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2017

DevOps Salary Report

Are you curious about how your job, salary, and working conditions stack up against other professionals in your field? Yep, we are too. That's why each year we analyze the data about salary from our State of DevOps survey and present it in this special report.

In the six years since we launched the first State of DevOps survey, we've been able to share a tremendous amount about how DevOps practices are used around the world, and how DevOps helps teams and companies work more rapidly, iteratively, and collaboratively — and get better business results. As we sort through our data, we also like to look at what we can share about the people who produce those results — and, because career development and career progress are important to us all, how these people are paid.

This year, we heard from 3,200 technology professionals on six continents, and broke down the salary data we received by geographic region and industry. We also sorted results by other factors, like the number of servers under management. We've tried to gain additional insight into workforce trends by asking about job titles and management practices. Finally, as part of our ongoing work to understand and promote diversity, we've gathered data about gender and the presence of people from underrepresented groups amongst our respondents.

As in years past, the largest concentration of our survey respondents work in the United States, followed by Western Europe, and then Asia. We also received responses from IT practitioners in Australia and New Zealand, Eastern Europe, and Latin America and the Caribbean. However, our data sets for these three regions are considerably smaller (each is below our 200-response threshold for confident trend reporting), so our insight into these regions is far less detailed than we'd like.

To help us more accurately report on the state of DevOps work around the world, please send your feedback and ideas for improving our data to **devopssurvey@puppet.com**.

Key findings

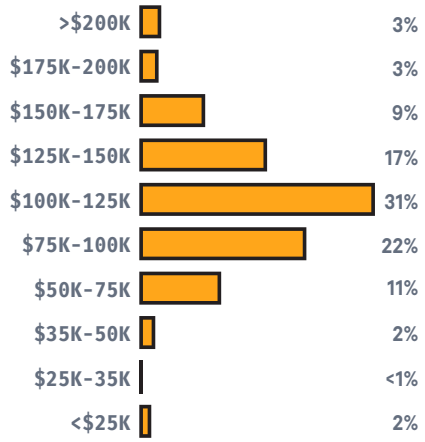
- Practitioner salaries are holding steady around the world.
- *Software engineer* and *DevOps engineer* are now the most common job titles, and the number of people who self-describe as *system administrator* has fallen off sharply.
- Manager salaries have dropped, and are now on par with those of IT practitioners.
- Salaries increase with the number of servers up to 2,000 servers, then level off.
- Women and underrepresented groups still make less money than others.

Please note that this report is intended to broadly reflect trends in tech pay by salary band, by title, and by broad region. The data is not specific enough to determine pay levels for any role or geographic region.

Understanding the report

We provided survey respondents with salary ranges and asked them to identify where they fell. Salary ranges are expressed in U.S. dollars, including those for international respondents. We did not adjust for variations in labor costs across different geographies. Beside each salary-range bar, you'll see a percentage figure; that's the percentage of respondents whose earnings fall within that salary range.

When reviewing this report, it's important to note three things: first, that geographic differentials can play a huge part in how salaries fall within these ranges; second, that our findings bucket people with different levels of work together; and third, that job titles may not always align with job duties, which is how pay is really determined in the market. For example, an entry level software engineer in Seattle may make more than in San Francisco, but a senior software engineer may make more in San Francisco than in Seattle..



Here are some of the most common job titles we classified as IT practitioners:

- DevOps engineer
- Software engineer
- Systems engineer
- Systems administrator
- Software developer
- Solutions architect
- Architect
- Infrastructure engineer
- Software architect
- Tech lead
- Network engineer
- IT specialist
- Platform engineer
- Automation engineer
- Cloud engineer
- Site reliability engineer

Here are some of the most common job titles we classified as IT managers:

- Director
- Manager
- IT manager
- Project manager
- DevOps manager
- Development manager
- IT director
- Engineering manager
- Operations manager
- Director of engineering
- Head of technology
- Product manager
- Program manager
- Software development manager
- VP of engineering
- Director of IT

Where we work: Salaries from around the world

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Where we work: Salaries around the world

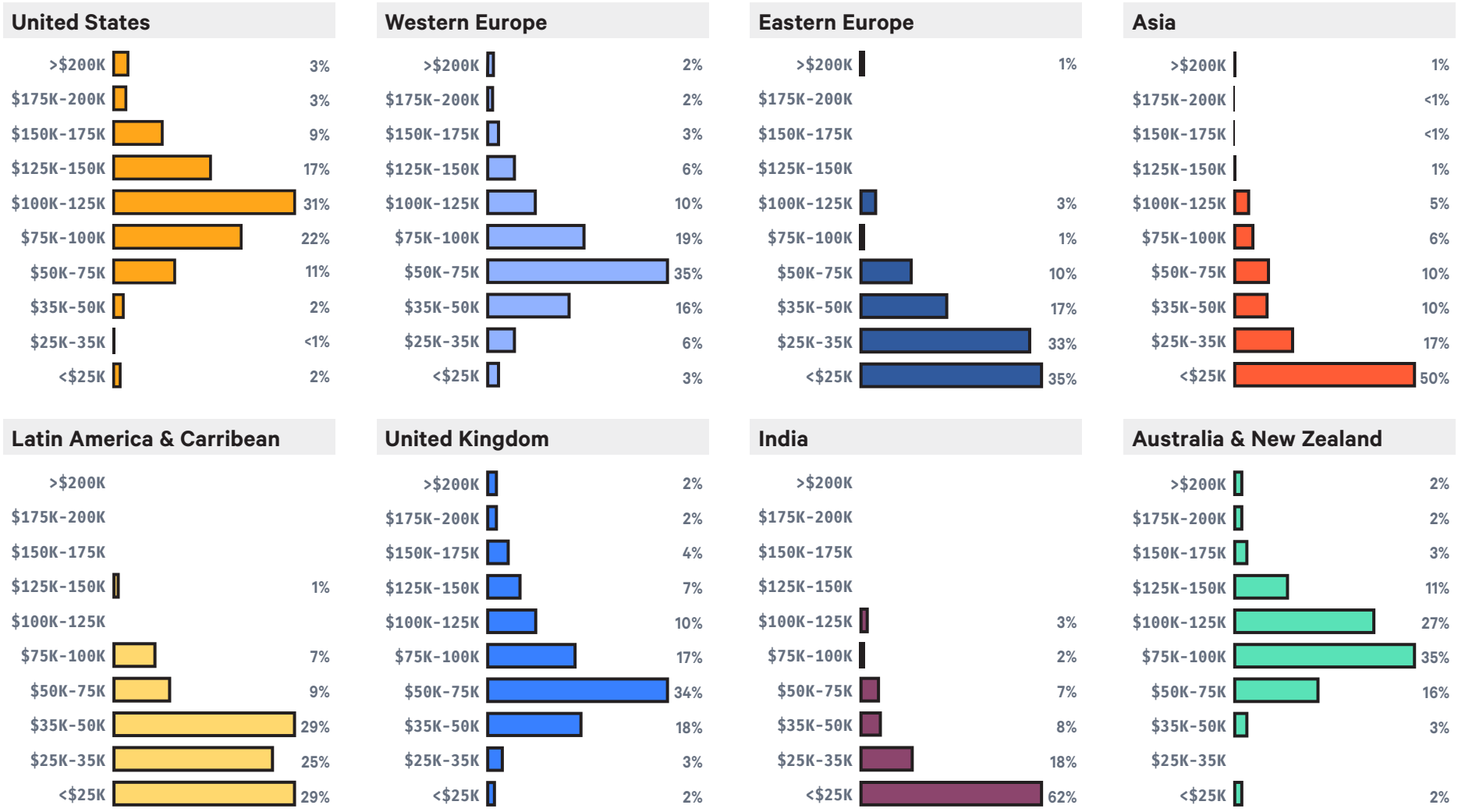
IT practitioners in the United States continue to earn higher salaries than their counterparts around the world. U.S. salaries haven't changed significantly in the past year, however. For the second year in a row, the most common annual salary in the U.S. is between $100,000 and $125,000. For Australia and New Zealand, the most common salary range remains $75,000-$100,000, although the number of respondents in the $100,000-$125,000 band is growing.

Western Europe's IT practitioners most commonly earn between $50,000 and $75,000 annually. However, we see more salaries in the higher bands this year than in 2016, indicating that salaries may be rising. We see a similar story in our data from Asia, where the majority of respondents earn $25,000 or less, but more practitioners are reporting salaries in the higher bands than last year. Eastern Europe is also trending up, with the number of respondents in this year's $25,000 to $35,000 band almost equal to the number in the $25,000-or-less band.

Our small sample of IT practitioners in Latin America and the Caribbean report the only significant shift in salary by region. Unlike 2016, when the most common annual salary in the region was less than $25,000, this year we saw nearly equal numbers of respondents reporting in each of the bottom three salary bands. While our sample size is not large enough to draw any definitive conclusions from this data, it suggests that salaries in the region may be on the rise.

This year we received enough survey responses from two nations besides the United States to report some country-specific data. We heard from 270 IT practitioners in the United Kingdom, where more than a third earn between $50,000 and $75,000. We received responses from nearly 160 Indian IT practitioners, 80 percent of whom earn $35,000 or less annually. We hope to continue to expand the size and geographic diversity of our data set in future years, allowing us to report with confidence on additional countries.

Where we work: Salaries around the world



Note: Geographic differences and level of work are not reflected in these salary bands.

The work we do: Salaries by industry

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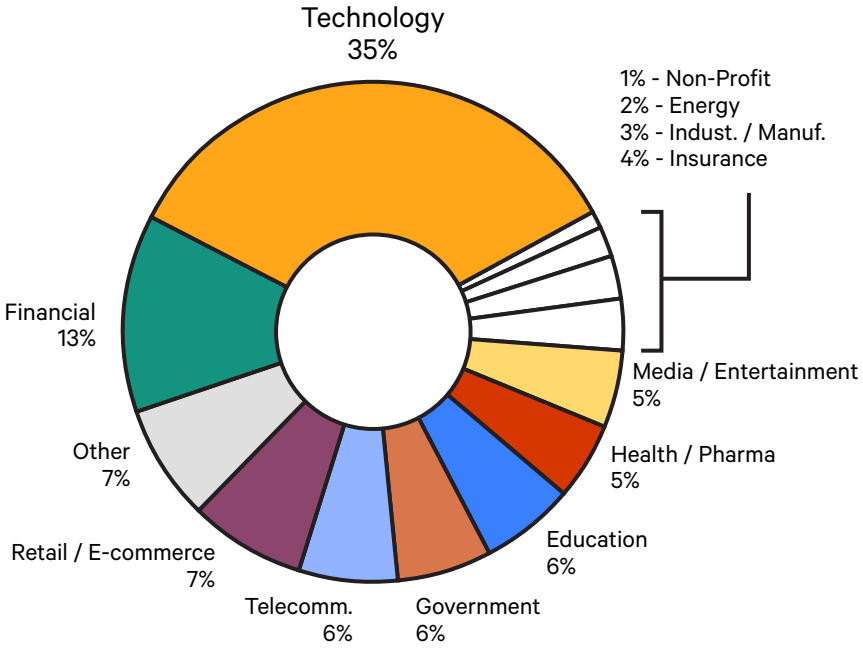
The work we do: Salaries by industry

More than a third of survey respondents around the world work in the technology industry, and a further 13 percent work in financial services. Our data shows that 62 percent of tech-industry workers worldwide earn less than $100,000 annually, and 44 percent of financial services workers earn more than $100,000 each year. This may be partly because of the high concentration of technology jobs in Asia, where wages are lower — 46 percent of our Asian respondents work in the tech sector.

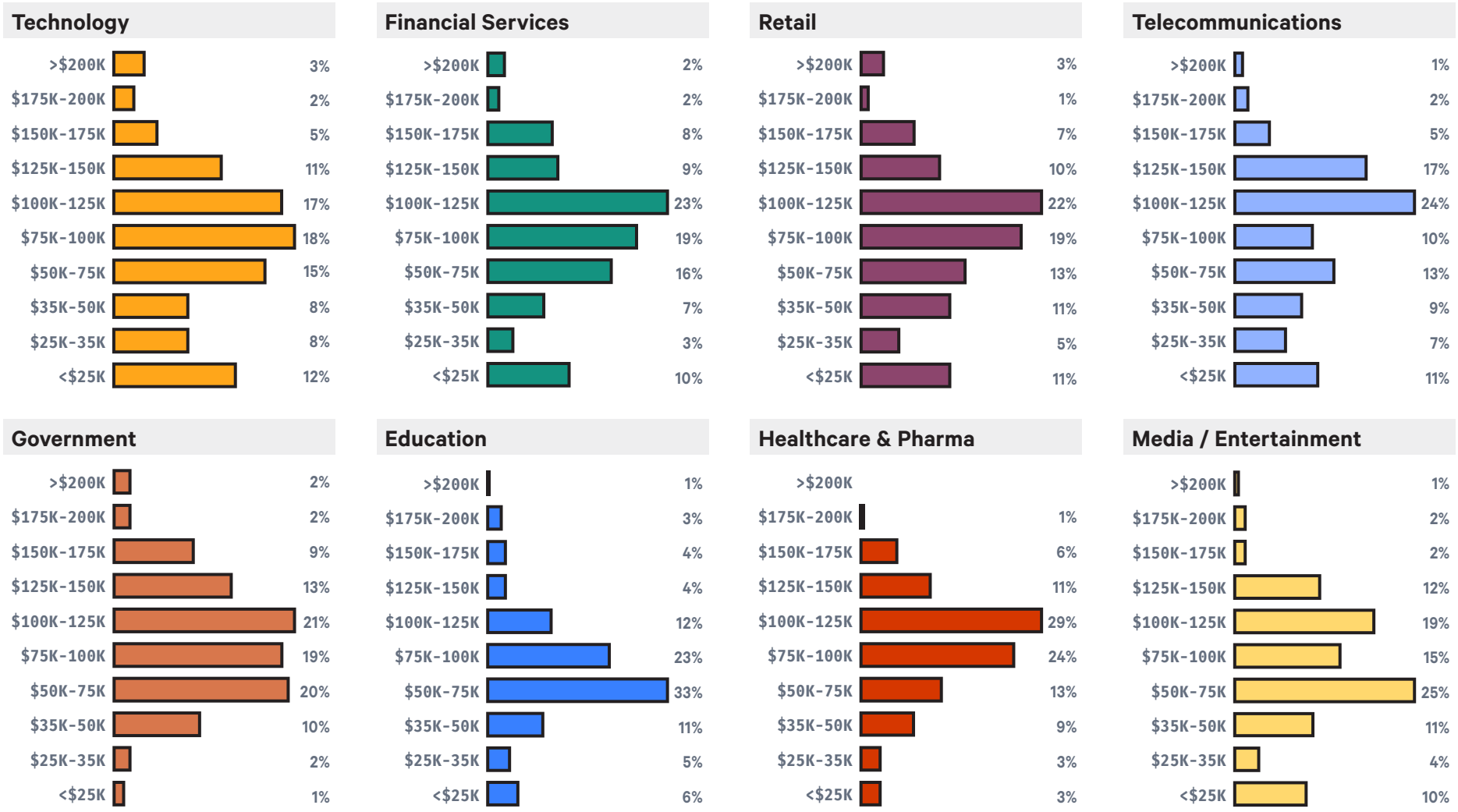
We received smaller numbers of responses from people working in the retail/consumer/e-commerce field (about 7 percent of respondents), in telecommunications (roughly 6 percent), and in health care/pharmaceuticals (5 percent). In these industries, workers most commonly reported earning between $100,000 and $125,000. We also have small data samples from workers in the education and media/entertainment industries, where $50,000 to $75,000 is the most commonly reported salary.

Finally, we were interested to learn that in the government sector, and in industries other than the choices we provided, the most commonly reported salary was evenly split between the $50,000-$75,000, the $75,000-$100,000, and the $100,000-$125,000 bands.

What industry do you work in?



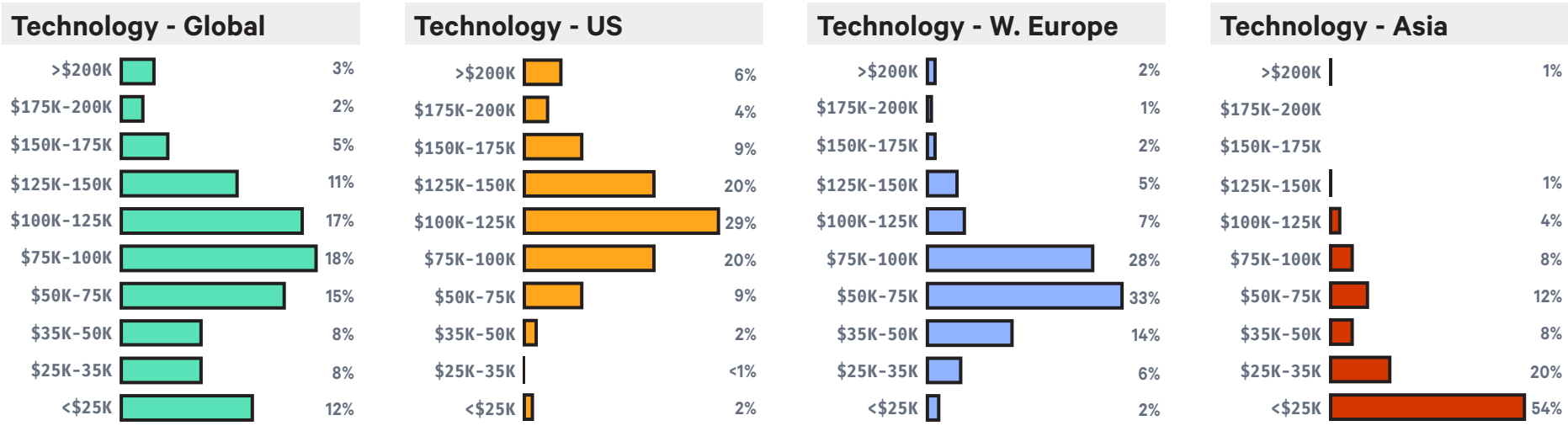
The work we do: Salaries by industry



Note: Geographic differences and level of work are not reflected in these salary bands.

In the United States, for both workers in the technology sector (our largest respondent group by far) and in the financial services field, the most common salary is in the $100,000-$125,000 range.

While we didn't gather enough data to be able to view regional salary trends for all industries, we can report that Asian workers in the technology industry are most likely to earn $25,000 or less annually, while tech-sector workers in Western Europe most commonly earn $50,000-$75,000.



What our business cards say: Salaries by job title

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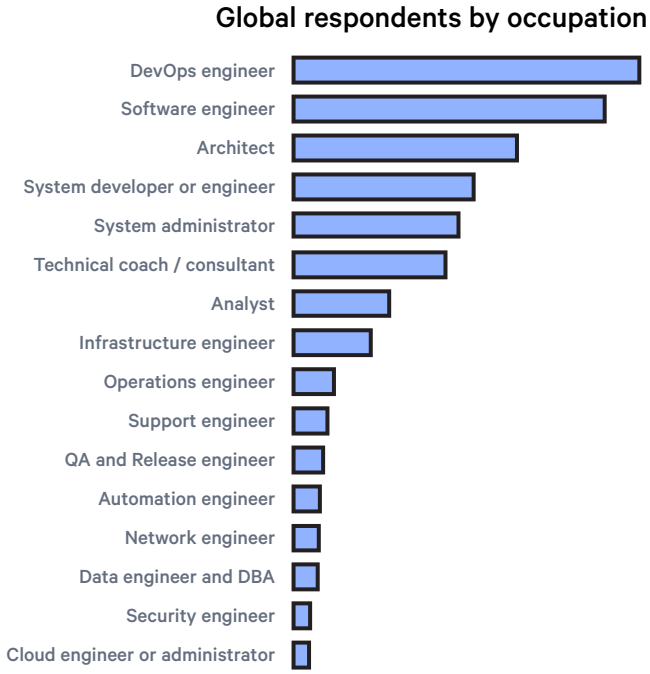
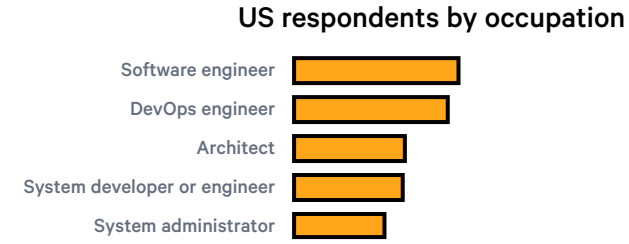
What our business cards say: Salaries by job title

We saw a significant shift in IT practitioners' job titles this year, with more titles containing the word "engineer," and fewer system administrators. Globally, *DevOps engineer* was the most commonly reported job title this year, followed by *software engineer*, *architect*, *system engineer* and then *system administrator*. This is a noticeable change from 2016 when *system administrator* was the most commonly reported job title, followed by *system engineer*.

In the United States, *software engineer* was the most commonly reported job title for the first time, followed closely by *DevOps engineer*. The number of U.S. respondents with the title *system administrator* fell off sharply, from 12 percent in 2016 to just 8 percent this year. While our Western European data set is too small to make confident pronouncements about job title trends, *DevOps engineer* is the most commonly reported job title in Western Europe in 2017, overtaking *system administrator*, *system developer*, and *system engineer*, which were more frequent in 2016.



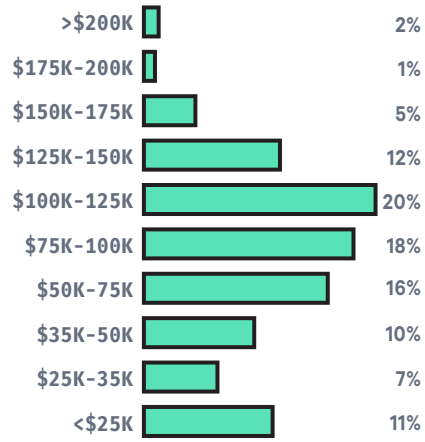


Globally, DevOps engineers and software engineers most commonly earn salaries in the $100,000 to $125,000 range, while system administrators' most common salary range is $50,000 to $75,000.

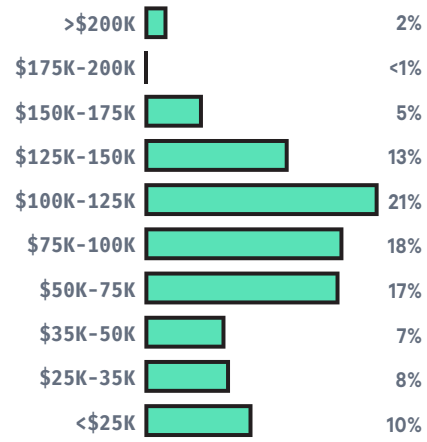
The most common U.S. salaries for most job titles haven't changed significantly in the past year. Software engineers, DevOps engineers, and system engineers most commonly reported the $100,000 to $125,000 salary band, as they did in 2016. We saw a change only in the most commonly reported salary among architects: These moved up one salary band this year, to a range of $125,000 to $150,000. We don't know if this change is due to market forces, or whether it's because we included cloud architects in the architects group this year (the first time we've done that).

The percentage of DevOps engineers and software engineers in the United States earning more than $100,000 increased slightly since last year, from 64 to 66 percent for DevOps engineers and 66 percent to 69 percent for software engineers. At the same time, the percentage of system engineers and system administrators in the United States earning more than $100,000 decreased, from 60 to 55 percent for system engineers and 34 to 31 percent for system administrators. (With fewer responses from system administrators this year, this data point has dropped below our confidence threshold).

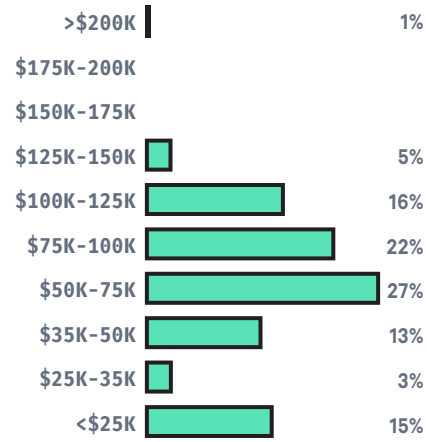
DevOps engineer - Global



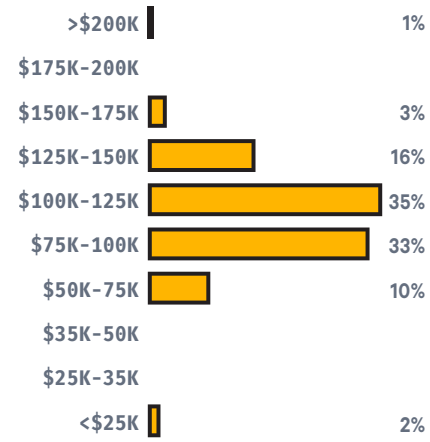
Software engineer - Global



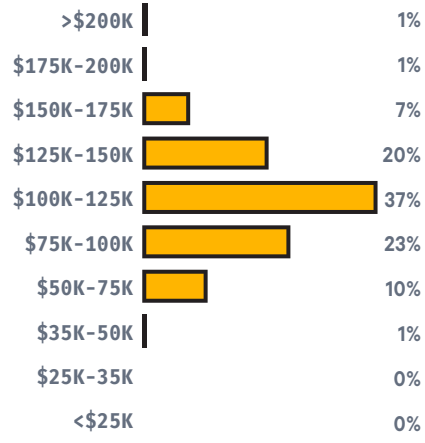
System administrator - Global



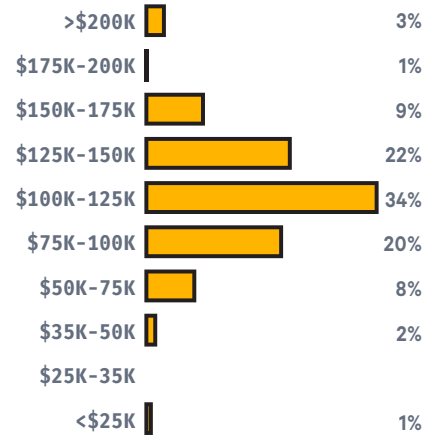
System dev. / engineer - US



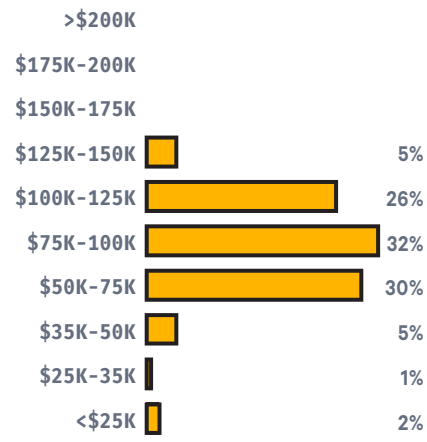
DevOps engineer - US



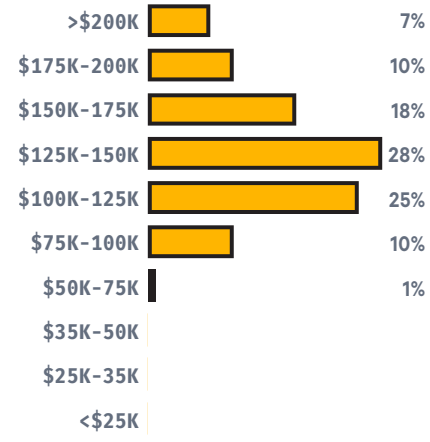
Software engineer - US



System administrator - US



Architect - US



Note: Geographic differences, level of work, and the use of different titles for the same work are not reflected in these salary bands.

Who we are: Salaries by demographic

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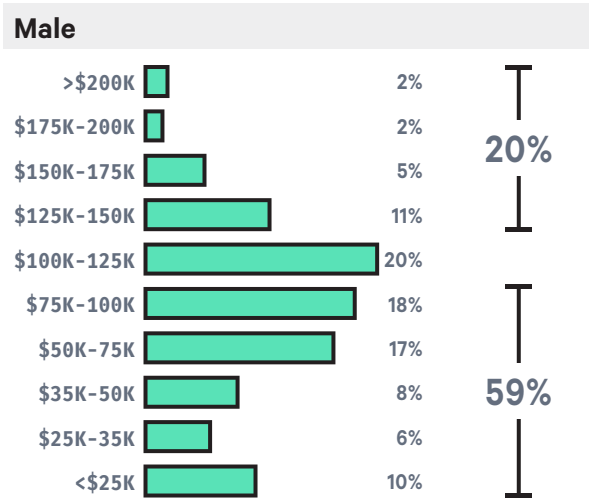
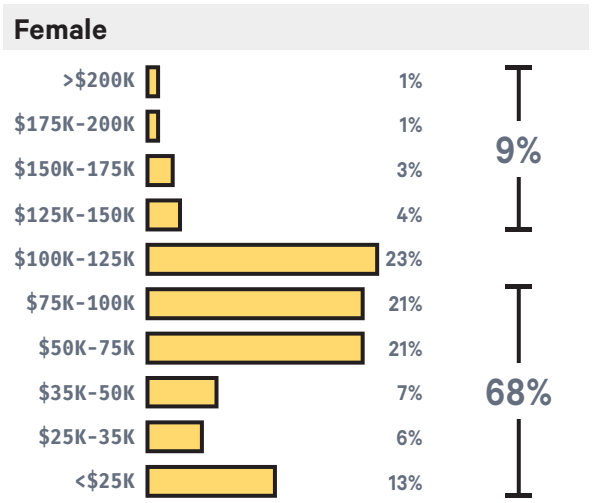
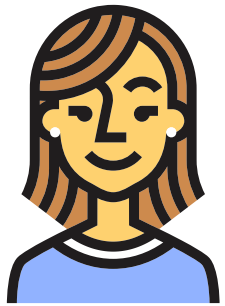
Who we are: Salaries by demographic

In 2017, six percent of survey respondents identified themselves as female, up slightly from 2016, and a small number identified as non-binary. While we're pleased to see at least some progress in the number of women responding to the DevOps Survey each year, we still don't have a large enough sample to perform a robust and confident analysis of global salary data by gender.

The data we gathered this year suggests that female IT practitioners most commonly earn annual salaries in the $100,000 to $125,000 band, which is commensurate with the most common salary earned by their male colleagues. However, within our limited data set, 20 percent of male IT practitioners earn salaries of more than $125,000 annually, but just nine percent of female IT practitioners earn in that band.





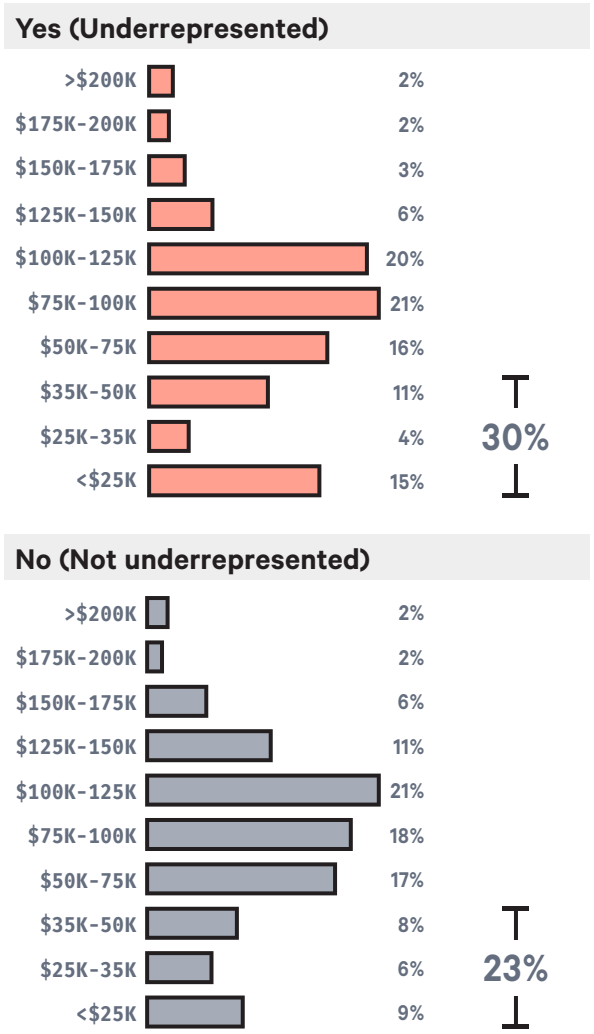


In 2017 we added a brand-new question. We asked survey respondents to identify whether they are part of a group that is currently underrepresented in technology (trusting each individual to determine what "underrepresented" means for their own situation). Of the 89 percent of survey respondents who answered this question, 16 percent identified themselves as part of an underrepresented group. The most common salary range for IT practitioners who identify as underrepresented is $75,000 to $100,000, closely followed by $100,000-$125,000. For people who don't identify as underrepresented, the most common salary reported was $100,000 to $125,000. Also, 30 percent of underrepresented respondents make less than $50,000 annually, compared to 23 percent of represented respondents.

We'd love to have enough data to make this section of the report more meaningful. The state of wage equality in technology is a vital issue, with wide-ranging ramifications for recruitment, retention, workplace culture and diversity. Please encourage your friends and colleagues of all genders, races, backgrounds, and abilities to contribute to next year's survey.

We're also happy to receive your ideas about improving our data: Email devopssurvey@puppet.com.

Do you identify as part of a group that is underrepresented in tech?




How long we've been at this: Salaries by years of experience
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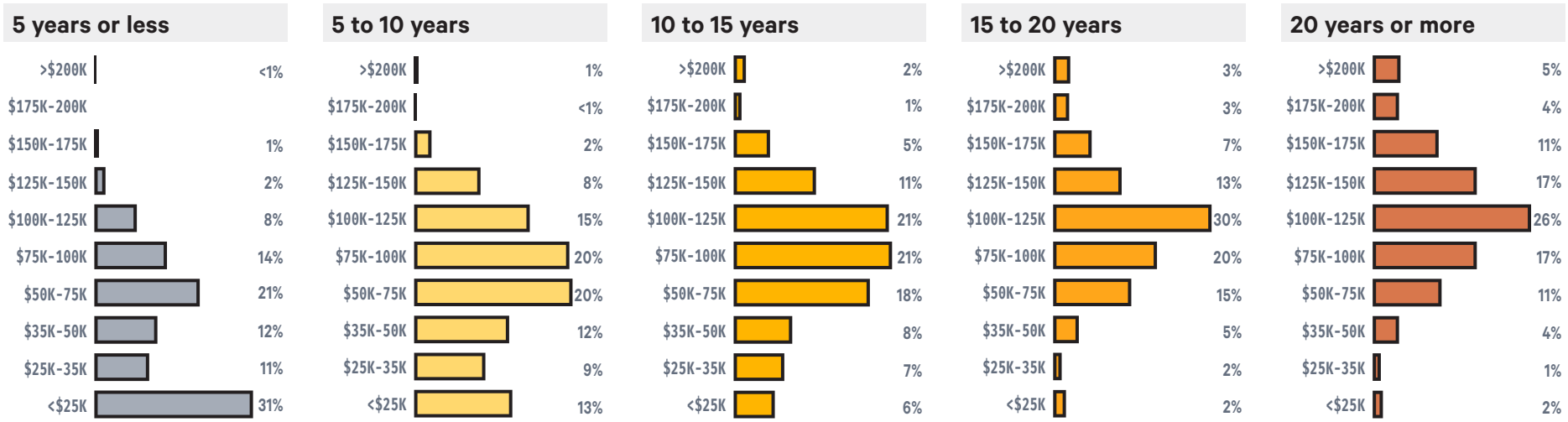
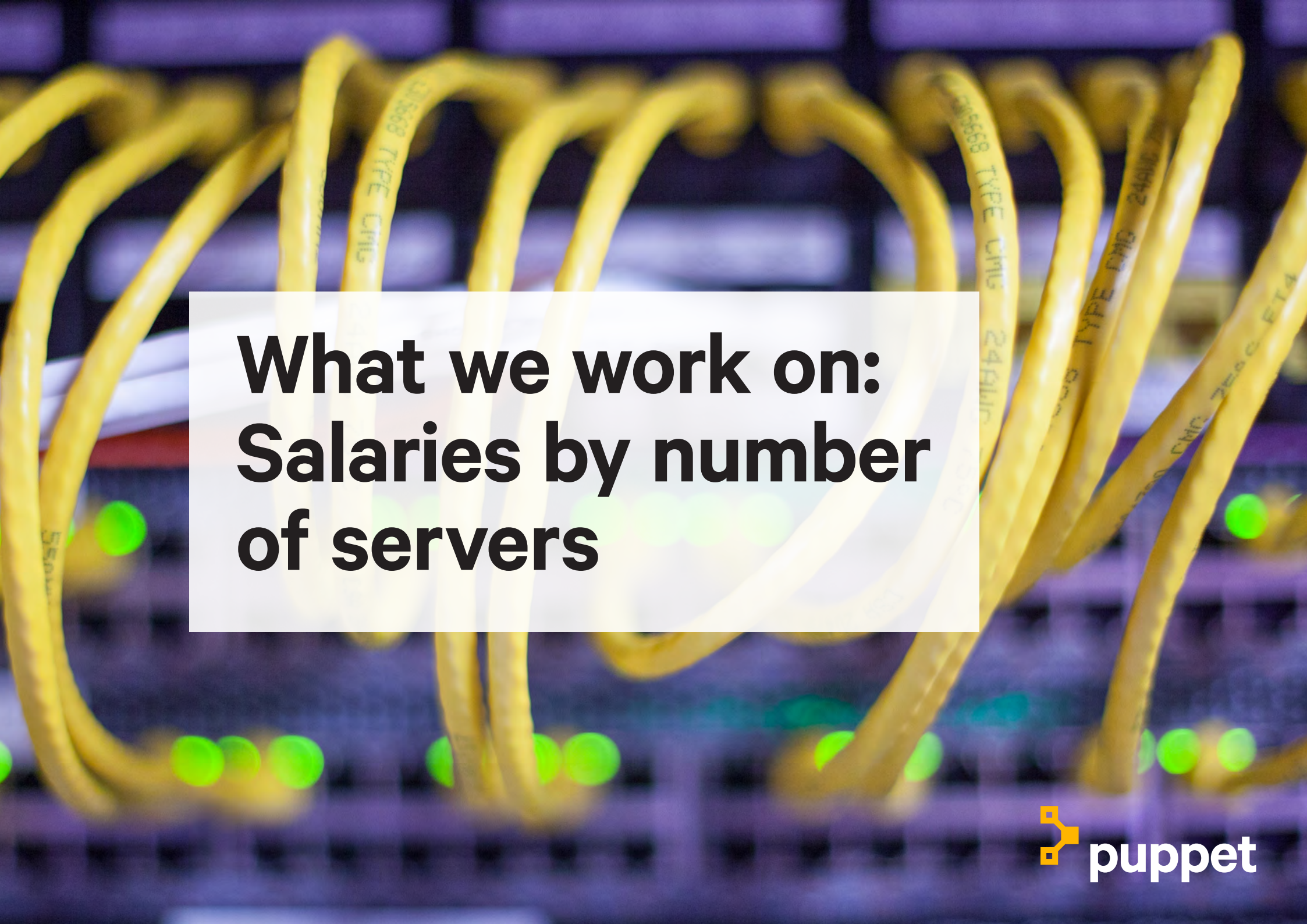
How long we've been at this: Salaries by years of experience

Unsurprisingly, our data shows that IT practitioners with more than a decade of experience generally earn higher salaries than those who are newer to the industry. While 37 percent of respondents with five years of experience or less make under $50,000, 60 percent of respondents with more than 15 years of experience earn $100,000 or more.



Note: Geographic differences and level of work — which drives salary at a higher rate than years of experience — are not reflected in these salary bands.


What we work on:
Salaries by number
of servers
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What we work on: Salaries by number of servers

The majority of survey respondents — 66 percent — work for companies that maintain fewer than 2,000 servers. Survey respondents whose companies have fewer than 100 servers most commonly report salaries of $50,000 to $75,000. The most common salary figure climbs a band, to $75,000-$100,000, for those who work at companies with 100 to 500 servers, and climbs again (to $100,000 to $125,000) for those whose companies have more than 500 servers. Past the 500-server mark, however, the most common salary holds steady at $100,000 to $125,000.

Who we work for: Salaries by size of organization

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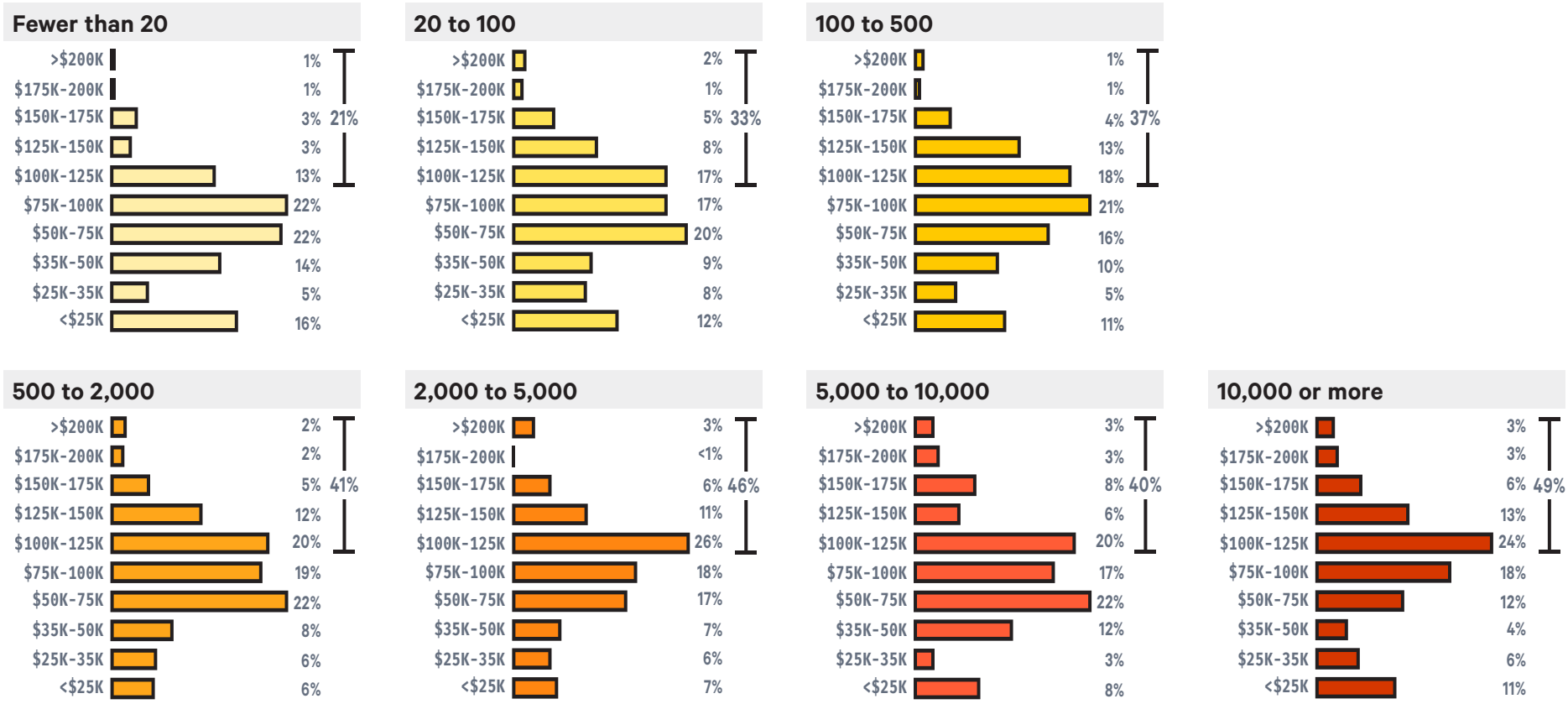
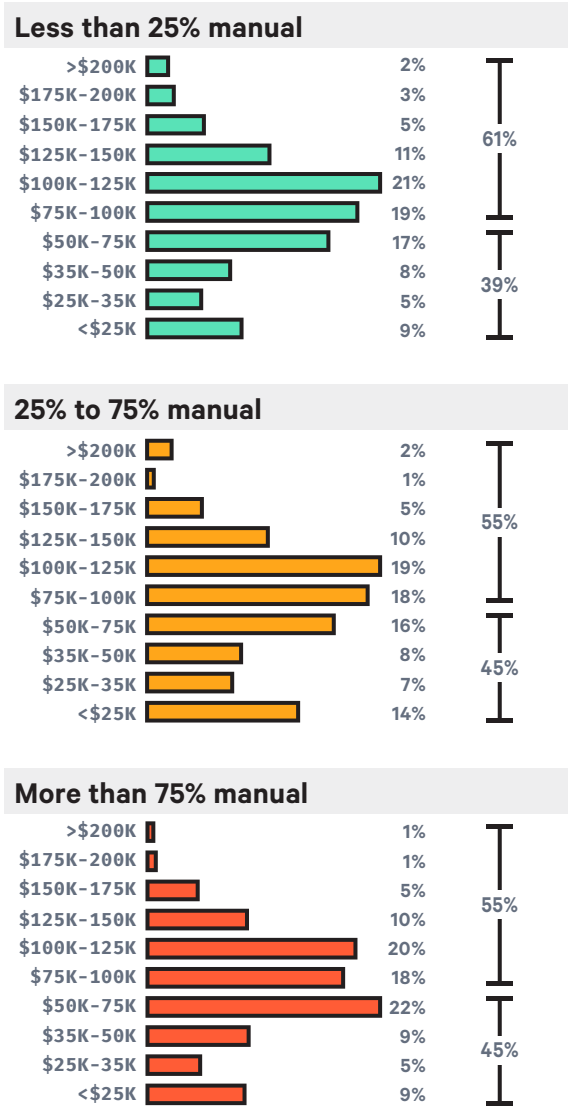
Who we work for: Salaries by size of organization

Again this year, we found a relationship between the number of employees at an organization and the salaries of practitioners who work there. At organizations with more than 10,000 employees, 49 percent of practitioners report earning more than $100,000, while only 21 percent of practitioners at organizations with 1-19 employees and 33 percent at organizations with 20-99 employees do.



Who's automating: Salaries by the degree of manual configuration management



Who's automating: Salaries by the degree of manual configuration management

This year we asked survey respondents what percent of their configuration management is done manually. We found that practitioners who reported their manual configuration management at less than 25 percent are likely to earn more than practitioners whose configuration management is more manual — that is, less automated.

Of the practitioners whose configuration management is less than 25 percent manual, 61 percent earn $100,000 or more (compared to 55 percent for practitioners with more manual configuration management) and 39 percent earn less than $75,000 (compared to 45 percent for those who exceed 25 percent manual configuration management).

This should put to rest the unspoken but often-present fear that automation will lead to worse job prospects for IT people. If you're doing less manual work, and more of your work has been automated, you're able to spend more time on innovation and work that's seen as strategic, and that provides value to the business. It's also likely your boss and organization value the fact that your contributions are more germane to the business.

Another possible factor in the higher pay of people working at jobs where more of the work is automated: people doing a lot of repetitive manual work are likely to seek a new job where they can do work that's more rewarding, both financially and professionally. In the **2017 State of DevOps Report**, we found that employees in high-performing teams (which employ DevOps practices such as automation) were 2.2 times more likely to recommend their organization as a great place to work, and 1.8 times more likely to recommend their team as a great working environment.

Who's in charge: Salaries of managers

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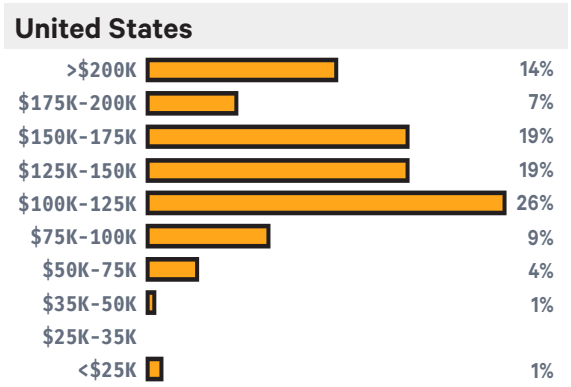
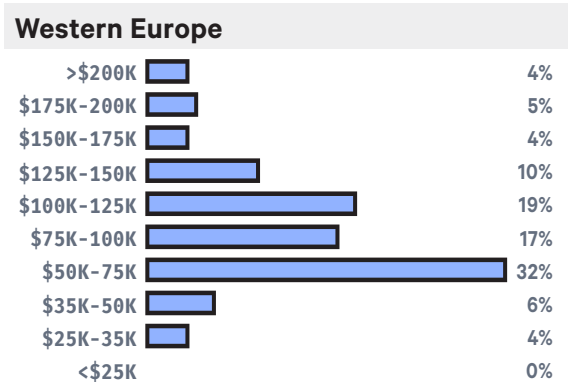
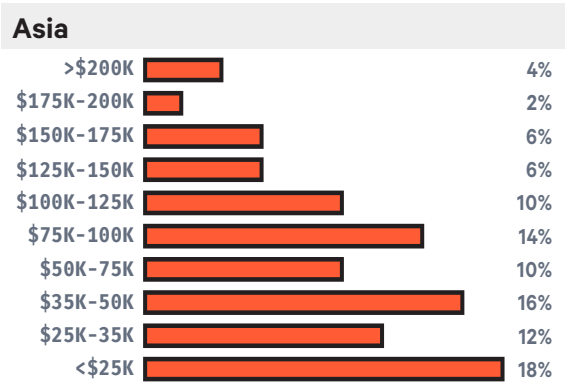
Who's in charge: Salaries of managers

We heard from more than 450 managers, VPs, and directors of IT this year. We learned that while IT practitioner salaries around the world are holding steady or increasing slightly, manager salaries have fallen over the past year. In the United States, the most commonly reported salary band for managers is $100,000 to $125,000. This band is one lower than 2016 and 2015's most common manager salary range, and is the same range that the largest number of U.S. IT practitioners report. This suggests the wage gap between practitioners and managers has narrowed significantly over the past 12 months.

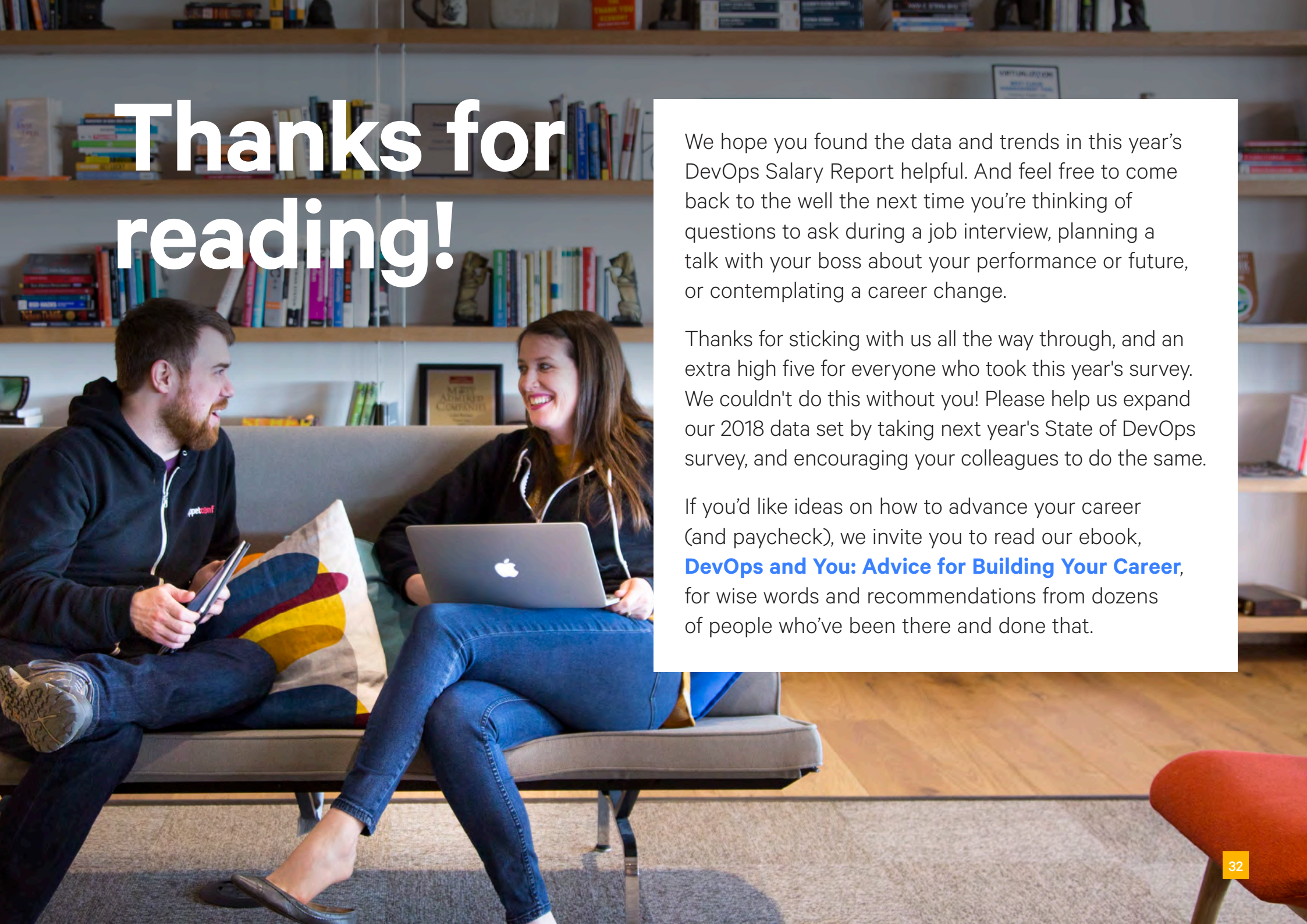
We see a similar pattern in the data we collected from Western Europe and Asia. In Western Europe, manager salaries have dropped one band to $50,000 to $75,000 annually, and are now on par with the salaries of IT practitioners working in the same region. The change is even more stark in Asia, where manager salaries have fallen two bands, from $35,000-$50,000 in 2016 to less than $25,000 today. Note, however, that our sample size of data from Asian managers is too small to report on, other than anecdotally.







Note: This data reflects salary ranges for people in leadership positions at any level.



Thanks for reading!

We hope you found the data and trends in this year's DevOps Salary Report helpful. And feel free to come back to the well the next time you're thinking of questions to ask during a job interview, planning a talk with your boss about your performance or future, or contemplating a career change.

Thanks for sticking with us all the way through, and an extra high five for everyone who took this year's survey. We couldn't do this without you! Please help us expand our 2018 data set by taking next year's State of DevOps survey, and encouraging your colleagues to do the same.

If you'd like ideas on how to advance your career (and paycheck), we invite you to read our ebook, **DevOps and You: Advice for Building Your Career**, for wise words and recommendations from dozens of people who've been there and done that.

Puppet is driving the movement to a world of unconstrained software change. Its revolutionary platform is the industry standard for automating the delivery and operation of the software that powers everything around us. More than 37,000 companies — including more than 75 percent of the Fortune 100 — use Puppet's open source and commercial solutions to adopt DevOps practices, achieve situational awareness and drive software change with confidence. Headquartered in Portland, Oregon, Puppet is a privately held company with more than 530 employees around the world.

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