



2019

STATE OF **IBM i** MODERNIZATION



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EXECUTIVE SUMMARY



The annual Profound Logic ‘State of IBM i Modernization Survey’ takes a look at the trends and attitudes that shape the IBM i modernization market. We reached out to the IBM i community, and the response was outstanding: close to 800 people, nearly 300 more than last year, took the survey. This enthusiasm resulted in very interesting findings for how businesses plan to use and modernize the platform in the coming year.

Overall, the attitude toward the IBM i platform is very strong. Traditionally, the negative view of the platform has been a major roadblock to future development and modernization of the platform. This attitude seems to be shifting somewhat, with more businesses having more confidence in the platform than in the recent past. The availability of new modernization and development options – including cloud, open source, and AI – could be reasons why fewer businesses view the IBM i platform as the “dinosaur” they once thought it was. While concerns about the platform – including a diminishing developer pool and outdated interfaces – remain, they aren’t the “platform-killer” they might have been in the past. There are now plenty of ways businesses can address those issues, and ensure that their IBM i has a long, healthy, and modern future.

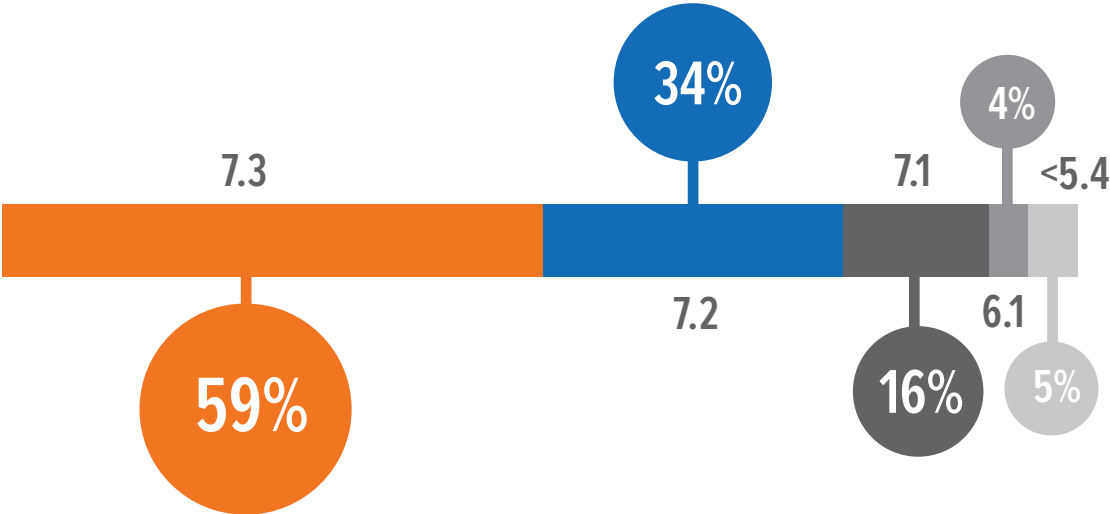
As you read through each section of the survey, you will see our summary of the results and suggestions for the future. We hope the survey will help your business better understand what is possible for your IBM i platform in the coming year.

CURRENT STATE OF IBM i



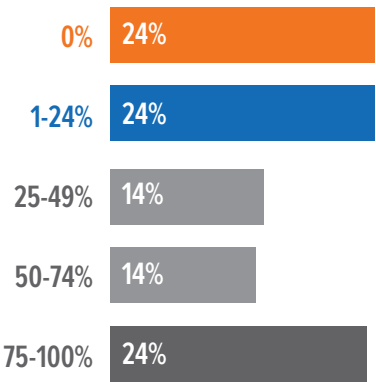
What version of IBM i are you using?

There has been a significant increase in the percentage of users upgrading to the most current version of IBM i (7.3) compared to the previous year. This can be viewed as a positive indicator in favor of remaining on the platform and extending its capabilities.



What percentage of your third-party applications use a graphical user interface (GUI)?

According to these results, the majority of businesses on IBM i are still using green screen interfaces for their third-party applications, with only a quarter indicating the majority of their third-party applications have modern GUIs. There may be several reasons for this, including end users being more comfortable with green screens and third-party applications not offering a GUI option.

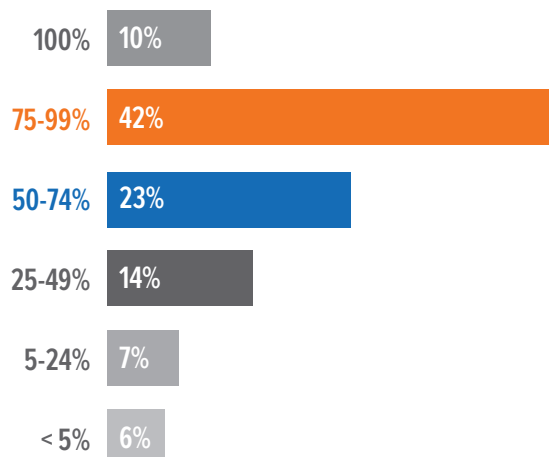


CURRENT STATE OF IBM i



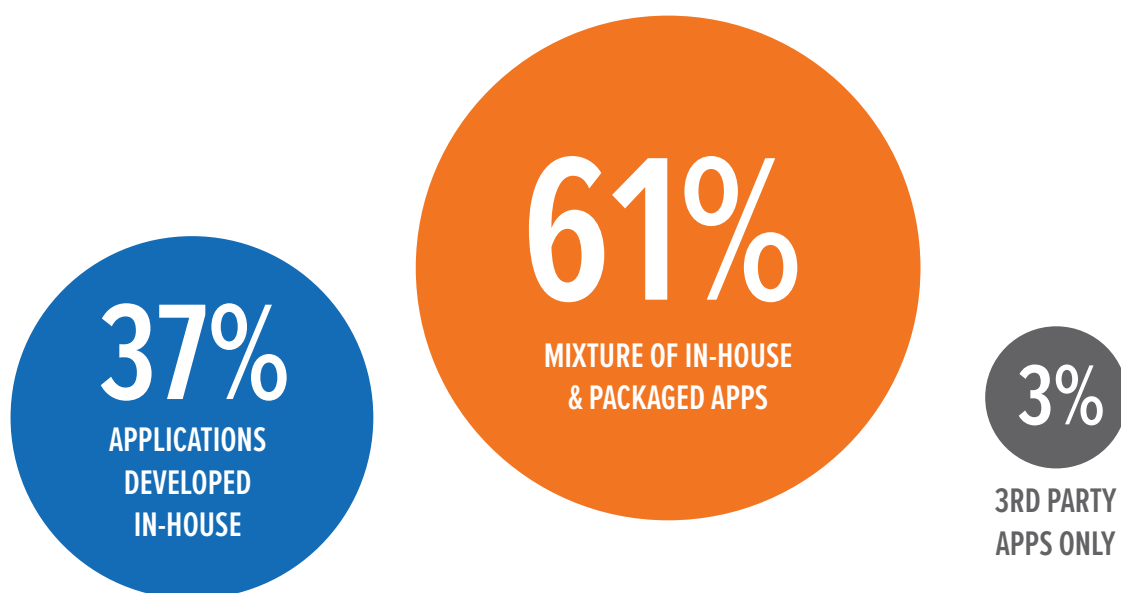
What percentage of your business applications run on the IBM i platform?

Compared to the previous year, businesses still rely on IBM i to run 50% or more of their applications.



Which of the following types of applications are used by your company?

There are no surprises here: The majority of IBM i businesses use a mixture of home-grown and packaged applications. This indicates that the businesses that use third-party apps will modify them using their in-house development teams and customize them to their business needs.

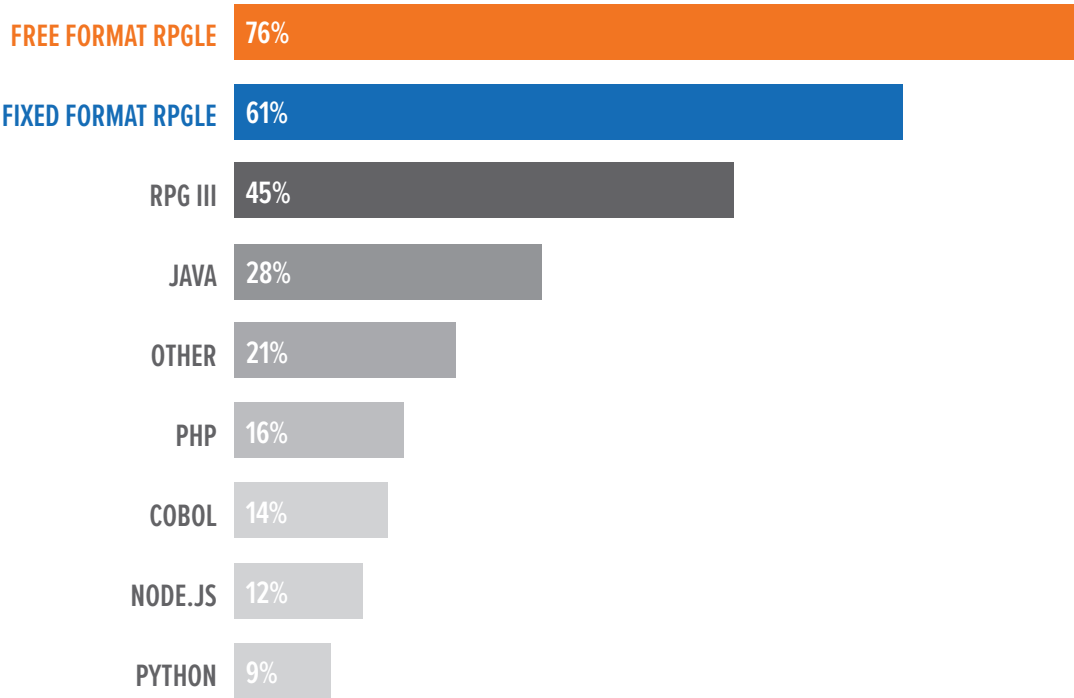


CURRENT STATE OF IBM i



Which programming languages are you currently using in your development?

For the second year in a row, Free Format RPGLE has come out on top as the most used programming language on IBM i. The use of Java hasn't moved the needle. But there have been some shifts in the use of Open Source languages. PHP has slipped three percent year over year. The use of Node.js, on the other hand, has gained traction, increasing eight percent over the past year.

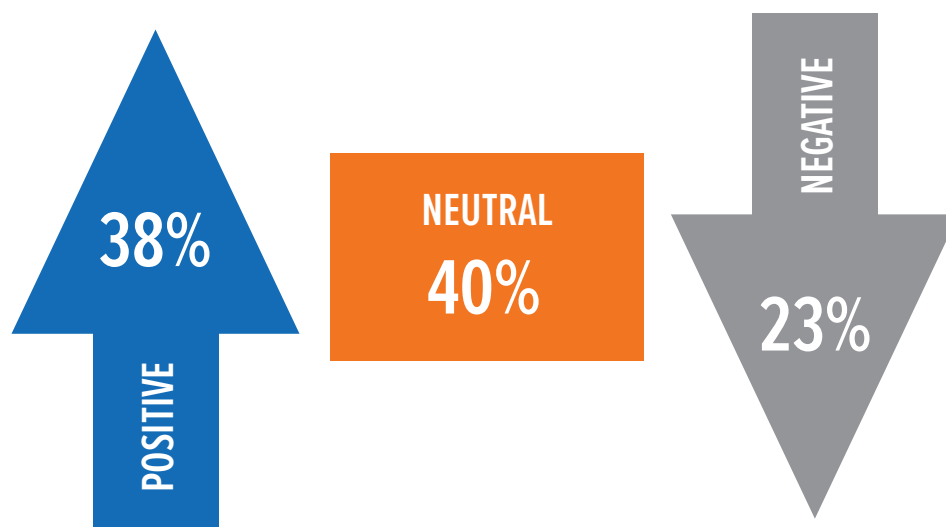


CURRENT ATTITUDES TOWARDS IBM i



What is the upper-management view of IBM i?

One of the greatest challenges IBM i developers have shared with us is that their upper management has a negative view of the platform. There has been shift away from a “negative view” toward a “neutral” and “positive” in this year’s survey, which is great news for champions of the IBM i platform.



What qualities do you appreciate most about IBM i?

IBM i continues to deliver great value to businesses, based on the results from this year’s survey. Up-time, reliability, security, and ease of support are all top reasons why users appreciate the platform.



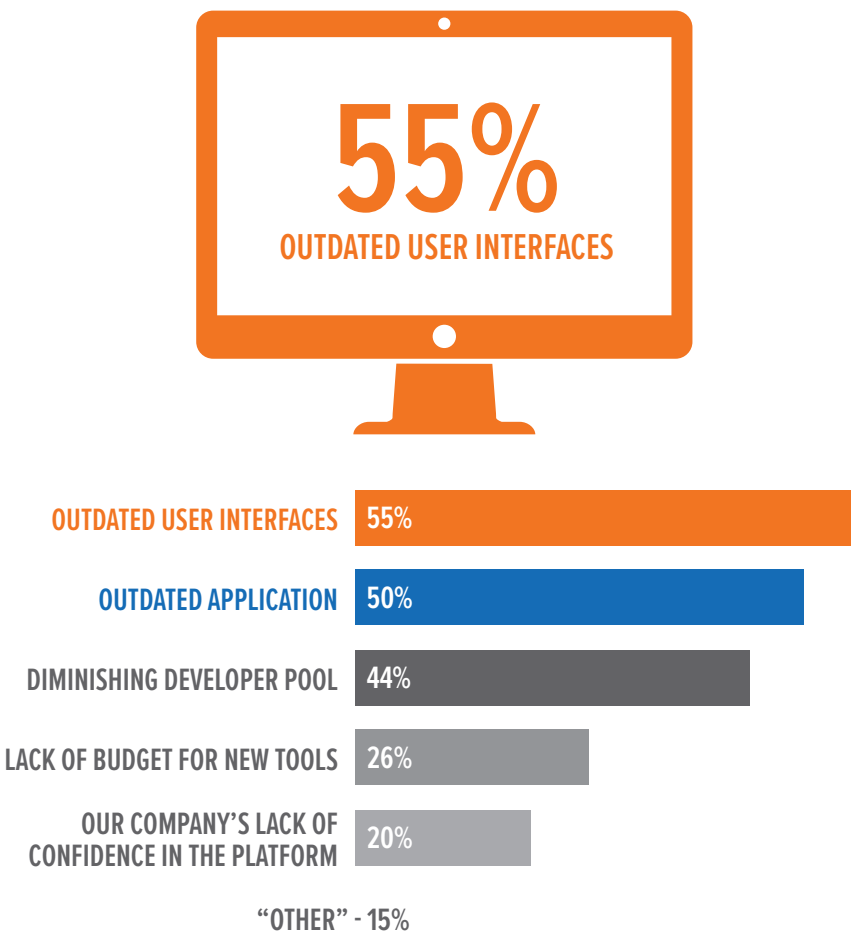
86% UP-TIME/RELIABLE
78% EASE OF SUPPORT
77% SECURITY
68% EASE OF DEVELOPMENT
48% COST EFFECTIVENESS
7% OTHER

CURRENT ATTITUDES TOWARDS IBM i



What are your top concerns about your company's IBM i applications?

The roadblocks facing businesses on IBM i in 2019 are much the same as they have been in years past. Fortunately, the top concerns – outdated interfaces and source code – can be addressed with modernization tools and services. A diminishing developer pool continues to be a concern, despite options that make it easier to hire new developers for the platform, such as moving to free-format RPG and Node.js. “Lack of confidence in the platform” is significantly down from last year; ten percent of businesses feel more confident in the platform this year than last.

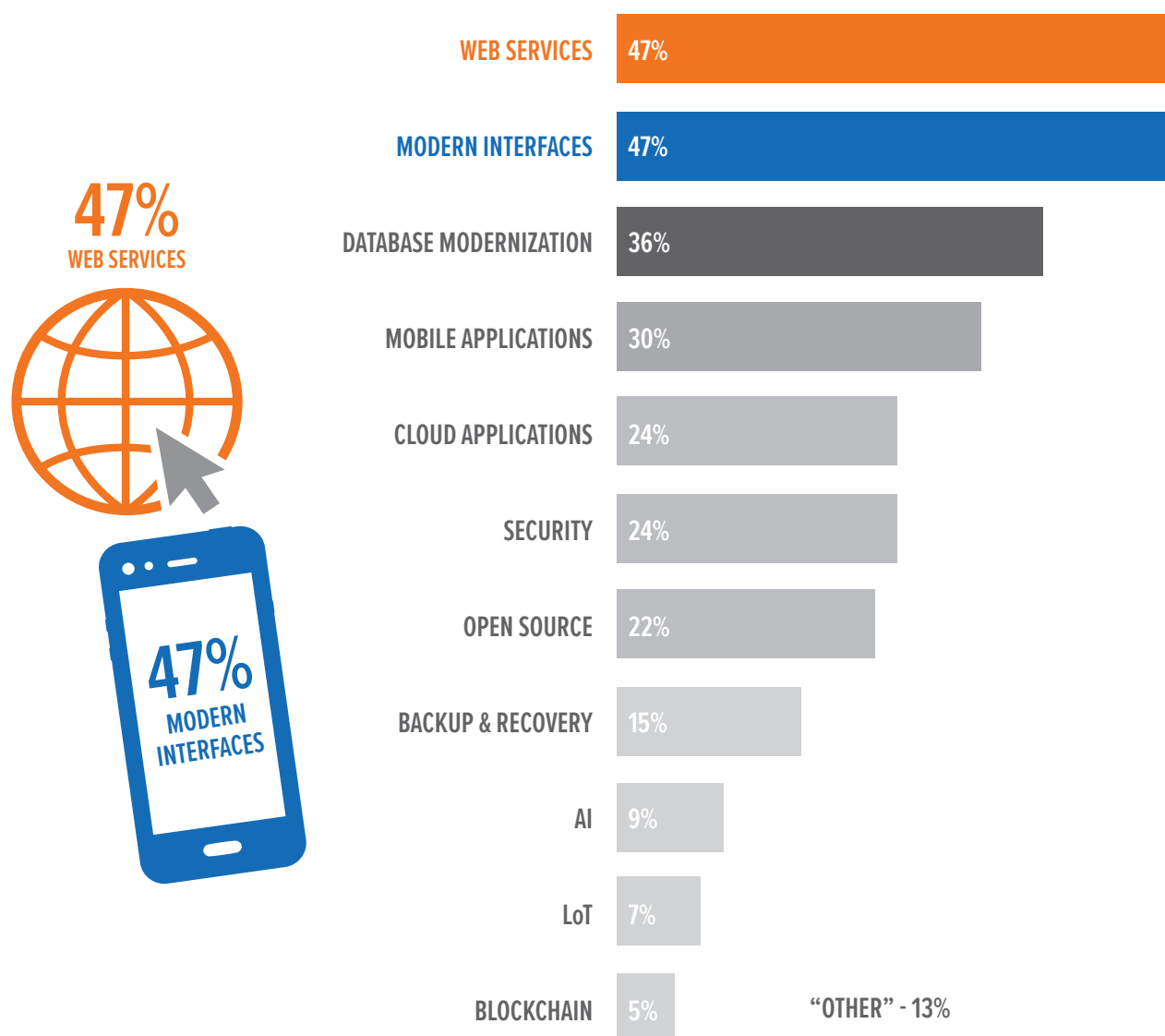


FUTURE OF IBM i IN THE BUSINESS



Which of the following do you plan to implement in 2019?

When asked about development plans in 2019, responses were up in all categories except two: Modern interfaces and Mobile applications. There could be several reasons for this. The most likely is that many businesses on IBM i have already undergone GUI modernization and mobile development efforts, and can now focus on other areas, such as open source development (which is up by six percentage points). Additionally, for the first time, we asked respondents to share their plans for IoT, AI, and Blockchain development. While the responses were light in these areas, it does show that businesses on the IBM i platform are starting to consider adopting these new technologies.

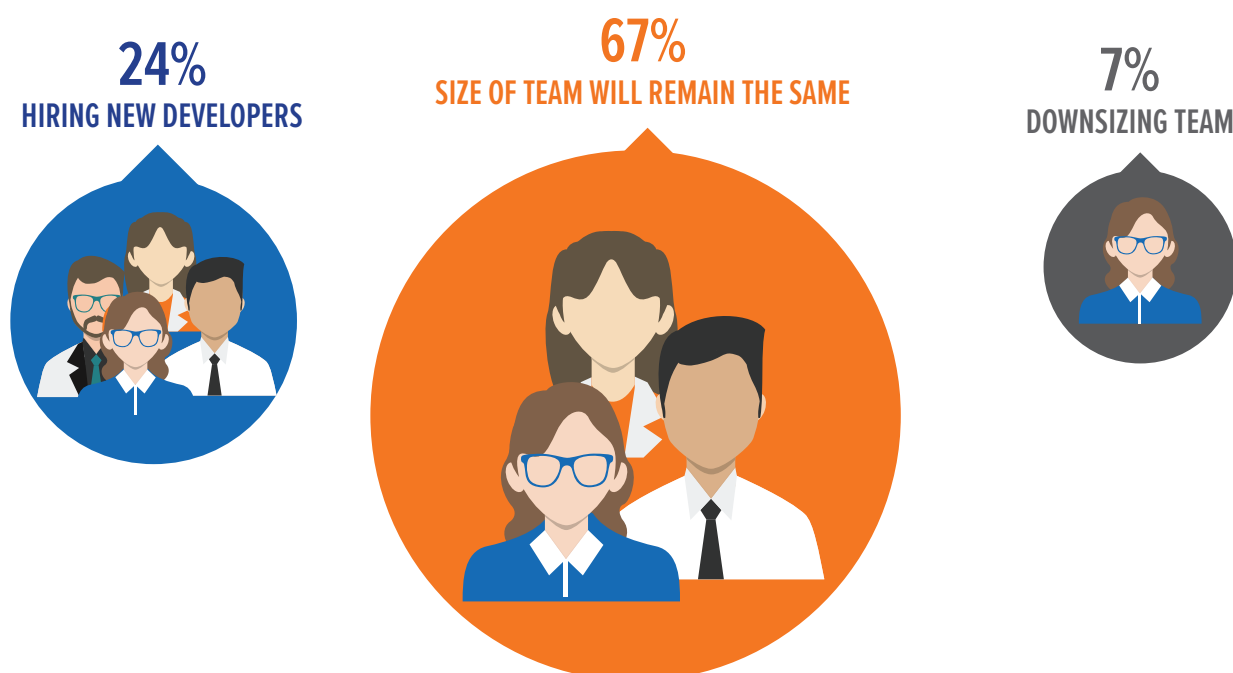


FUTURE OF IBM i IN THE BUSINESS



What will your team look like in the next year?

Compared to last year's results, There have been some slight, but positive, shifts in this category. Overall, respondents stated that their development teams will remain the same size this year compared to last. And more companies (three percent) will hire additional developers in 2019. Additionally, slightly fewer teams are downsizing due to the retirement of their developers. However, there has been a slight uptick in the number of teams that are downsizing due to a lack of development and due to outsourcing some or all of their development to a third party.



Do you plan on modernizing this coming year?

People were more definitive about their modernization plans in 2019 than they have been in past years' surveys. While three percent more people, compared to last year, stated they would undertake a modernization project this year, over five percent of respondents say they would not. Fewer people overall are unsure about their modernization plans compared to last year.

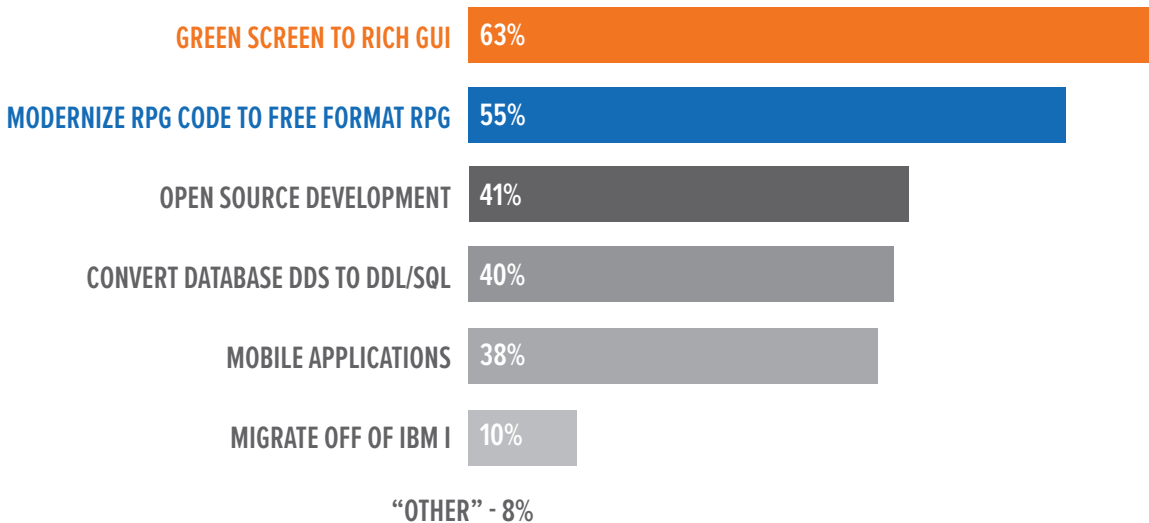


FUTURE OF IBM i IN THE BUSINESS



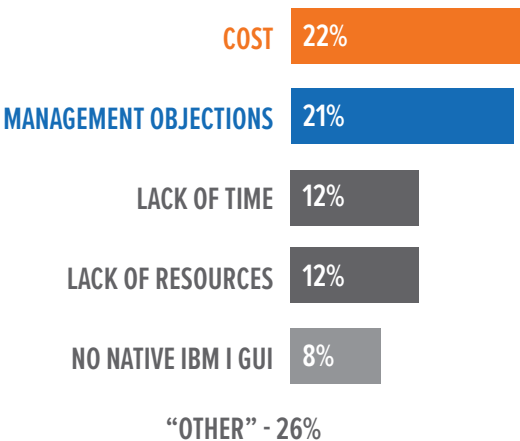
Which modernization projects are you starting?

When it comes to the types of modernization projects that businesses are undertaking, modernizing green screens to rich GUI interfaces and fixed-format RPGLE remain at the top of the list. Slightly more people said they are moving away from the platform this year than last (by around three percent), there is a significant shift toward open source development, which has increased by over 20 percent year over year.



What's holding you back from modernizing your IBM i?

This year, like last year, "cost" was listed as a top reason for not undertaking a modernization project. But a top roadblock – management objections – has actually decreased by five percent since last year's survey. The "Other" category outpaced the other objections listed, and a quarter of those respondents state that they have already modernized their IBM i environments.

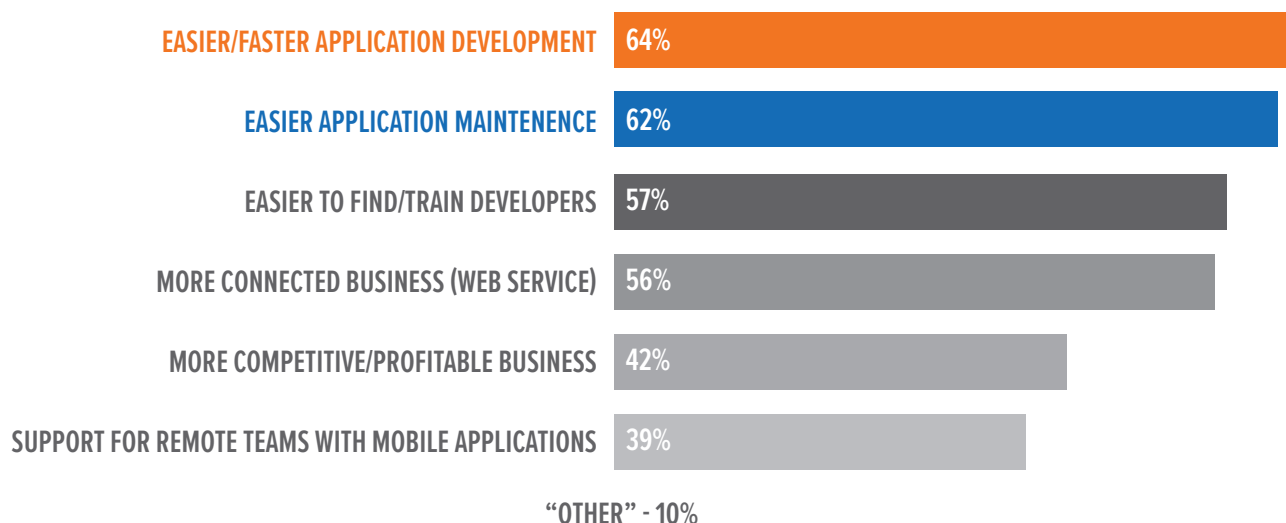


FUTURE OF IBM i IN THE BUSINESS

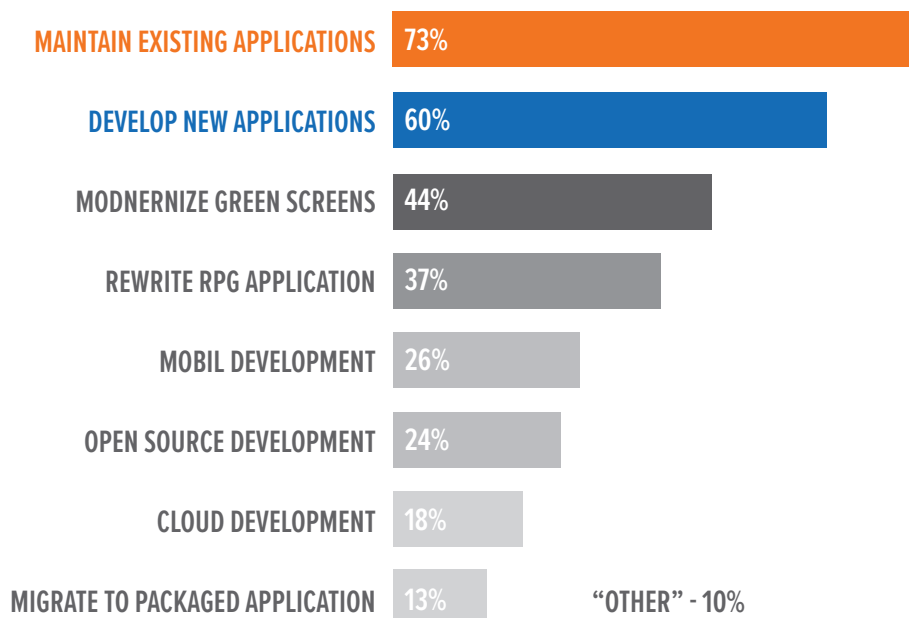


How would a modern environment help?

The responses to this question have remained consistent year over year: Modernizing IBM i applications, code, and databases have a significant, positive impact on businesses.



What are your development plans for IBM i in 2019?



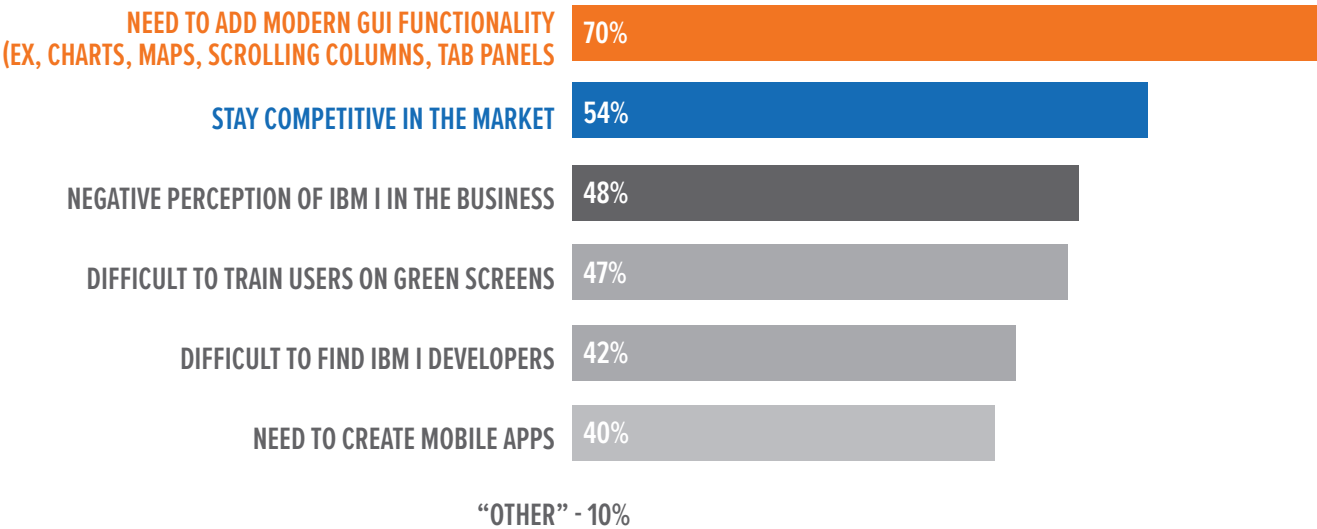
Compared to last year's results, the pace at which businesses are developing new applications hasn't changed much. However, "Modernizing green screens" has slipped slightly, while newer capabilities – including open source and cloud development – have increased by several percentage points. As seen elsewhere, mobile development is missing a lot of the urgency seen in past years, coming in five percentage points less than last year.

FUTURE OF IBM i IN THE BUSINESS

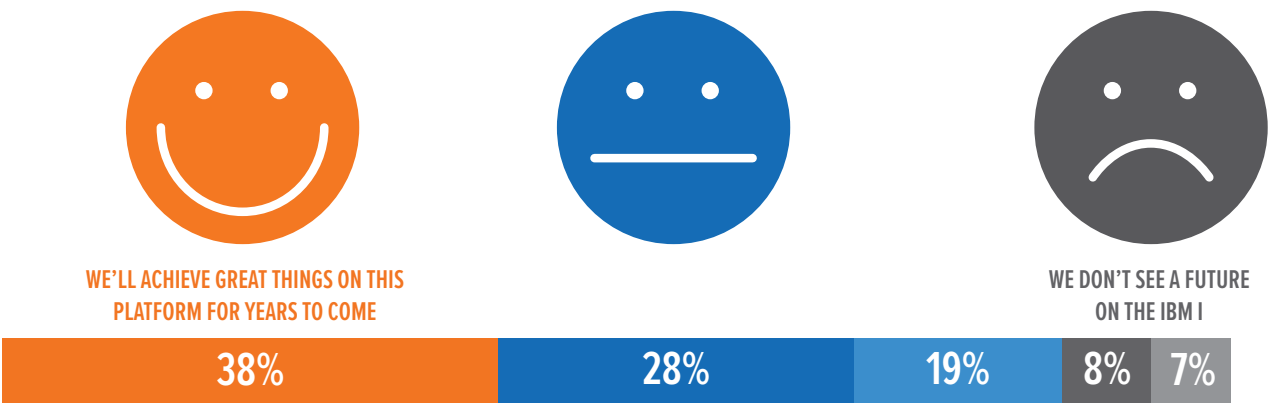


What are your reasons for modernizing?

The need to add modern web GUIs to IBM i application remains a top reason for modernizing, with “staying competitive” coming in at second place. Creating mobile apps, however, has significantly dropped in importance as a reason to modernize, losing 10 percentage points since the last survey



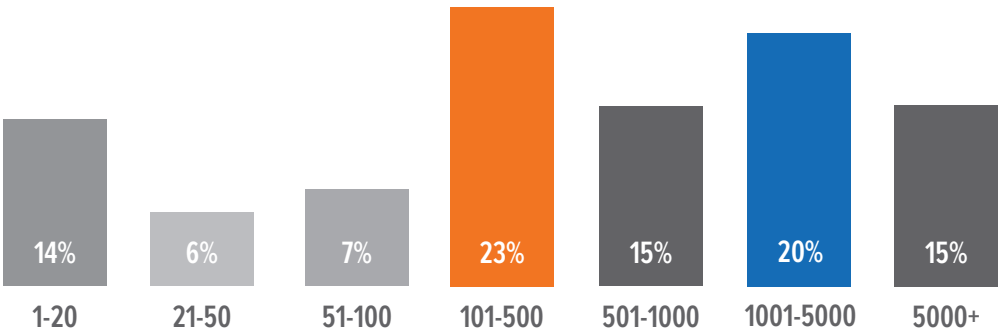
How optimistic are you about the future of IBM i in your business?



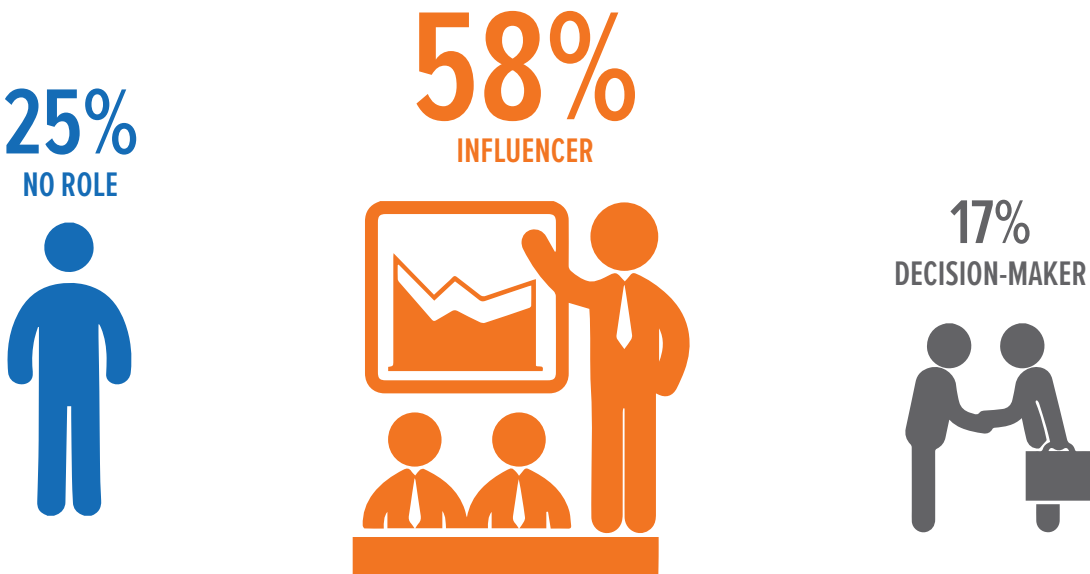
ABOUT THE SURVEY

The 2018 State of IBM i Modernization survey ran in early 2018 and was promoted through email, Website ads, and articles in trade publications such as IT Jungle and MC Press Online. The goal of the survey was to take the “temperature” of the current attitude toward the platform in businesses, and what, if any, plans the respondent’s business have for modernizing the platform.

What size is your organization?

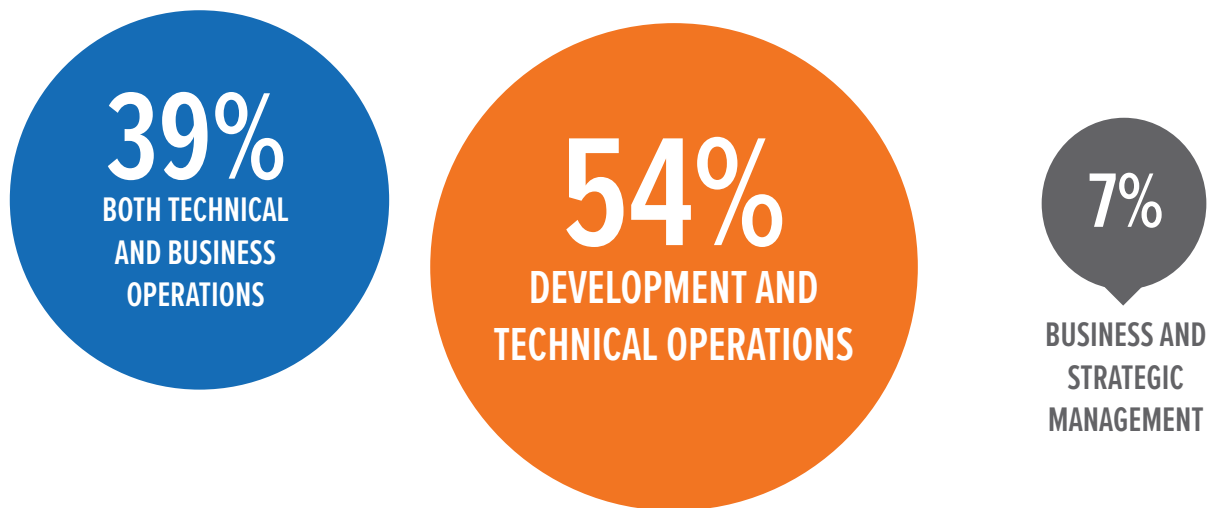


What is your role for purchasing new software/hardware?



ABOUT THE SURVEY

Which of the following best describes you?



About Profound Logic Software

At Profound Logic, our mission is to provide the most innovative and native solutions for IBM i application development and modernization. For over 15 years, we have helped thousands of customers around the world transform legacy interfaces and source code; develop modern desktop and mobile applications; and optimize enterprise systems. Our developers are true IBM i experts, fluent in modern languages that include RPG, PHP, HTML5, and Node.js.

We have offices in Ohio, California, and Mississippi, in addition to partners located around the world. Learn more at www.profoundlogic.com or contact us at 877-224-7768.

For questions regarding this survey, please contact info@profoundlogic.com.

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