Skills Tracking and Management

AGENDA

Survey Background

1 The industry's most in-depth look yet at skills tracking and management in three different project-based domains conducted in 4Q/2018

2 Input from 60 different companies including IT services, professional services and product development executives and managers, resource managers and resource management office leadership

3 Professional/Consulting services and Enterprise/IT services made up 94% of the respondents. Recently added to the Survey Series is input from Product Development orgs representing 6% of respondents.

Survey Questions

1 **What type of organization do you represent?**

a) Professional or Consulting Services (PS or CS)
b) Enterprise/IT (E/IT)
c) Product Development (PD)
d) Other

2 **How many resources in total does your organization manage collectively with all resource managers?**

a) <50
b) 51-100
c) 101-200
d) 201-500
e) >501

3 **Does your current skills database effectively support your business needs?**

a) Yes
b) No

4 **How many roles do you define in your delivery organization?**

a) <50
b) 51-100
c) 101-200
d) 201-500
e) 501-1000
f) >1001

5 **Do you have skills defined for each role?**

a) Yes
b) No

6 **How many different skills do you track?**

a) <50
b) 51-100
c) 101-200
d) 201-500
e) 501-1000
f) >1001

7 **What categories of skills do you track? (check all that apply)**

a) Product knowledge
b) Platform or systems knowledge
c) Industry knowledge
d) Soft skills
e) Language skills
f) Third party tools and technologies
g) Certifications
h) Delivery capabilities
i) Other

8 **Which functional organization defines the skills description and taxonomy?**

a) HR
b) Service delivery
c) RMO/PMO
d) Other

9 **How many proficiency levels do you track?**

a) 1
b) 2
c) 3
d) 4
e) 5+
f) We don't track proficiency levels

10 **How often do employees update their skills in the skills database? (check the answer closest to what you require)**

a) Monthly
b) Quarterly
c) Annually
d) Ad-hoc
e) Employees don't input their own skills information
f) We don't have a skills database

11 **How is skills information in the skills database validated?**

a) By managers
b) By SMEs of skill areas
c) Employees validate their own
d) They are not validated
e) Other

12 **How do you physically store your skills database? (check all that apply)**

a) Commercial PPM/PSA/RPM system
b) HCM system
c) Homegrown system
d) Excel/Access
e) We don't have an electronically stored skills database

13 **As input to your resource management planning, which of the following do you track? (check all that apply)**

a) Project interests of delivery personnel
b) Specific project requests from delivery resources
c) Career interests of delivery resources
d) None of these

14 **What do you use skills data for? (check all that apply)**

a) Project assignment
b) Forecasting skills mix needs
c) Career planning and development
d) Other

15 **We are satisfied with our PSA/PPM/RPM tool(s) regarding capabilities for skills tracking and management?**

a) Very satisfied
b) Somewhat satisfied
c) Not satisfied
d) Searching for a new tool now or soon in the future

16 **Our highest priority for PSA/PPM/RPM improvements related to skills management and tracking is:**

a) Better flexibility for our skills hierarchy
b) Improved analysis capability
c) Better automated support for staffing selection prioritization based on employee or management input
d) Systems or application consolidation/integration
e) Other

Key Takeaways

1 The majority of organizations feel their skills tracking and management capabilities is an area for improvement. Addressing the basics of building and managing an effective skills database will drive near term industry improvements in RM effectiveness.

2 The technology supporting skills tracking and management is getting better but improvements are needed to provide more flexibility, actionable data, and reduce dependencies on spreadsheets and other separate tools.

3 There are clear best practices for creation, maintenance and management of skills databases to support Just-in-Time Resourcing® capabilities. This survey highlights this area as a critical gap for the industry as a whole to improve upon. The RMI will continue to put emphasis in this area and provide help and education to assist with this evolution.
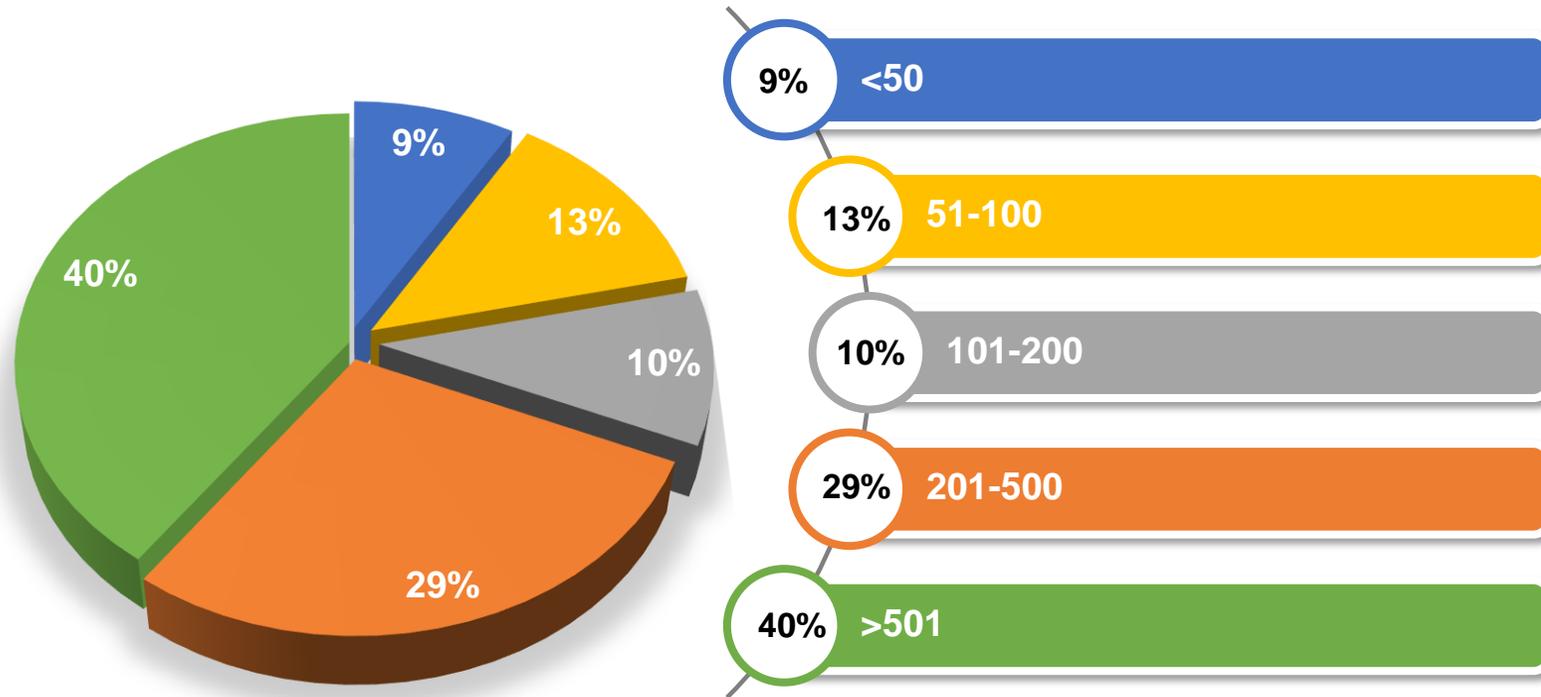
Q1: Type of Organization – All Respondents

65% Professional or Consulting Services

29% Enterprise/IT

6% Product Development
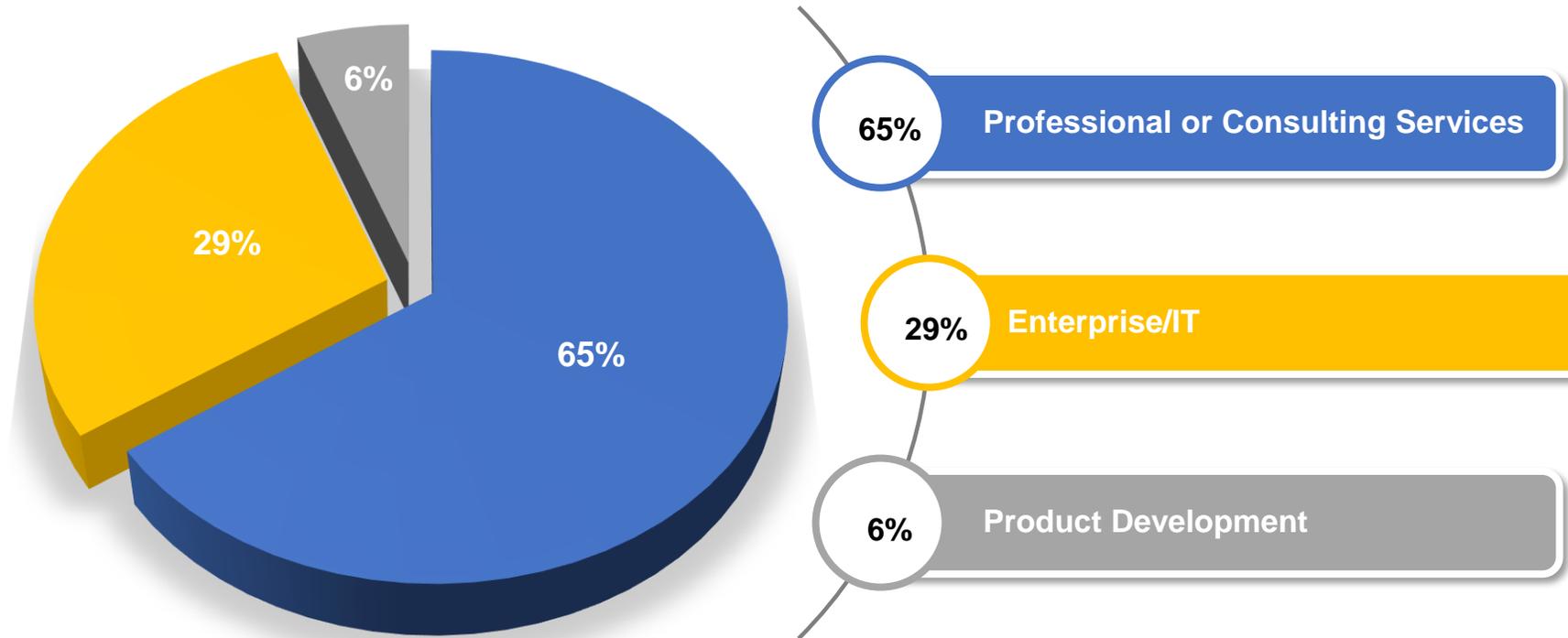
Professional and Consulting Services (PS/CS) Responses

Q2: How many resources in total does your organization manage collectively with all resource managers? – PS/CS
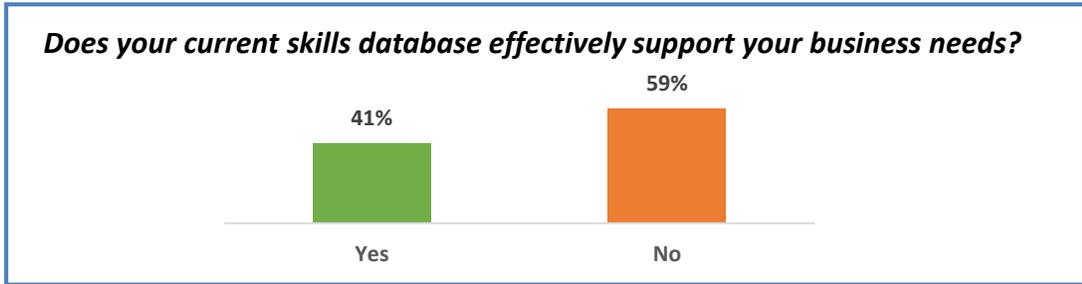
9% **<50**

13% **51-100**

10% **101-200**

29% **201-500**

40% **>501**

Pie chart values: 9%, 13%, 10%, 29%, 40%

79% of respondents represented organizations with more than 100 resources being managed. Building a useable skills database gets harder as the organization scales so no surprise we had lots of interest from these larger teams.

Q3: Does your current skills database effectively support your business needs? – PS/CS

41% | **Yes**
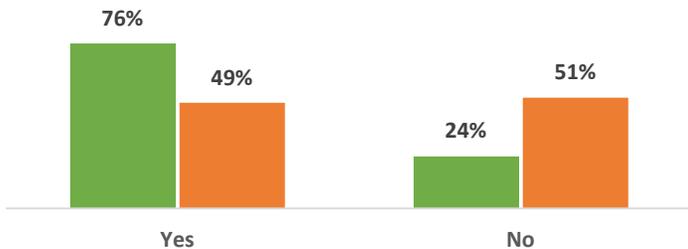
59% | **No**

41%

59%
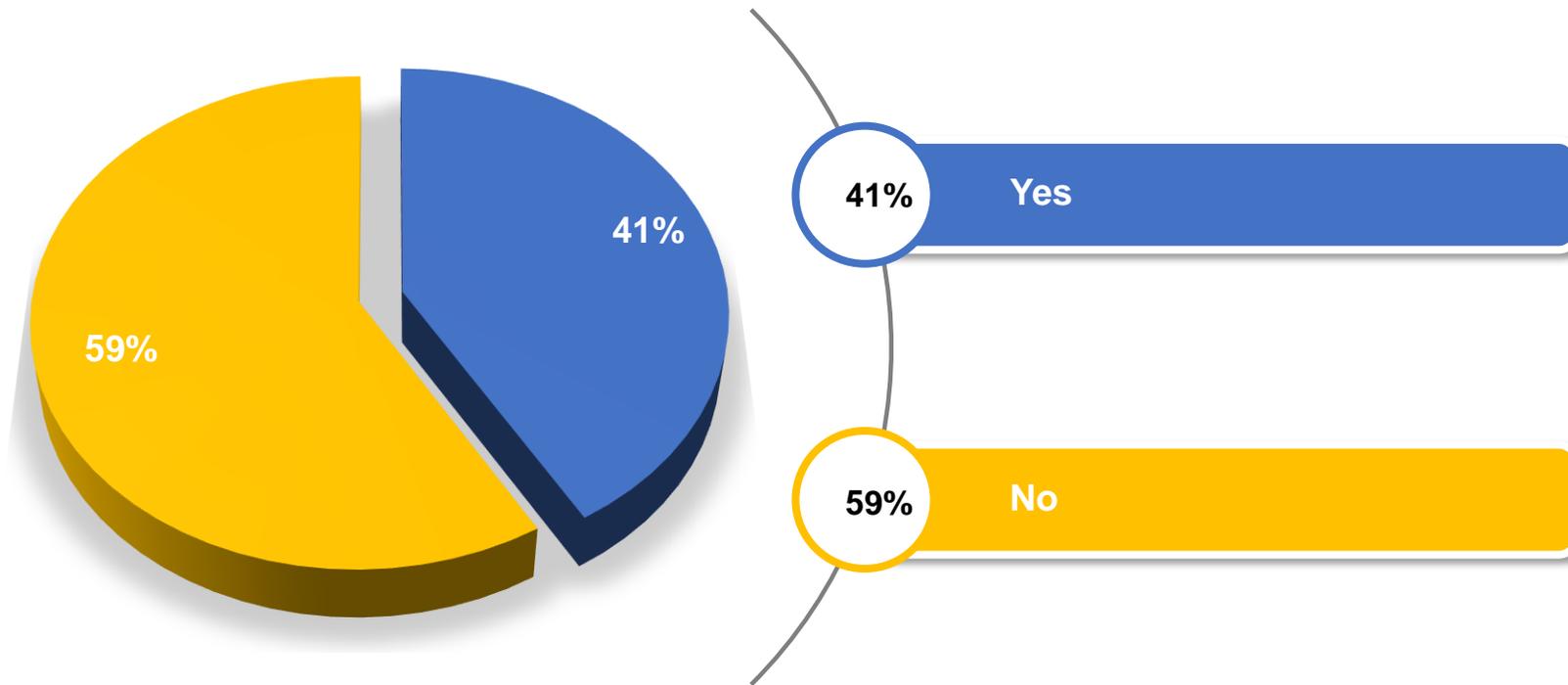
More than half the companies responding indicated the skills database capabilities in their organizations was a pain point. Since an effective skills database is essential to planning allocation of human resources, addressing this shortfall should be a high priority for these companies.

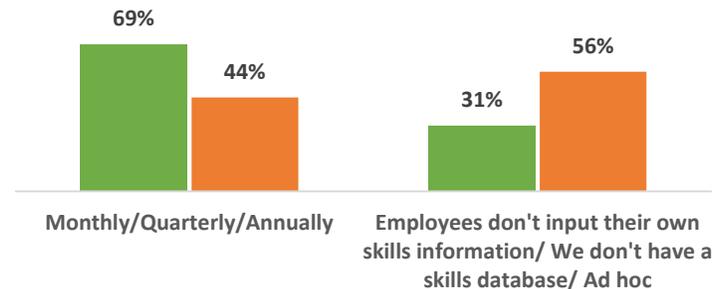# Analysis (PS/CS): The leaders in creating and using an effective skills data base do the following:

Does your current skills database effectively support your business needs?

41%	59%
Yes	No

Do you have skills defined for each role?

76% / 49% (Yes)
24% / 51% (No)

How often do employees update their skills in the skills database?

69% / 44% (Monthly/Quarterly/Annually)
31% / 56% (Employees don't input their own skills information/ We don't have a skills database/ Ad hoc)

How is skills information in the skills database validated?

79% / 54% (By managers/ By SMEs of skill areas)
21% / 46% (Employees validate their own/ They are not validated/ Other)

Three RMI best practices for building an effective skills database were confirmed with this survey data.
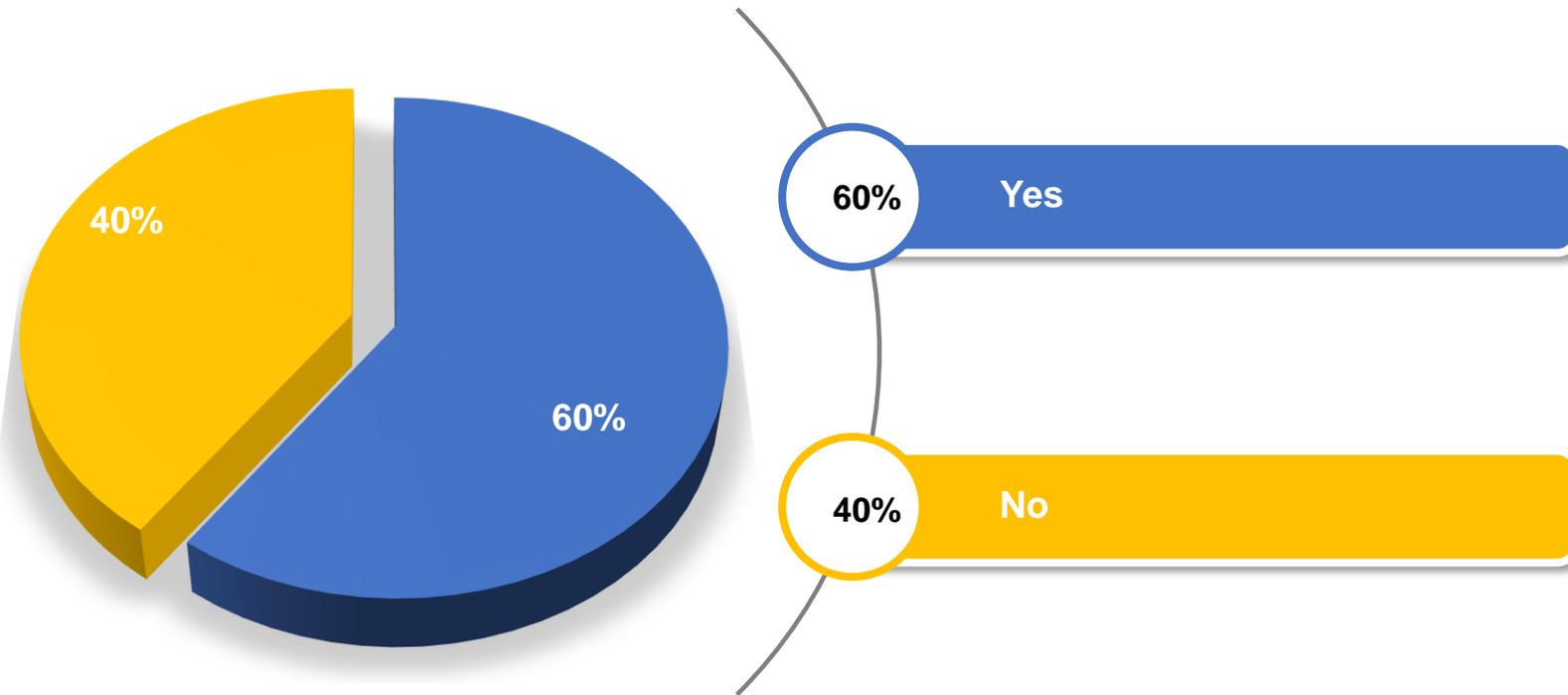
They are:
1) defining skills by role
2) regular updates by employees
3) proper validation of employee data by management or SMEs

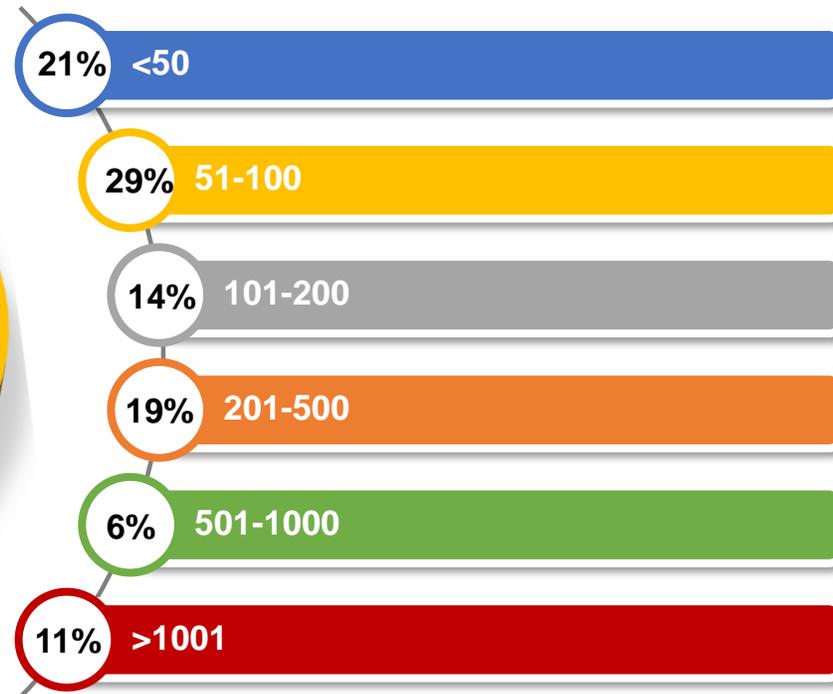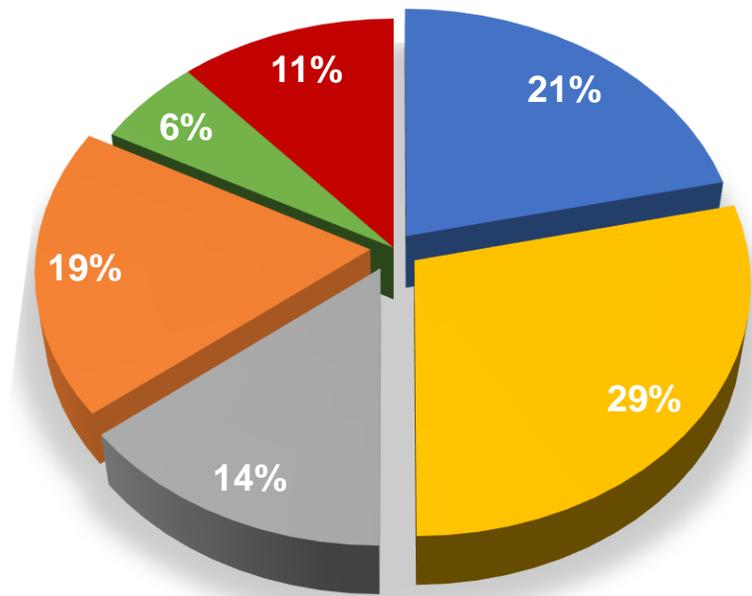| Percentage	Range
71%	<50
16%	51-100
3%	101-200
3%	201-500
4%	501-1000
3%	>1001

Role definition is an important aspect of a skills database design. The process of defining roles is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.
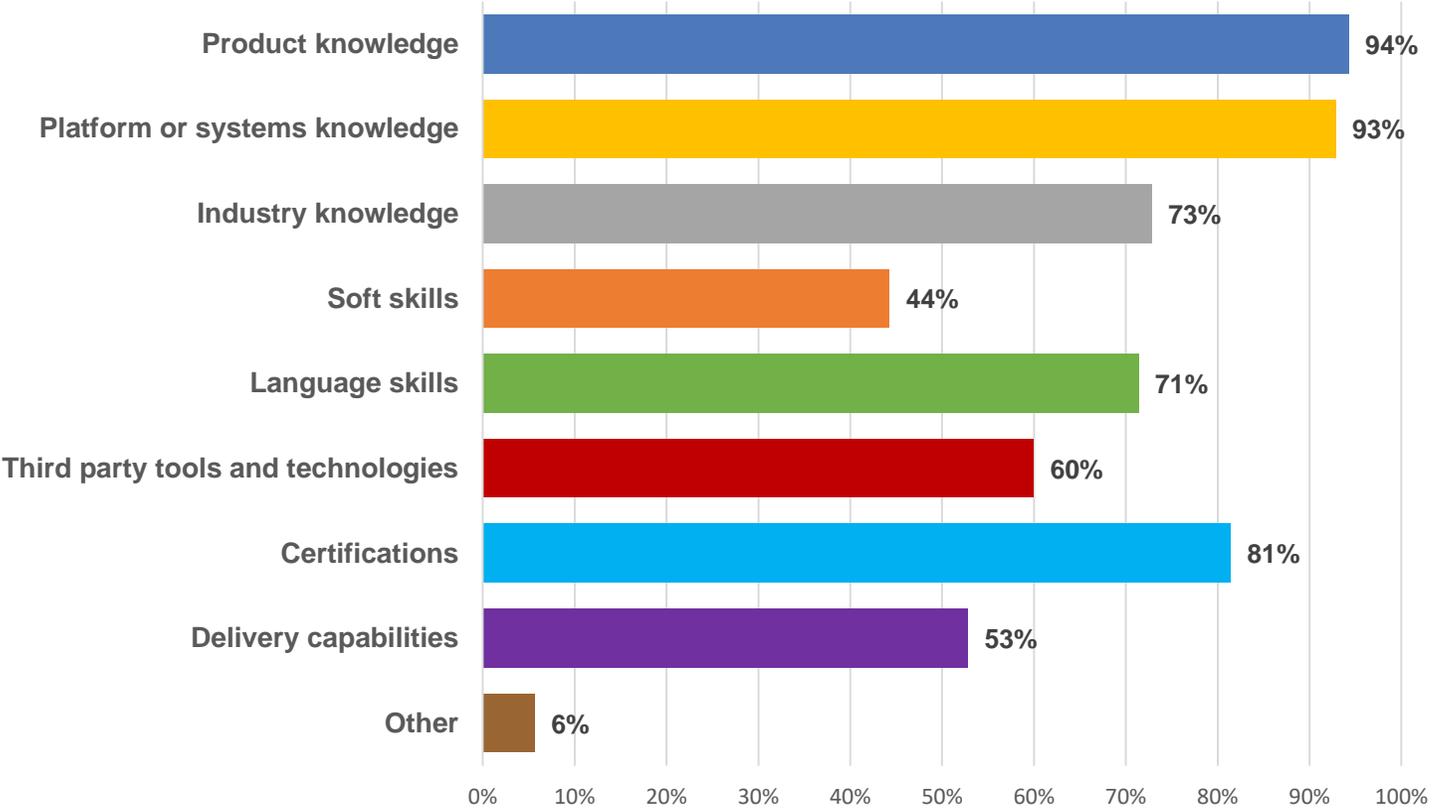
60% Yes

40% No

Perhaps one of the most concerning findings of this survey was that 40% had no skills definition for roles. The lack of precision in role definition makes it infinitely more difficult to plan for skills development and acquisition.

21% <50

29% 51-100

14% 101-200

19% 201-500

6% 501-1000

11% >1001

Skill definition is an important aspect of a skills database design. The process of defining skills is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.

Q7: What categories of skills do you track? (check all that apply) – PS/CS

Category	Percentage
Product knowledge	94%
Platform or systems knowledge	93%
Industry knowledge	73%
Soft skills	44%
Language skills	71%
Third party tools and technologies	60%
Certifications	81%
Delivery capabilities	53%
Other	6%

There is a clear focus on the 'hard' skills while 'soft' skills lags. In Professional and Consulting services soft skills particularly those related to client interactions are key to improved customer satisfaction, scope creep containment, project management and more and therefore should receive additional focus.

Q8: Which functional organization defines the skills description and taxonomy? – PS/CS

11% HR

49% Service delivery

31% RMO/PMO
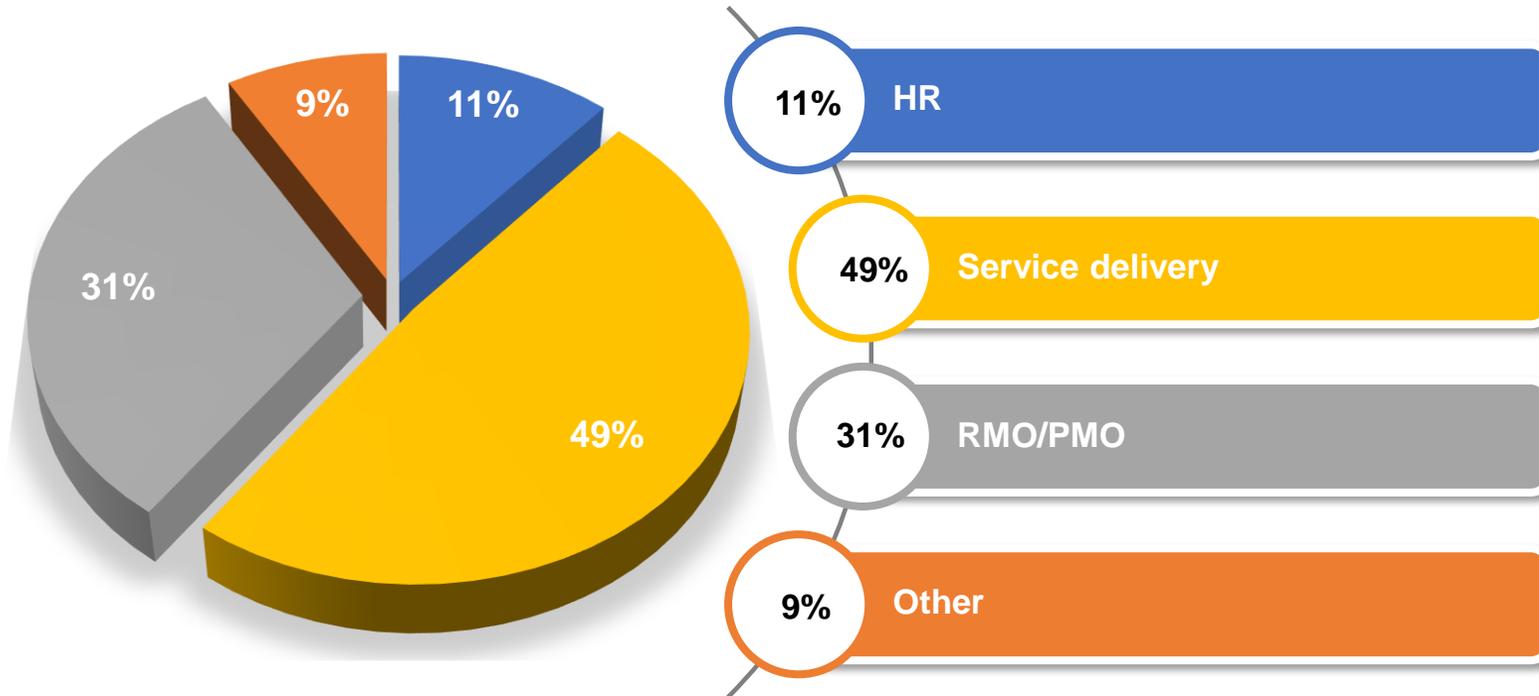
9% Other

While this data does not address trends for how skills are defined, RMI observation is that cross-functional participation in the process is on the rise. No surprise is that most are done by the teams that have to execute with those skills.

Other:
- Emerging Technology Practice and Technical Enablement
- Global effort between consulting, product, RMO, PMO
- Collaboration between HR and Services Delivery
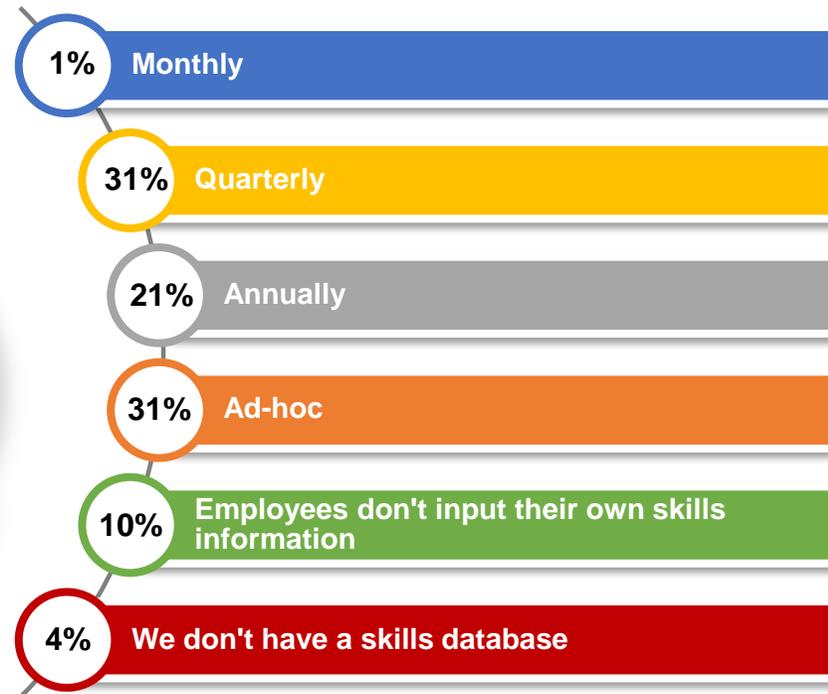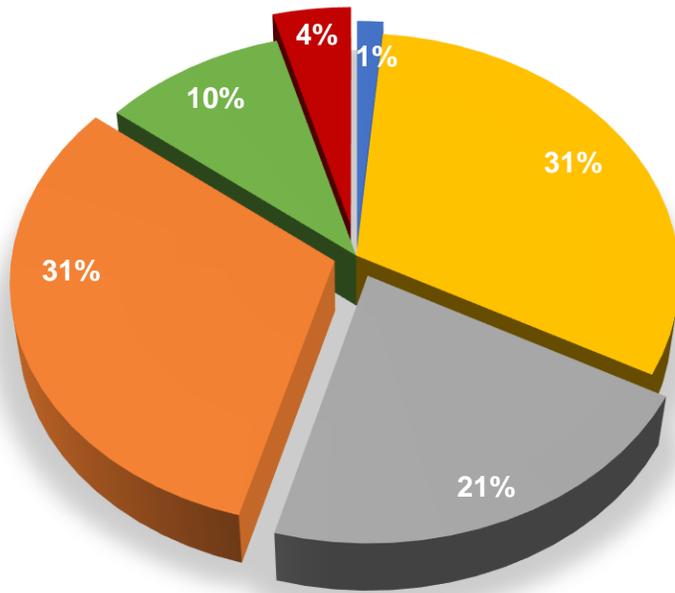- Jointly defined by Product Dev, Support, Education, and Consulting orgs (RMO represents Consulting)
- Consultants' Line Managers
- Operations

Q9: How many proficiency levels do you track? – PS/CS

17% — 3

36% — 4

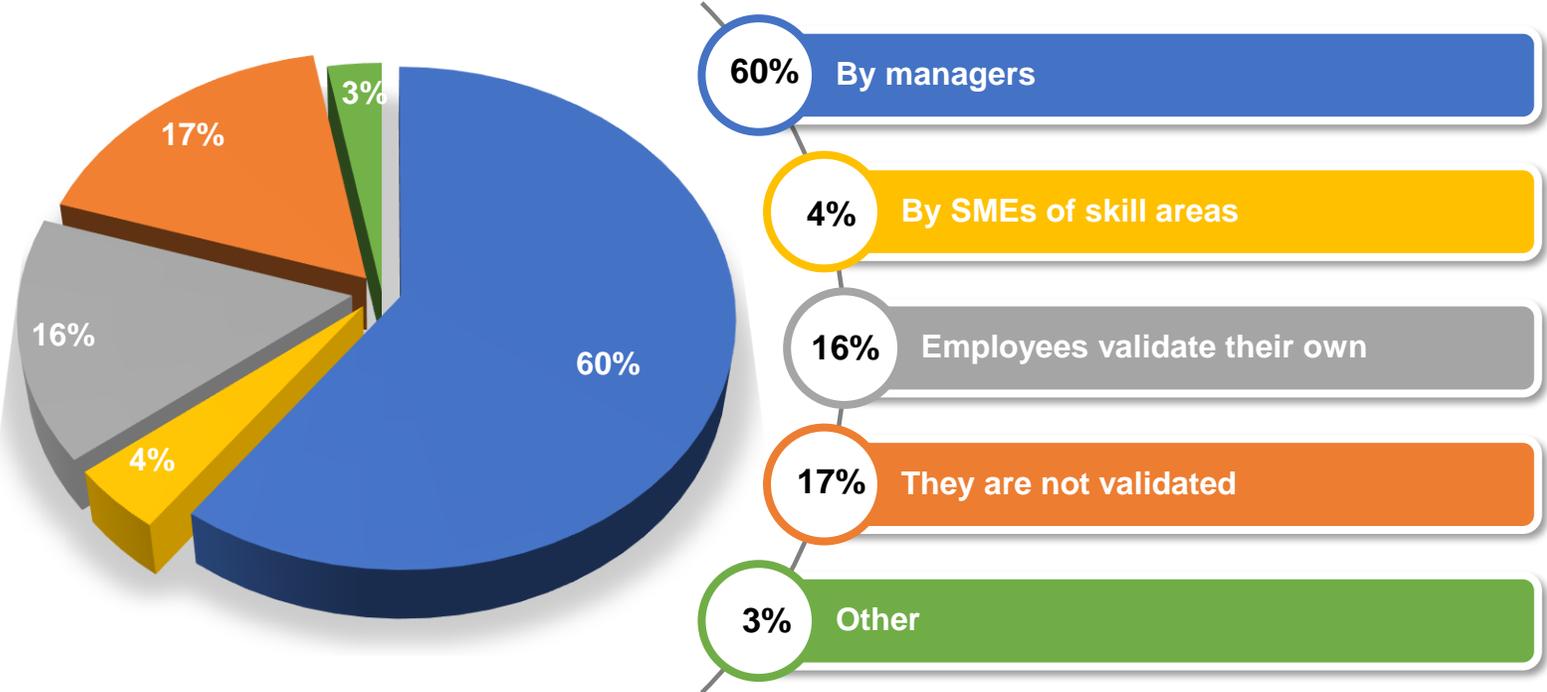**39%** — 5+

9% — We don't track proficiency levels
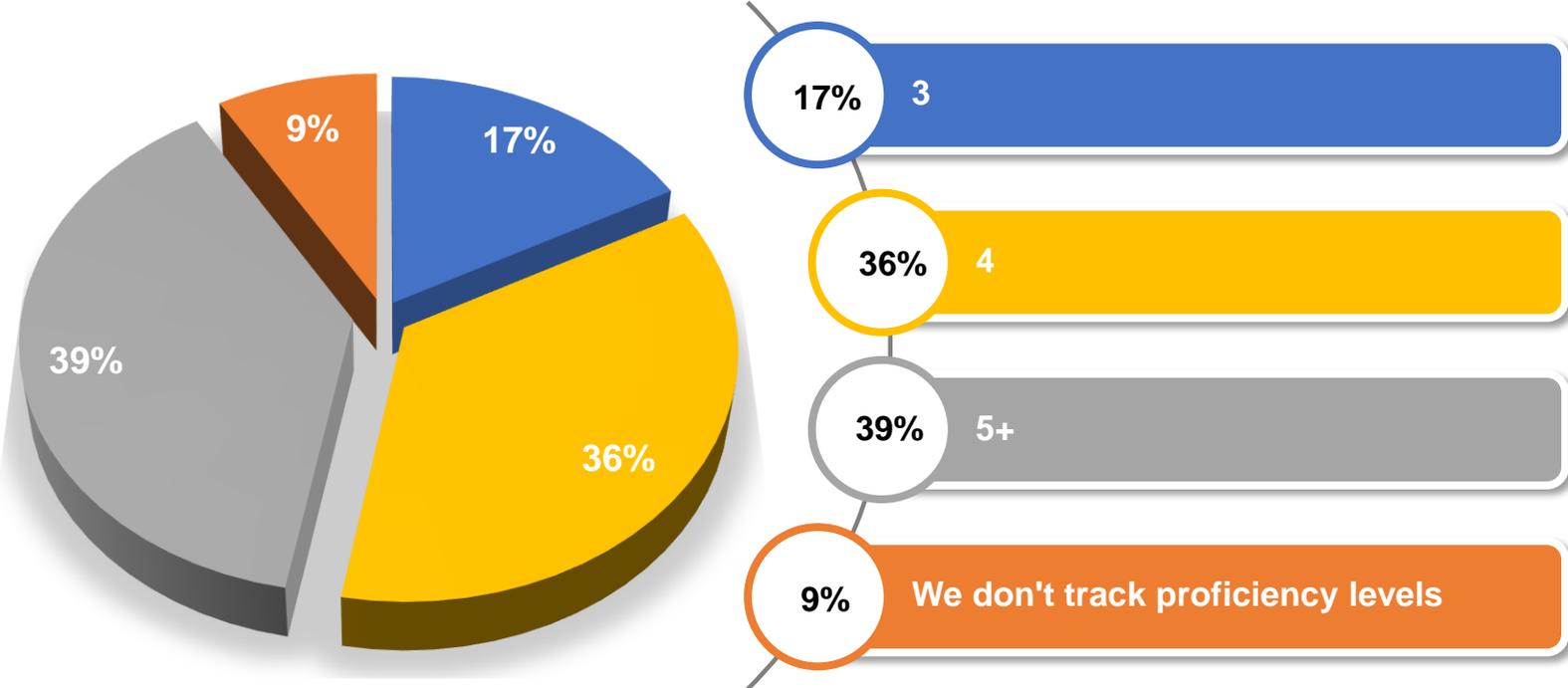
Good news that 91% are tracking defined proficiency levels, and most are using a reasonably uncomplicated metric to do so.

Q10: How often do employees update their skills in the skills database? (check the answer closest to what you require) – PS/CS

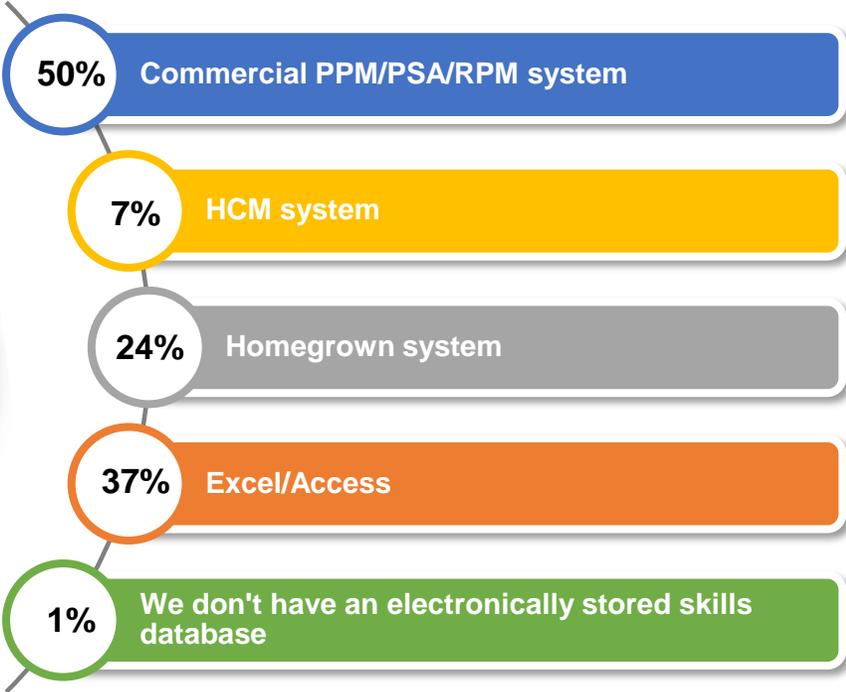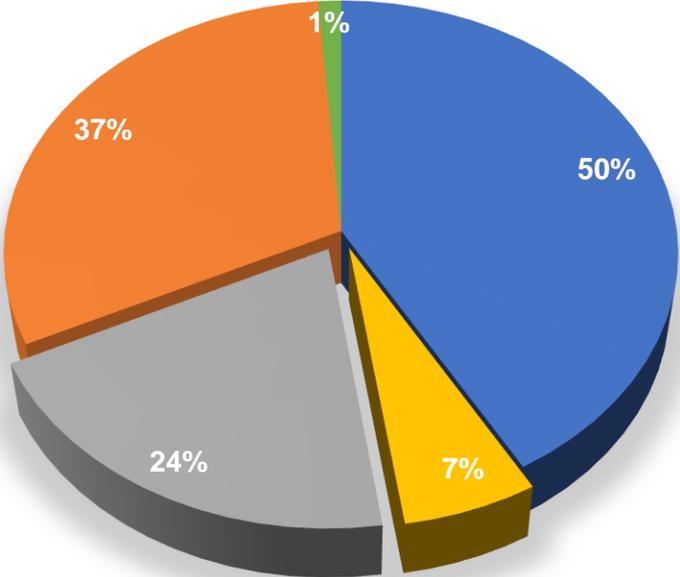|	
1%	Monthly
31%	Quarterly
21%	Annually
31%	Ad-hoc
10%	Employees don't input their own skills information
4%	We don't have a skills database

A key success factor in successful resource management is a well designed and maintained skills database. With 44% using ad-hoc or with no process for employee updates, the industry has significant room for improvement.

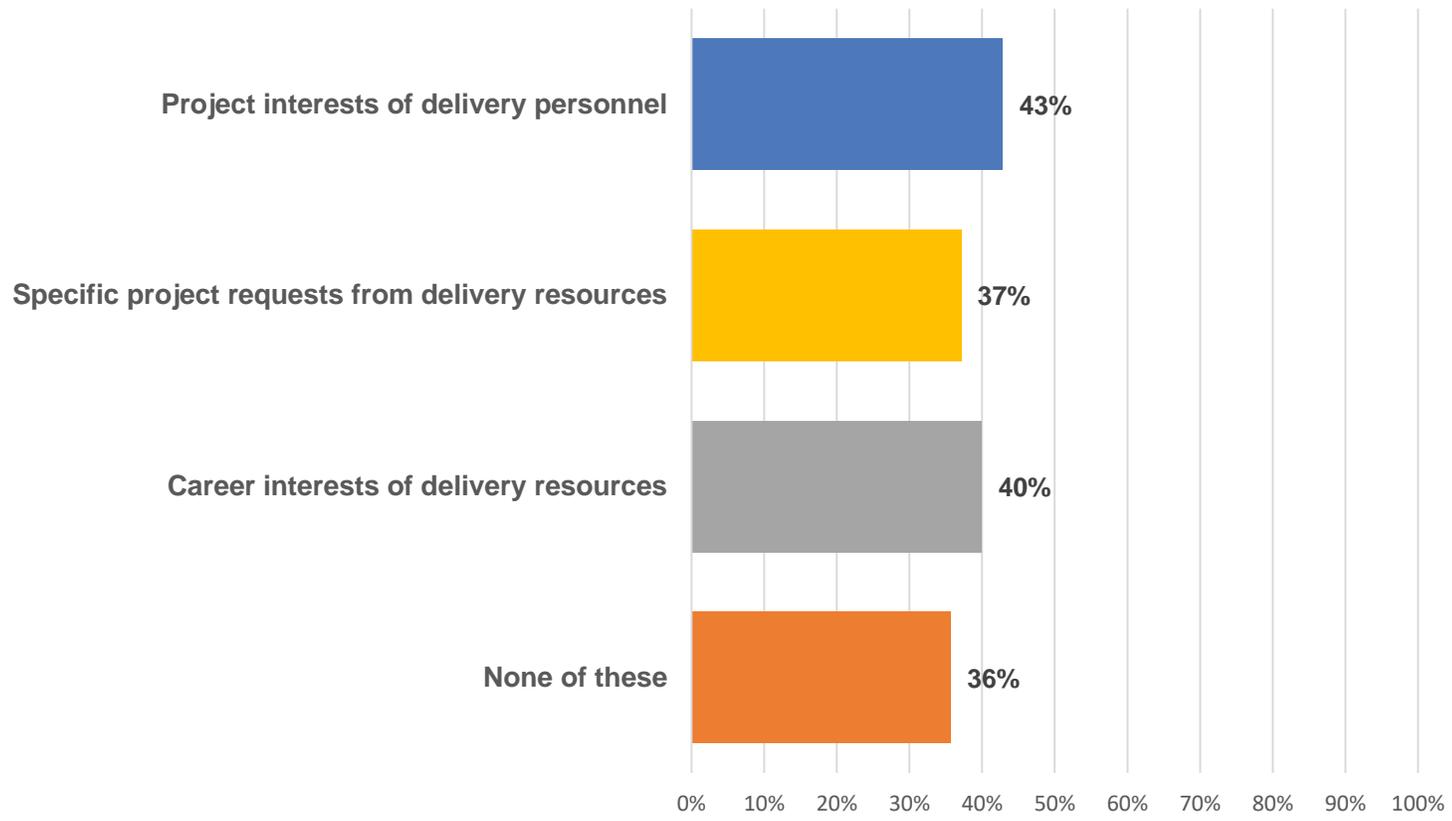# Q11: How is skills information in the skills database validated?– PS/CS

60%	**By managers**
4%	**By SMEs of skill areas**
16%	**Employees validate their own**
17%	**They are not validated**
3%	**Other**

Pie chart percentages: 60%, 17%, 16%, 4%, 3%

For companies that require regular maintenance of skills information, most have a validation procedure to ensure integrity of the data. Note that a third default to either no validation or allow the employee to self-validate. The RMI recommends that a manager or SME conduct validation somewhere in the process.

Q12: How do you physically store your skills database? (check all that apply) – PS/CS

50% Commercial PPM/PSA/RPM system

7% HCM system

24% Homegrown system

37% Excel/Access

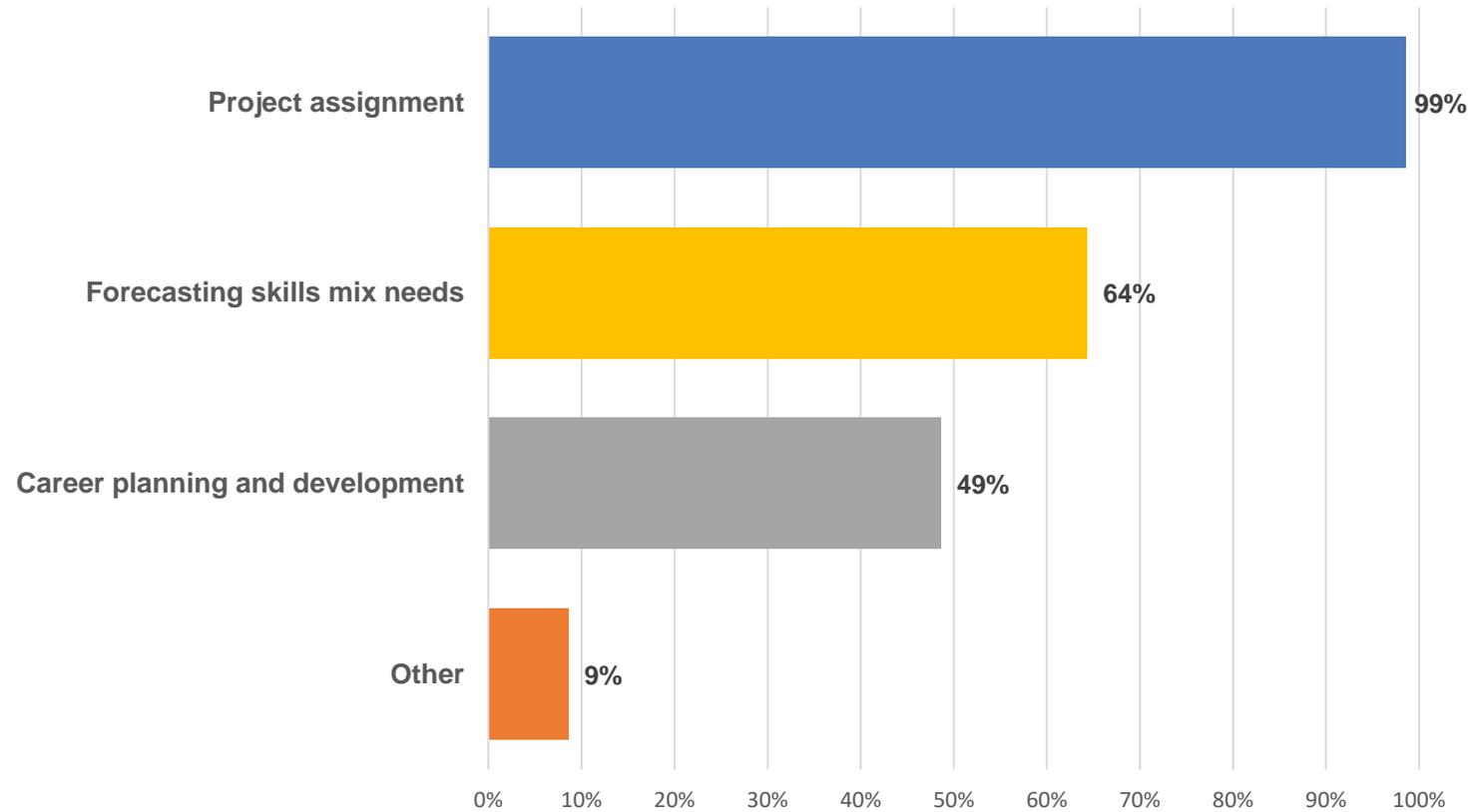**1%** We don't have an electronically stored skills database

Half or more respondents are using a specific tool to store the skills database. The use of spreadsheets to support the process puts a spotlight on the need for more robust automation tools to reduce or eliminate the current dependence on a separate tool.

The tightening of workforce availability will require all companies to up their game when it comes to employee engagement. It is encouraging that so many are tracking elements important to the individual to support scalable employee engagement programs. Note that more than one third however are not tracking these elements.

Project interests of delivery personnel — 43%

Specific project requests from delivery resources — 37%

Career interests of delivery resources — 40%

None of these — 36%

Q14: What do you use skills data for? (check all that apply) – PS/CS

Project assignment — 99%

Forecasting skills mix needs — 64%

Career planning and development — 49%
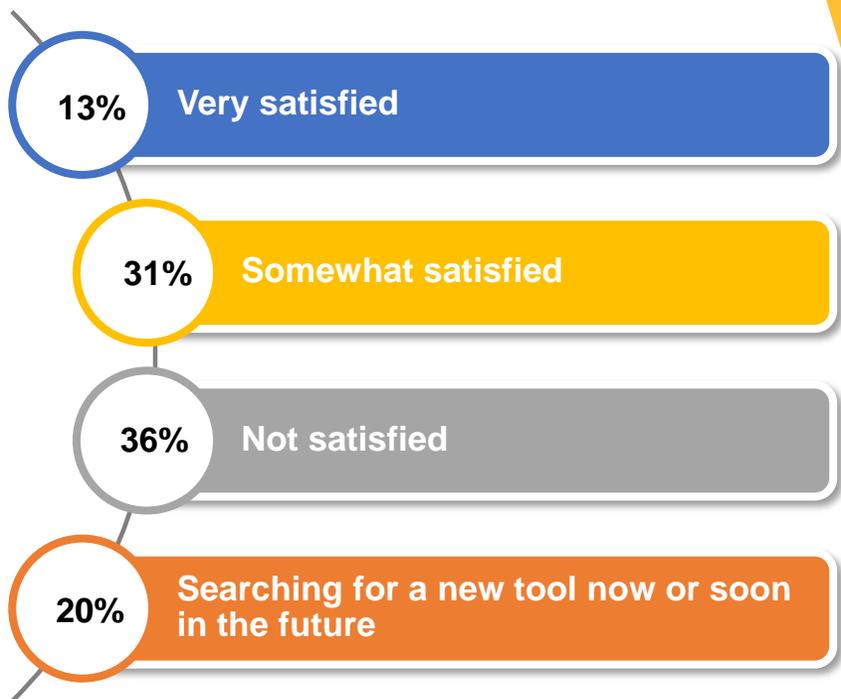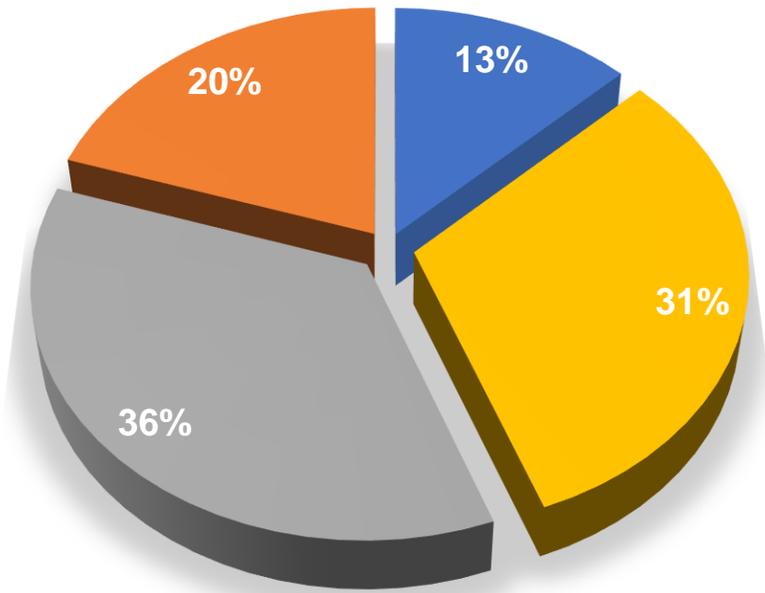
Other — 9%

Getting to great in Resource Management will require companies to put skills data to work more universally for forecasting and career planning and development efforts. The 'old world' companies will be those where the focus remains solely on project allocation needs.
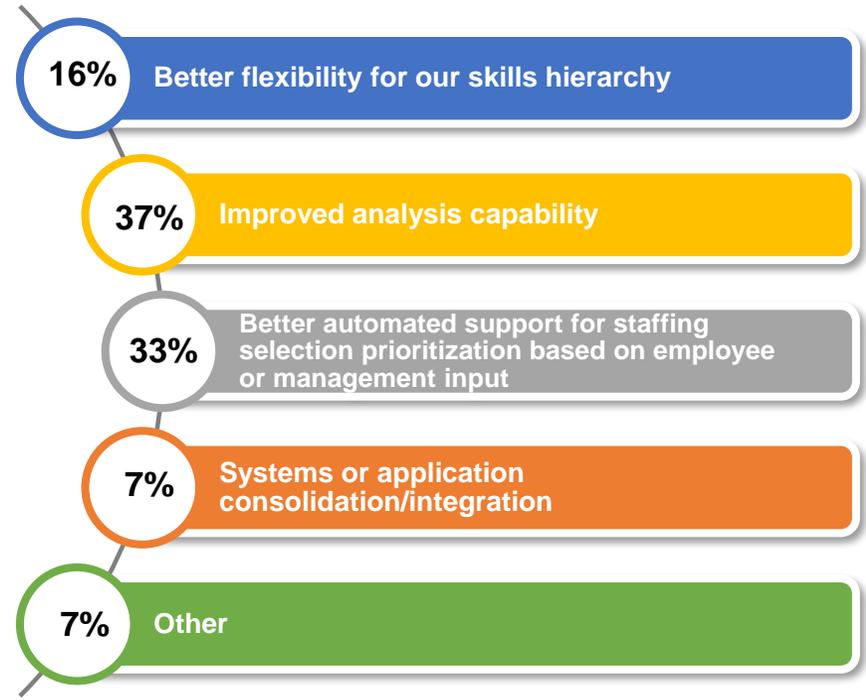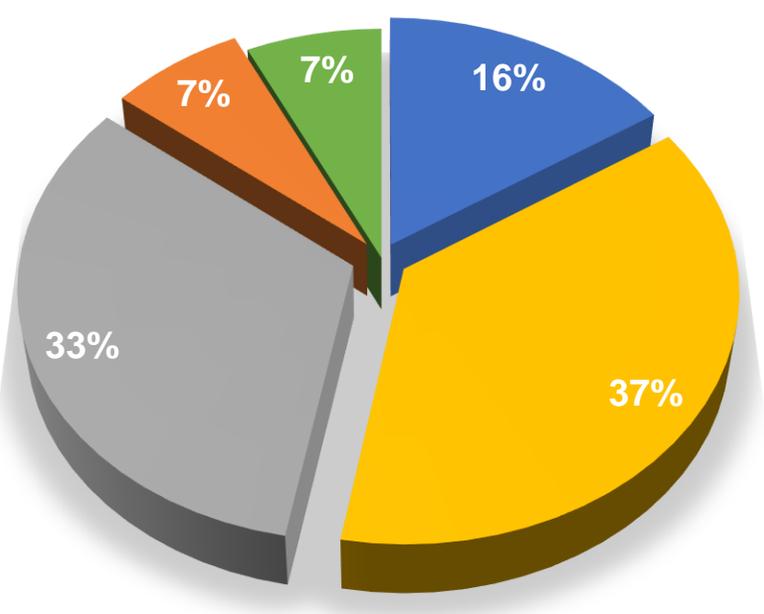
Other:
- We WILL be using for career planning, just not doing it yet
- New hiring / upskilling if shortage on skills for a specific product
- We do not use the skills database correctly at the moment but plan to use for all of the above
- Training plans, curriculum
- To develop training were there are gaps
- Nothing at this time because it is not user friendly and too broad

Q15: We are satisfied with our PSA/PPM/RPM tool(s) regarding capabilities for skills tracking and management? – PS/CS

13% Very satisfied

31% Somewhat satisfied

36% Not satisfied

20% Searching for a new tool now or soon in the future

While 44% are somewhat or very satisfied with their automation tool(s), the rest are not. These findings are entirely consistent with past RMI research identifying opportunities for PSA/PPM providers to improve capabilities for tracking and managing skills.

16% Better flexibility for our skills hierarchy

37% Improved analysis capability

33% Better automated support for staffing selection prioritization based on employee or management input

7% Systems or application consolidation/integration

7% Other

Flexibility, analytics, and more sophisticated capabilities for project allocation made up the predominance of identified needs for PSA/PPM application enhancements.

Other:
- Ease of implementation
- Timeliness of the data provided by resources
- We still need to formalize and rollout our employee skill update/review process as well as our processes for maintenance of the skills included in the database
- Need automation for external resources to review and update skills
- A system that actually works
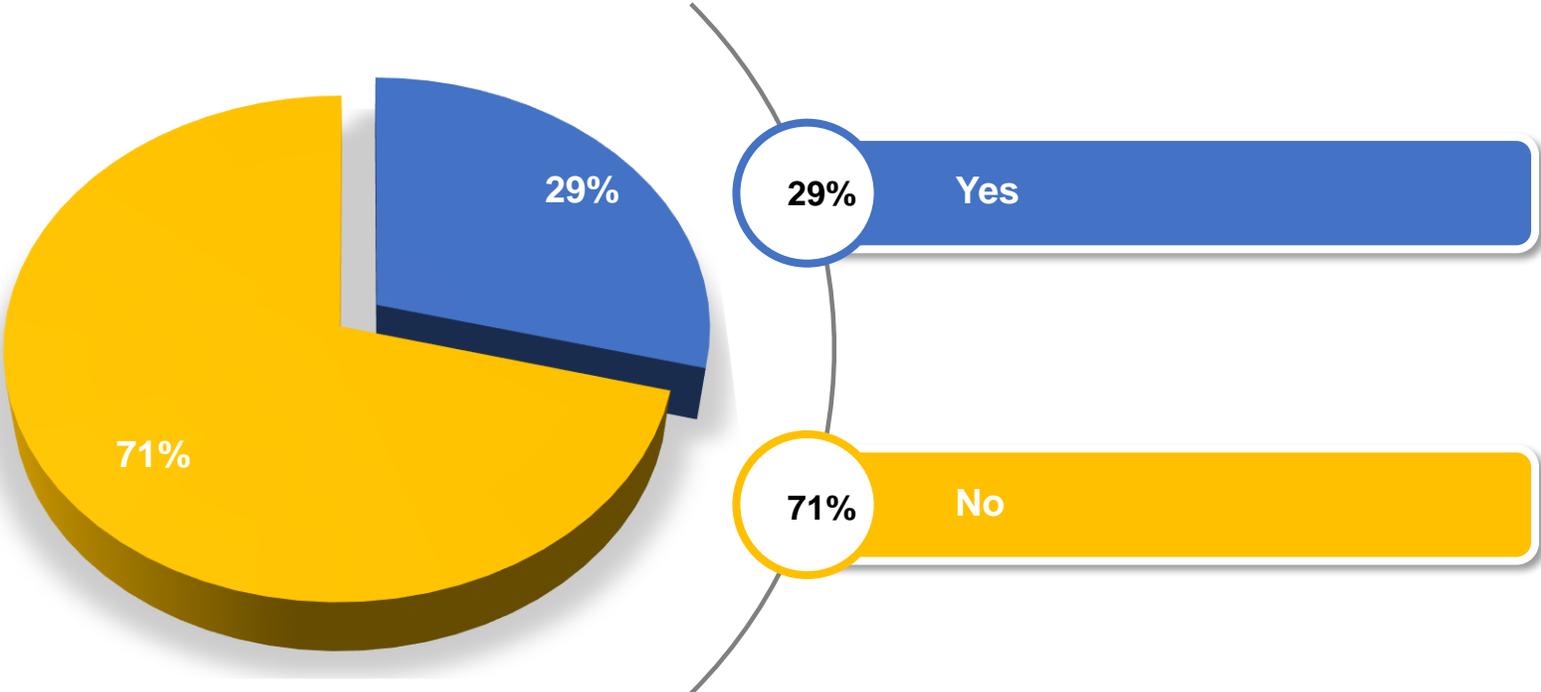
Enterprise/IT Responses

Q2: How many resources in total does your organization manage collectively with all resource managers? – E/IT

3% 51-100

26% 101-200
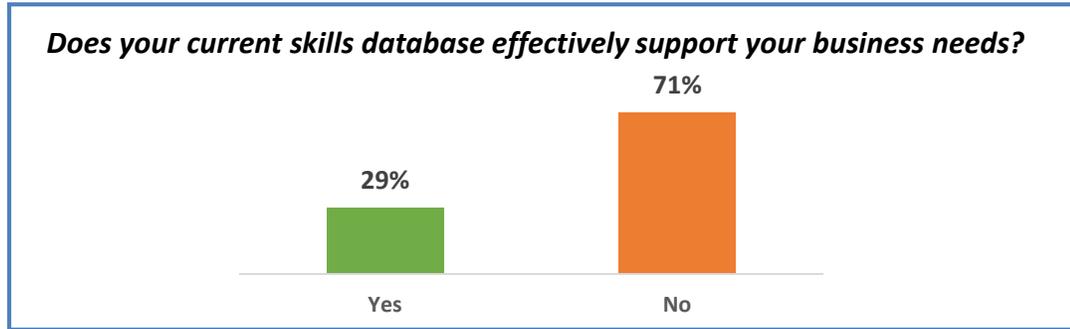
13% 201-500

58% >501
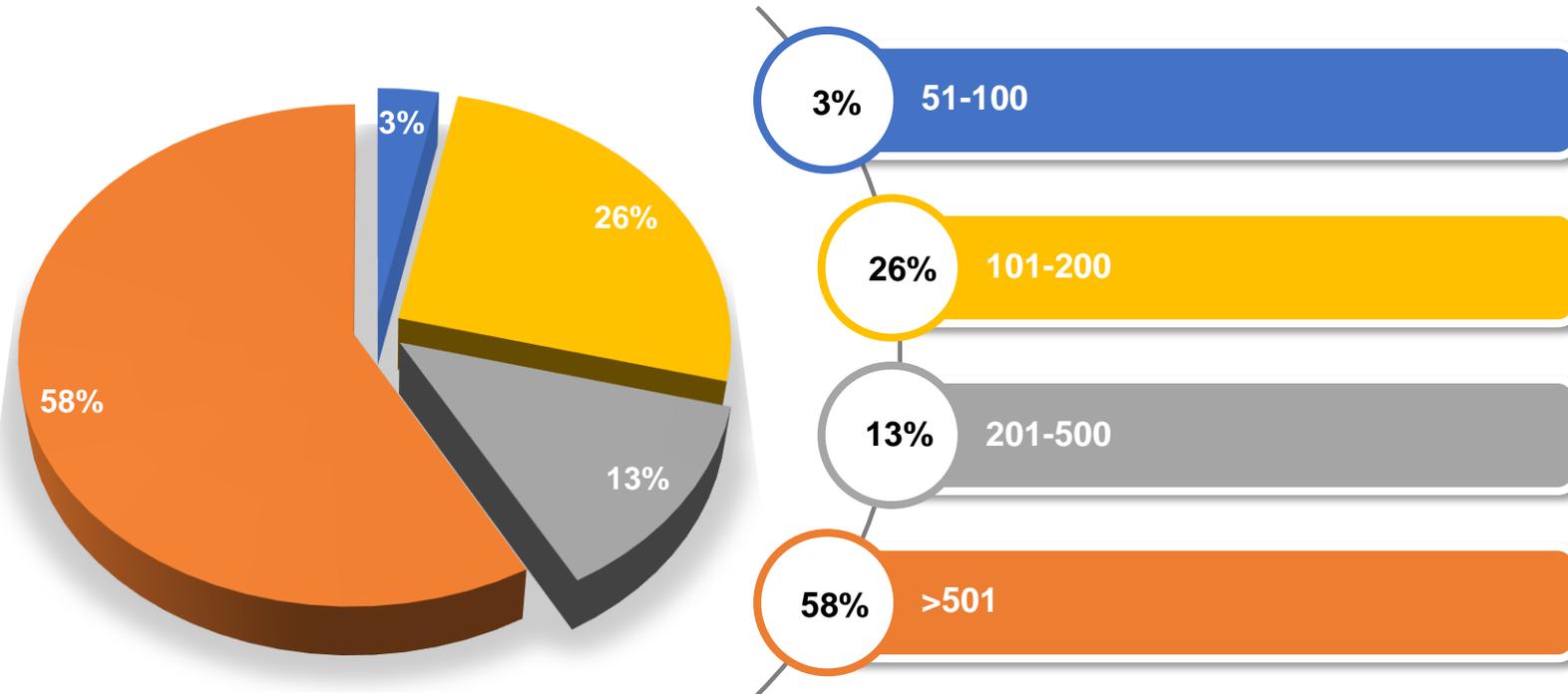
97% of respondents represented organizations with more than 100 resources being managed. Building a useable skills database gets harder as the organization scales so no surprise we had lots of interest from these teams.

Q3: Does your current skills database effectively support your business needs? – E/IT

29%

71%

29% Yes

71% No

More than two thirds of the companies responding indicated the skills database capabilities in their organizations was a pain point. Since an effective skills database is essential to planning an allocation of human resources, addressing this shortfall should be a high priority for these companies.
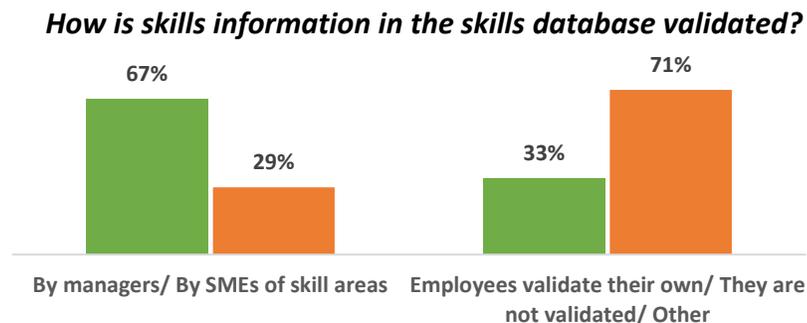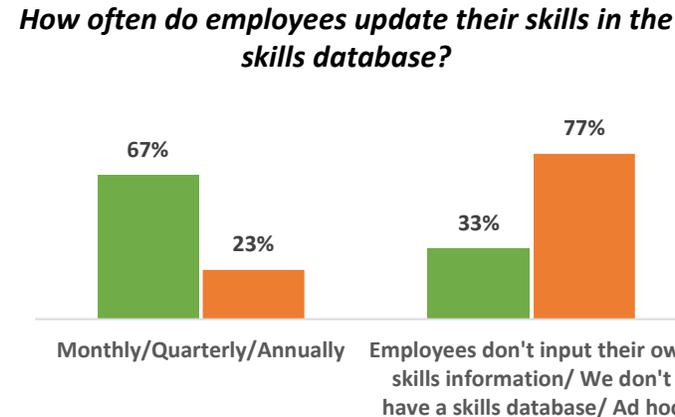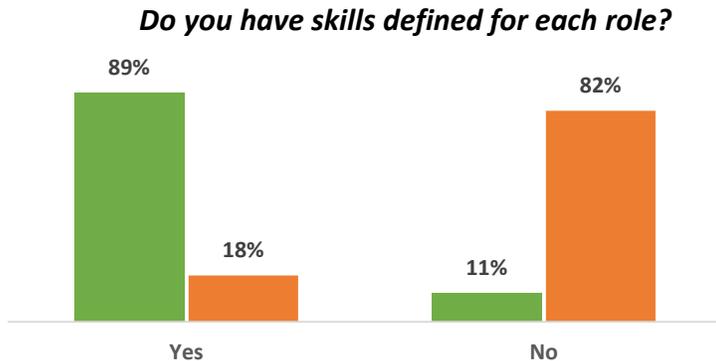
Does your current skills database effectively support your business needs?

- Yes — 29%
- No — 71%

Do you have skills defined for each role?

- Yes — 89% / 18%
- No — 11% / 82%

How often do employees update their skills in the skills database?

- Monthly/Quarterly/Annually — 67% / 23%
- Employees don't input their own skills information/ We don't have a skills database/ Ad hoc — 33% / 77%

How is skills information in the skills database validated?

- By managers/ By SMEs of skill areas — 67% / 29%
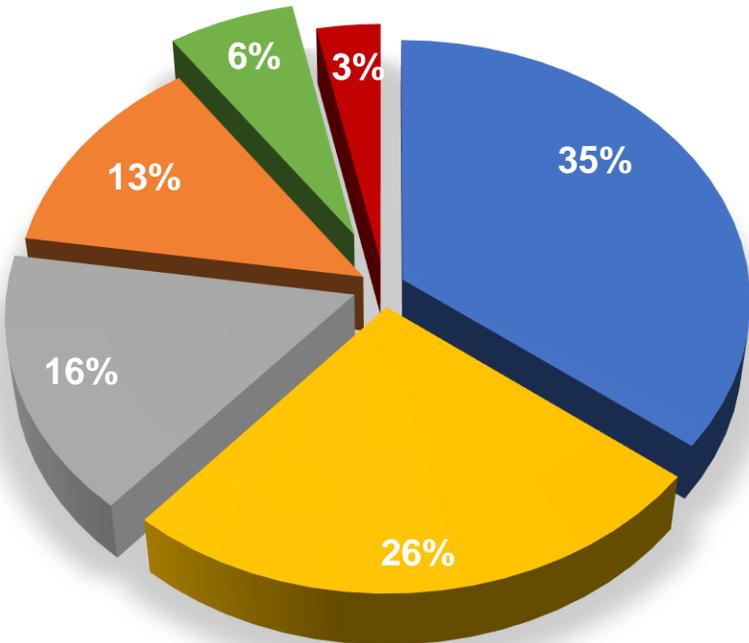- Employees validate their own/ They are not validated/ Other — 33% / 71%

Three RMI best practices for building an effective skills database were confirmed with this survey data.

They are:
1) defining skills by role
2) regular updates by employees
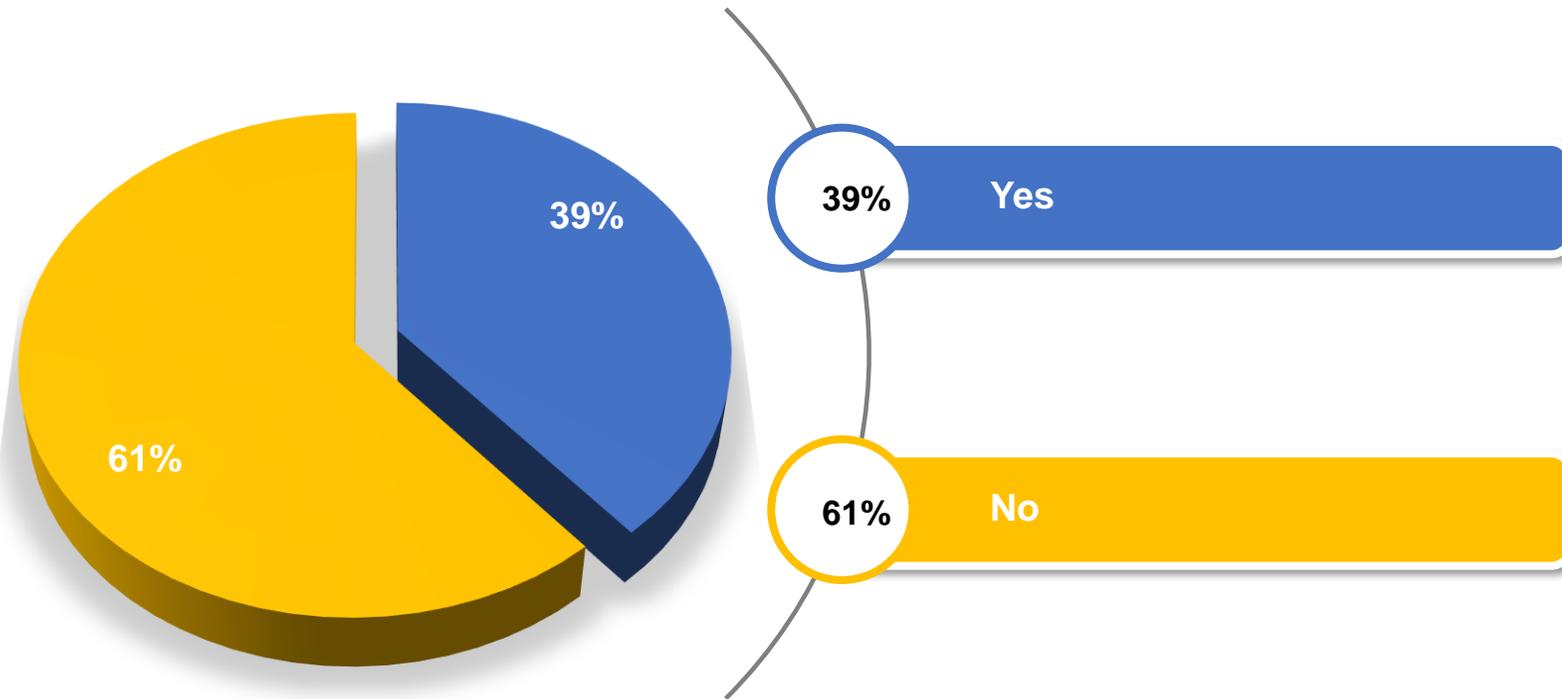3) proper validation of employee data by management or SMEs

35% **<50**

26% **51-100**

16% **101-200**

13% **201-500**

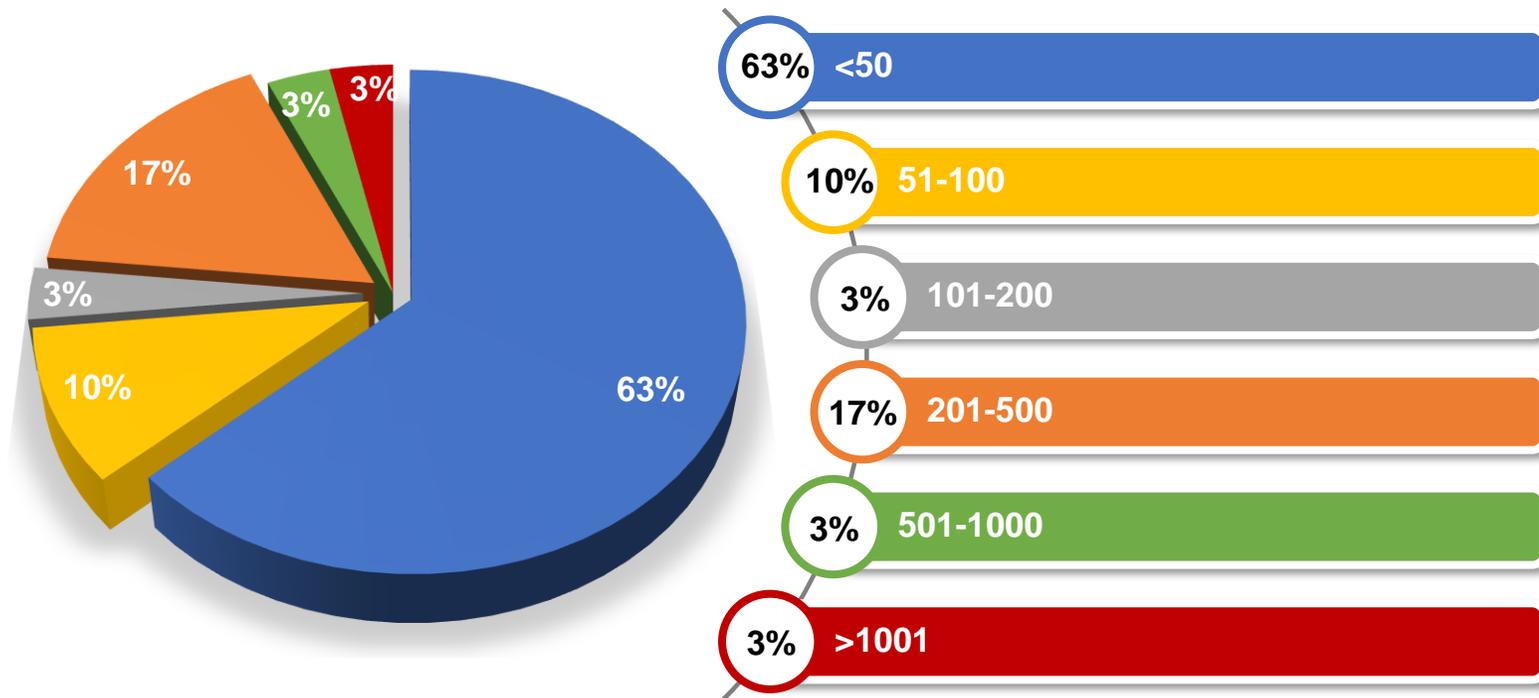**6%** **501-1000**

3% **>1001**

Skill definition is an important aspect of a skills database design. The process of defining skills is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.

Q5: Do you have skills defined for each role?– E/IT

39%

61%

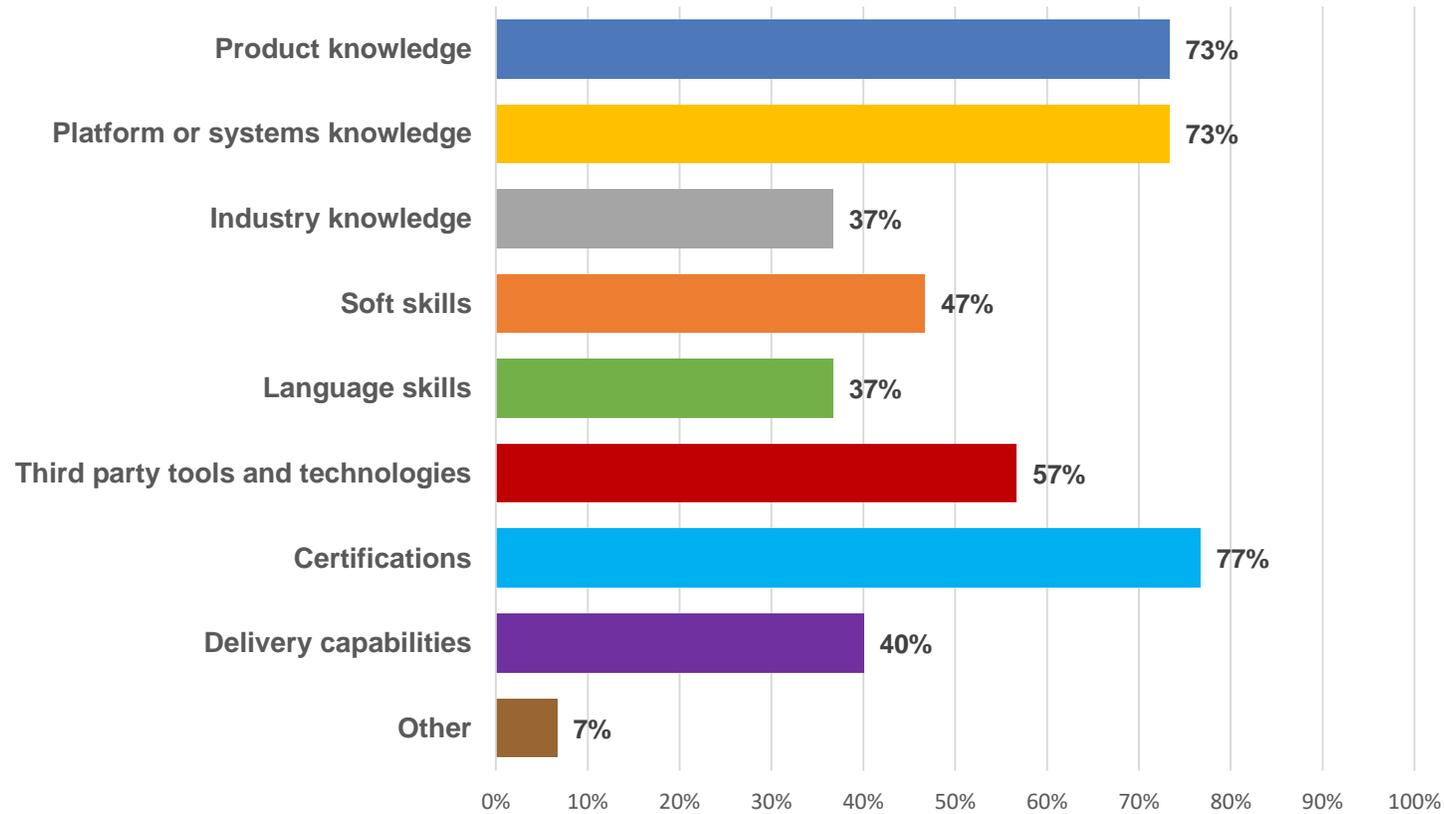| 39% | **Yes** |

| 61% | **No** |

Perhaps one of the most concerning findings of this survey was that nearly two thirds had no skills definition for roles. The lack of precision in role definition makes it infinitely more difficult to plan for skills development and acquisition.

63% <50

10% 51-100

3% 101-200

17% 201-500

3% 501-1000

3% >1001

Skill definition is an important aspect of a skills database design. The process of defining skills is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.

Q7: What categories of skills do you track? (check all that apply) – E/IT

Category	Percentage
Product knowledge	73%
Platform or systems knowledge	73%
Industry knowledge	37%
Soft skills	47%
Language skills	37%
Third party tools and technologies	57%
Certifications	77%
Delivery capabilities	40%
Other	7%

There is a clear focus on the 'hard' skills while 'soft' skills lags. Soft skills particularly those related to internal client interactions are helpful for managing project expectations and outcomes. Therefore E/IT orgs should consider giving soft skills additional focus.

35% HR

26% Service delivery

23% RMO/PMO

16% Other
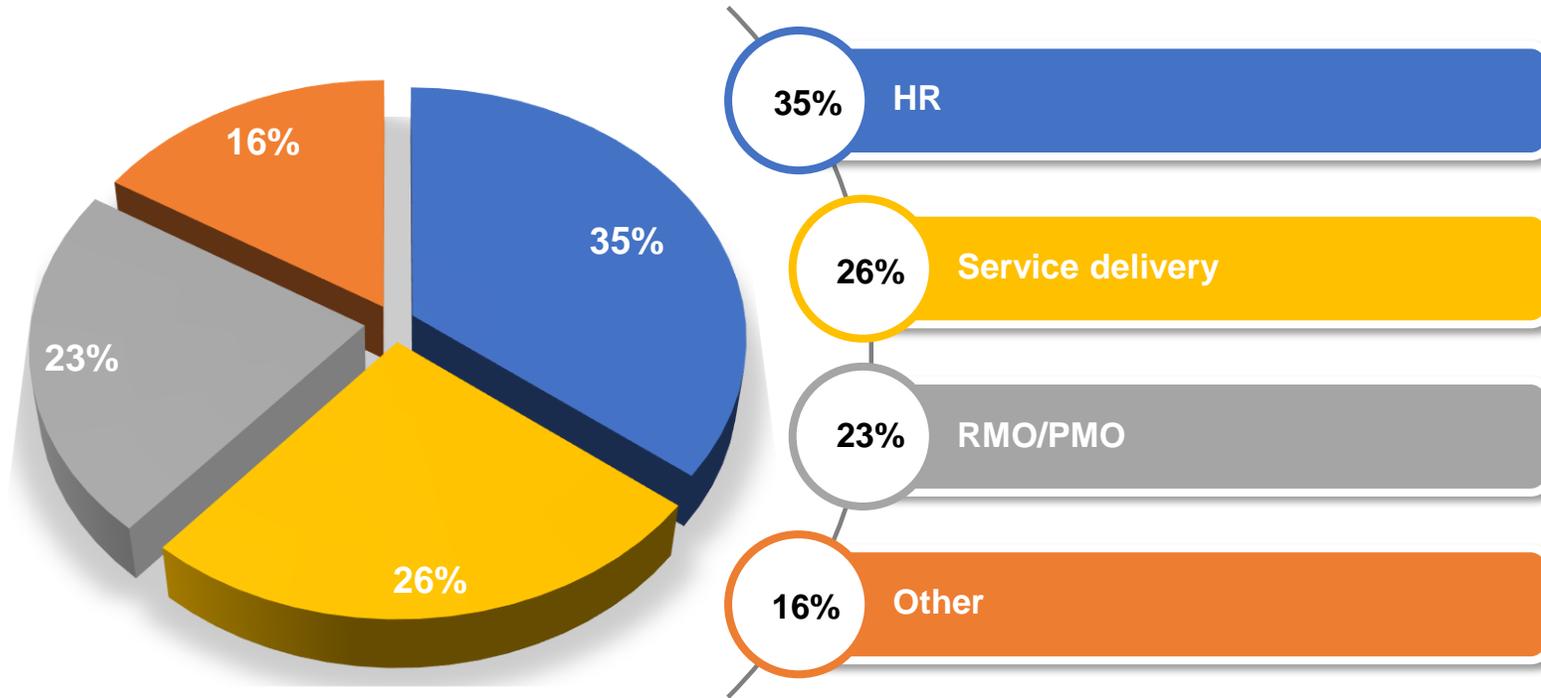
In contrast to their PS/CS counterparts, HR plays a more involved role with these teams in the formation of a skills taxonomy. The RMI recommends this process be cross-functional as the use, maintenance, and ongoing evolution of the skills taxonomy can benefit from both delivery and HR.

Other:
- IT Leadership
- All HR, RMO, PMO, Service Delivery together
- We currently do not have anything in place and we are working on developing it. It will be a taskforce made up of mixed functions.
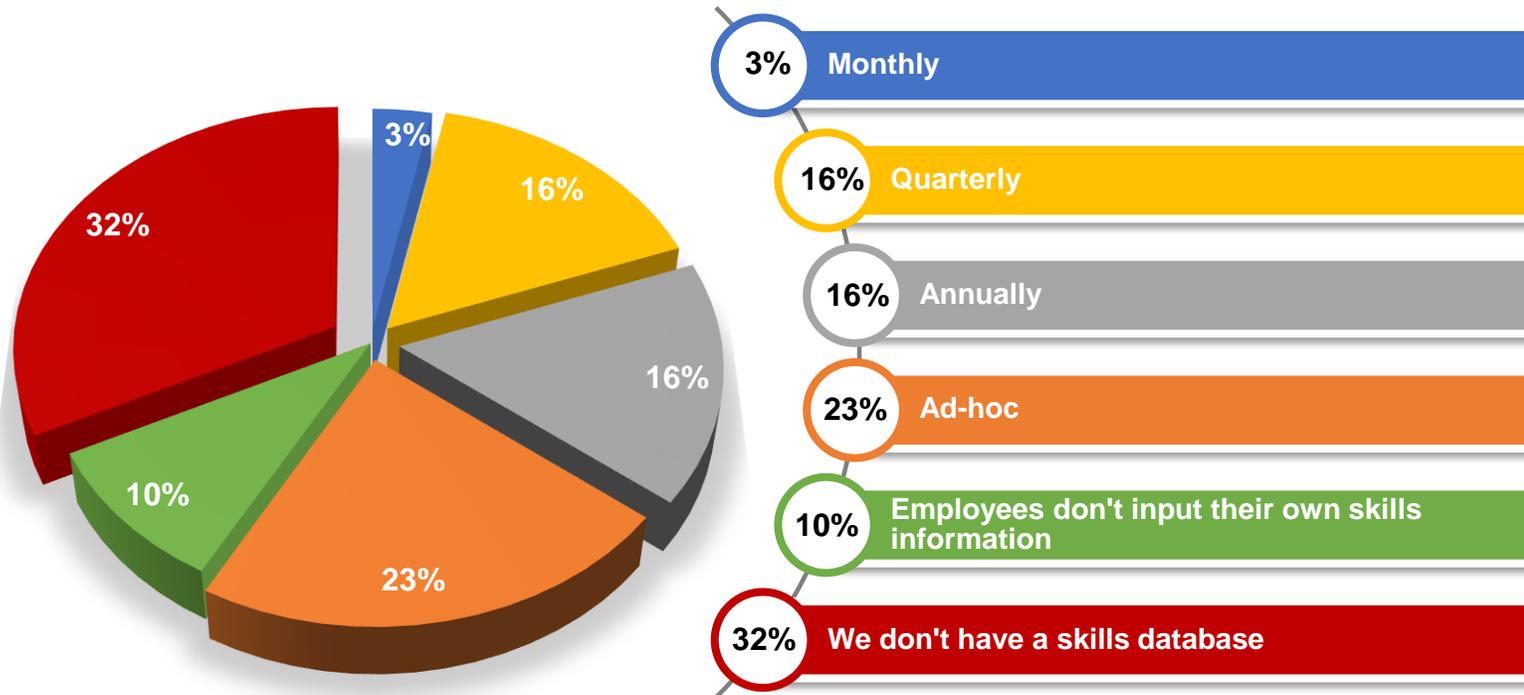- Learning and Knowledge Management team
- Engineering and Project Management Managers

Q9: How many proficiency levels do you track? – E/IT

- 10% — 3
- 23% — 4
- 35% — 5+
- 32% — We don't track proficiency levels

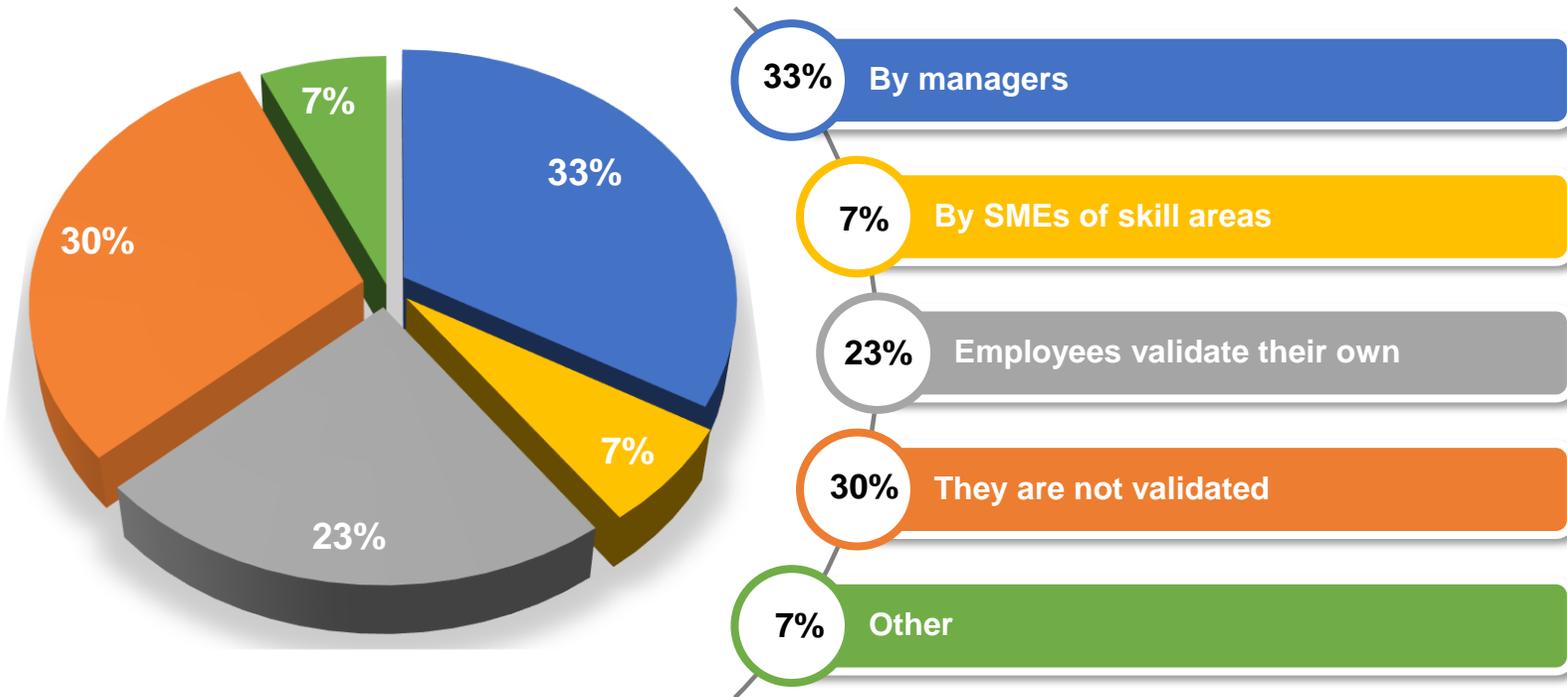Pie chart values: 10%, 23%, 35%, 32%
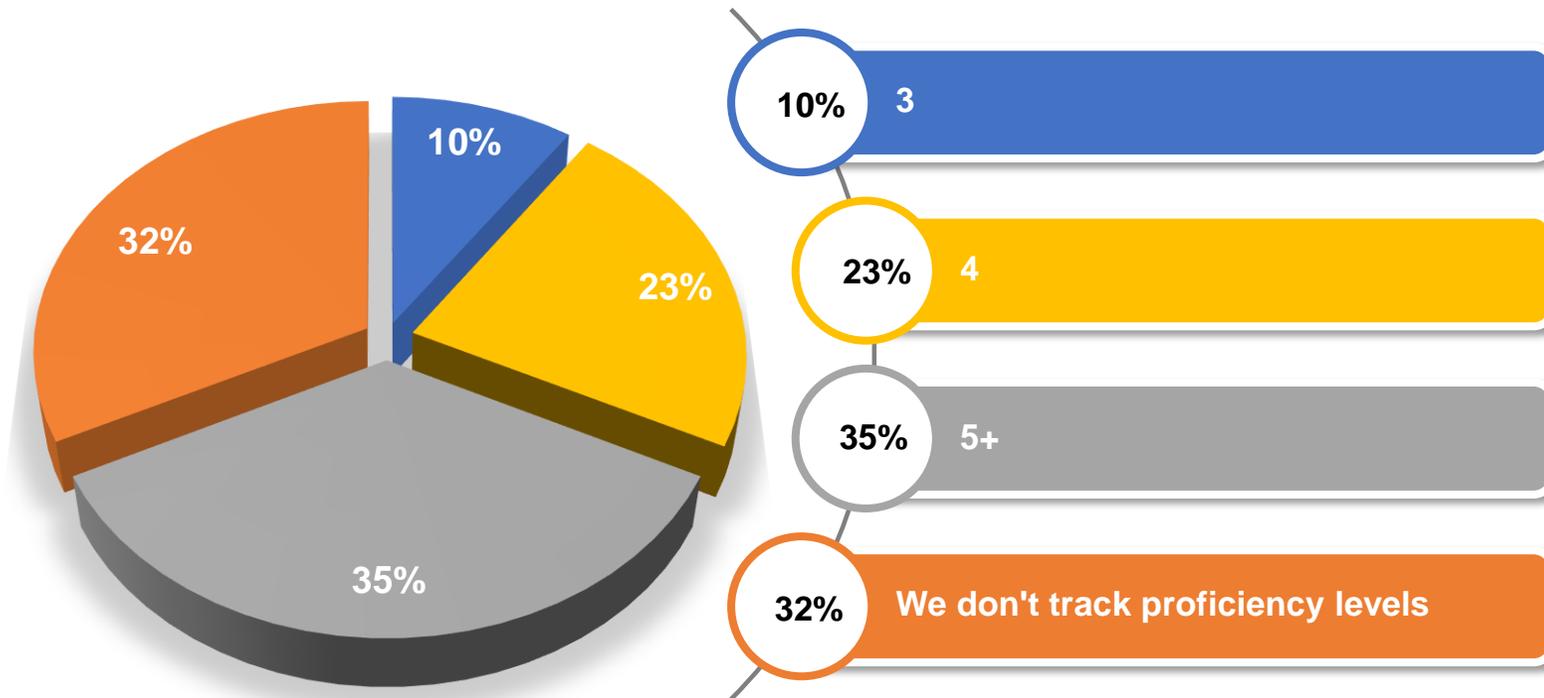
The RMI believes that E/IT should put more focus on proficiency to improve productivity and morale of the workforce, and project quality. A clear contrast exists with E/IT vs. their PS/CS counterparts. The RMI believes this is because PS/CS personnel are more external client facing and therefore proficiency for billable services puts more pressure to this aspect of employee development.

Q10: How often do employees update their skills in the skills database? (check the answer closest to what you require) – E/IT

3% Monthly

16% Quarterly

16% Annually

23% Ad-hoc

10% Employees don't input their own skills information

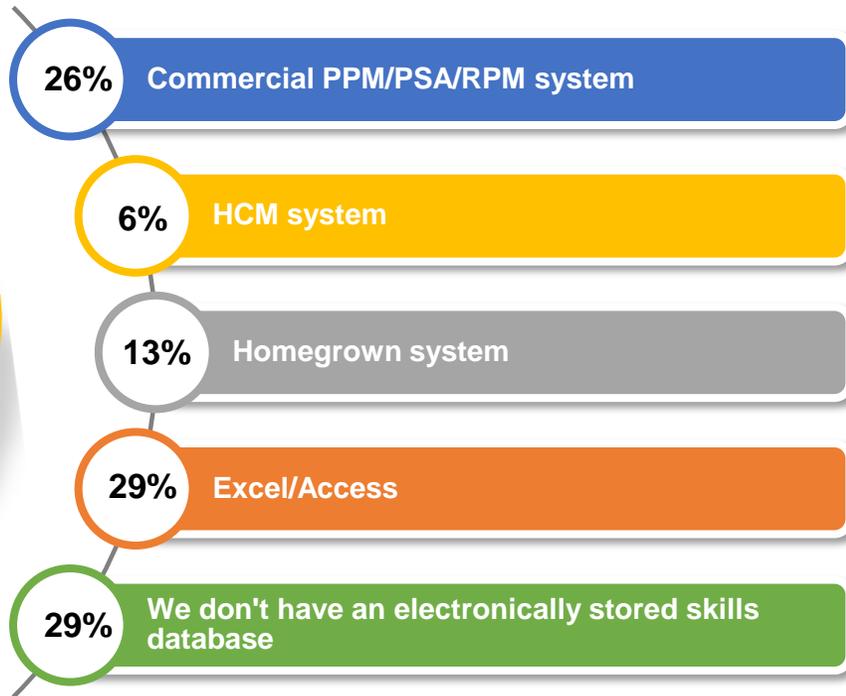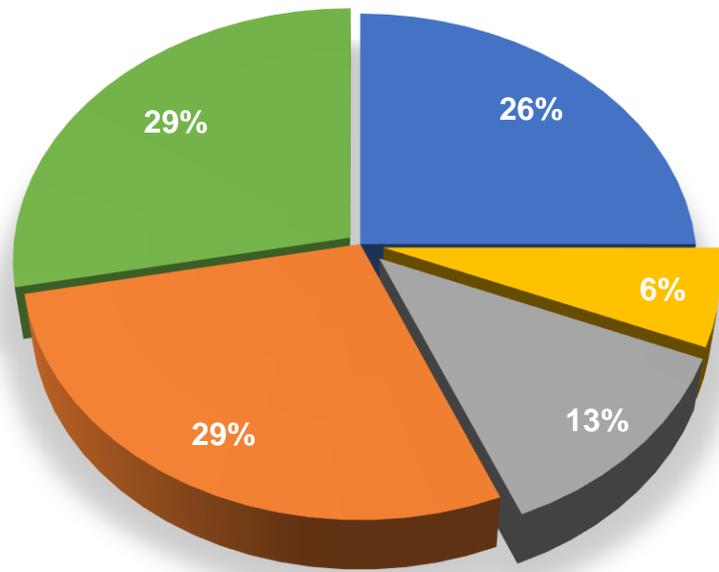32% We don't have a skills database

A key success factor in successful resource management is a well designed and maintained skills database. A third of respondents have no skills database. Another 33% using ad-hoc or with no process for employee updates. The data clearly points to an industry with significant room for improvement regarding skills databases supporting resource management.

33% By managers

7% By SMEs of skill areas

23% Employees validate their own
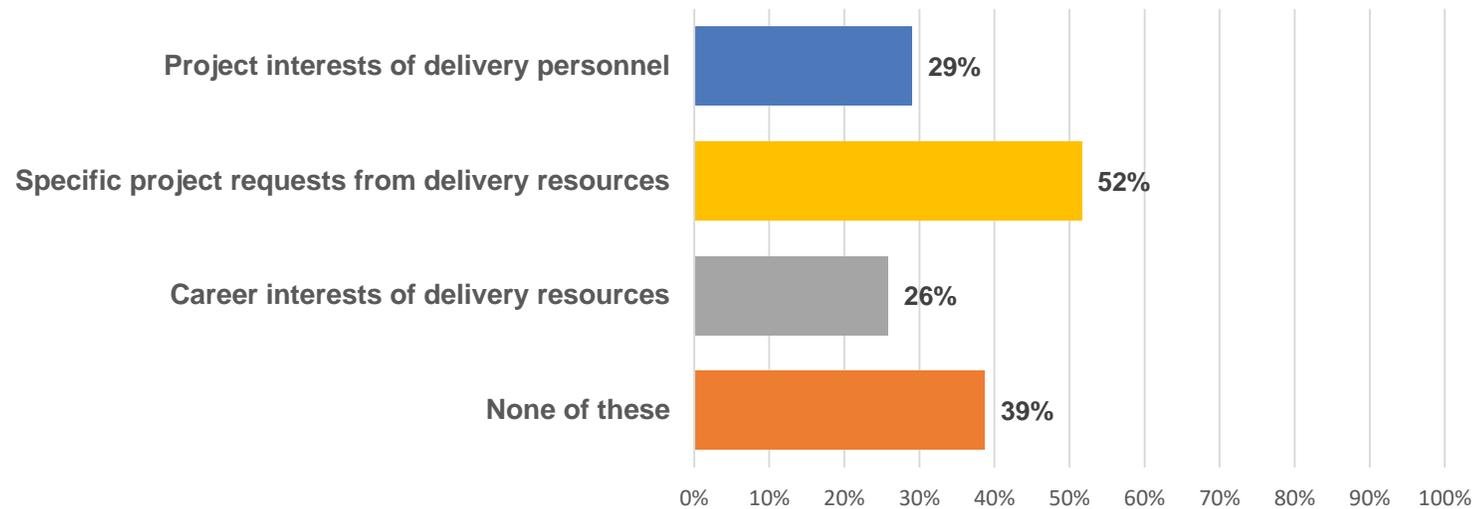
30% They are not validated

7% Other

For companies that require regular maintenance of skills information, only 40% have a validation procedure to ensure integrity of the data. Note that more than half default to either no validation or allow the employee to self-validate. The RMI recommends that a manager conduct validation somewhere in the process.

Q12: How do you physically store your skills database? (check all that apply) – E/IT

26% Commercial PPM/PSA/RPM system

6% HCM system

13% Homegrown system

29% Excel/Access

29% We don't have an electronically stored skills database
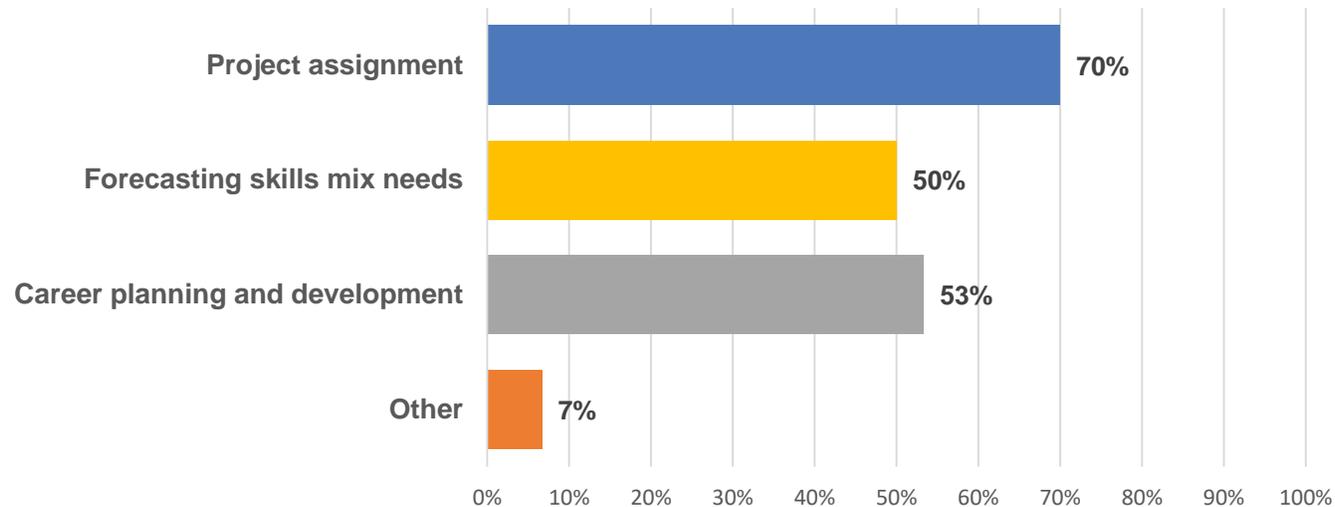
Less than half of respondents are using a specific tool to store the skills database. The use of spreadsheets to support the process puts a spotlight on the need for more robust automation tools to reduce or eliminate dependence on separate tools. With almost a third not using a skills database, this represents a real opportunity to use technology and process to improve overall resource management and employee engagement.

Project interests of delivery personnel — 29%
Specific project requests from delivery resources — 52%
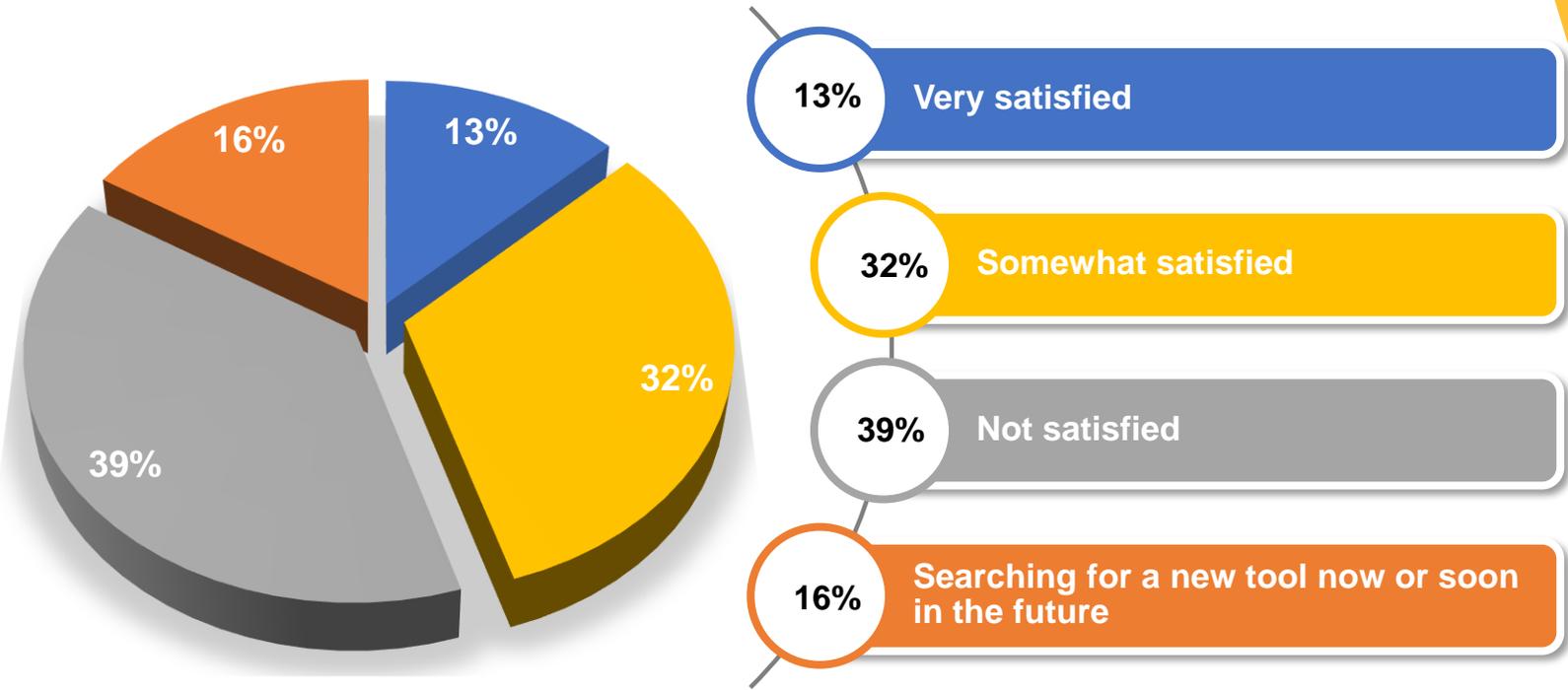Career interests of delivery resources — 26%
None of these — 39%

The tightening of workforce availability will require all companies to up their game when it comes to employee engagement. It is encouraging that so many are tracking elements important to the individual to support scalable employee engagement programs. Note that more than one third however are not tracking these elements.

Q15: We are satisfied with our PSA/PPM/RPM tool(s) regarding capabilities for skills tracking and management? – E/IT

13% Very satisfied

32% Somewhat satisfied

39% Not satisfied

16% Searching for a new tool now or soon in the future

While 45% are somewhat or very satisfied with their automation tool(s), the rest are not. These findings are entirely consistent with past RMI research identifying opportunities for PSA/PPM providers to improve capabilities for tracking and managing skills.

Q16: Our highest priority for PSA/PPM/RPM improvements related to skills management and tracking is: – E/IT
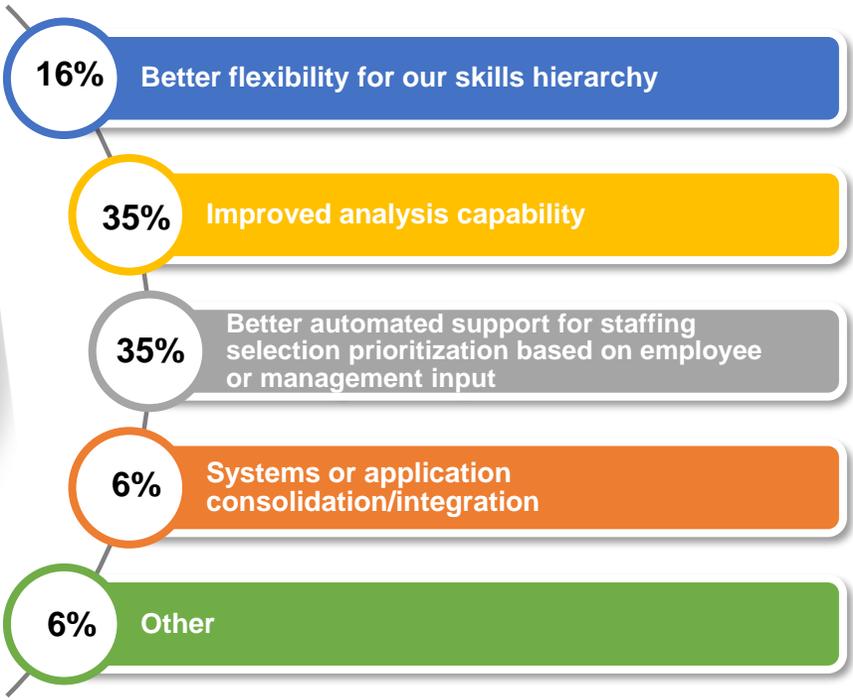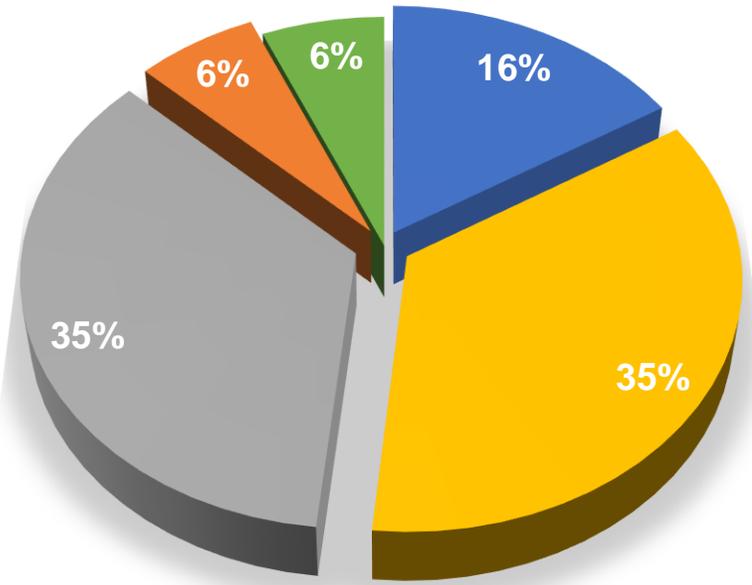
16% Better flexibility for our skills hierarchy

35% Improved analysis capability

35% Better automated support for staffing selection prioritization based on employee or management input

6% Systems or application consolidation/integration

6% Other

Flexibility, analytics, and more sophisticated capabilities for project allocation made up the predominance of identified needs for PSA/PPM application enhancements.

Other:
- No PPM improvements-difficult to track centrally due to HR privacy issues related to recording personal skills and proficiencies
- Simply having the forms/fields to track the data

Product Development Responses

Note: Product development is a new focus group for the RMI and this survey had only a small number of respondents from those organizations. As our respondent base and product development membership grows, this data will become more valuable to those organizations. The results are not too dissimilar from the PS/CS and E/IT.
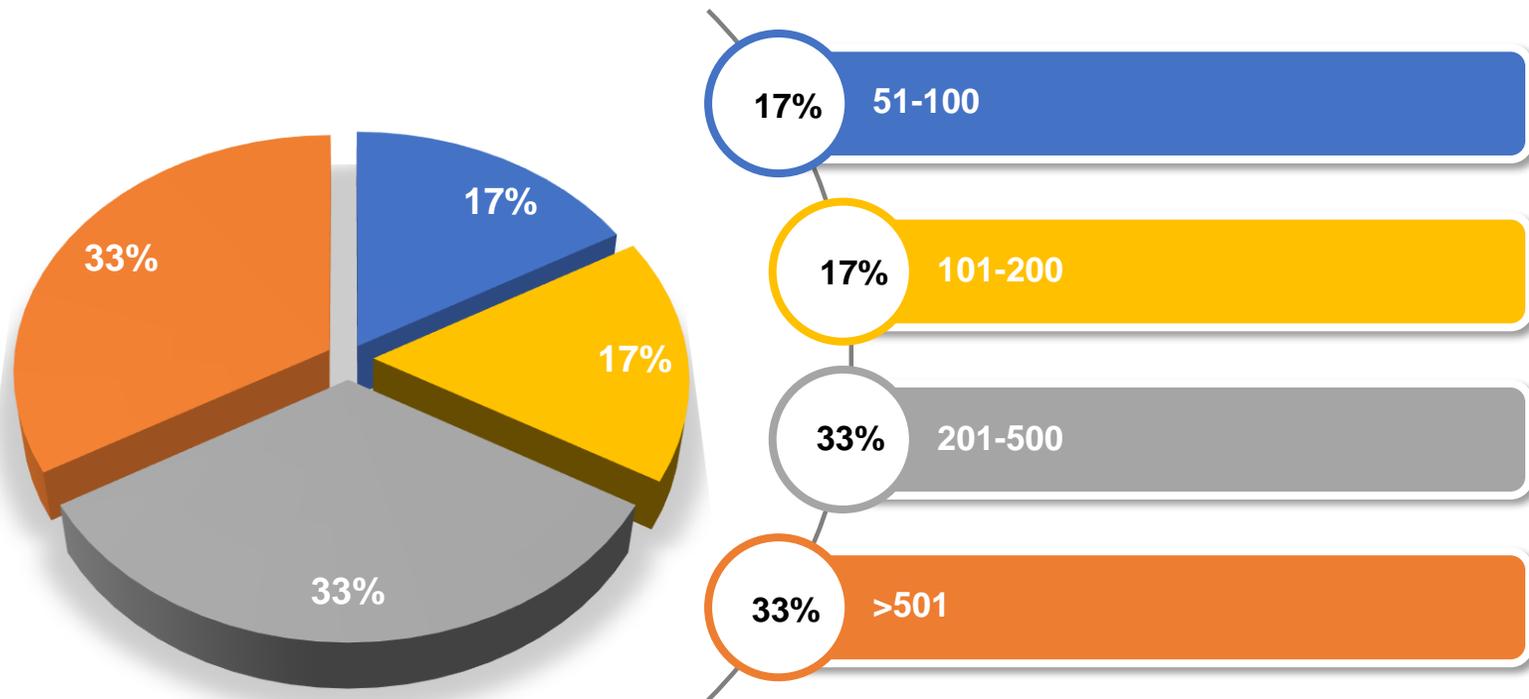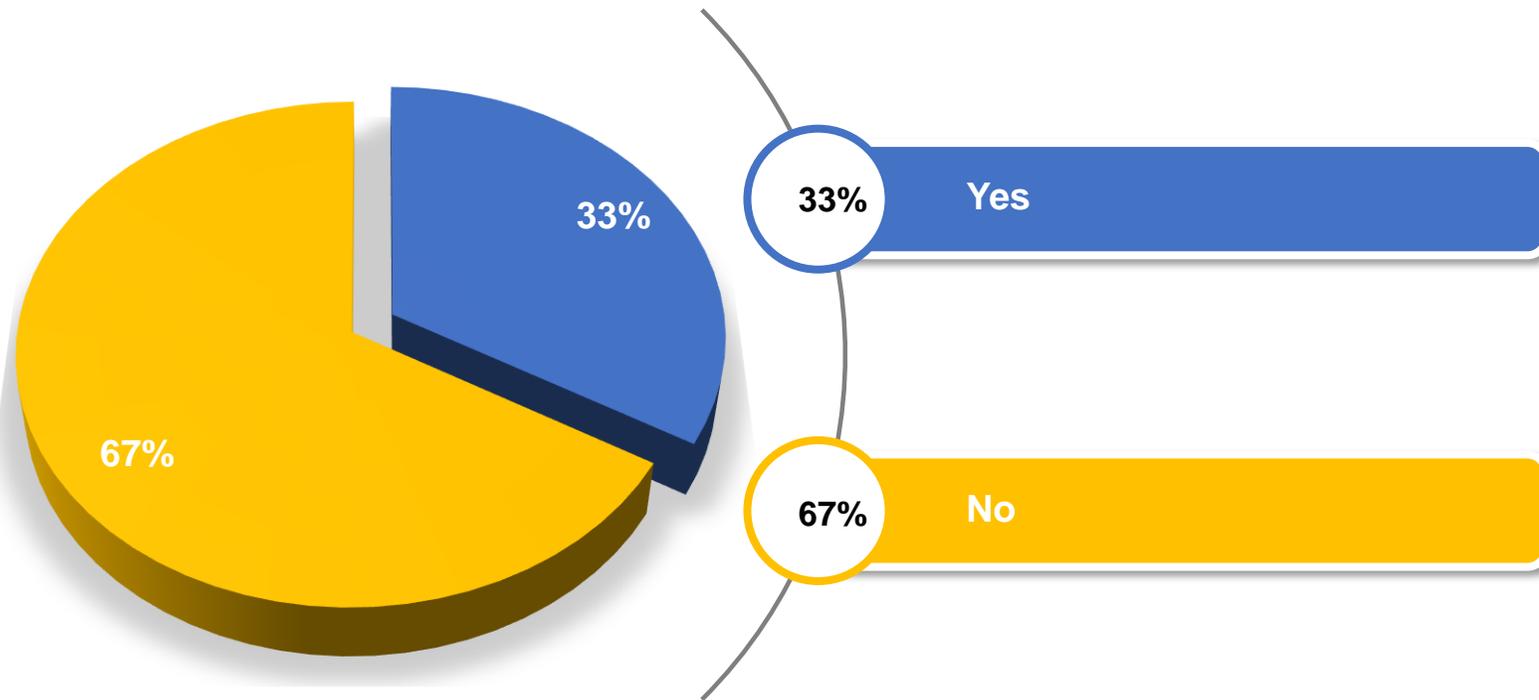
Q3: Does your current skills database effectively support your business needs? – PD

33% Yes

33%

67%

67% No

More than two thirds of the companies responding indicated the skills database capabilities in their organizations was a pain point. Since an effective skills database is essential to planning an allocation of human resources, addressing this shortfall should be a high priority for these companies.
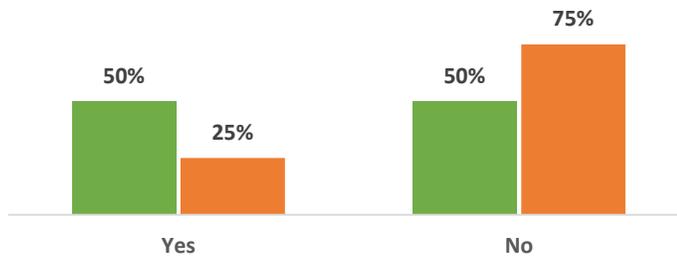
Analysis (PD): The leaders in creating and using an effective skills data base do the following:

Does your current skills database effectively support your business needs?

- Yes: 33%
- No: 67%

Do you have skills defined for each role?

- Yes: 50% / 25%
- No: 50% / 75%

How often do employees update their skills in the skills database?

- Monthly/Quarterly/Annually: 0% / 50%
- Employees don't input their own skills information/ We don't have a skills database/ Ad hoc: 100% / 50%

How is skills information in the skills database validated?

- By managers/ By SMEs of skill areas: 50% / 50%
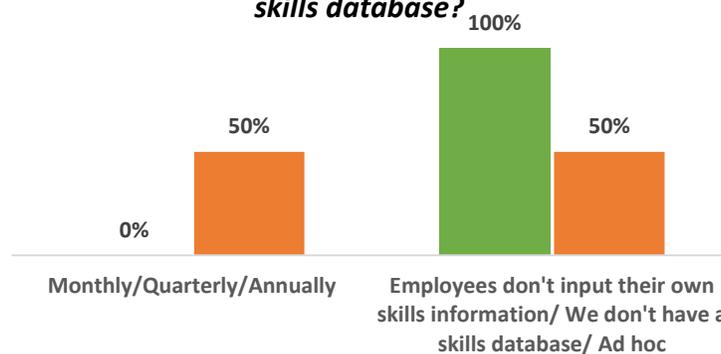- Employees validate their own/ They are not validated/ Other: 50% / 50%

Three RMI best practices for building an effective skills database were confirmed with survey data for PS/CS and E/IT.

The sample size for PD was too small to collect statistically valid data. The RMI believes in future surveys if we are able to expand PD participation, support for best practices as outlined below will be confirmed:
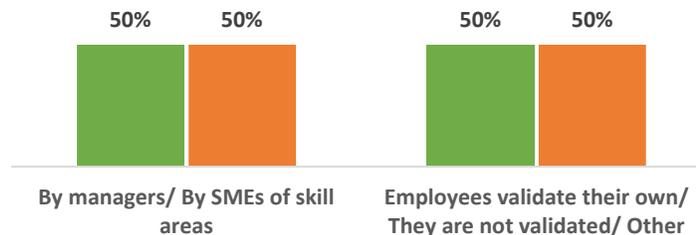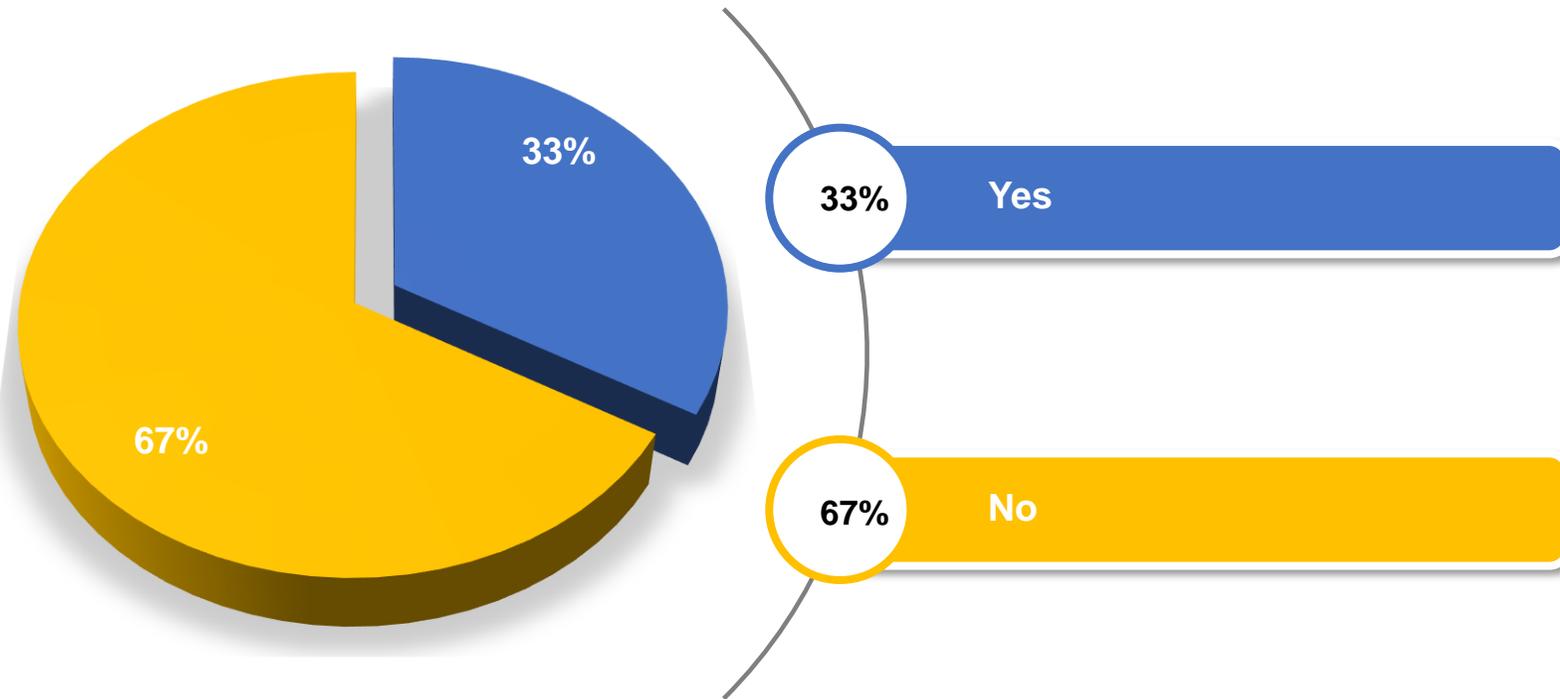
They are:

1) defining skills by role
2) regular updates by employees
3) proper validation of employee data by management or SMEs
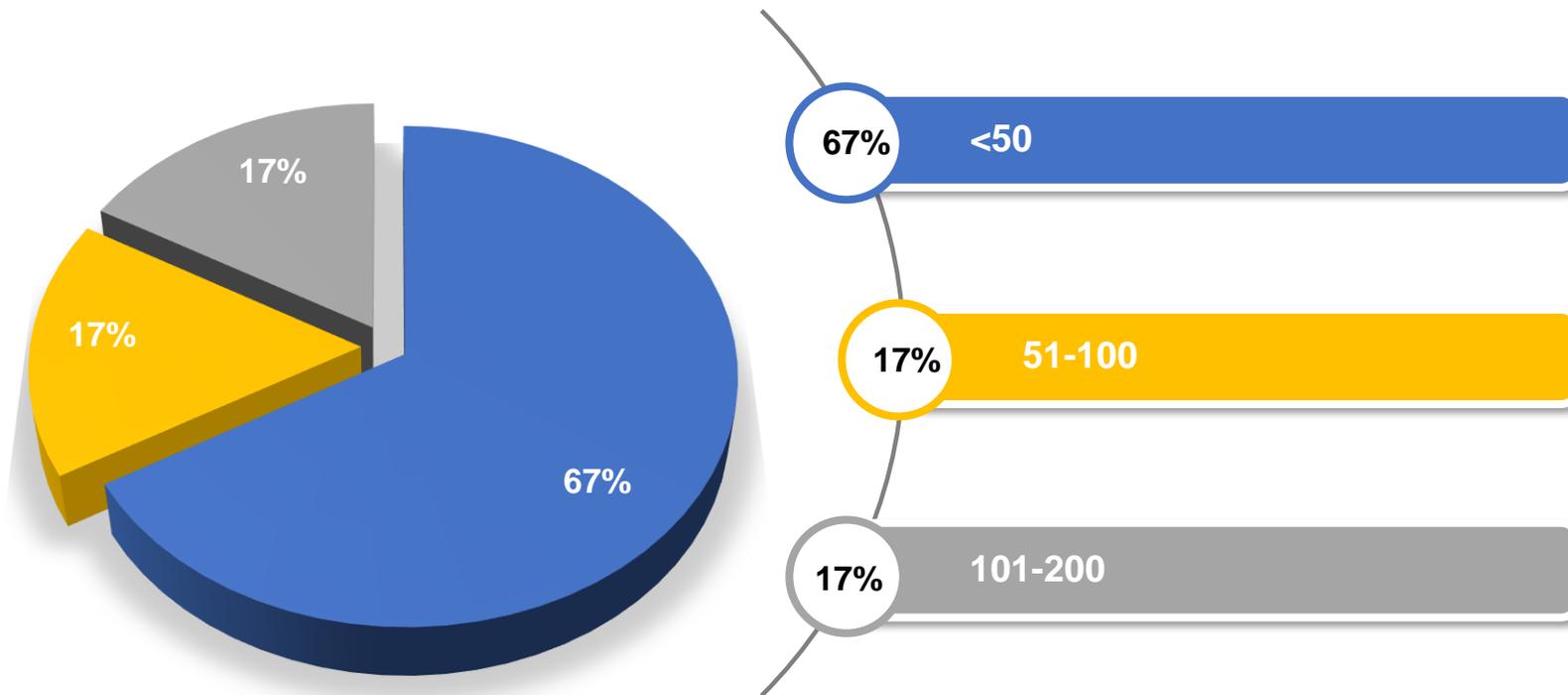
67% <50

17% 51-100

17% 101-200

Skill definition is an important aspect of a skills database design. The process of defining skills is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.
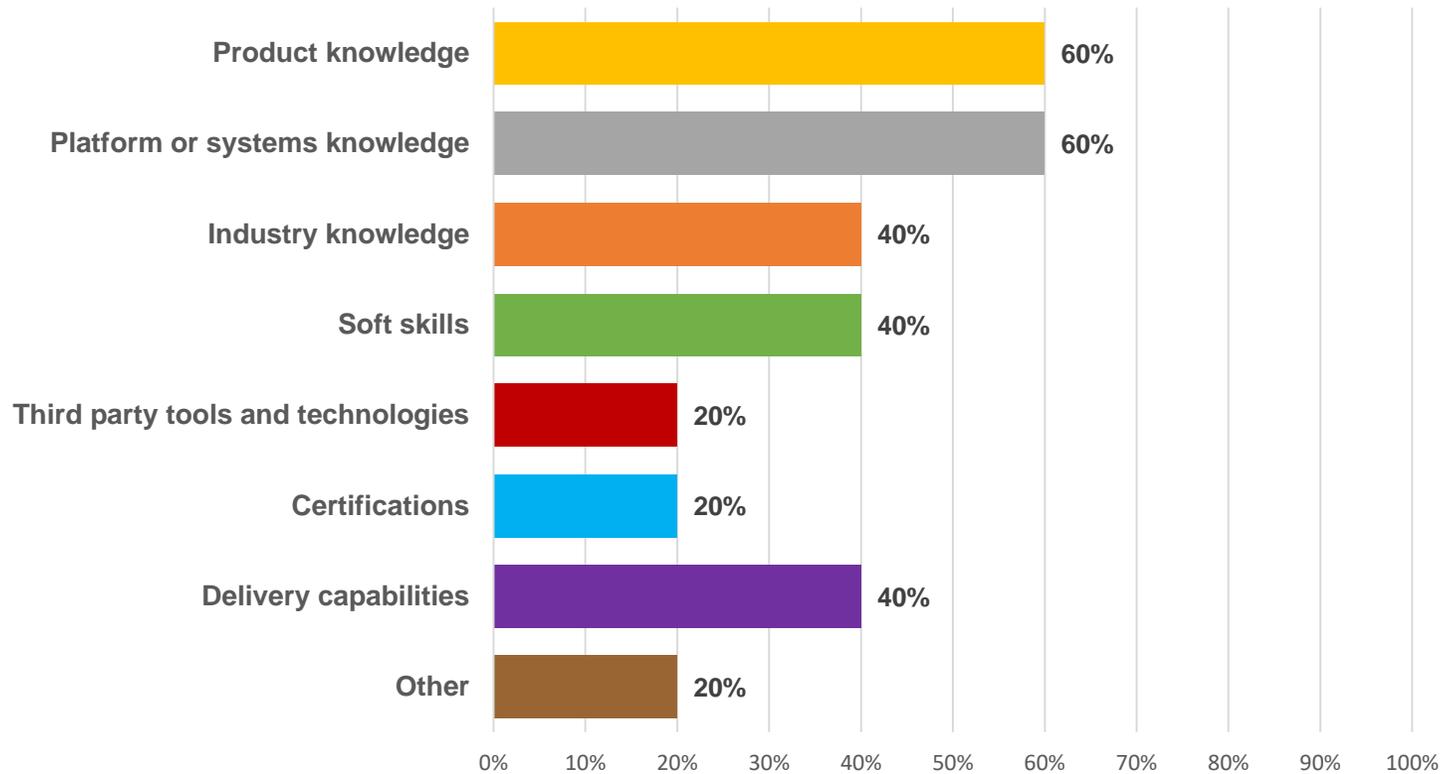
33%

33% Yes

67%

67% No

Perhaps one of the most concerning findings of this survey was that two thirds had no skills definition for roles. The lack of precision in role definition makes it infinitely more difficult to plan for skills development and acquisition.

67% **<50**

17% **51-100**

17% **101-200**

Skill definition is an important aspect of a skills database design. The process of defining skills is as much an art as a science when it comes to having a correct amount of granularity to enable planning which can be specific while not too cumbersome to manage and maintain.

Q7: What categories of skills do you track? (check all that apply) – PD

Product knowledge — 60%
Platform or systems knowledge — 60%
Industry knowledge — 40%
Soft skills — 40%
Third party tools and technologies — 20%
Certifications — 20%
Delivery capabilities — 40%
Other — 20%

There is a clear focus on the 'hard' skills while 'soft' skills lags. Soft skills particularly those related to internal client interactions are helpful for managing project expectations and outcomes and therefore PD orgs should consider giving soft skills additional focus.
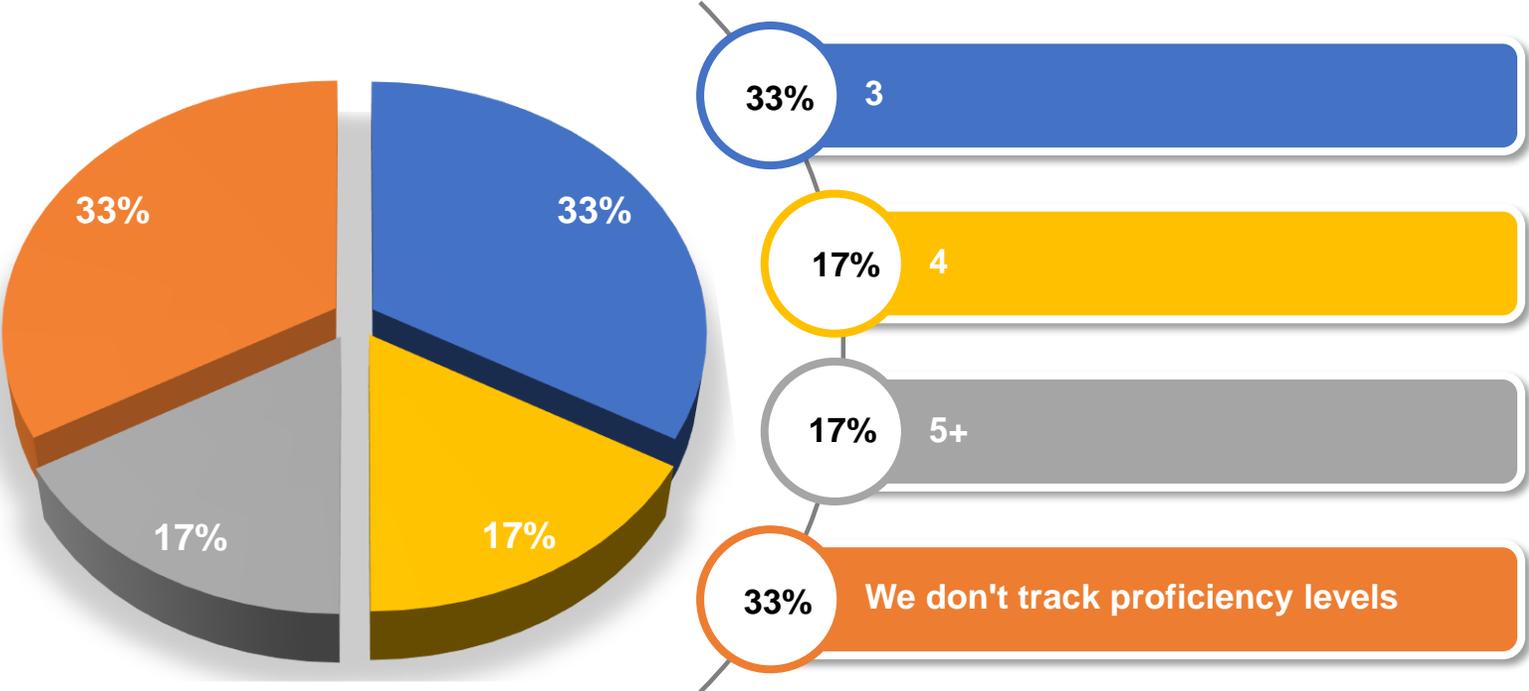
17%	HR
17%	Service delivery
50%	RMO/PMO
17%	Other
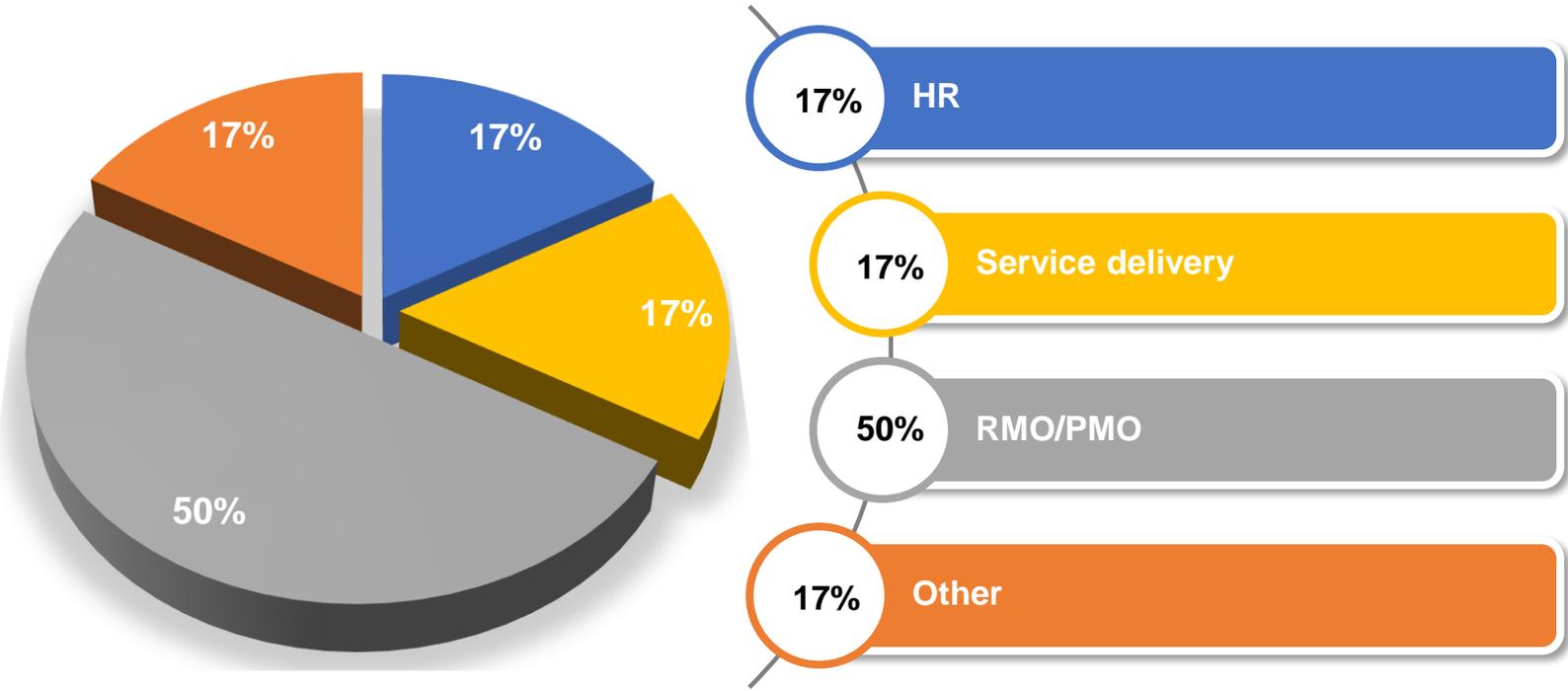
The RMI recommends this process be cross-functional as the use, maintenance, and ongoing evolution of the skills taxonomy can benefit from both PD and HR.
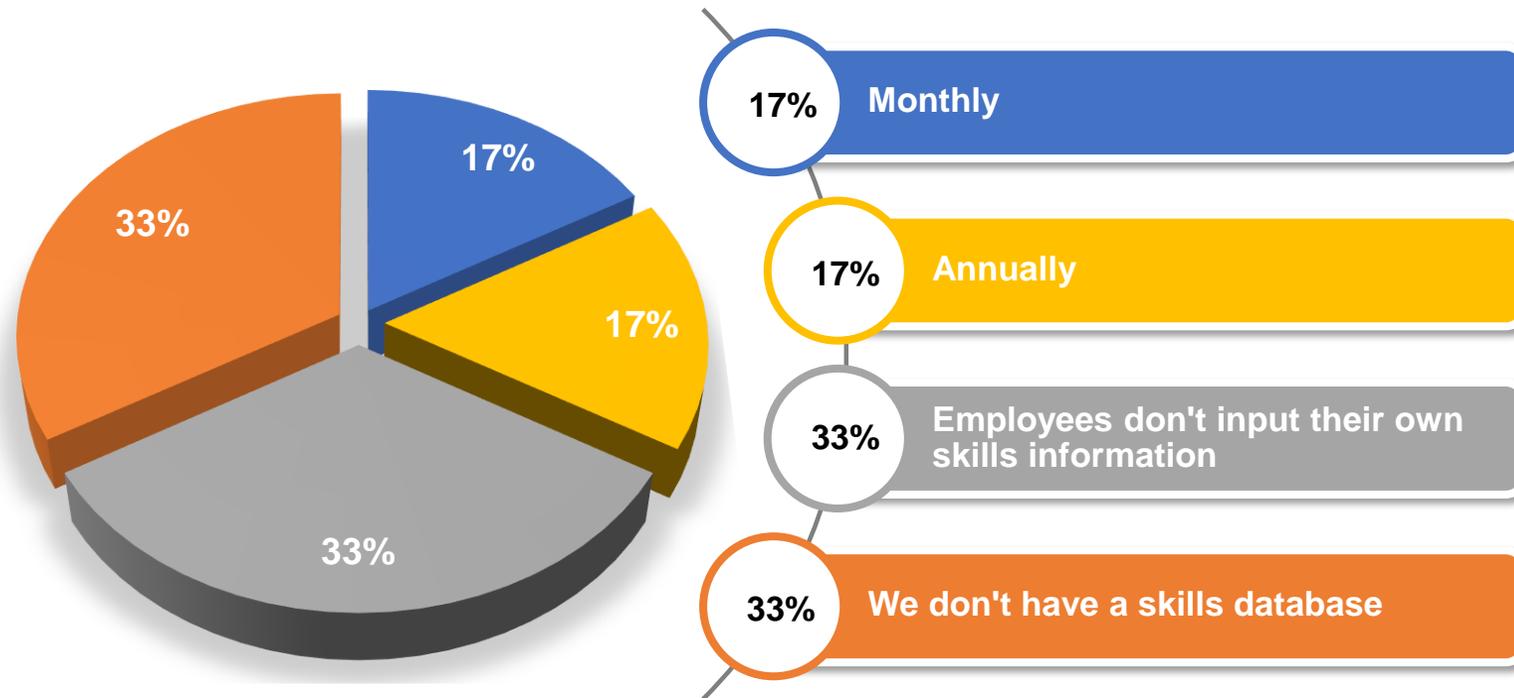
Other:
- Each department

33% 3

17% 4

17% 5+

33% We don't track proficiency levels

Encouraging that two thirds of PD respondents do track proficiency levels. The remaining third should put more focus on proficiency to improve productivity and morale of the workforce, and project quality. A clear contrast exists with PD vs. their PS/CS counter-parts. The RMI believes this is because PS/CS personnel are more external client facing and therefore proficiency for billable services puts more pressure on this aspect of employee development.

Q10: How often do employees update their skills in the skills database? (check the answer closest to what you require) – PD

17% Monthly

17% Annually

33% Employees don't input their own skills information

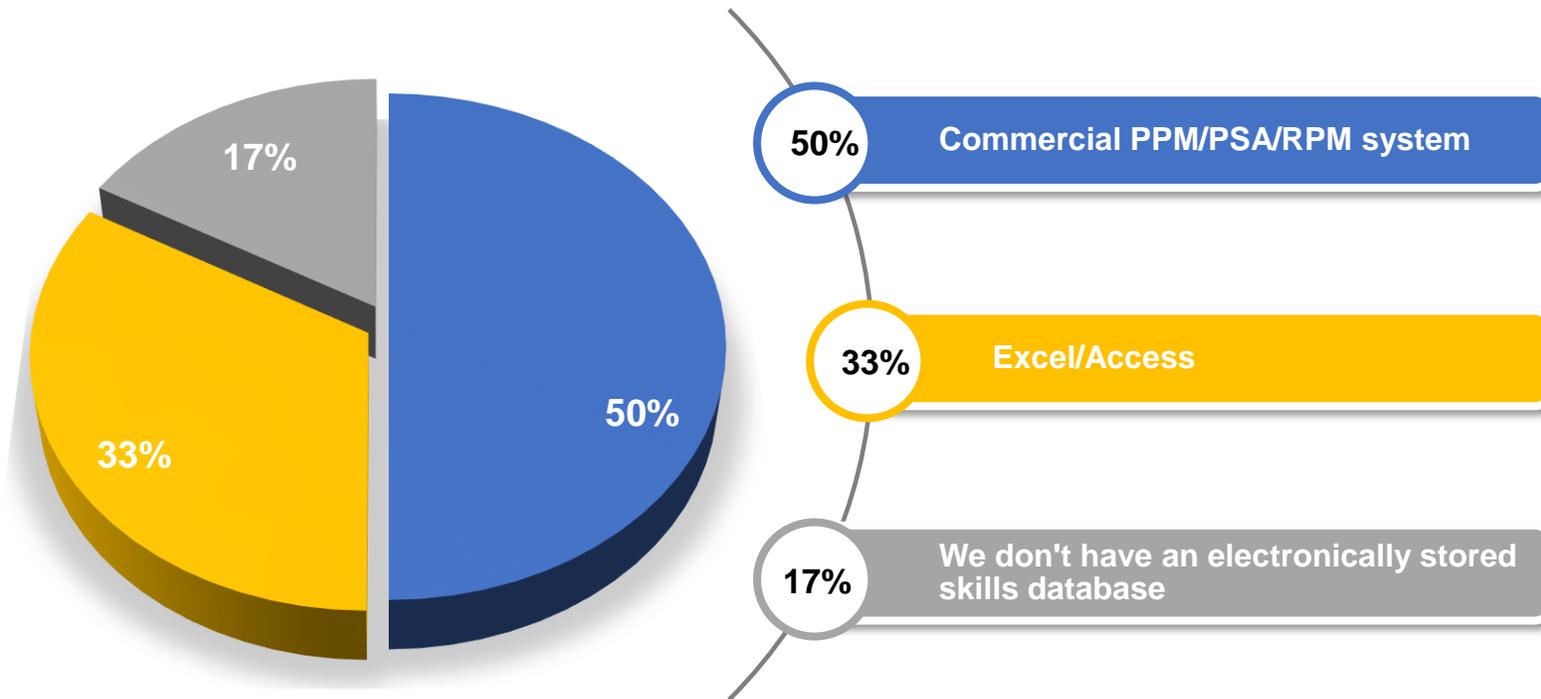**33%** We don't have a skills database

A key success factor in successful resource management is a well designed and maintained skills database. A third of respondents have no skills database. Another 33% with no process for employee updates. The data clearly points to an industry with significant room for improvement in skills database management supporting resource management.

50% By managers

33% They are not validated

17% Other
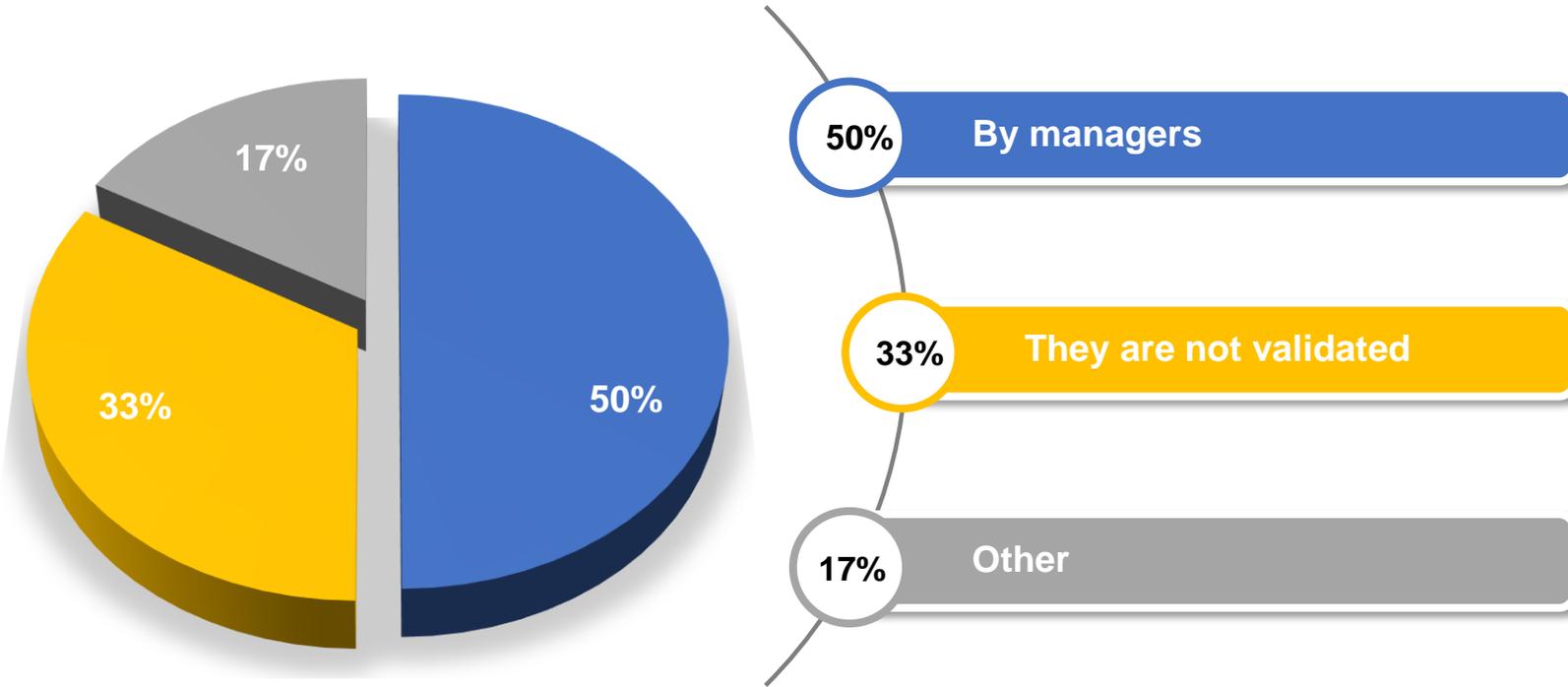
For companies that require regular maintenance of skills information, only 50% have a manager involved in validation of employee inputs to ensure integrity of the data. The RMI recommends that a manager conduct validation somewhere in the process.

50% Commercial PPM/PSA/RPM system

33% Excel/Access

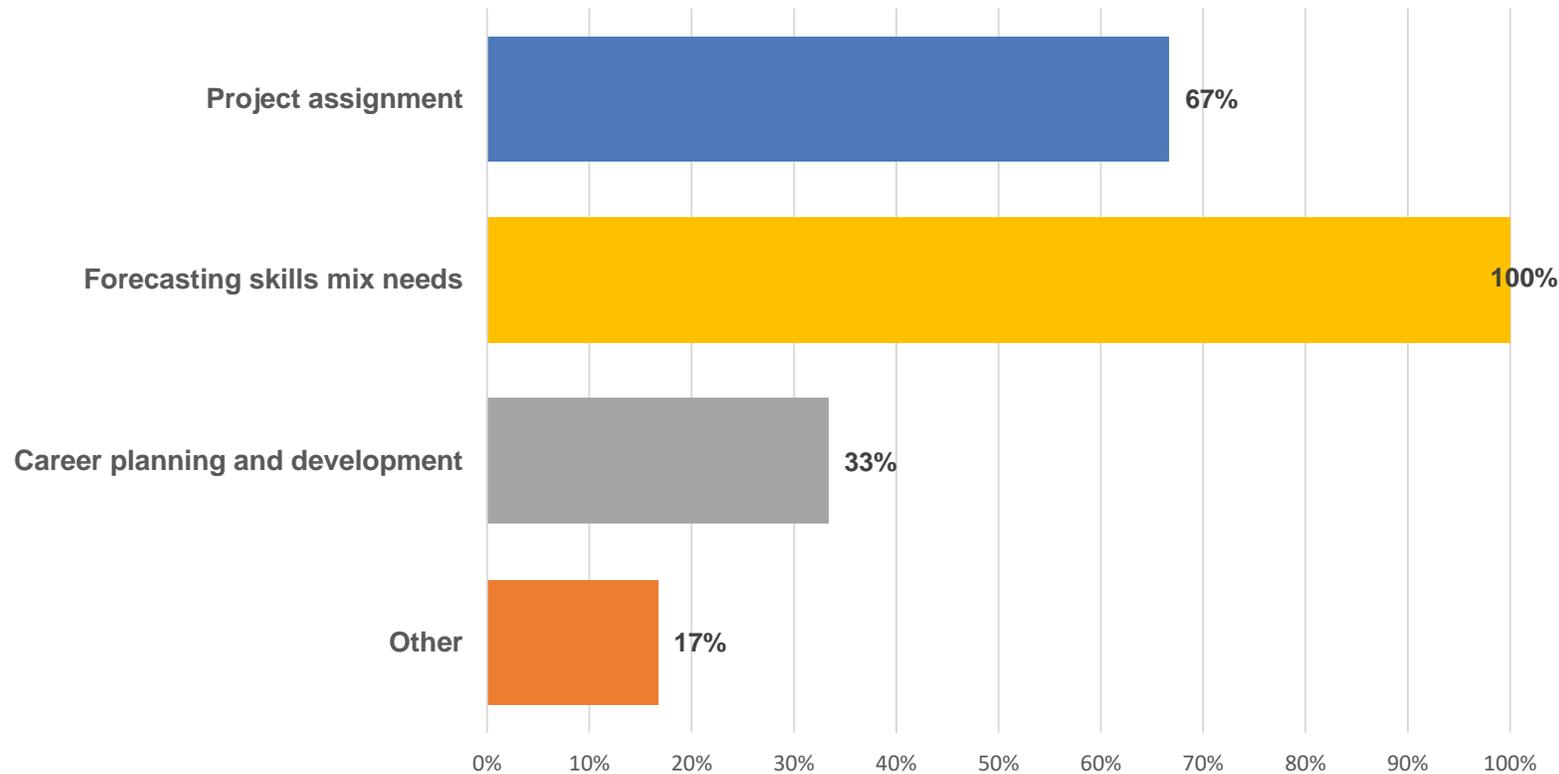**17%** We don't have an electronically stored skills database

Half of respondents are using a specific tool to store the skills database. The use of spreadsheets to support the process puts a spotlight on the need for more robust automation tools to reduce or eliminate dependence on separate tools. With 17% not using a skills database, this represents a real opportunity to use technology and process to improve overall resource management and employee engagement.

Q13: As input to your resource management planning, which of the following do you track? (check all that apply) – PD
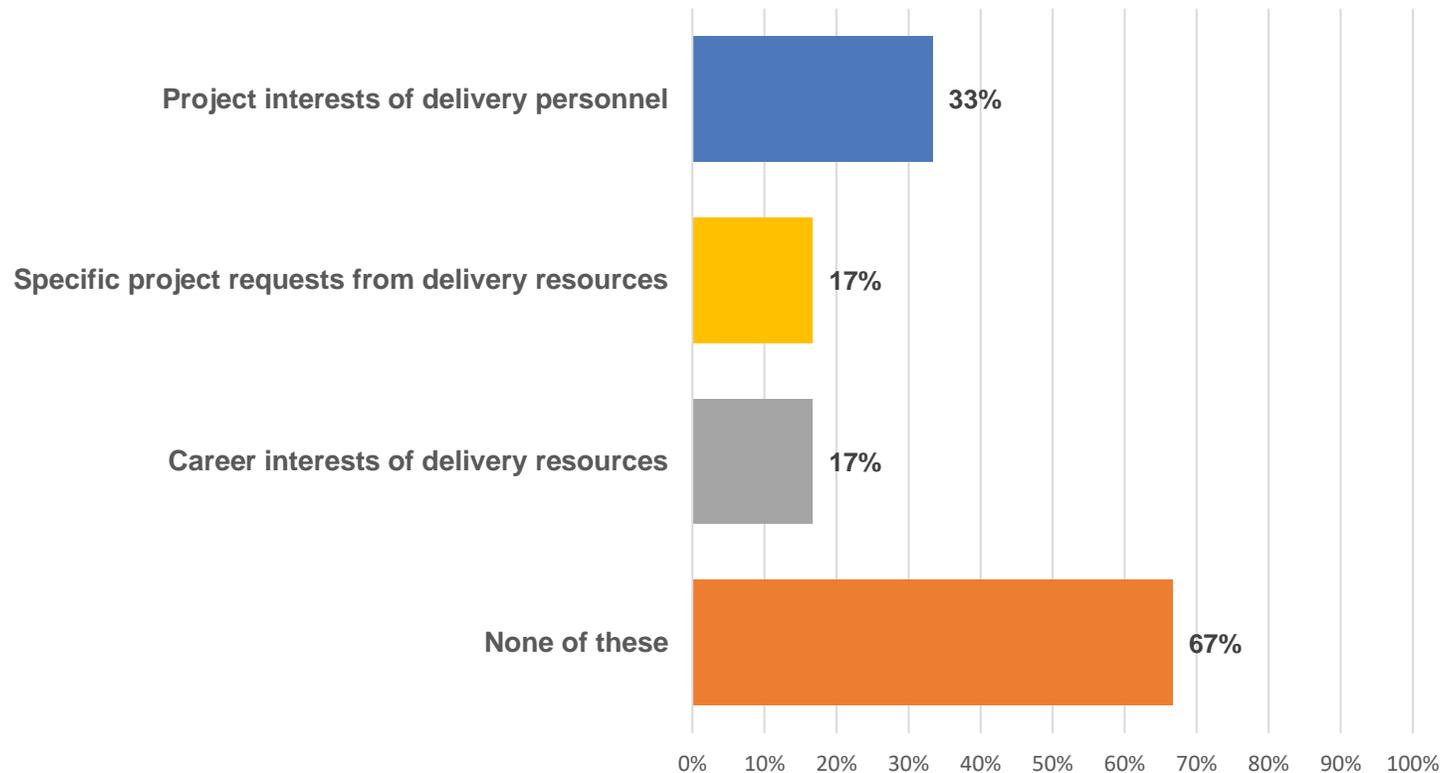
The tightening of workforce availability will require all companies to up their game when it comes to employee engagement. It is encouraging that some are tracking elements important to the individual to support scalable employee engagement programs. Note that more than two thirds however are not tracking these elements.

Project interests of delivery personnel — 33%

Specific project requests from delivery resources — 17%

Career interests of delivery resources — 17%

None of these — 67%

Q14: What do you use skills data for? (check all that apply) – PD

Getting to great in Resource Management will require companies to put skills data to work more universally for forecasting and career planning and development efforts. The 'old world' companies will be those where the focus remains solely on project allocation needs.
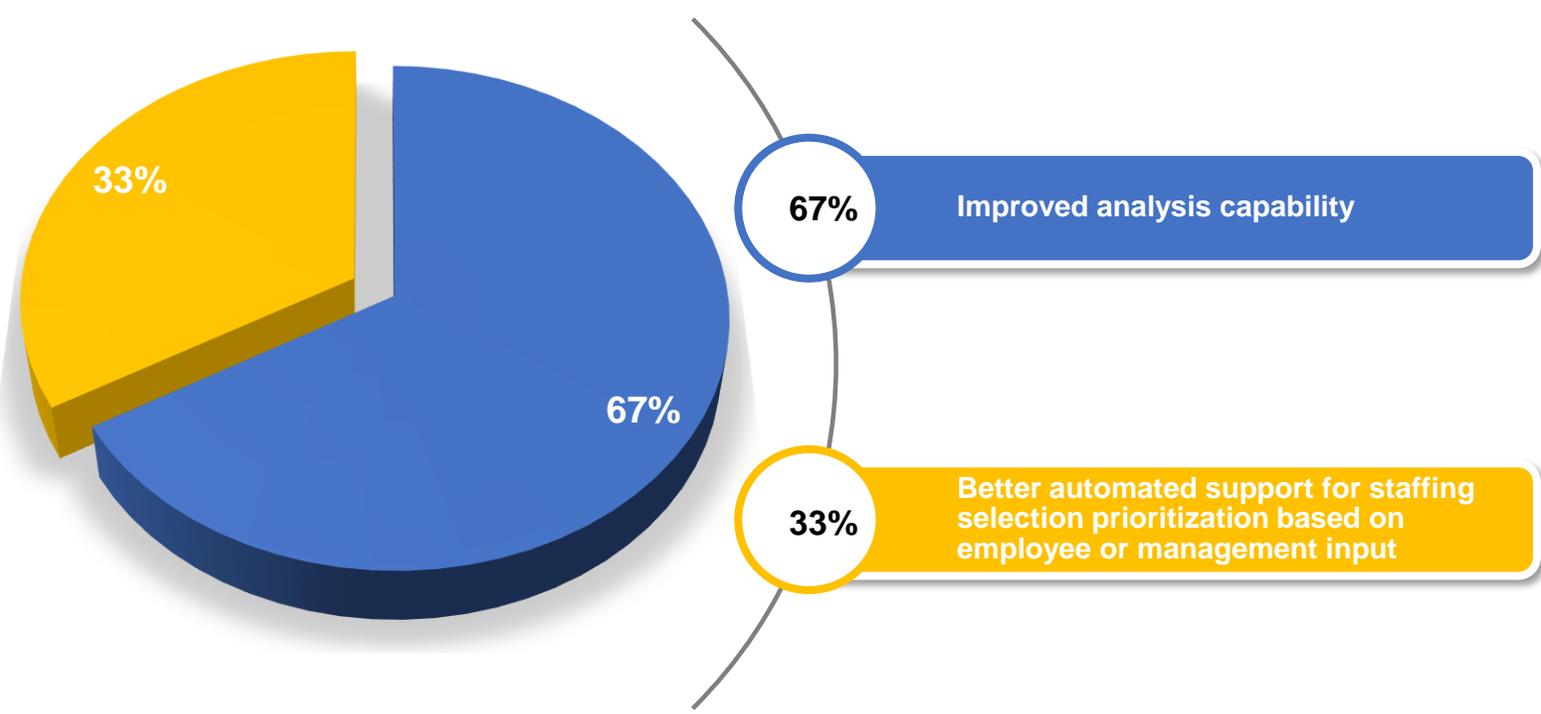
Other: • We use role data for this where demand and capacity use common role titles

Q15: We are satisfied with our PSA/PPM/RPM tool(s) regarding capabilities for skills tracking and management? – PD

50% — Somewhat satisfied

33% — Not satisfied

17% — Searching for a new tool now or soon in the future
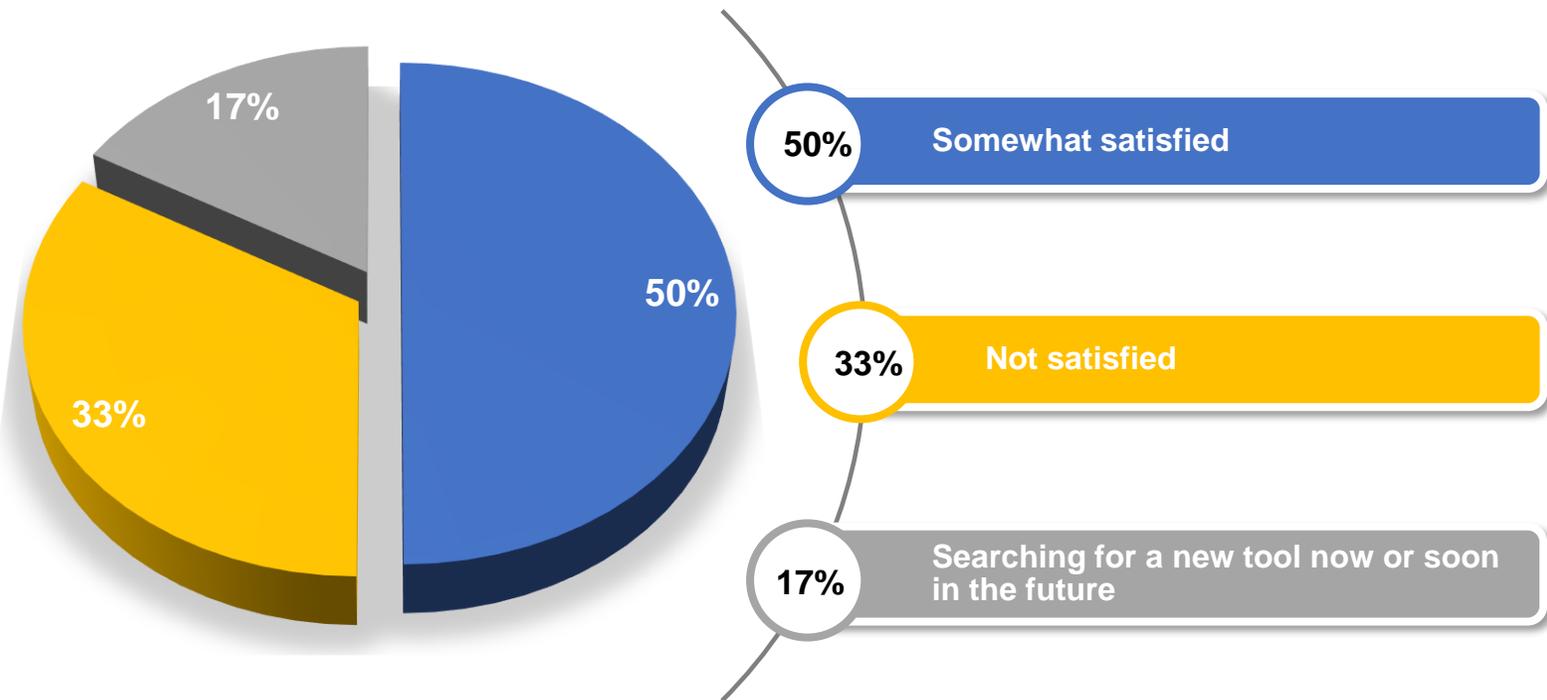
While 50% are somewhat satisfied with their automation tool(s), the rest are not. These findings are entirely consistent with past RMI research identifying opportunities for PSA/PPM providers to improve capabilities for tracking and managing skills.

Q16: Our highest priority for PSA/PPM/RPM improvements related to skills management and tracking is: – PD

67% Improved analysis capability

33% Better automated support for staffing selection prioritization based on employee or management input

Improved analytics and more sophisticated capabilities for project allocation made up the predominance of identified needs for PSA/PPM application enhancements.

Survey Summary

SKILLS TRACKING AND MANAGEMENT
Survey Summary

1   The majority of organizations feel their skills tracking and management capabilities is an area for improvement. Addressing the basics of building and managing an effective skills database will drive near term industry improvements in RM effectiveness.

2   The technology supporting skills tracking and management is getting better but improvements are needed to provide more flexibility, actionable data, and reduce dependencies on spreadsheets and other separate tools.

3   There are clear best practices for creation, maintenance and management of skills databases to support Just-in-Time Resourcing® capabilities. This survey highlights this area as a critical gap for the industry as a whole to improve upon. The RMI will continue to put emphasis in this area and provide help and education to assist with this evolution.

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