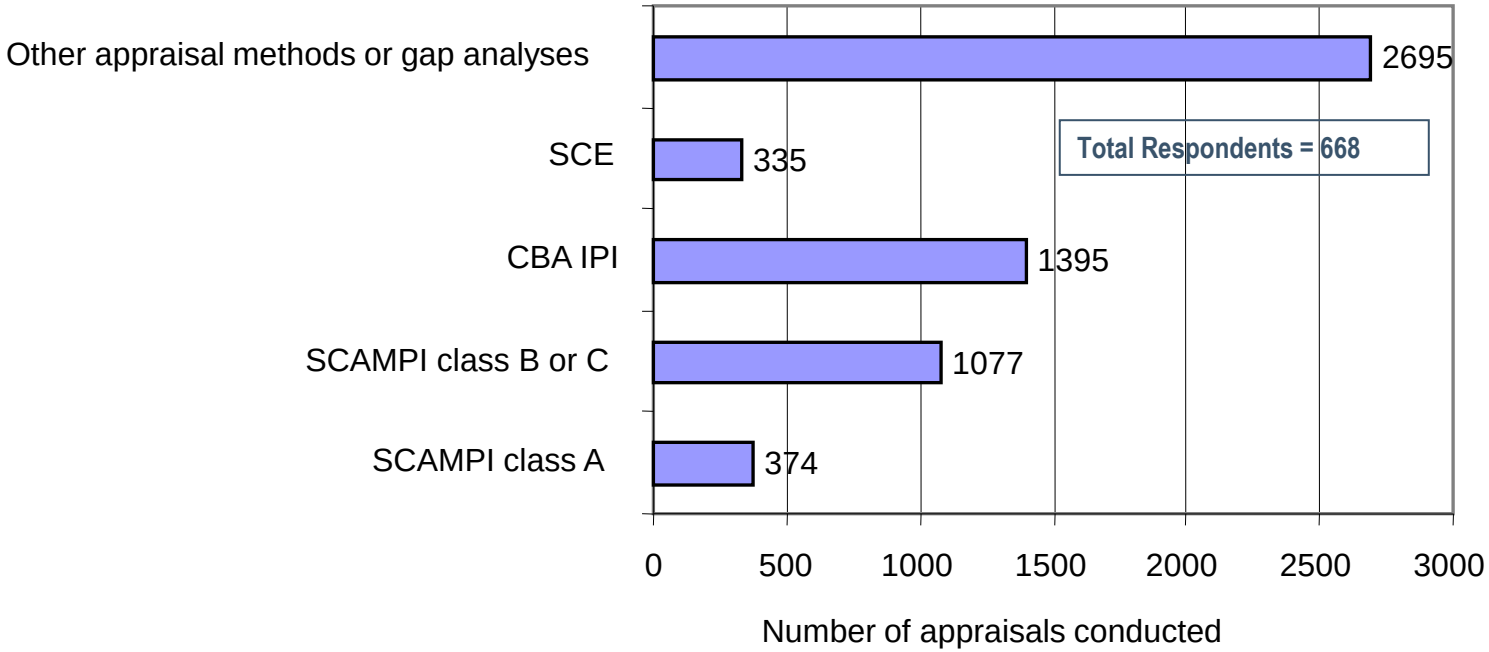
Approximately how many appraisals, if any, have been conducted in your organization since June 2000?

(Multiple responses were permitted)



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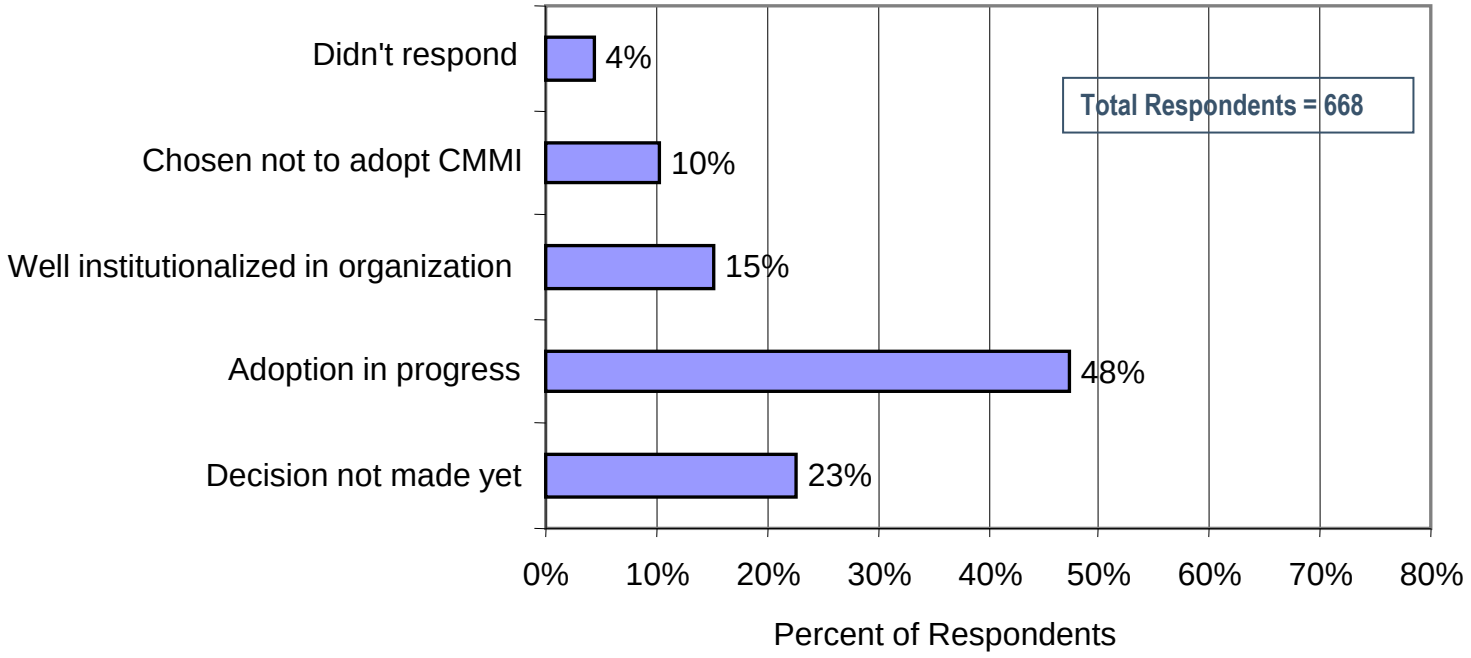
Has your organization made a decision about adopting CMMI?



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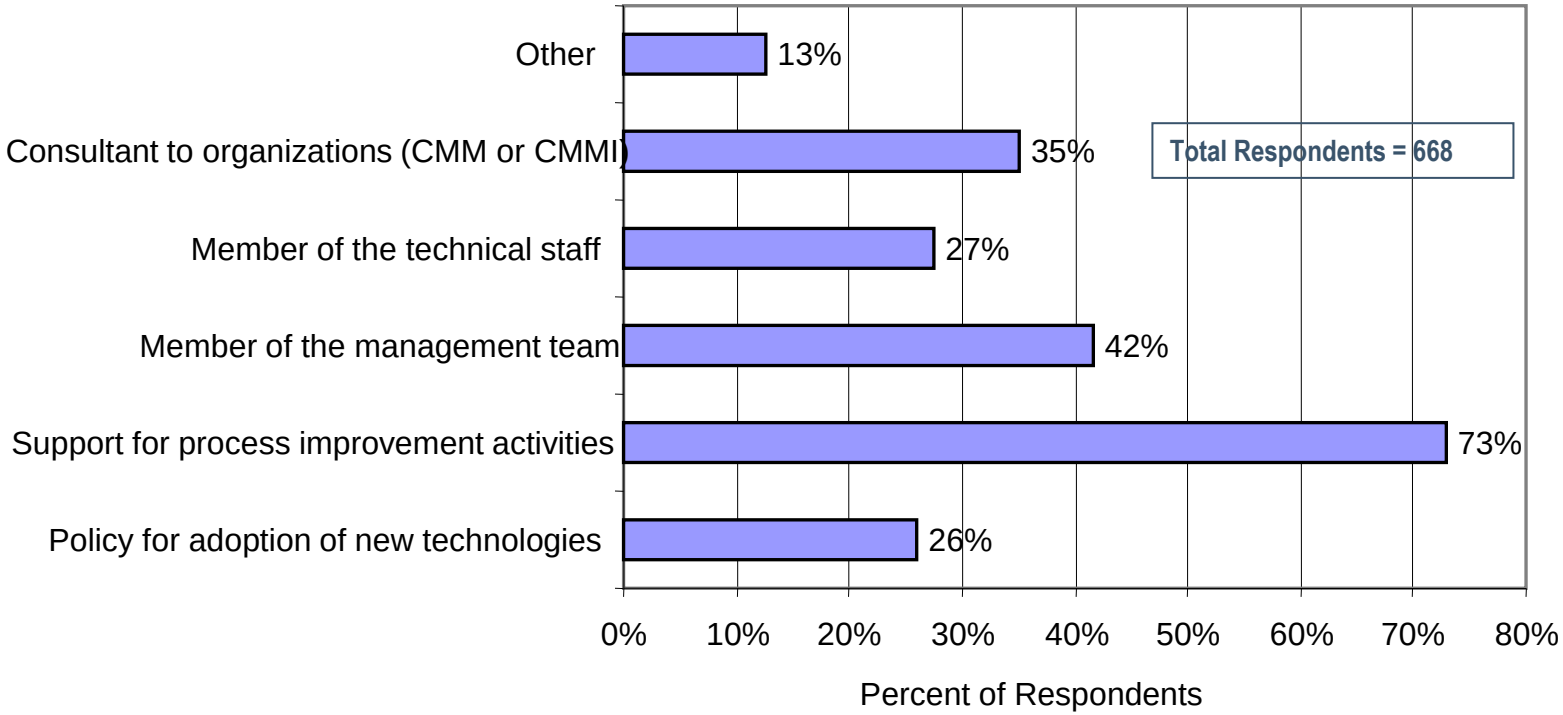
What is your personal role in process improvement?

(Multiple responses were permitted)



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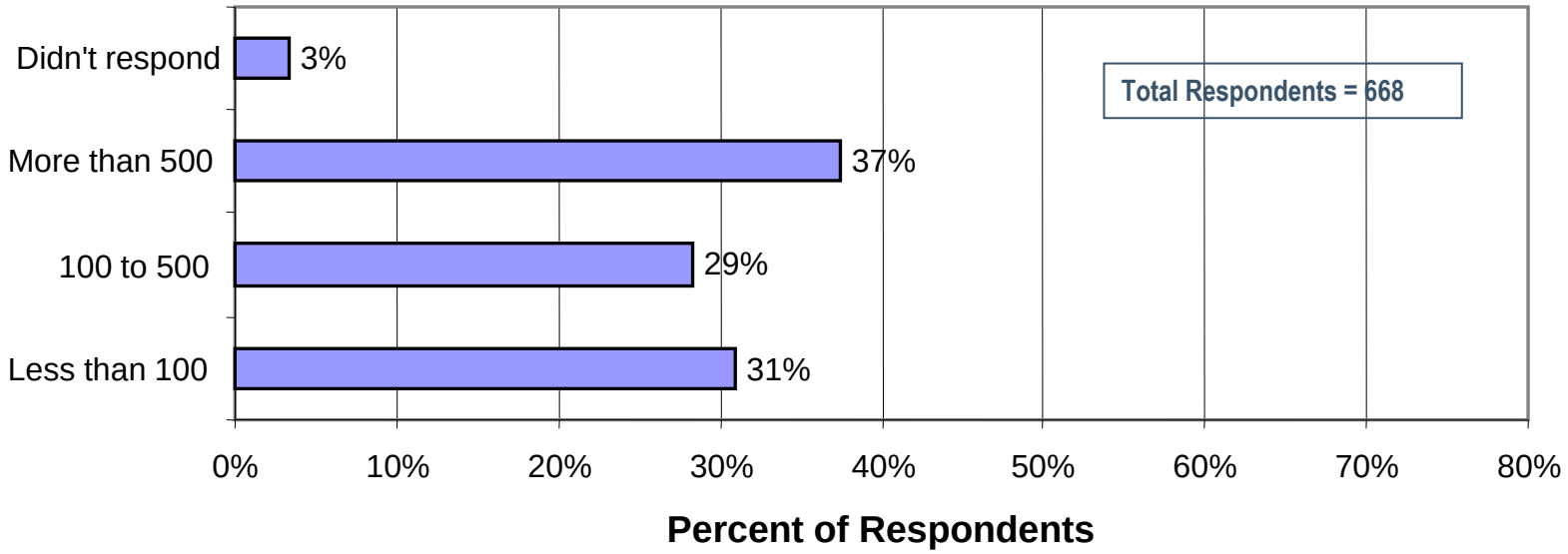
Approximately how many full-time equivalent (FTE) employees does your organization employ who are primarily engaged in the development, maintenance, or acquisition of software or software-intensive systems?



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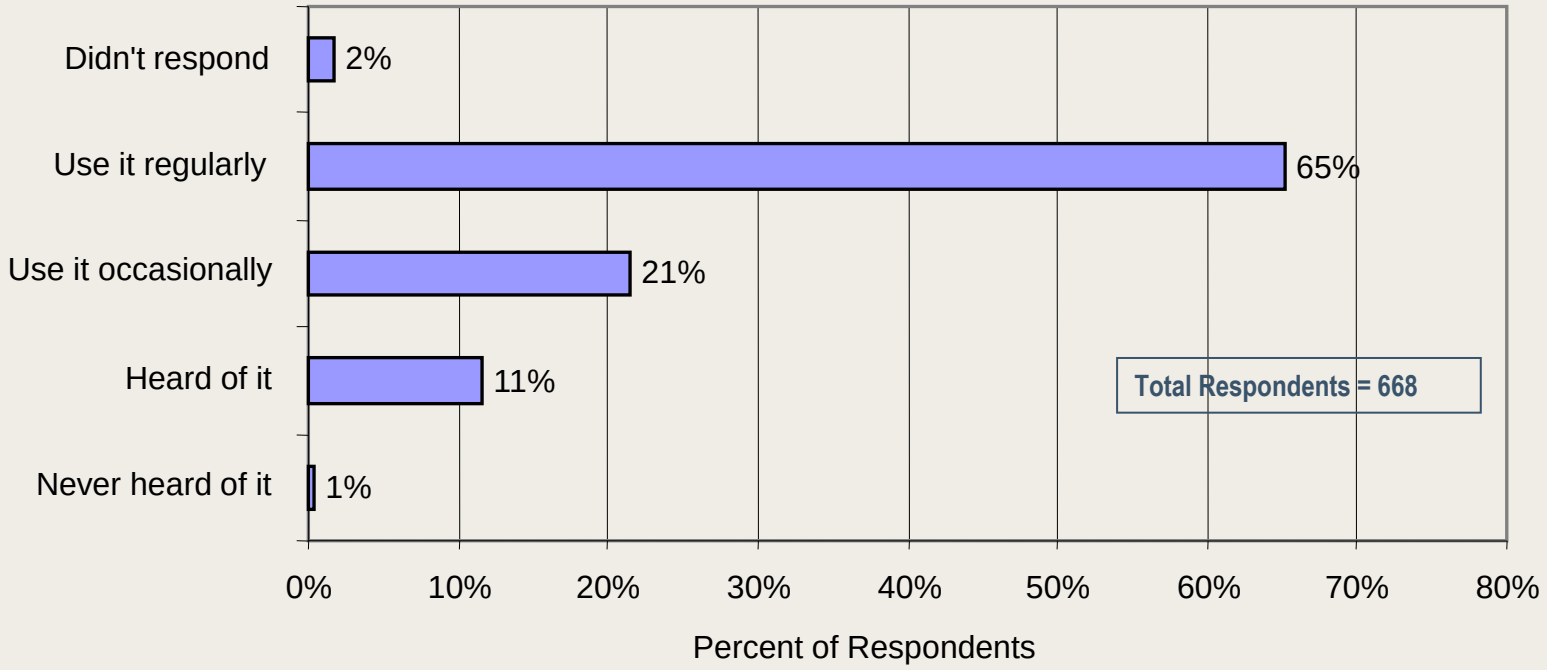
How would you best describe your familiarity with the Software CMM?



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Global Issues

Thirteen questions were asked

General questions that address CMMI adoption

- CMMI concepts or terminology
- model representations
- costs
- ROI

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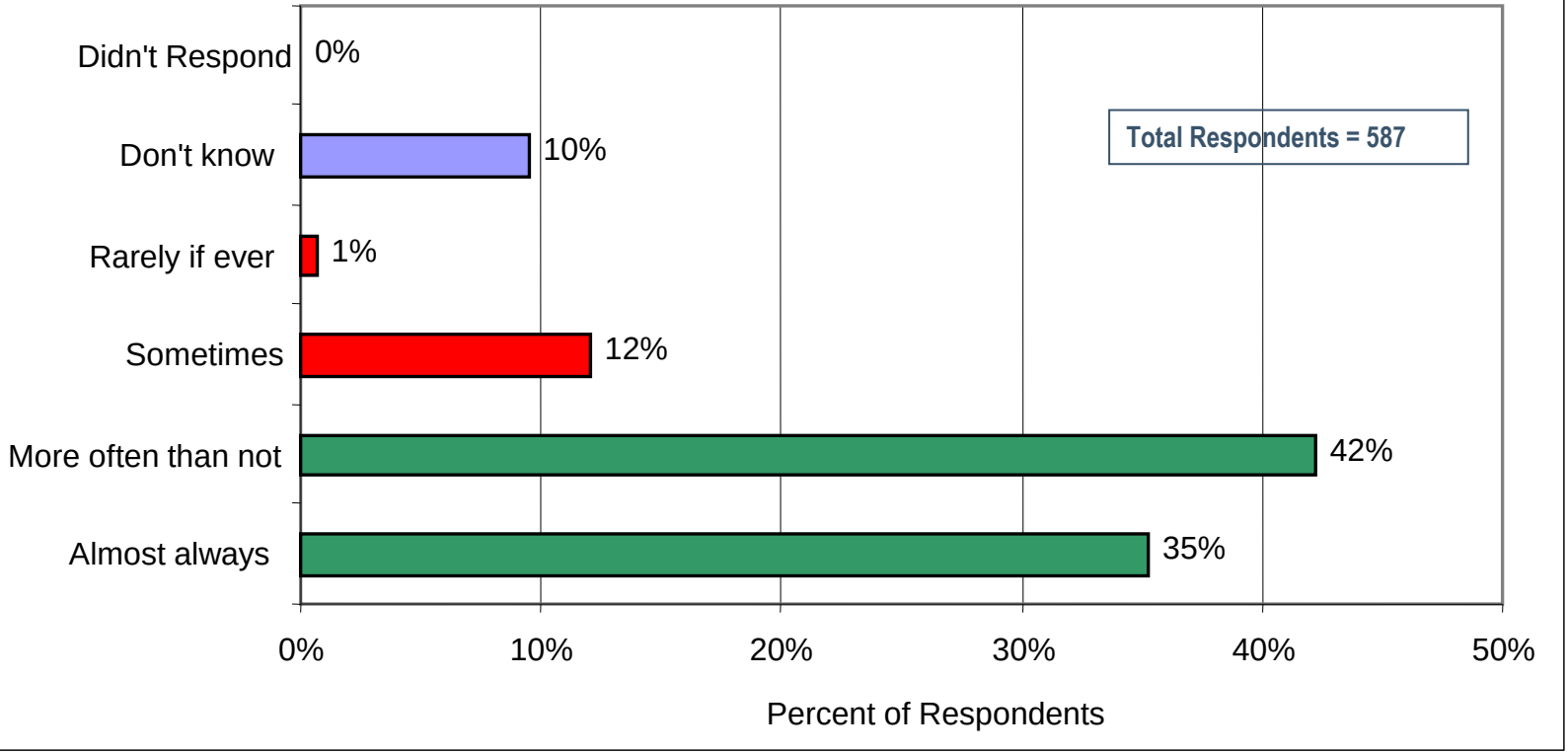
In your opinion, is CMMI adequate for guiding process improvement?



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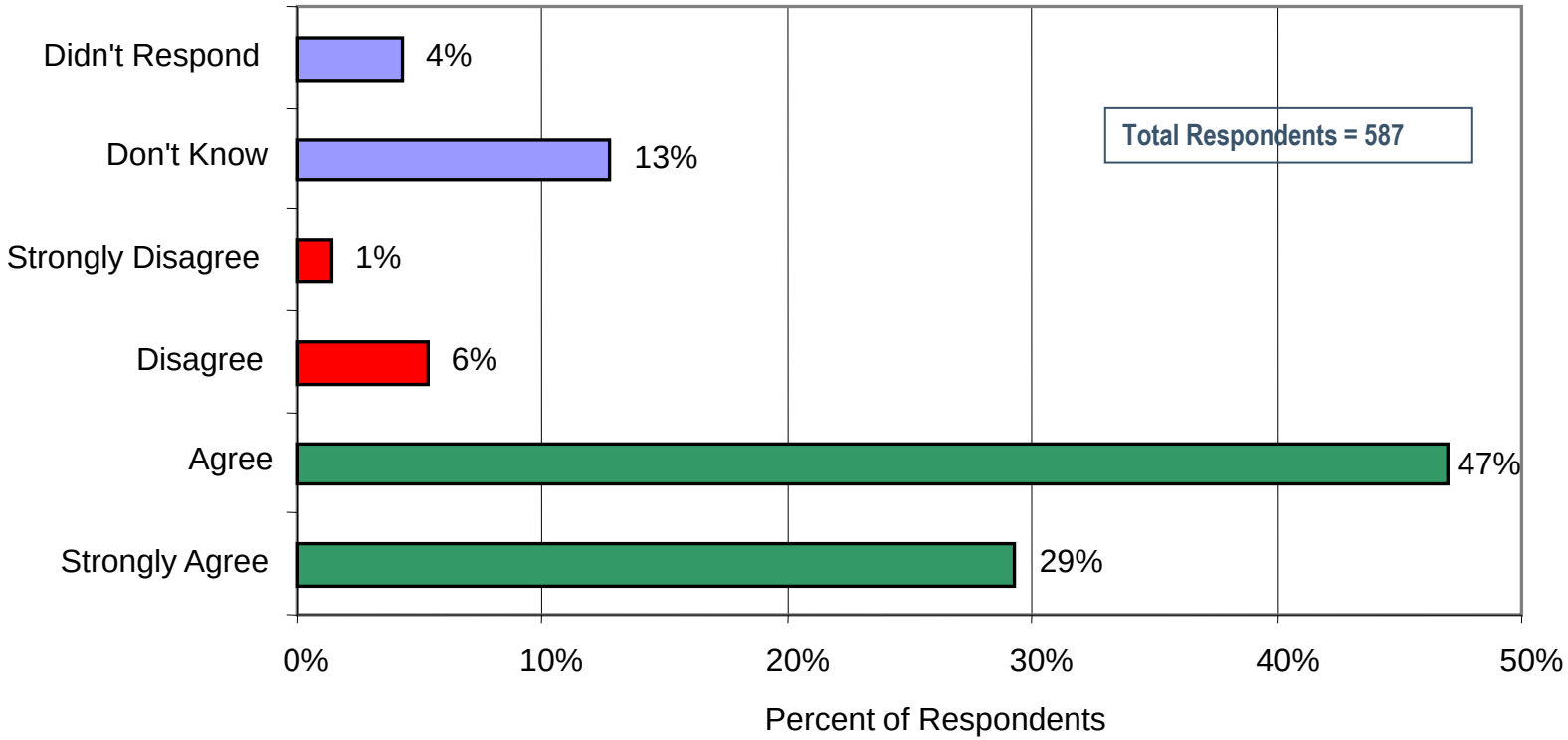
Adopting CMMI will help us to leverage our earlier investments in process improvement.



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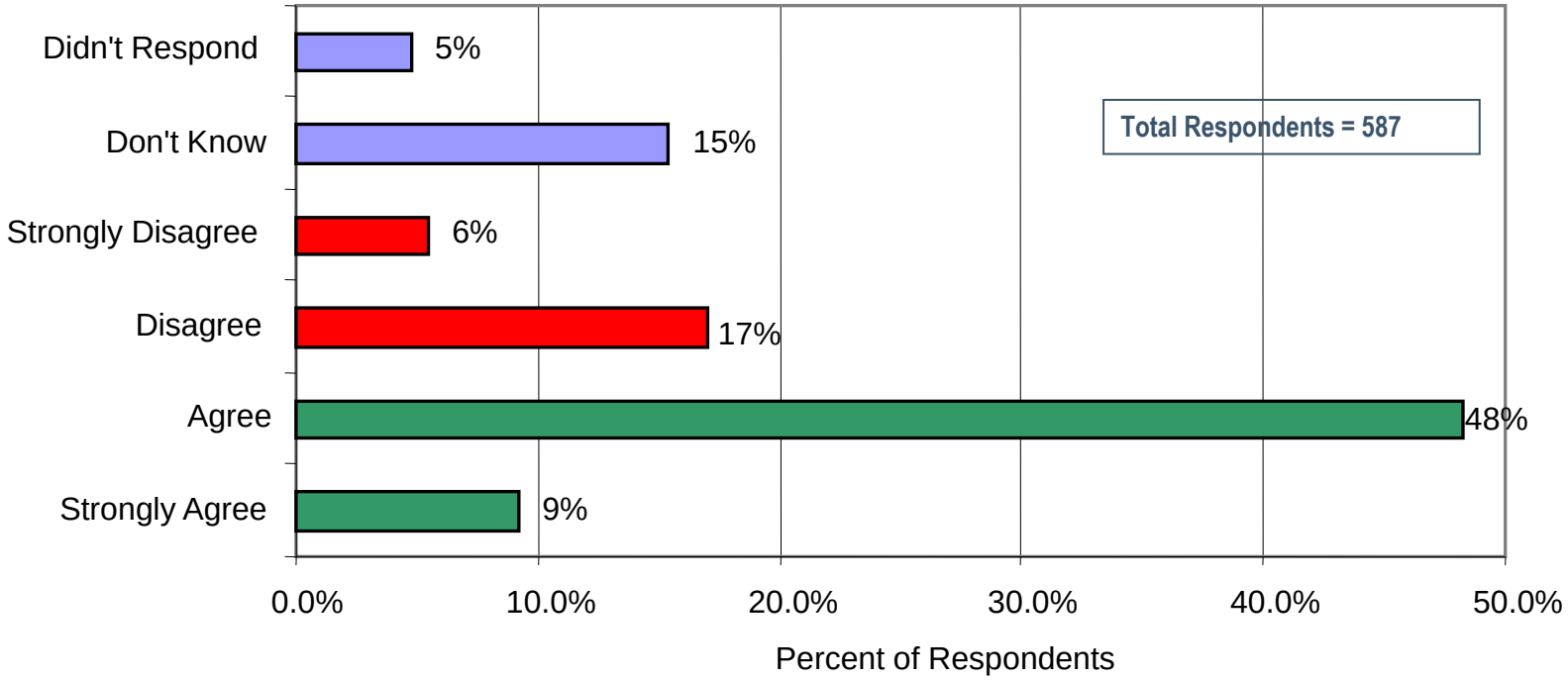
Existing CMMI training courses, guidance documents, web resources, and other process assets are adequate for our purposes.



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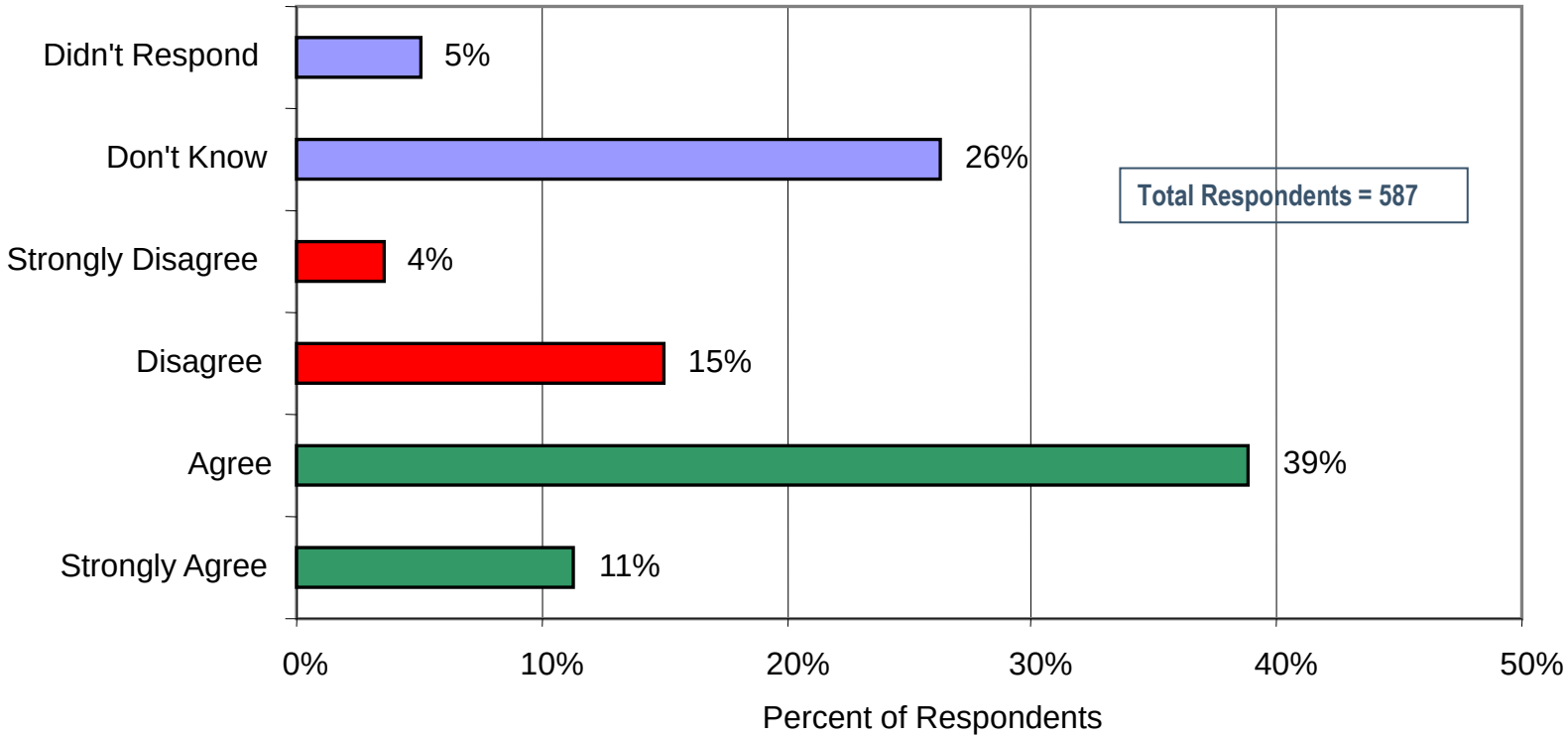
Existing CMMI appraisal methods are suitable for our organization's needs.



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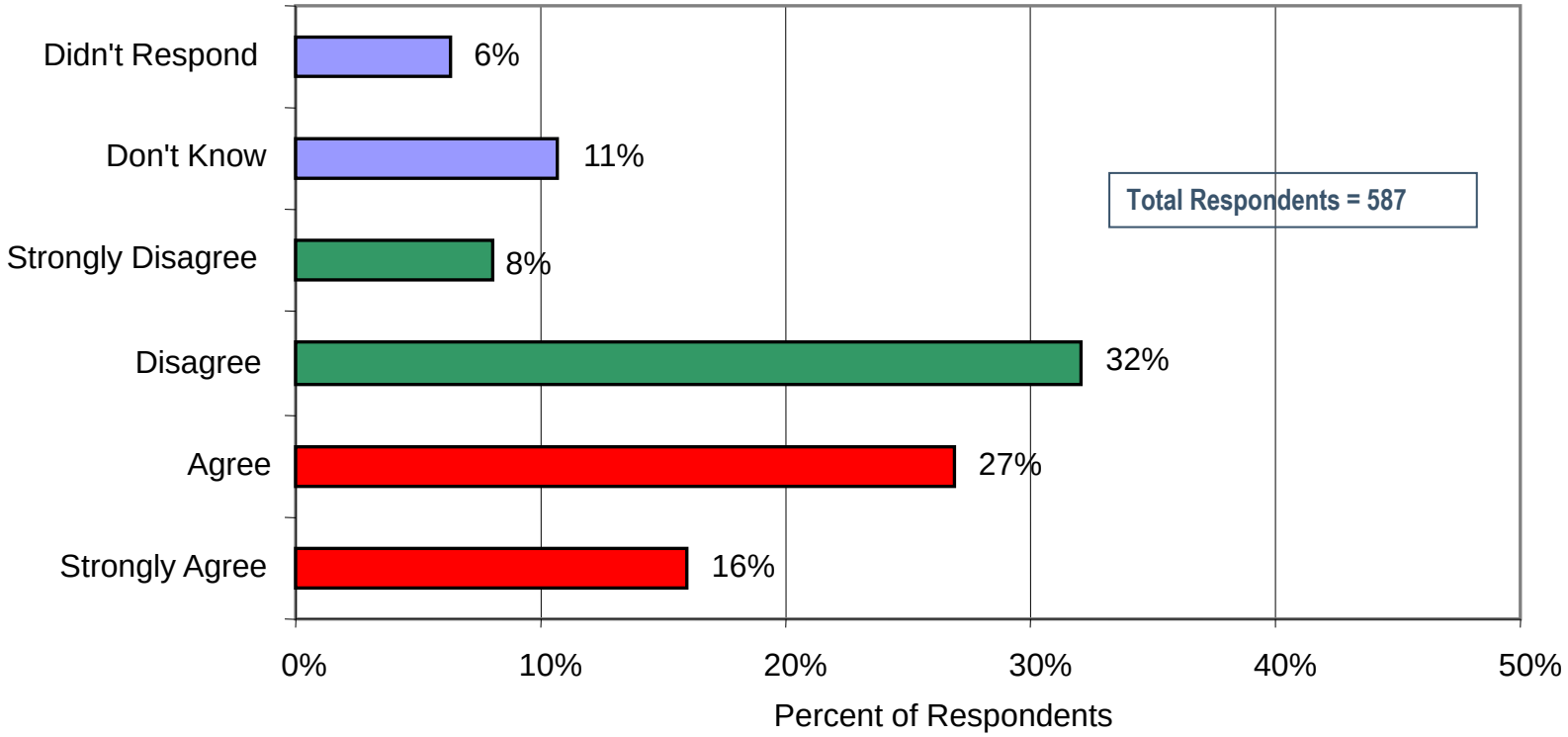
The cost of adopting CMMI is impeding the adoption of CMMI in our organization.



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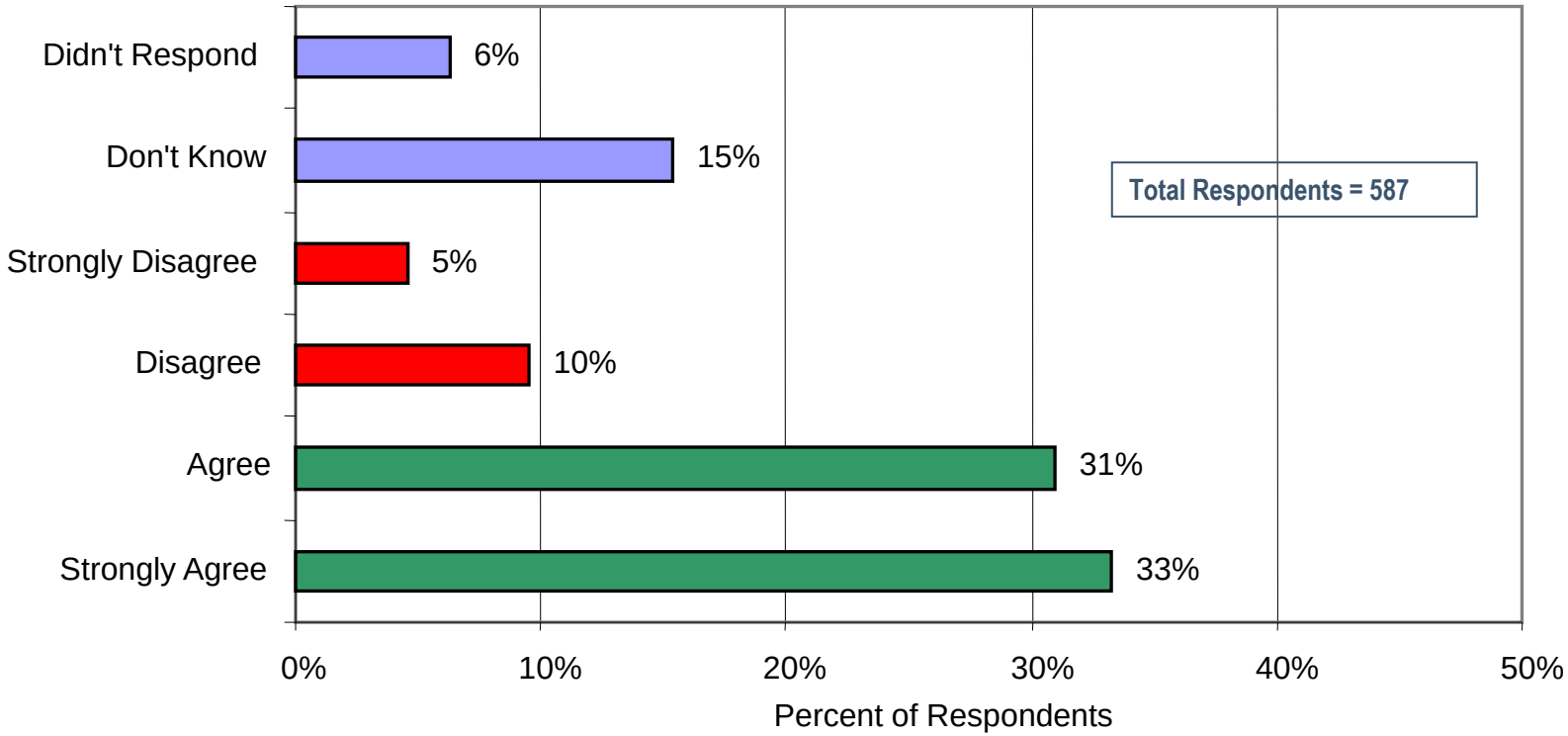
Including both systems engineering and software in a single model has been a help for us.



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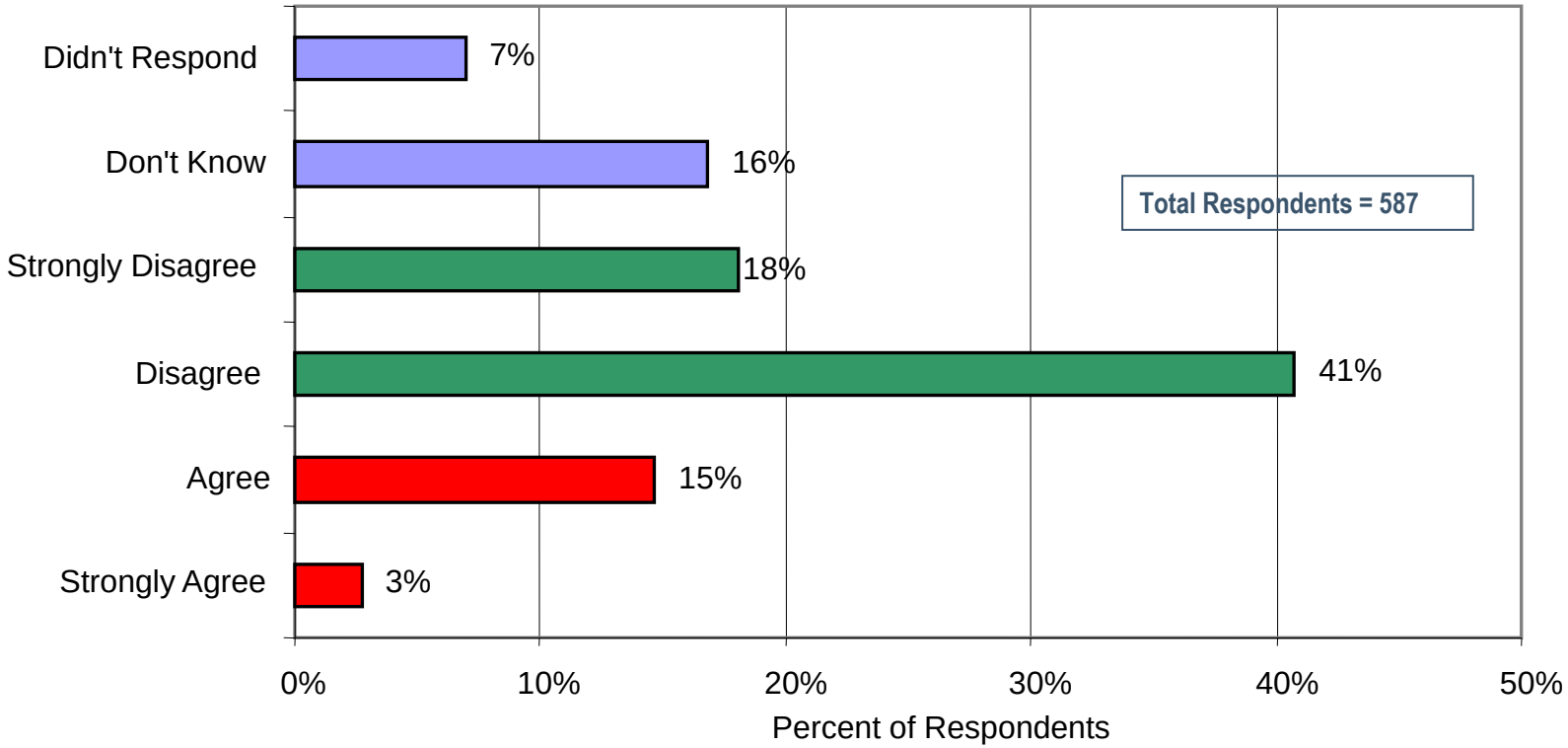
We have had difficulty in mapping our processes to the CMMI.



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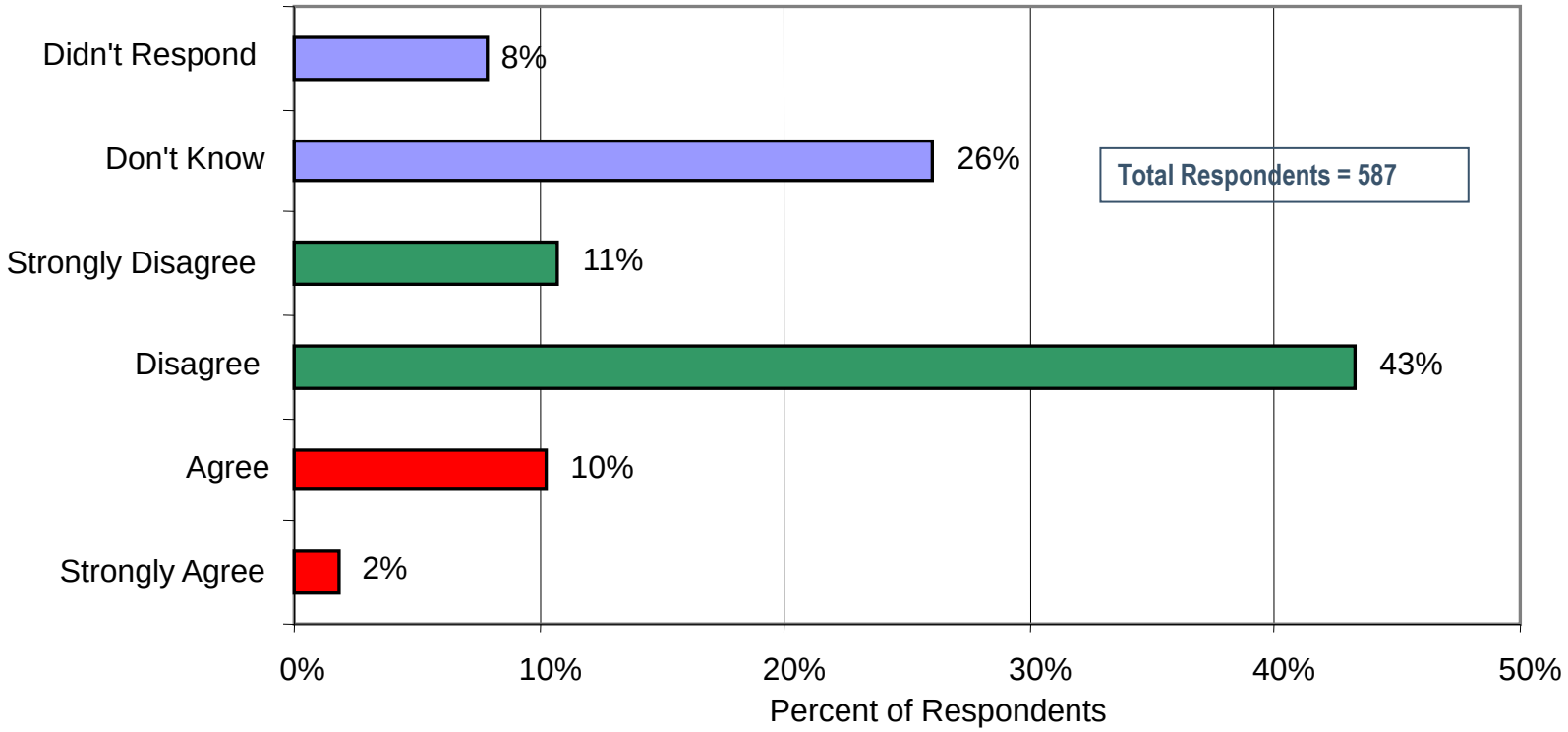
We have had difficulty tracking the changes and additions from models that we have previously used.



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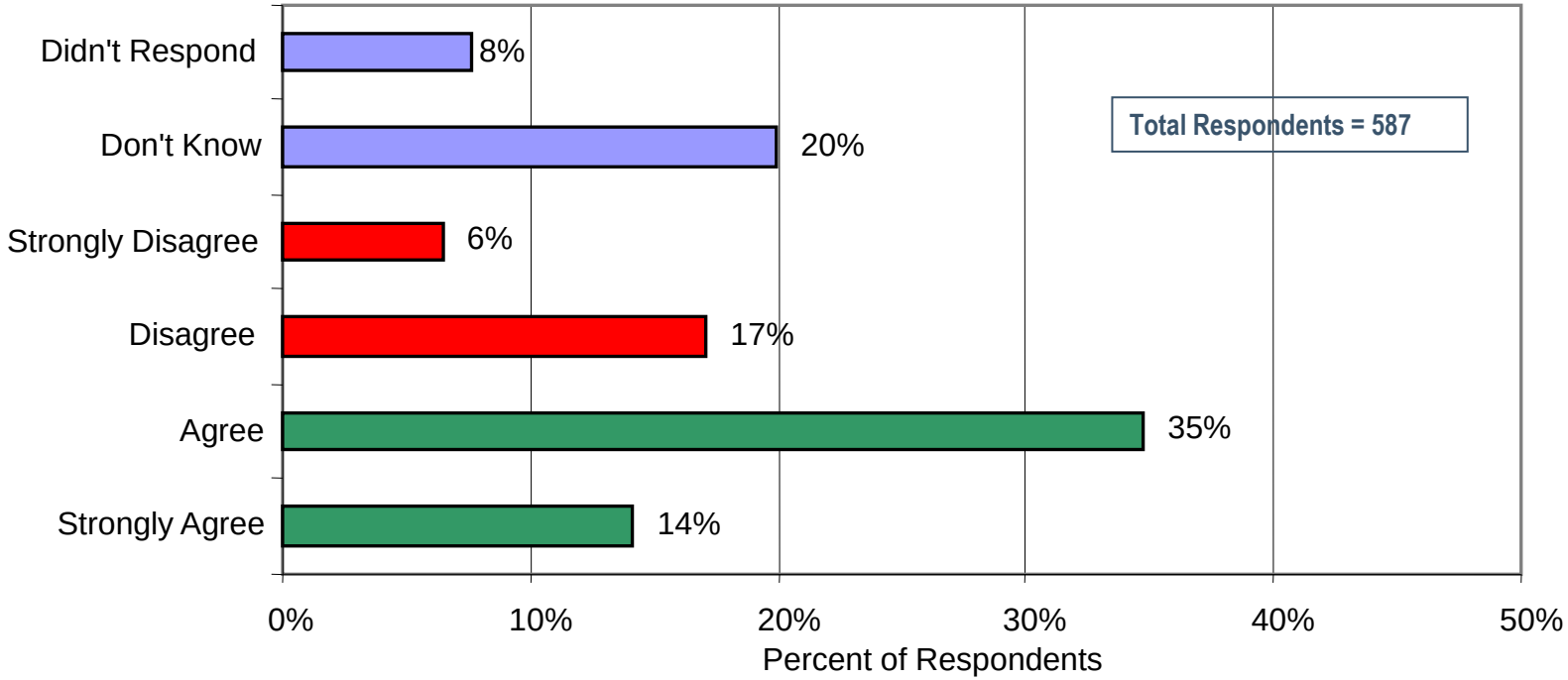
Having a choice between the two model representations (staged or continuous) and variations (SW, SE, IPPD, SS) has been helpful for us.



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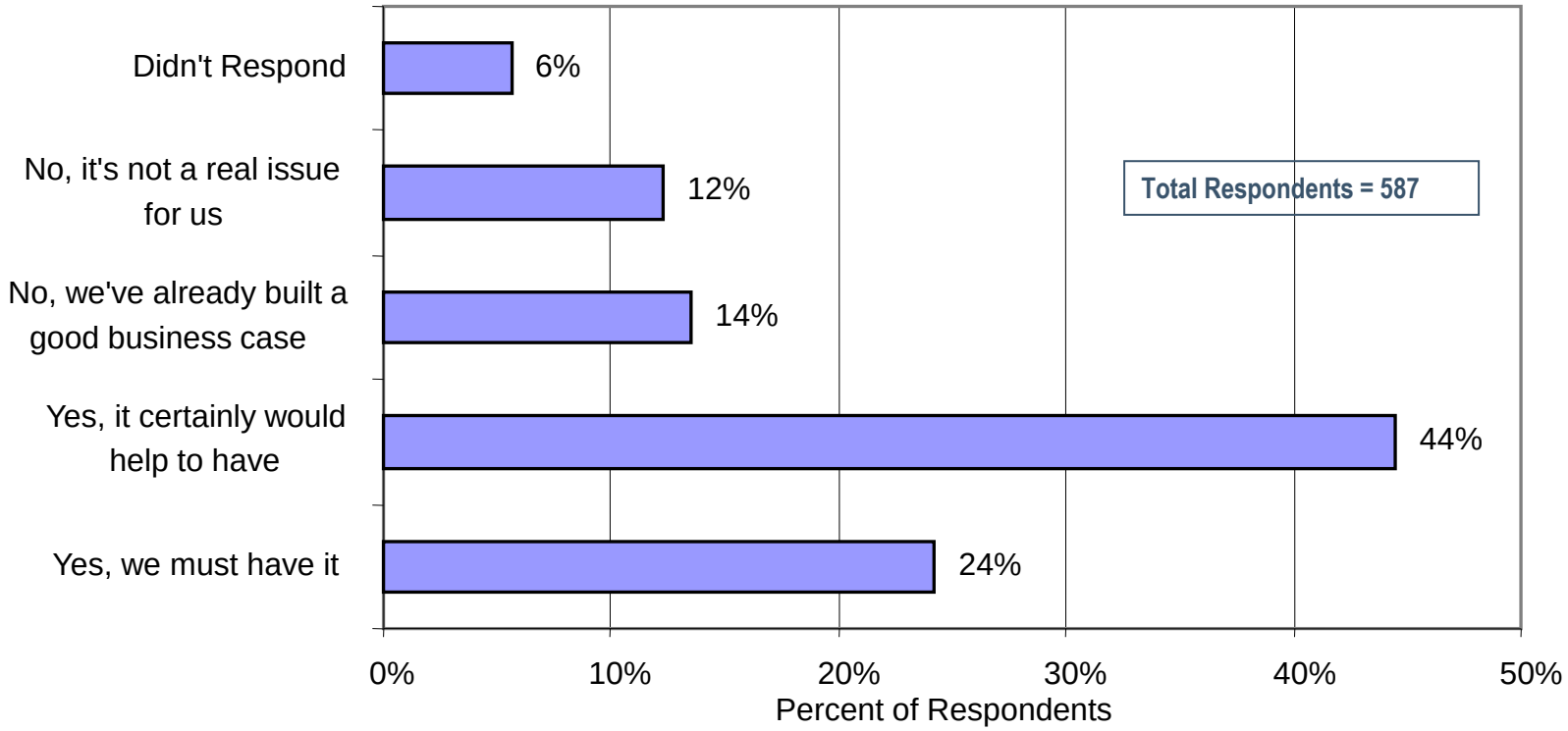
Does your organization need ROI or other quantitative evidence to help make the business case for adopting CMMI?



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Conclusions

The responses were overwhelmingly positive.

Much of the data collected is not unique to commercial software, IT, and IS organizations. Similar data was reported by organizations in disciplines such as systems engineering and acquisition.

We still need to conduct our detailed analysis.

Copies of the report are available on the CMMI Website at http://www.sei.cmu.edu/cmmi/.

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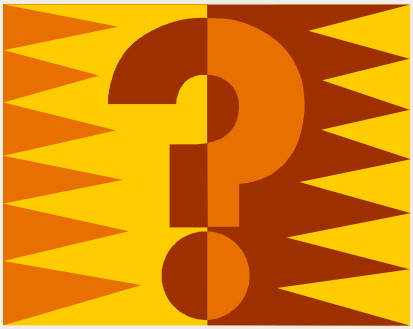
Questions



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For More Information About CMMI

Go to CMMI Web site:

http://www.sei.cmu.edu/cmmi
http://seir.sei.cmu.edu

Contact SEI Customer Relations:

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