

2020 RESEARCH REPORT

Streaming Challenges and Optimization Needs

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WOWZA



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Introduction

Streaming media capabilities have become essential across a range of industries. But successfully deploying a streaming platform can be both costly and time consuming. What's more, the optimal architecture and configuration settings tend to vary for each use case.

This report illuminates the myriad challenges that organizations face when integrating video streaming into their business strategy. Our findings reveal that by enlisting consulting expertise, organizations are able to ease the process with a one-stop solution.

Deployment speed, scalability, and performance all rank as top concerns for respondents. Luckily, Wowza Professional Services acts as a proven strategy for eliminating these hurdles.

It's simple. By letting our experts take care of the hard stuff, businesses in the online video space are able to focus on their core competencies and accelerate time to value.

Traci Ruether
Content Marketing Manager
Wowza



Survey Methodology

Now, more than ever, getting a streaming solution up and running requires not just basic technical know-how but also a clear vision of the scale and scope required to service customers and consumers that have made the switch to online-video-centric work, worship, and entertainment.

To accomplish their goals, [many companies are turning to professional services](#). We wanted to understand the challenges and opportunities faced by those trying to launch or expand their streaming services in this time of almost unprecedented uncertainty.

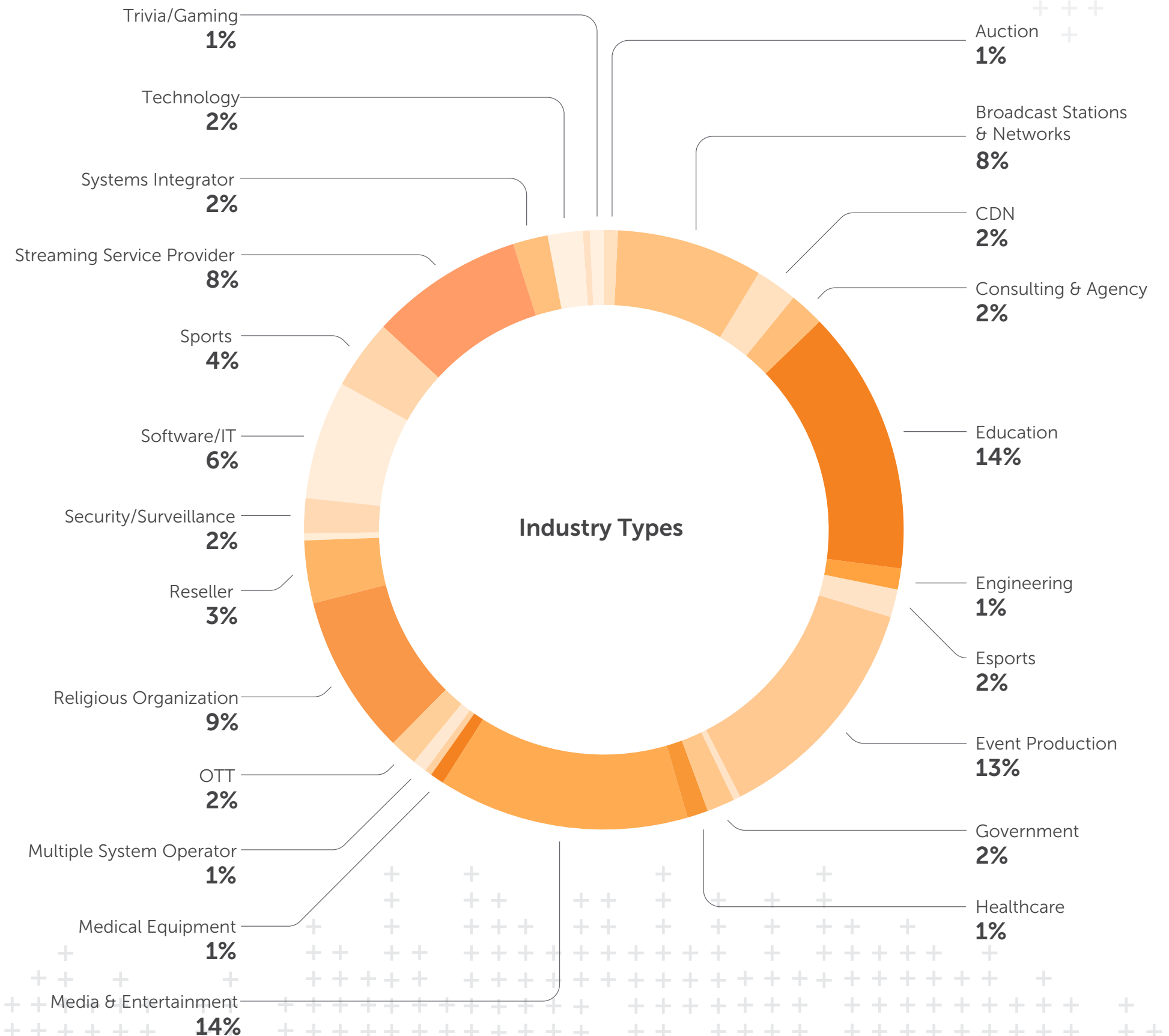
Over the course of March and April 2020, Wowza and Help Me Stream Research Foundation surveyed the online video industry — from corporations and not-for-profits to houses of worship and visual artists — to gauge the extent of deployment challenges.

We had 264 quality responses from across the globe. The largest group of respondents hailed from North America (39%) and Europe (28%), but we also had representation from Asia-Pacific (14%), South America (9%), as well as smaller percentages from Africa, Australia/New Zealand, India, and the Middle East.

Respondents' job responsibilities spanned a wide spectrum: engineering (28%), executive management (22%), research & development (11%), as well as sales, marketing, strategy, product management, and business development responsibilities.

Finally, we also had a wide spectrum of industries represented. The survey generated responses from 27 of those. Percentages can be seen in the accompanying graph, but the top five industry represented were education and media & entertainment (each accounting for 14% of total respondents), event production (13%), religious organizations (9%), and streaming service providers (8%) followed closely by broadcast stations & television or cable networks.

Tim Siglin
Founding Executive Director
Help Me Stream Research Foundation



Key Takeaways

- 01 Speeding up deployment is the number one reason organizations are considering professional services.
- 02 The build-versus-buy conundrum is lessened when outsourcing code development and architecture design.
- 03 Cost containment is a major factor when choosing professional services, but not to the exclusion of expertise that's not available in house.
- 04 Live event streaming projects dominated survey respondents' plans. Streaming's popularity during uncertain times may explain why 'architecting solutions to scale' is key.
- 05 Latency concerns are important, more so for those who've launched streaming projects.
- 06 Custom code development ranks as a major priority for those with high revenues or viewership levels.
- 07 Operational costs (opex) concerns now command more attention than capital expenditure (capex) concerns, thanks to a shift to cloud-based services.
- 08 Respondents with higher viewership and/or revenue goals are more likely to engage professional services.

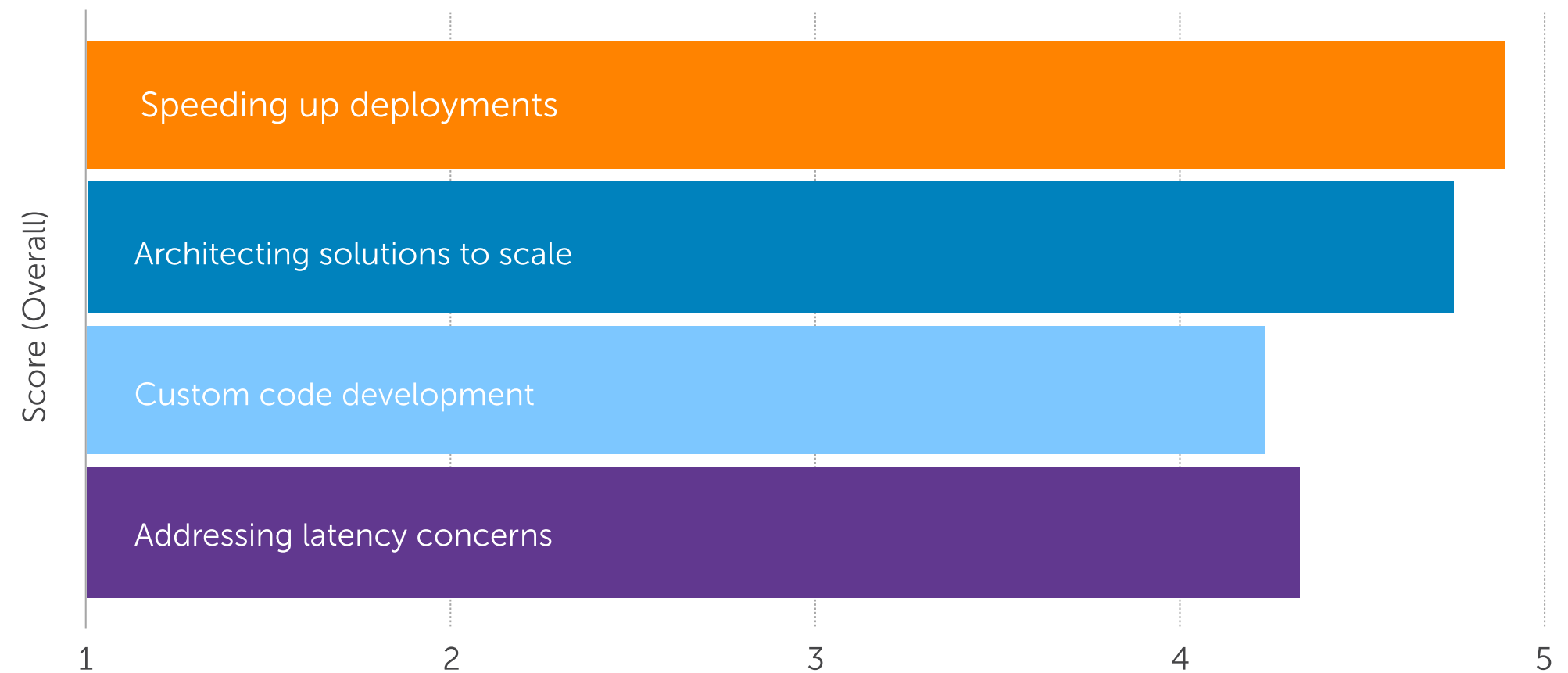


01 Speeding up deployment is the number one reason organizations are considering professional services.

ANALYSIS:

The most compelling reason organizations consider using professional services is to lower time to market by speeding up at-scale deployments. Respondents also note architecting solutions to scale and access to custom code development as key benefits of professional services.

Reasons for Considering Third-Party Professional Services



01 Speeding up deployment is the number one reason organizations are considering professional services.

WOWZA'S TAKE

Professional consulting services can shave months off of the time required to onboard, consult documentation, test, and fine-tune a new streaming system. This doesn't just save money by speeding up deployment — it's also critical for delivering value to end-users. For one promising live commerce app, the choice to outsource certain engineering functions allowed them to achieve an already publicized deadline.

"We wouldn't have met our launch date without enlisting the help of [Wowza Professional Services](#). They sped up the process significantly and tackled roadblocks that we wouldn't have otherwise

been able to solve," explained the app's product marketing manager. "Video requires a lot of knowledge, and we were developing a complex environment with multiple risks due to interactivity and dual streams. This made for a very unique configuration that required the help of Wowza Professional Services."

Beyond just meeting their deadline, the company walked away knowing that they'd engineered the best system possible for their ecosystem. For this reason, many organizations find that enlisting expert help results in long-term cost efficiencies.

02 The build-versus-buy conundrum is lessened when outsourcing code development or architecture design.

ANALYSIS:

Survey respondents with growth aspirations understand that they face a build-versus-buy decision. One respondent noted that if they found an all-in-one solution, they “would go with that platform or build it out with our model and white label service.”

Often, though, there’s a need to balance both. In that case, a best-case scenario is a customizable, robust base-level platform, coupled with professional services for custom code development, which not only offers the potential benefit of ‘building’ a system alongside professionals intimately familiar with the extensibility of the platform, but may also eliminate unnecessary complexities by architecting a bespoke system while lowering overall time to market.

Reasons for Considering Third-Party Professional Services

// We are working to become a streaming service provider and launching our own mass media company. We currently use Vimeo because it’s cheaper than building a system from the ground up. But we would like to build our own system using Wowza. //

02 The build-versus-buy conundrum is lessened when outsourcing code development or architecture design.

WOWZA'S TAKE

While a flexible streaming server software like [Wowza Streaming Engine](#) falls on the 'build' side of the build-versus-buy equation, it can be combined with Wowza Professional Services to deliver a turnkey solution. This merges the benefits of both approaches by ensuring customization and quick implementation — all the while eliminating the need for in-house expertise.

Based on past projects that Wowza's Professional Services team has worked on for specific customers, here are some specific benefits of engaging external engineering help:

- **Strategic development and design.** Wowza's engineers will tailor your workflow to your resources and use case.
- **Reduced complexities.** Wowza Professional Services will provide guidance on optimizing your architecture and troubleshooting specific scenarios.
- **Custom module development.** From synchronization to security, Wowza's team stands ready to implement additional functionality and shorten the time to development.

03 Cost containment is a major factor when choosing professional services, but not to the exclusion of expertise that's not available in house.

Considerations When Determining Whether to Use Third-Party Professional Services

ANALYSIS:

The uncertainty around the overall cost of professional services (and subsequent budget impact) was the top concern amongst survey respondents when considering professional services engagements.

Yet they also understood the benefits of engaging external expertise, when that meant bringing robust solutions to market quicker at scale.

// All professional external services will be determined by the budget and requirements of our clients. We offer packages that we can provide with in-house equipment and infrastructure, but if they need bespoke services and can afford it, we will bring on board other professional to help deliver the event if necessary." //

// Is there any opportunity for different levels of professional services catering to different scales of business? Or levels of intricacy to tap into a larger scale of demand for your support? We for sure love your service but are somewhat overwhelmed by the potential of Wowza Video. //

03 Cost containment is a major factor when choosing professional services, but not to the exclusion of expertise that's not available in house.

WOWZA'S TAKE

Because Wowza's Professional Services offering is customized to the scope of each unique project, organizations are able to select the level of investment that's right for them.

For those set on engineering their system in house, we can quickly onboard your team with classroom training. If a custom-built solution is more in line with your needs, our engineers are happy to see the project through from start to finish.

Our hybrid, customer-focused approach is designed to help organizations big and small bridge the gaps in their streaming workflow. For that reason, we encourage you to [contact us](#) directly for a quote based on your specific requirements.

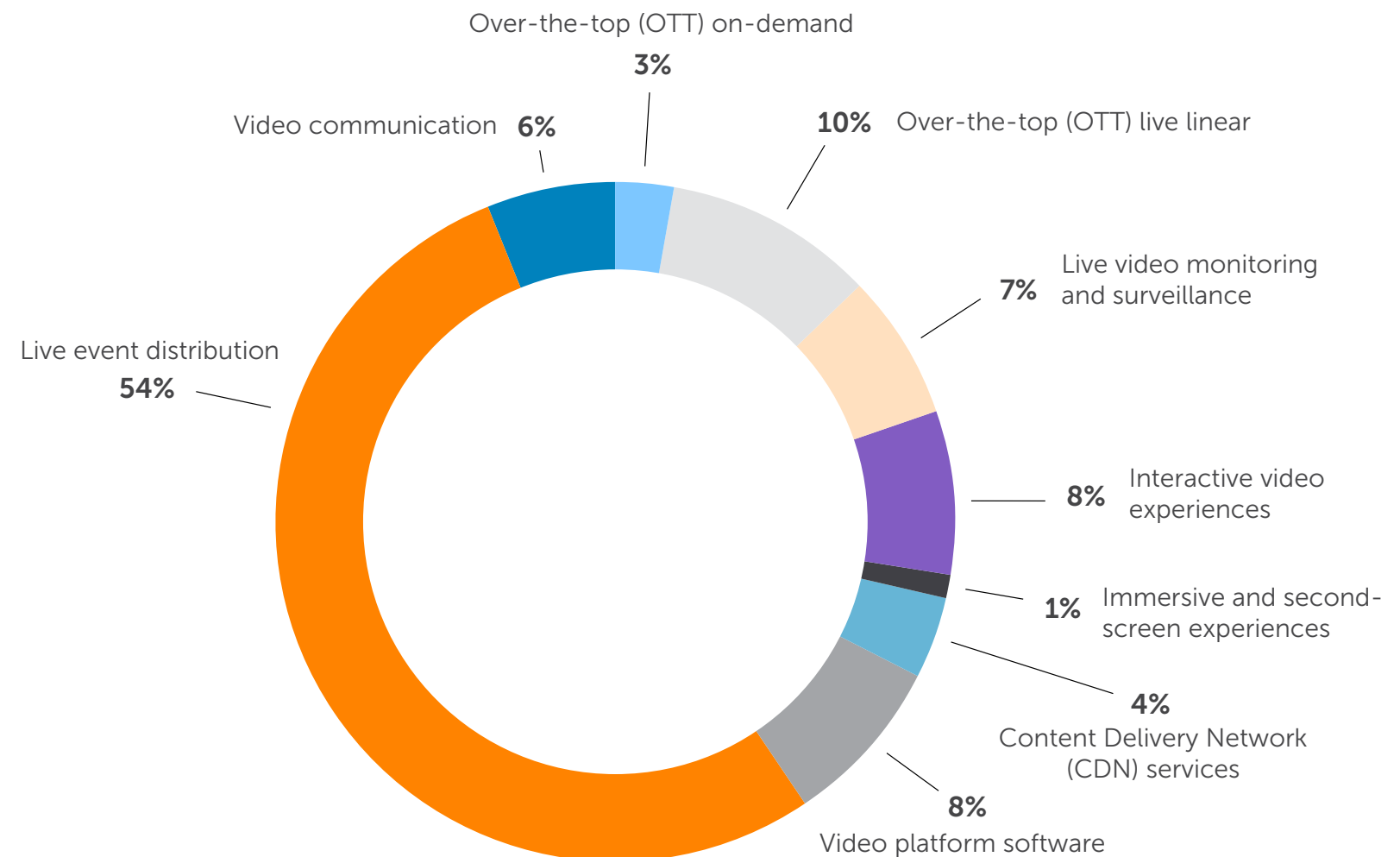
04 Live event streaming projects dominated survey respondents' plans. Streaming's popularity during uncertain times may explain why 'architecting solutions to scale' is key.

What type of streaming solution is closest to what your organization is trying to deliver?

ANALYSIS:

Over half of respondents (54%) indicated they plan to launch live event streaming projects. For those with cost or pricing concerns around professional services, half of those had very low revenue and viewership or subscriber ranges (between 101-500), yet the percentage of this group trying to launch live event streaming was higher (~64% compared to 54%).

This may also explain why 'architecting solutions to scale' was a significant professional services motivator for Media & Entertainment, Event Production, Education respondents.



// We are achieving now interactive video streaming for church events, especially [important] today with COVID-19 outbreak. //

// We wanted to put on a Virtual Music festival and get the DJs to stream to one source so we could bring it all together and re-stream it. //

// Streaming from funeral homes to remote family and friends. //

// We are currently assisting 100% of our customers with transitioning to a remote workflow due to the COVID-19 lockdown orders. //

04 Live event streaming projects dominated survey respondents' plans. Streaming's popularity during uncertain times may explain why 'architecting solutions to scale' is key.

WOWZA'S TAKE

Survey responses indicate that the [coronavirus crisis](#) has heightened the need for live event distribution across all industries. Church streaming, fitness, education, and virtual music events were all listed as upcoming streaming projects — with COVID-19 called out as the *raison d'être*. [The pandemic has brought about a need for reliable streaming](#) to rapidly expanding audiences, which explains why scaling was top of mind for respondents.

COVID-19 hasn't just forced organizations to accommodate an uptick in viewers, it's also made speedy deployment crucial. The varied impacts

of this crisis couldn't have been predicted. As a result, delivering high-traffic broadcasts has proven challenging even for those organizations well versed in streaming at scale.

One surefire way for organizations to adapt at the drop of a hat is by supplementing their in-house resources with the expertise of a trusted provider. In addition to solutions implementation and training, Wowza Professional Services offers dedicated event support to set up, optimize, and monitor streams during live broadcasts.

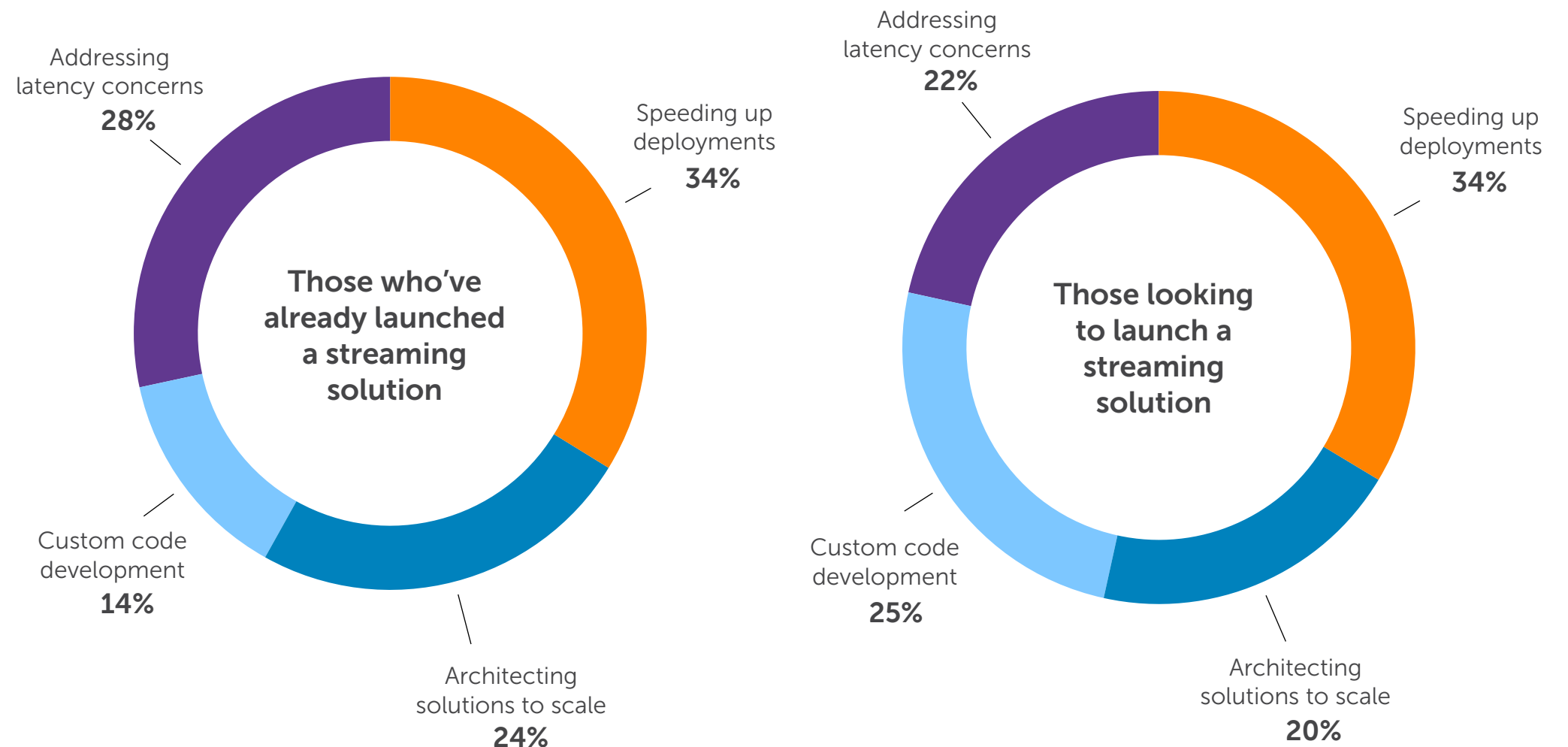
05 Latency concerns are important, more so for those who've launched streaming projects.

Please rank the reasons you might outsource development for streaming projects

ANALYSIS:

Latency concerns continues to be a dividing line between those who have already launched solutions versus those who are contemplating launching streaming projects. Those who have not yet launched a streaming project tend to be more concerned about whether their solutions will be secure and meet privacy thresholds, while those who have launched solutions are looking for ways to drive down latency.

We see this as a natural progression: once a solution has been secured and privacy concerns have been addressed, latency is the next biggest hurdle to cross for live event streaming projects.



// For interactive entertaining and education formats we need very low-latency products. //

05 Latency concerns are important, more so for those who've launched streaming projects.

WOWZA'S TAKE

Latency is a very common concern. And while everyone thinks they need it, we don't actually recommend low-latency streaming for those use cases that would be better off prioritizing reliability and cost efficiencies. This is because the deployment of low-latency streaming workflows often introduces additional complexities.

For some customers, though, timely delivery of information can be a matter of life and death. Such was the case for [Child Health Imprints](#), an IoT medical provider that was able to achieve low-latency streaming for remote healthcare capabilities by enlisting Wowza Professional Services. The organization partnered with Wowza to enable real-time monitoring and data synchronization on their iNICU platform.

[Read the Case Study](#)

06 Custom code development ranks as a major priority for those with high revenues or viewership levels.

ANALYSIS:

While overall survey responses showed that speeding up deployments and architecting solutions to scale are the top professional services priorities, there's a marked shift in priorities for those organizations that have robust revenues.

For respondents noting that they have greater than \$1 million in revenue, custom code development rose to the second-highest professional services need.

Custom code development rose to the greatest professional services for one select group: those with mature viewership or subscriber bases and robust revenues. As noted in the graphic, those with a combination of more than \$1 million in revenue and 10,000 viewers/subscribers ranked custom code development above even the need to speed up deployments.

This ranking appears to show that, even with a large revenue and viewership baseline, some organizations lack the in-house expertise to tailor streaming solution code to maximum benefit.

Top Professional Services Priorities for Organizations With Greater Than \$1 Million in Revenue and More Than 10,000 Viewers/Subscribers

01	Custom Code Development
02	Speeding Up Deployments
03	Architecting Solutions to Scale
04	Addressing Latency

// Currently we are trying to develop a one-stop shop for non-profits and charity auctioneers to go to for virtual gala events. We want to be able to provide streaming services, ticketing, chat, etc. as a single package to the end user. //

06 Custom code development ranks as a major priority for those with high revenues or viewership levels.

WOWZA'S TAKE

Custom code development can also prove useful for those organizations with streaming infrastructure in place. Such was the case for Intelligent Video Solutions (IVS), an organization that engaged Wowza Professional Services to help troubleshoot recurring obstacles and optimize their platform.

Just take their word for it:

“Even with developers on staff that have been working with Wowza for years, Wowza Professional Services provided a level of expertise that we wouldn’t otherwise have access to. Certain obstacles were slowing our development cycle. We were spending many hours researching as opposed to actually writing code. Wowza’s team gave us architecture recommendations, information about tools we were unaware of, and example code for features that we’ve previously struggled to implement.”

— Dustin Stern, VP of engineering at IVS.

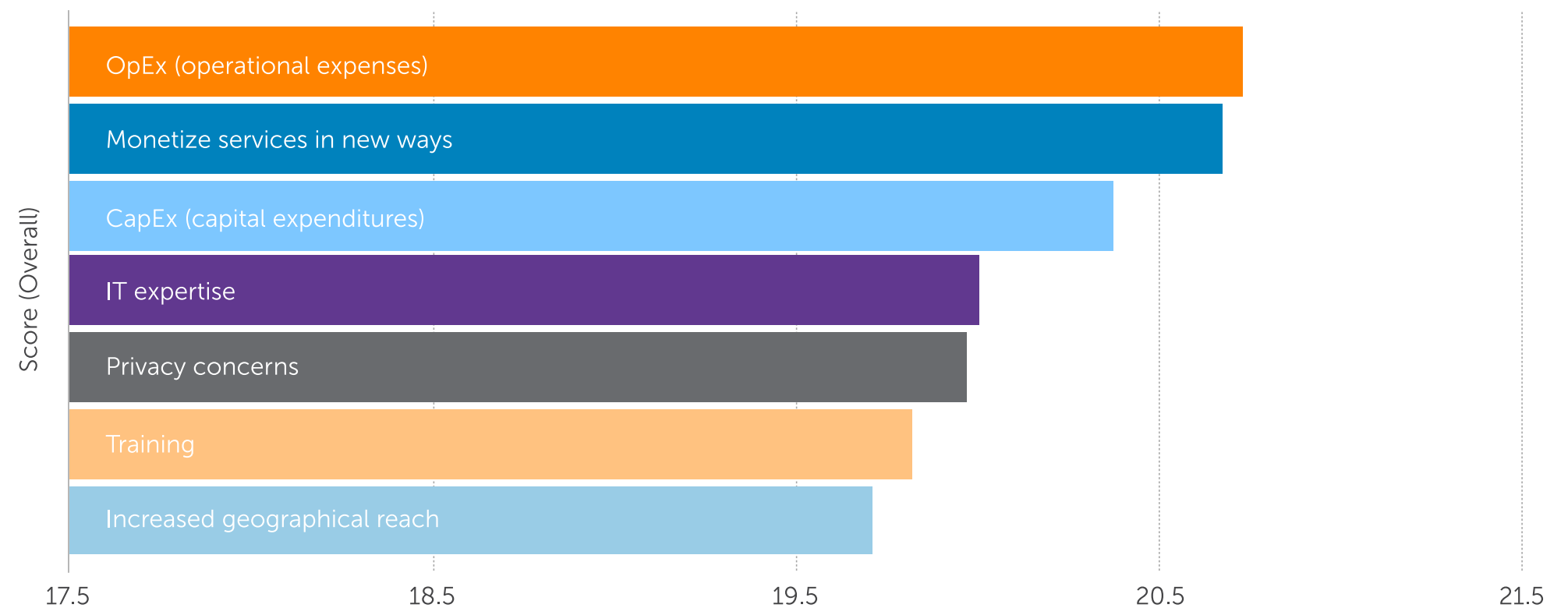
[Read the Case Study](#)

07 Operational costs (opex) concerns now command more attention than capital expenditure (capex) concerns, thanks to a shift to cloud-based services.

ANALYSIS:

While it used to be that capital expenditures (capex) were top of mind for most streaming projects, the shift towards cloud-based services has lowered capex upfront costs. As a result, operational costs (opex) have now moved up on business concern lists, followed closely by new ways to monetize content.

Top Business Concerns Related to Streaming-Based Products or Services



07 Operational costs (opex) concerns now command more attention than capital expenditure (capex) concerns, thanks to a shift to cloud-based services.

WOWZA'S TAKE

To accommodate the shift towards software as a service (SaaS) applications, we offer our fully managed Wowza Video Platform, as well as our self-managed Wowza Streaming Engine software — which can be deployed on premises or in the cloud. Some customers opt to take a hybrid approach by integrating both products into their streaming workflow. Our Professional Services team can take both cost and monetization concerns into account when implementing a solution and talk through your business concerns.

08 Respondents with higher viewership and/or revenue goals are more likely to engage professional services.

Considerations When Determining Whether to Use Third-Party Professional Services

ANALYSIS:

The need for professional services varies based on two distinct factors: revenues and viewership levels as well as deployment stage.

Those with higher revenues and/or viewership levels were more likely to consider engaging outside resources. While this is to be expected for large-scale projects, we also found that startups with big plans were not averse to considering professional services.

Some respondents also noted that they have their own in-house teams. Surprisingly, very few respondents noted intellectual property concerns, indicating a trust in professional services organizations.

// As a matter of fact, we are wanting to work with Wowza so that we can advance our company and the products/services that we deliver. //

// We have most of the technical expertise that we need to implement this in-house. There are times that we do need outside help, such as optimizing for specific use cases. We'd happily pay for that. //

08 Respondents with higher viewership and/or revenue goals are more likely to engage professional services.

WOWZA'S TAKE

Streaming deployments tend to increase in complexity as an organization evolves. Luckily, we've spent the last decade learning how to make live streaming easier, better, and more powerful. There's simply no better resource out there than the experts who live and breathe live streaming.

To find out how Wowza can help you meet your viewership and revenue goals, [contact us today](#).



About Wowza

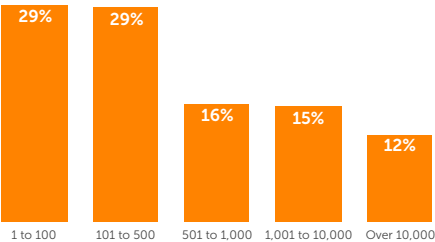
Wowza is the global leader in live video solutions. Our full-service platform powers reliable, secure, low-latency video delivery for companies worldwide. With more than a decade of experience working with 35,000+ organizations in industries ranging from media and entertainment to healthcare and surveillance, Wowza provides the performance and flexibility that today's businesses require. We work with each customer to ensure their success in putting streaming to work for their business.

Our promise is simple: If you can dream it, Wowza can stream it.

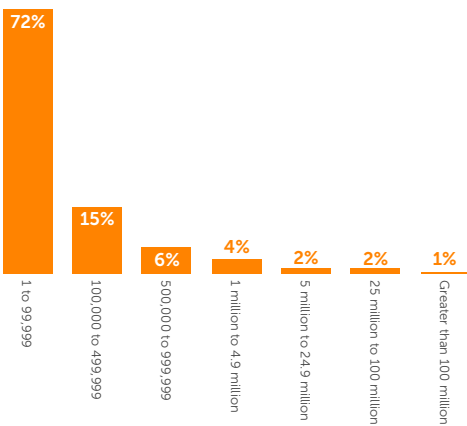
APPENDIX: SURVEY QUESTIONS AND RESPONSES

As a recap, the actual questions and responses are listed below, in sequential order (excluding demographic, geography, and job responsibility questions).

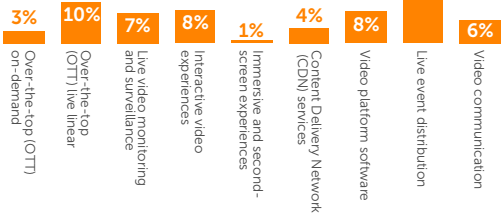
01 What is your organization’s typical viewer or subscriber size for streaming-based products or services?



02 In US dollars, please provide your organization’s overall revenue for streaming- based products or services.



03 What type of streaming solution is closest to what your organization is trying to deliver?



04 Please tell us about streaming media integration projects your organization is currently working on, regardless of whether or not it might involve third-party professional services (open-ended response).

Responses included:

- Fitness video chat
- Live on-site event replacement alternative
- Quiz applications
- Video chat services
- Virtual trade shows
- Broadcast church services
- Esports broadcast events
- Pay-per-view streaming
- Real-time drone streaming
- Internet radio
- Virtual classrooms
- Streaming media app
- Webinars
- Live sports
- VOD services

05 Please rank — from top (first) to bottom (last) — the reasons you might consider third- party professional services for your current or near-future projects for streaming media- related products or services.

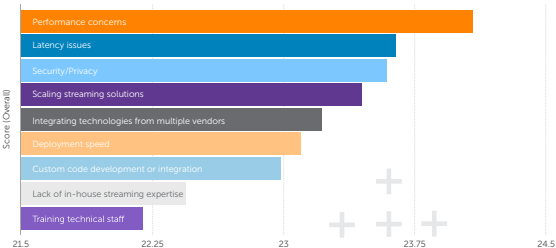


06 Are there any compelling reasons your organization would choose NOT to use professional services on your current projects? (open-ended response)

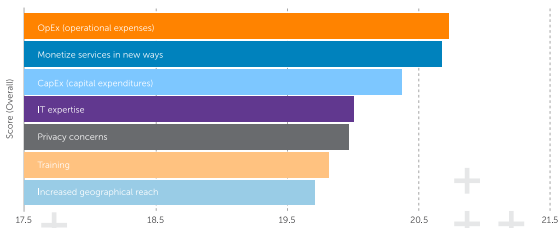
Responses included:

- Budget restrictions
- Already have in-house resources
- Project is straightforward
- Streaming deployment is working fine as is

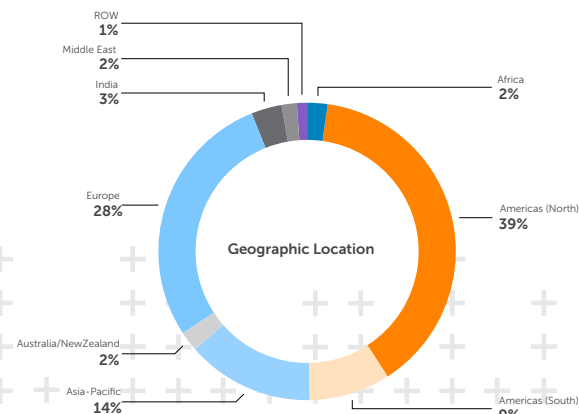
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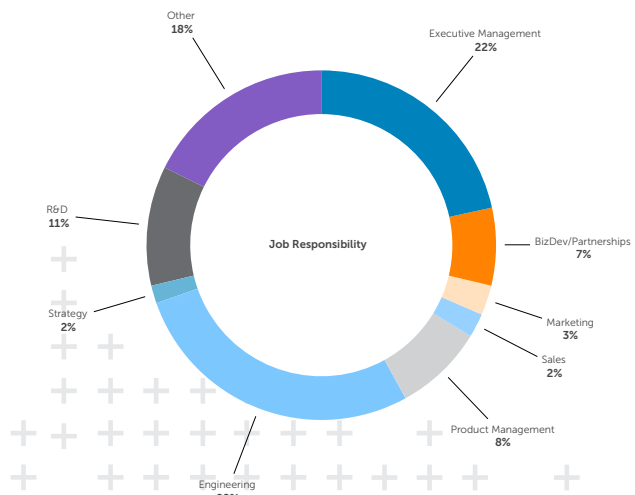
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09 Region of world by respondent



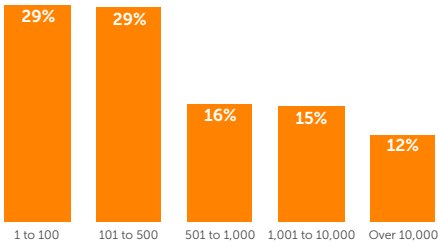
10 Job responsibility



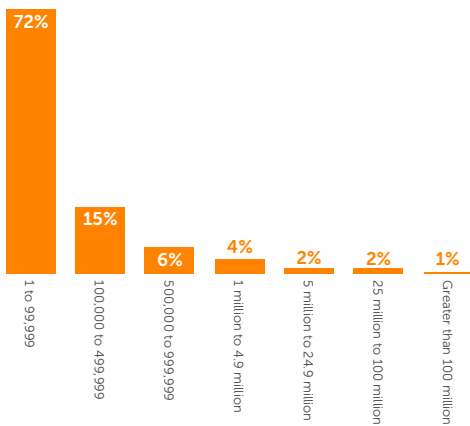
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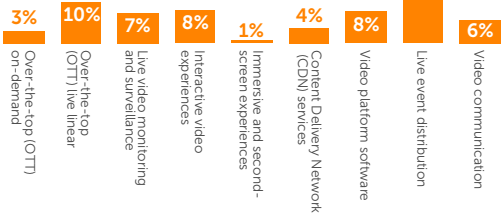
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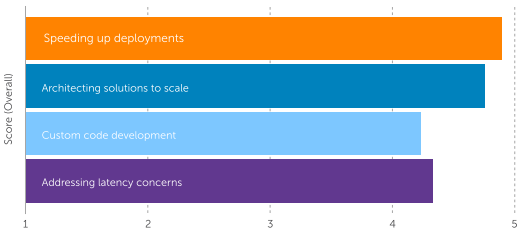


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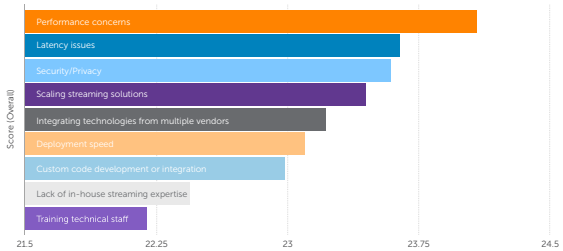


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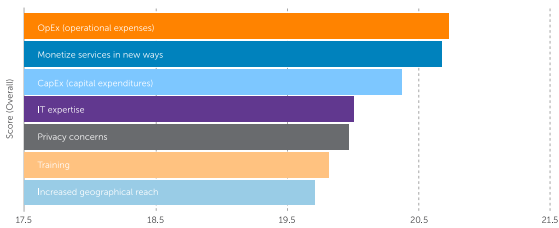
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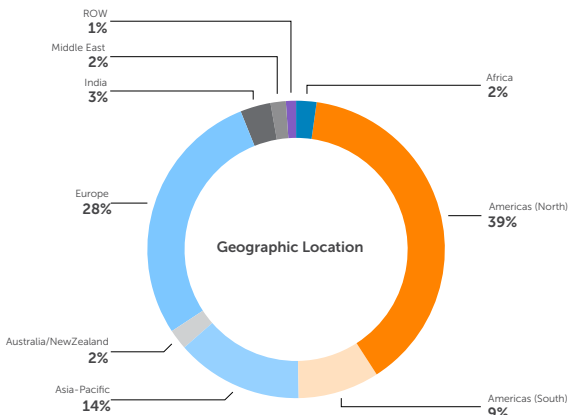
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09 Region of world by respondent



10 Job responsibility

