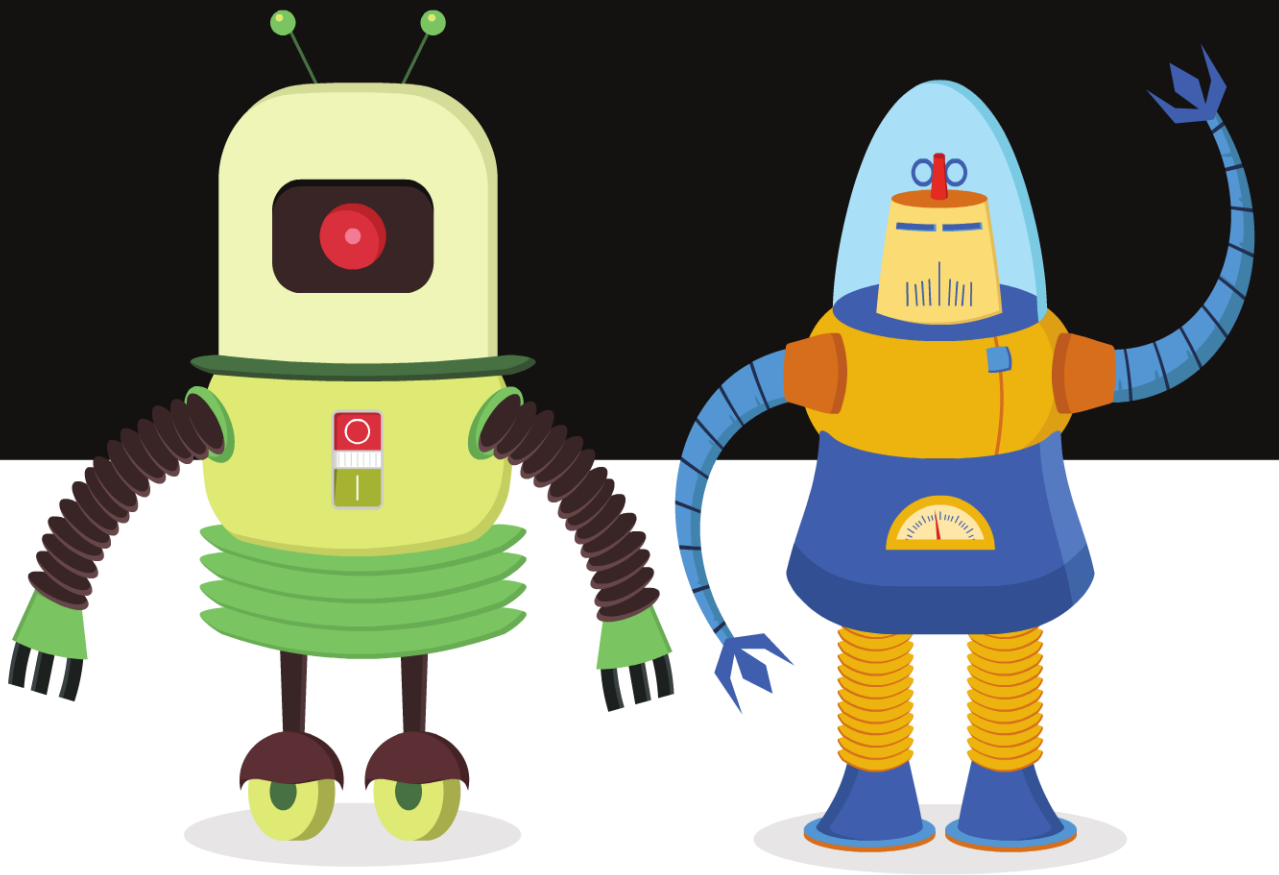
Speed of Automation Adoption Faster for Providers than Customers

A new 2016 survey focused on service automation defined as:

"using software to perform tasks, processes, or entire services that were previously performed by humans."



BY MARY LACITY, COP, AND LESLIE WILLCOCKS, COP

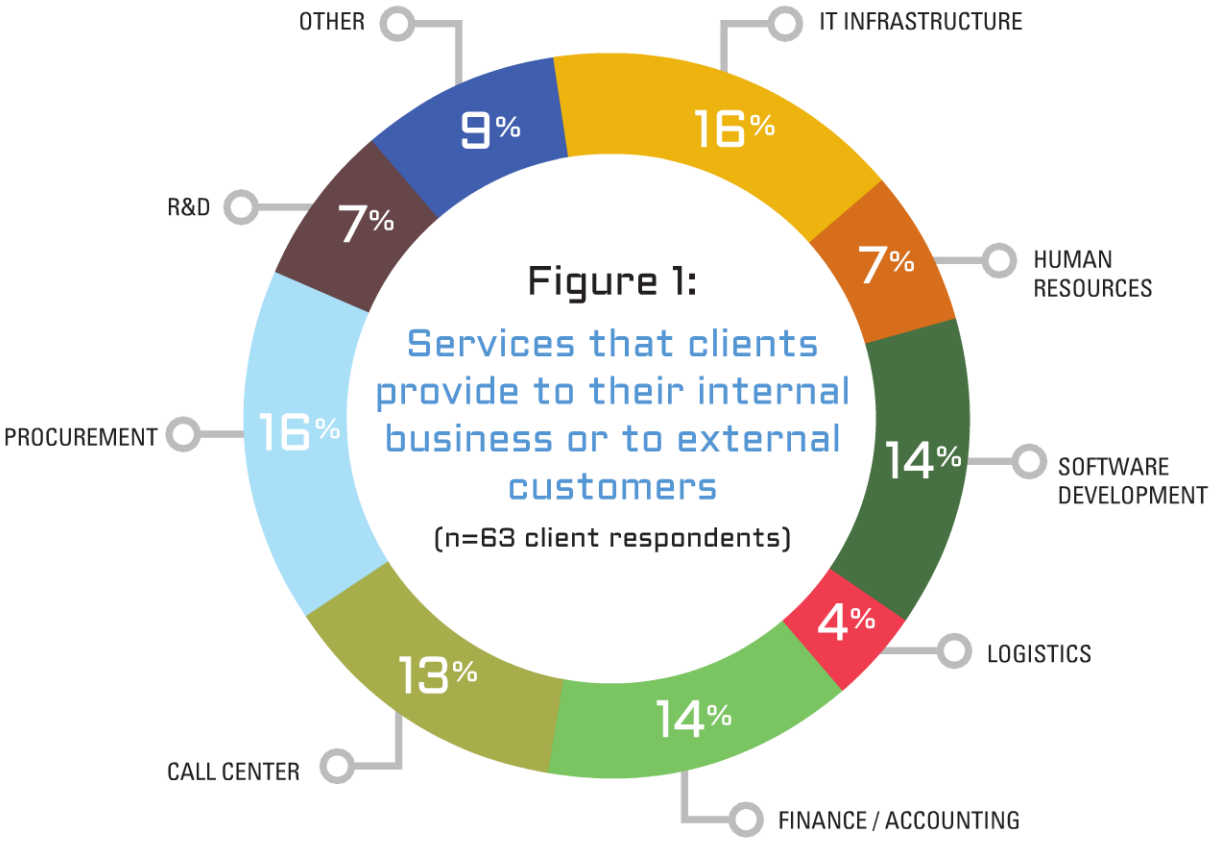
Last year's survey indicated low adoption levels but immense opportunities for automating services (see the 2015 April/May issue of PULSE Magazine for details). Last year's OWS attendees expressed immense curiosity and interest in service automation, and indeed the attendees inspired our yearlong research project that culminated in the publication of our book, Service Automation: Robots and the Future of Work.

IAOP also responded by launching the Robotic Process Automation (RPA) chapter in Dallas on July 9, 2015 and by featuring service automation speakers at their 2015/2016 events. So has all this member interest resulted in higher levels of service automation adoption in 2016? We decided to repeat the service automation survey at OWS16 to find out.

This year's results are mixed. Providers indicated that they have embraced automation during the past year by building service automation capabilities and by offering proprietary solutions. In contrast, client adoption levels of service automation have remained low overall, but interest and opportunities for automation remain high. However, we know from our own research that early client adopters have achieved great business outcomes from service automation. After presenting the detailed survey findings, we summarize below the business benefits achieved from service automation deployments.

Service Automation in Client Organizations

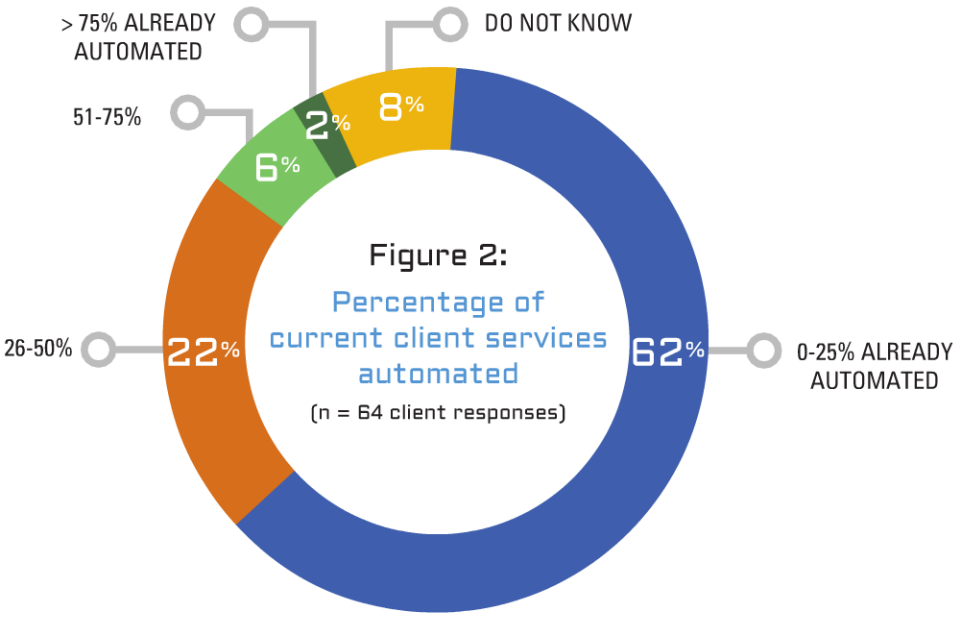
Clients who attended the OWS client-only networking represented organizations that deliver a variety of services to other parts of their businesses or to external customers, most commonly procurement, IT infrastructure, software development, financial and accounting services, and call center services (see Figure 1).



See publisher's page for http://stevebrookes.com/service_automation.html

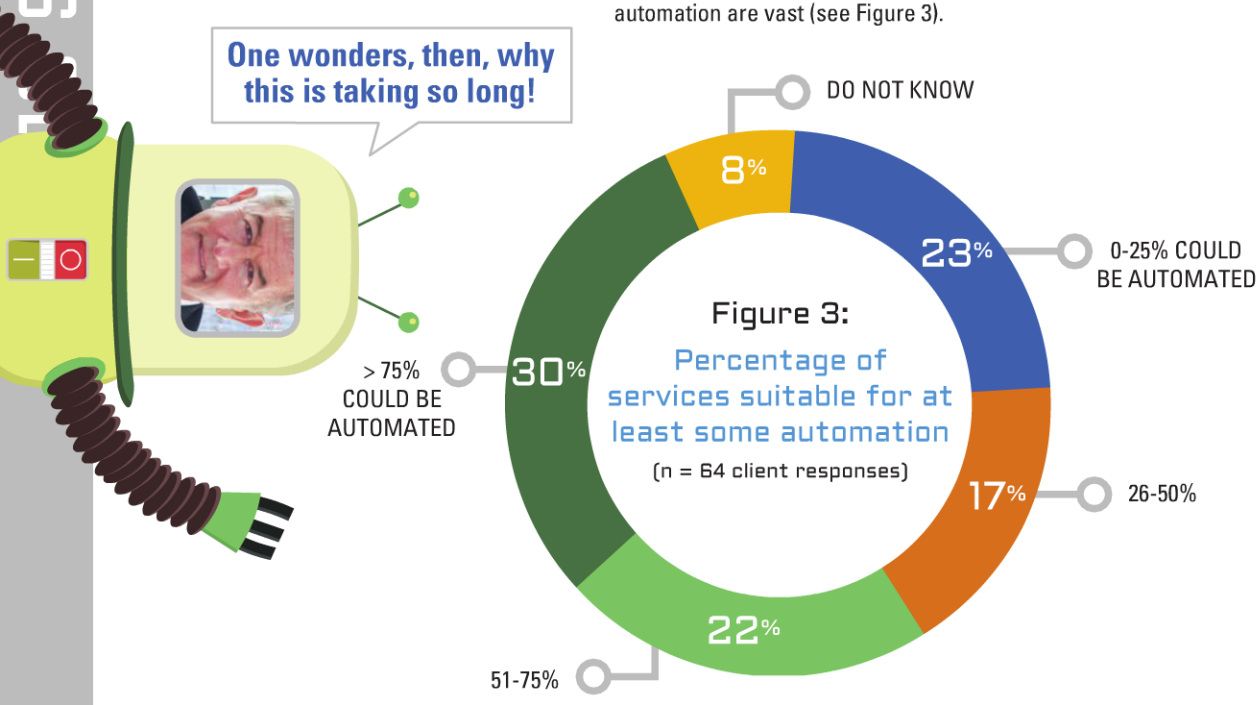
Percentage of services already automated

Among these many types of services, we asked clients to indicate the percentage that had already been at least partially automated. The results in Figure 2 suggest a low level of service automation adoption.



Percentage of services that could be automated

Although current services were not highly automated overall, we asked clients what percentage of their services was suitable for at least some automation. Their responses, like last year, indicated that the opportunities for service automation are vast (see Figure 3).



Next we asked clients about who is leading the automation agenda. Specifically, respondents were asked the degree to which they agreed with a statement using a seven point scale, with a "1" indicating strongly disagree and a "7" indicating "strongly agree." The mean responses are found in Table 1. The only decisive result from clients was that clients agreed that their organizations increasingly expected services to be automated. We also asked providers and advisors to chime in on these questions as well. Specifically, we asked them to share what they thought their clients were doing about automation. When asked who is taking the automation lead – the client or provider – results were indecisive from all three communities. Their mean responses all hovered around the "neither agree or disagree" levels on statements about who was leading service automation. It would seem that many clients need help in assessing how automation could affect their business and IT services. Indeed, providers and advisors strongly agreed that this was the case.

Table 1: Perceptions of Service Automation Leadership (1 = strongly disagree; 7 = strongly agree)

SURVEY QUESTION: CLIENT VERSION	AVERAGE CLIENT RESPONSE (N = 64)	SURVEY QUESTION: PROVIDER/ADVISOR VERSION	AVERAGE PROVIDER/ ADVISOR RESPONSE (N = 56)
My organization increasingly expects services to be more automated.	**5.56**	My clients increasingly expect services to be more automated.	**4.68**
My organization is taking the lead on automation business services – we are not waiting for providers to help us.	**4.02**	My clients are taking the lead on automation business services—they are not waiting for providers to help them.	**4.26**
My organization primarily relies on service providers to automate business services.	**4.25**	My clients primarily rely on service providers to automate business services.	**4.18**
My organization places heavy weight upon providers' automation capabilities when choosing among different providers.	**4.32**	(No version asked to providers/advisors.)	**N/A**
(No version asked to clients.)	**N/A**	My clients need help in assessing how automation could affect their business and IT services.	**5.53**

Service Automation in Provider Organizations

Using the data from the 39 providers who answered the survey during the provider/advisor-only networking session, we asked providers only which statement(s) described their current service automation strategy. Providers could tick multiple responses (see Table 2). Overall, the providers indicated that service automation was key to their strategy – only 18 percent thought service automation was NOT a key component. Over half the providers indicated that service automation was part of their value proposition to clients. Additionally, 46 percent of service providers use service automation internally to keep their headcounts lean.

Table 2: Provider's Current Service Automation Strategy (n = 39 providers)

INDICATE WHICH STATEMENT(S) DESCRIBE YOUR CURRENT SERVICE AUTOMATION STRATEGY	PERCENTAGE OF PROVIDERS
Service automation is not a key component of our current strategy—our people trump any tools	**18%**
Service automation is a key component of our value proposition to clients	**51%**
Service automation keeps our headcount lean	**46%**
Service automation is changing our location strategy (e.g., labor arbitrage less vital)	**13%**

As far as affecting location strategies, some people assert that service automation will dramatically shift the attractiveness of some locations because labor arbitrage becomes a diminished source of value in a highly automated world. In contrast to this view, only 13 percent of providers indicated that service automation was affecting their location strategies.

We offer a case study from our book as insight into the survey finding. Xchanging is a global BPO provider with 8,000 employees. When Xchanging adopted Robotic Process Automation (RPA), it automated processes in its current delivery centers rather than move processes. Xchanging used RPA to redesign work so that people in each delivery center could be released from repetitive and highly structured tasks to focus on more value-added work requiring judgment and social interactions. Thus, processes in the UK delivery center stayed in UK and processes in the Indian delivery center stayed in India after automation.

We also asked providers only which statement(s) described their current service automation capabilities. Providers could tick multiple responses (see Table 3). Overall, providers are pursuing proprietary solutions – over half the providers have already deployed proprietary service automation tools on client engagements and 28 percent are currently developing propriety solutions. Over a third of providers are also using third-party service automation tools, but these are primarily used internally rather than as part of a client engagement.

Table 3: Provider's Current Service Automation Capabilities (n = 39 providers)

INDICATE WHICH STATEMENT(S) DESCRIBE YOUR CURRENT SERVICE AUTOMATION CAPABILITIES	PERCENTAGE OF PROVIDERS
We have proprietary service automation tool(s)/platform under development	28%
We already implemented proprietary service automation tools/platform for internal use	31%
We already implemented proprietary service automation tools/platform for external use on client engagements	51%
We use third-party automation tools/platforms internally	36%
We buy/resell third-party automation tools/platforms for external use on client engagements	21%

Mapping the Service Automation Landscape

Thus far, we have only examined service automation generically. Service automation, however, includes a variety of tools and platforms with various capabilities and we wanted to ask clients, providers, and advisors to comment on specific automation tools within the broad service automation landscape.

To help make sense of this landscape, we consider two broad classes of service automation tools, RPA and Cognitive Intelligence (CI). Each class of tools is designed to deal with specific types of data and processes (see Figure 4). We conceive of the realm of RPA as occupying the part of the service automation landscape that handles structured data and rule-based processes. Most RPA tools connect to existing software (like enterprise resource planning systems) by assigning the software "robot" a logon ID and password, including RPA platforms. People who configure RPA tools do not need programming experience, but rather use RPA's friendly graphical user interfaces to configure robots to execute processes. Within the realm of RPA, there is a lot of variety, including RPA tools that focus on desktop deployment, enterprise server deployment, or cloud deployment. Popular companies in the RPA realm include Blue Prism, Automation Anywhere and UiPath.

We conceive of the realm of cognitive intelligence as occupying the part of the service automation landscape that handles unstructured data and is capable of inference-based processing. The new set of tools, including IPSoft's Amelia and IBM's Watson, use natural language interfaces to read, build patterns and relationships among data, and apply knowledge to solve problems, or to pose additional pertinent questions. Some of these tools also claim emotional intelligence, the ability to assess another human being's sentiment or state of arousal.

Figure 4:
Service Automation Landscape

We posed questions to clients, providers, and advisors about the current level of RPA and CI adoption within their firms.

Robotic Process Automation

Drilling down to more specific types of service automation, we asked specific questions about Robotic Process Automation (RPA) adoption twice during OWS16, once during the RPA keynote session and once during the networking sessions.

We polled the OWS audience during the keynote session on Robotic Process Automation about their organization's current level of RPA adoption. The session was attended by 48 percent clients, 30 percent providers and 21 percent advisors. Of the several hundred people in the audience, 188 responded to the question, "Which of the following best describes your organization's current RPA Adoption level?" (see Figure 5).

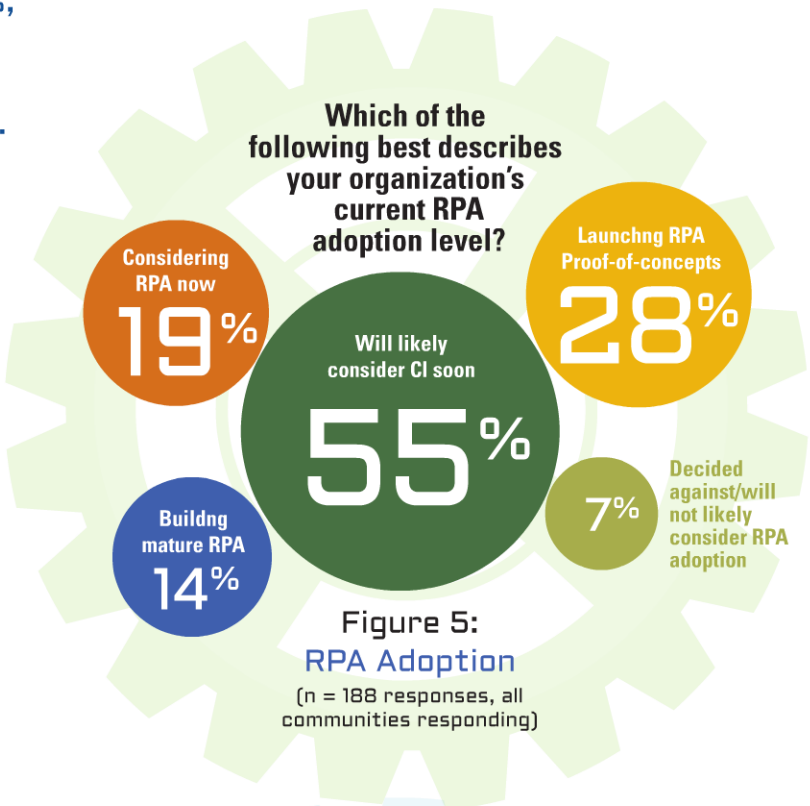


Figure 5:
RPA Adoption
(n = 188 responses, all communities responding)

While most respondents indicated that their organizations would likely consider RPA adoption soon, 19 percent said they were considering RPA now, 28 percent indicated they had launched RPA proof-of-concepts, and 14 percent said their organizations were well on their way to building mature RPA capabilities. These results are very interesting because they show a high level of RPA deployment, but the keynote survey question confounded client/provider/advisor responses, so we returned to the client survey for insight into client RPA adoption.

Using the survey data collected during the client-only networking session, we asked clients whether they agreed with the statements, "my organization has adopted RPA" and "my organization is considering RPA." The client responses indicated low RPA adoption levels, with only 14 percent of clients indicating that their organization had already adopted RPA (see Figure 6).

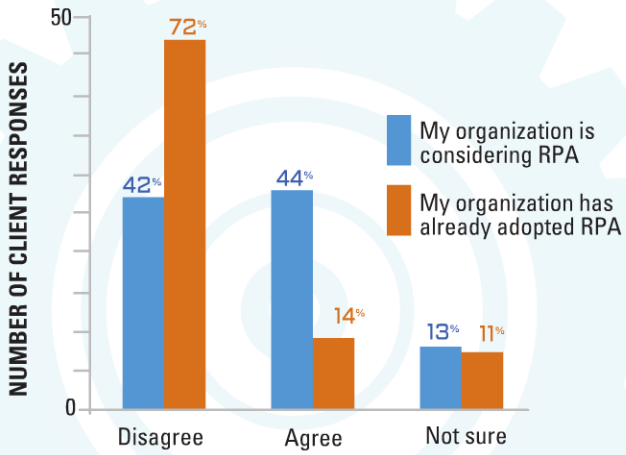


Figure 6:
RPA in client organizations
(n = 64 client responses)

Cognitive Intelligence Adoption

In our research, we found that RPA tools were easier to deploy than cognitive intelligence tools because RPA tools deal with structured data, rules-based processes, and RPA tools have easy- to-configure interfaces. In contrast, our research found that the current state of CI tools require an immense amount of investment in skills and in training the humans to train the CI tools. We would therefore expect even lower levels of CI adoption than RPA adoption and indeed we did.

We polled the OWS audience during the keynote session on Robotic Process Automation about their organization's current level of CI adoption. 198 attendees responded to the question, "Which of the following best describes your organization's current CI Adoption level?" (see Figure 7). While most respondents (55 percent) indicated that their organizations would likely consider CI adoption soon, only 17 percent said they were considering CI now, only 11 percent indicated they had launched CI proof-of-concepts, and only 5 percent said their organizations were well on their way to building mature CI capabilities. But again, this survey question was answered by all the communities. What did clients report?

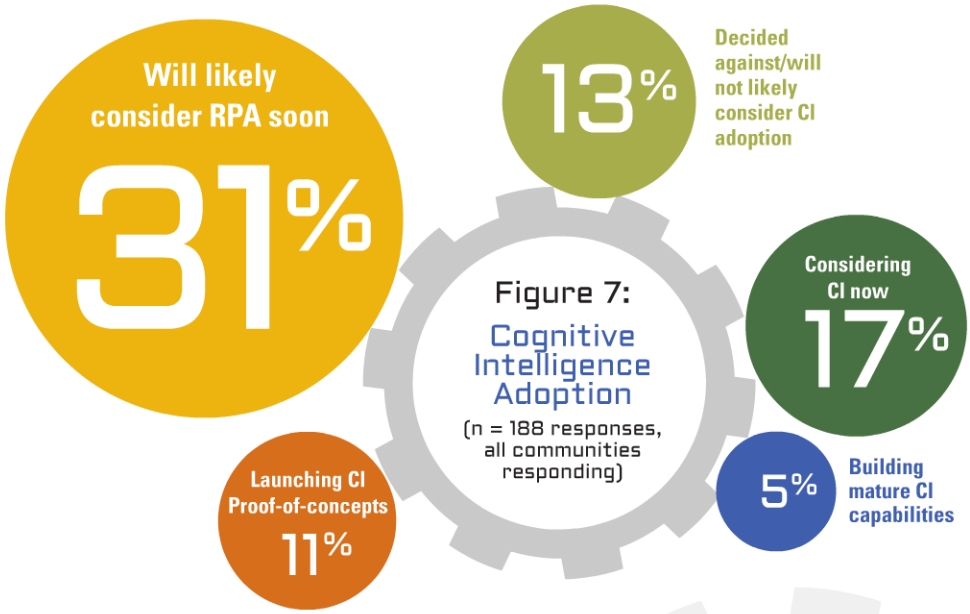


Figure 7: Cognitive Intelligence Adoption (n = 188 responses, all communities responding)

We asked clients whether their organizations were seriously considering cognitive intelligence tools or if their organization had already adopted CI. As evident from the results in Figure 8, most clients were not yet embracing CI. The current adoption levels were quite low, with only 13 percent of clients indicating that their organization had already adopted CI. Twenty-one clients (33 percent of respondents) indicated that their organizations were considering CI.

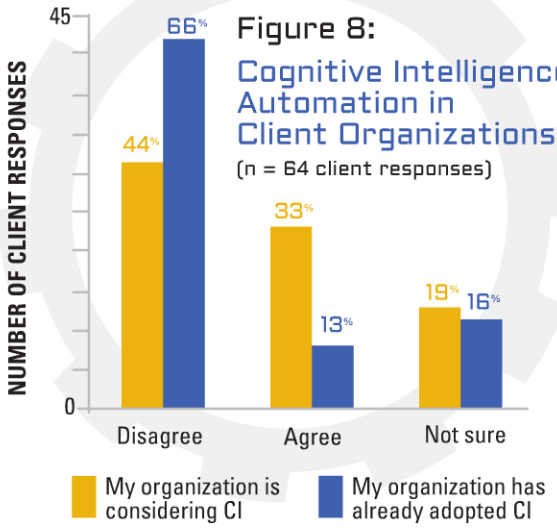
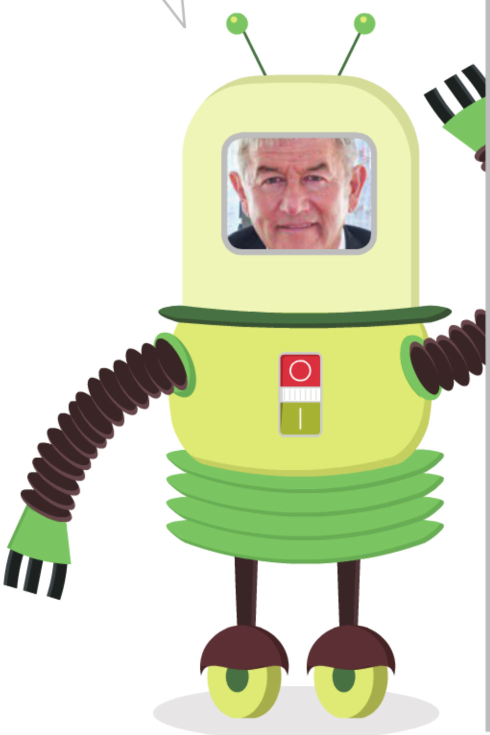


Figure 8: Cognitive Intelligence Automation in Client Organizations (n = 64 client responses)

Outcomes from Early RPA Adopters

Overall, provider attendees at OWS16 reported embracing service automation faster than clients. But we know that mean responses from survey data mask the variety of client experiences. In the past year, we aimed to help educate potential client adopters by objectively researching mature client adopters of service automation. We learned that early adopters were focusing on RPA (not CI) and that RPA adoptions resulted in a multitude of business benefits, including:

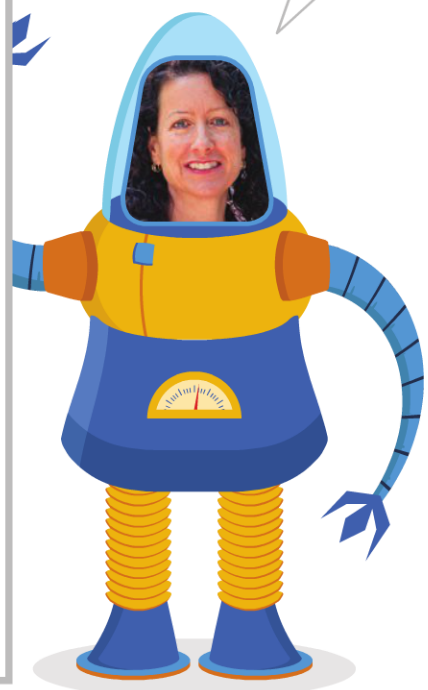
Service automation tools do not sleep or eat



- FTE savings reduced the overall costs of services;
- 24 hour service coverage without having to do shiftwork because service automation tools do not sleep or eat;
- Flexible virtual workforce because software "robots" were be multi-skilled (check on what they mean?);
- Consistent quality because software "robots" did not make mistakes;
- Higher compliance because software "robots" were configured to follow regulations and processes are all recorded and thus easily audited;
- Faster service delivery because software is faster than humans on repetitive tasks;
- Faster deployment of new functionality because service automation tools are easier to deploy than other IT solutions;
- Highly scalable solutions to meet surges in service demand;
- Higher job satisfaction for employees because dreary tasks were done by the software, freeing them to focus on tasks requiring judgment, empathy and social interactions.

To achieve such results, research participants identified 25 practices that led to favorable outcomes. The practices address defining a service automation strategy, launching successful service automation initiatives, preparing the organization for the changes service automation induces, and building enterprise-wide service automation capabilities (see our book for details). This coming year, we hope to study early adopters of cognitive intelligence tools and welcome suggestions from the IAOP community on companies to study.

"Robots" do not make mistakes



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