

2020 INSIGHTS

on External Development for the Video Game Industry

What's Inside

External development refers to the practice of video game Developers / Publishers (buyers) leveraging Service Providers (sellers) in any aspect of development including but not limited to art, animation, cinematics, audio, server-side/front-end engineering, porting, game development, UX-UI, motion capture QA, localization, and VFX. This report is intended to provide insights in to the changing trends in external development that have occurred in recent years as it becomes an increasingly integral part of game development.

The statistics in this report were derived from nearly 200 submissions from industry professionals of Service Providers and leading game Developers / Publishers worldwide. Data was anonymously contributed to provide insights on engagements.

The research and data gathered to establish this report was collected by the organizers of the External Development Summit (XDS), with contributions from the **XDS Advisory Committee**. Permission must be requested if you would like to use this information in public articles or presentations.

Special Report: Impact of COVID-19 on External Development

Due to the ongoing health crisis at the time of writing this Industry Report, we also focused attention on creating an article on the impact COVID-19 has had on external development in Q1 of 2020, based on survey results from over 300 industry professionals.

[VIEW THE
ARTICLE
HERE](#)

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Who We Are

External Development Summit (XDS) is the only annual, international games industry event held in Canada, with a primary focus on external development for Art, Animation, Audio, Engineering, QA and Localization. Each year, a broad community of game developers / publishers, Service Providers, and middleware providers meet in Vancouver to contribute to the advancement of the video game industry through collaboration, sharing of best practices, networking and the delivery of a high-caliber, educational program. XDS 2020 will take place on September 9-11, 2020 in Vancouver, Canada.



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The data in this report was collected between the dates of December 10, 2019 and January 31, 2020.
*Please note that some data tables throughout this report may not add to a total % of 100 due to rounding.

QUICK STATS

Top 3 most important factors when selecting a Service Provider

-  **1 Quality of Assets** (same Y-o-Y)
-  **2 Rates**  **Track Record**
-  **3 Team Skill Sets** (moved up from 2nd place)

Quality of Work continues to be the most important factor year over year as it was selected by 90% of all respondents (18% increase YoY). Rates and Track Record tied for 2nd place. Team Skill Sets moved from 2nd to 3rd place year over year. Language/communication skills moved from 3rd to 5th place.

90%

of Developers / Publishers externalize some or all of their 3D art (vehicles, props, weapons, characters), while UI/UX and VFX decrease respectively to 57% and 50%



97%

of Developers / Publishers foresee a growth in demand for external development

(5% increase YoY)



#1 Reason Companies Engage Service Providers:

for flexible skill-set
ramp-up / ramp-down

(to build more content and features was a close 2nd)



WHO PARTICIPATED – SERVICE PROVIDERS OVERVIEW

Percentage of Service Providers Offering the Following Services

74% of Service Providers surveyed **propose Art services** while **only 15% are proposing Audio or Localization**. This is linked to the historical positioning of XDS that began with a main focus on art outsourcing and co-development, however does not necessarily reflect the broader market.

	2019	2020	
Art	65%	74%	↑
Animation	44%	57%	↑
Game Development – Console	12%	36%	↑
Game Development – Mobile	20%	39%	↑
Game Development – PC/Online	16%	39%	↑
Game Development – VR/AR	14%	35%	↑
Cinematics/VFX	27%	34%	↑
QA	10%	22%	↑
UI/UX	27%	21%	↓
Engineering (server side, front end, web development, etc.)	14%	20%	↑
Localization	12%	15%	↑
Audio	13%	15%	↑
Other (MoCap, Marketing assets, Music, Player support, etc.)	13%	14%	↑

*Notice a difference to last year's results? We changed the way we represent Service Providers offering by displaying the percentage (%) of respondents who offer each line of service.

An evolving community or a changing Service Provider landscape?

59% of Service Providers who responded to this year's survey did so for the **FIRST TIME!**

52%



of Service Providers surveyed have **LESS THAN 50 EMPLOYEES** with only 6% having more than **500 EMPLOYEES**

EMPLOYEES

45%



of these Service Providers have been in business for **MORE THAN 10 YEARS**

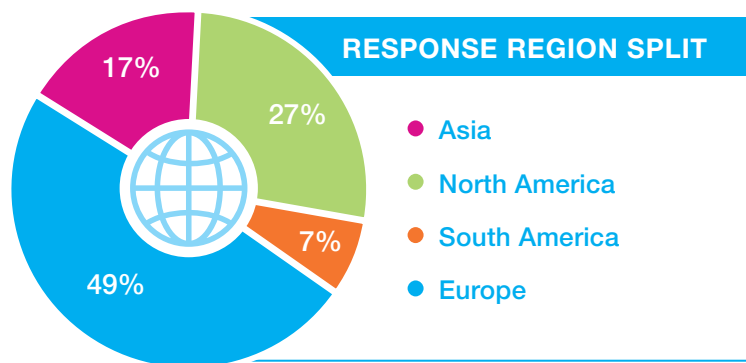
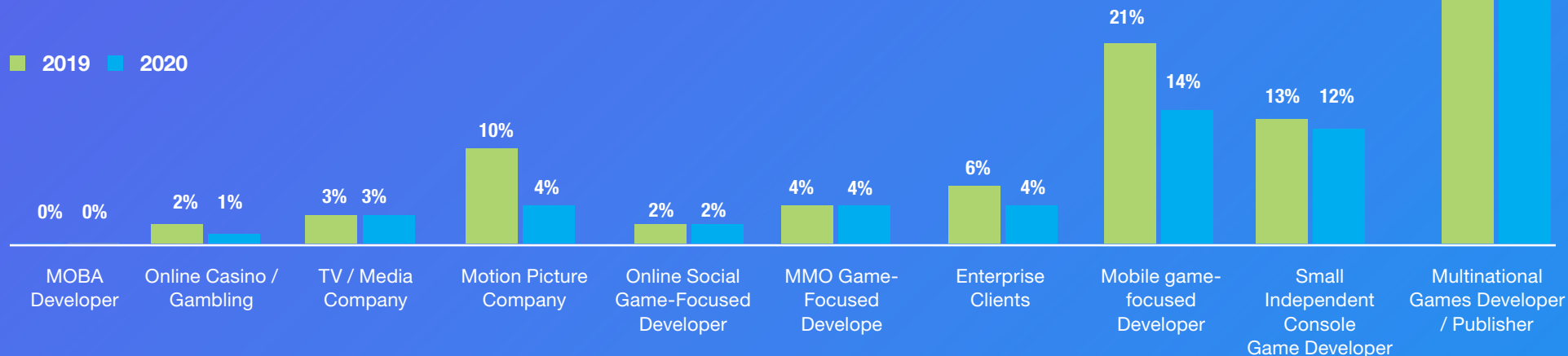
TIME IN BUSINESS

WHO PARTICIPATED – SERVICE PROVIDERS OVERVIEW

Client Make-up

In this year's survey we analyzed the client make-up against the size of Service Providers for a more accurate representation of the overall market. This explains the increase for Multinational Games Developers/Publishers as compared to the previous year.

In this case, 54% of the overall workforce represented by all Service Providers surveyed are engaged with Multinational Games Developers/Publishers.



LOCATIONS

49% of Service Providers that participated have only **ONE LOCATION**

13% operate out of **more than FIVE LOCATIONS**



WHO PARTICIPATED – DEVELOPERS / PUBLISHERS OVERVIEW

Developers / Publishers Platform Focus

Console and browser/PC games are the main platform focus for Developers/Publishers, with mobile games following closely behind. VR/AR games still drive some attention. Streaming/Cloud games are new to the scene but represents only a small part of the landscape due to its burgeoning existence, however we can expect to see significant growth in this category next year. Facebook games continue to represent a very small focus.

	2019	2020	
Console games	67%	70%	↑
Browser/PC games	40%	67%	↑
Mobile games	29%	56%	↑
Multi-Platform	36%	—	
VR/AR games	17%	15%	↓
Streaming/Cloud games	—	7%	
Facebook games	2%	2%	
Social Casino games	2%	—	
Other	—	3%	

*Notice a difference to last year's results? We changed the way we represent Developers / Publishers platform focus by displaying the percentage (%) of respondents who support each platform. Also note the option for Multi-platform was removed in the 2020 survey to allow specific platforms to be targeted.

A renewed community?

48% or nearly 1 in every 2 Developers / Publishers responded to this survey for the first time

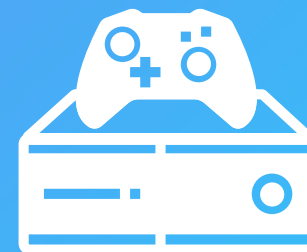
71% of survey respondents have a central team that helps manage external development with an average of 4 members

5

is the most frequent number of Service Providers a developer works with annually

38%

Developers / Publishers reported an annual spend of **\$6M or greater** for external development



Diversity & Inclusion

Diversity can be classed as the range of human and organizational similarities and differences. Inclusion can be classed as the process of using those differences and similarities to achieve a common goal. By leveraging D&I in the workplace it can open up talent pools, increase retention, foster innovation and make for a more desirable place of work.

We all have a major role to play to further D&I for our industry!

At XDS 2019, we partnered with Google to create awareness for D&I by collecting pledges for how attendees will advocate for a diverse and inclusive culture within their teams and partnerships.

Thank you to Nikki Roth, Sr Technical Artist at Google for Driving The Pledge Wall Effort!



"Be thoughtful
of others in every
interaction and
encourage everyone
to bring their whole
selves."

"Help other women
acquire confidence in
themselves and their
approach to work
and life."

"Be more informed
about different cultures
that people come
from so that I can
communicate better.
I am a direct person and
sometimes that is not
the best approach."

"Do my best to mentor
without bias. everyone
deserves a chance"

"I will work on
asking more clarifying
questions instead of
assuming another
person's intentions."

An additional **20%** of
Service Providers plan to
implement D&I objectives

3% decrease YoY

52% of Service Providers
have diversity and inclusion
objectives within the
workplace

8% decrease YoY

70% of Game Developers/
Publishers consider it
important that Service
Providers have D&I
objectives in their workplace

first time stat collected

EXTERNAL DEVELOPMENT INDUSTRY OBSERVATIONS

Mergers and Acquisitions

21% of Service Providers reported that they were actively looking for acquisition targets, which is 13% higher than the prior year. This sharp increase reflects the need to follow the trend established by big players, and the risk of remaining too small to survive - especially in AR where the market is most diluted.

Interestingly the percentage of respondents who claim they were approached for M&A declined slightly but remains high with 42% (16% decrease YoY). This likely means a smaller subset of Service Providers are aggressively looking for M&A targets and represent the majority of the conversations taking place.

Top 3 services companies are interested in acquiring

	2019 RANKING	2020 RANKING
3D Art	1	1
Animation	1	2
Cinematics / VFX	Cinematics (3) VFX (2)	3

12%

of respondents have acquired
Service Providers in the
past 12 months, which is
UP 7% YoY

44%

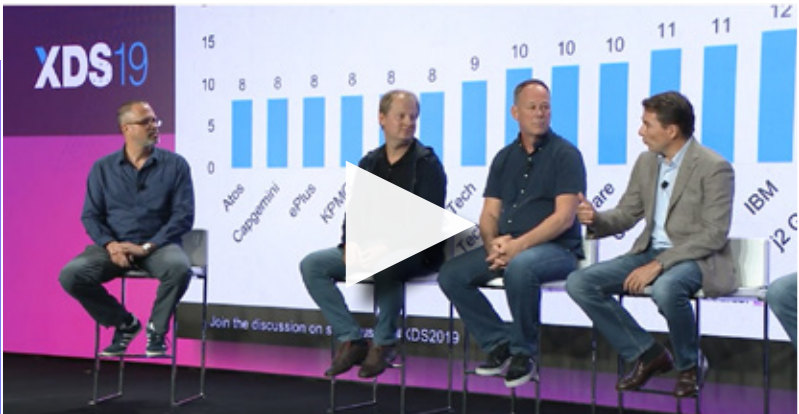
of respondents are open to
being acquired, which is
DOWN 11% YoY
(27% could not disclose)

21%

of Service Providers are looking
for acquisition, which is
UP 13% YoY
(13% could not disclose)

42%

of Service Providers have
been approached for M&A
conversations, which is
DOWN 16% YoY
(21% could not disclose).



LEARN MORE

To learn more about the state of M&A, check out the Executive Panel “**XDev Consolidation - Examining the Impact, Opportunities, Challenges and Future**”, delivered at XDS 2019.

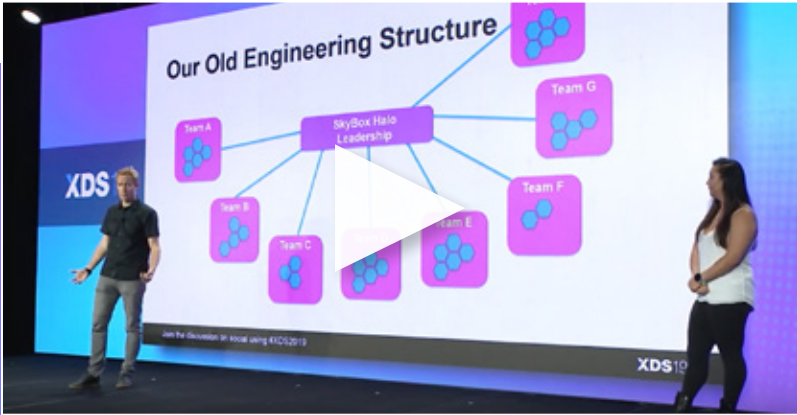
EXTERNAL DEVELOPMENT INDUSTRY OBSERVATIONS

Top Reasons Developers / Publishers Engage Service Providers

The “why” behind the reasons Developers/ Publishers engage with Service Providers.

This year flexible skill-set ramp-up/ramp-down reached the top spot ahead of building content and features. With the launch of new platforms and new consoles production, teams are stretched for capacity. As part of this, developers require flexibility and adaptability in order to adjust to last-minute business requests and increased scope, resulting in a reliance on external development. Cost savings remained a consistent 3rd place.

	2018 RANKING	2019 RANKING	2020 RANKING	
Flexible skill-set ramp-up/ramp-down	2	2	1	↑
To build more content and features	1	1	2	↓
Cost savings	3	3	3	
Lack of available local resources	5	4	4	
Access hard-to-find skills/capabilities	4	4	5	↓
Support content needs for live services	6	6	6	
Speed up development through follow the sun (24x7) production model	7	7	7	
Other (ie. development support via follow-the-sun model)	—	—	8	



LEARN MORE

Successful co-development relies on highly effective development philosophies, process, technologies and cultural understanding. Watch 343 Industries’ Casey Wu and SkyBox Labs’ David Hiscock present their journey in **developing multiple Halo titles in close collaboration.**

EXTERNAL DEVELOPMENT INDUSTRY OBSERVATIONS

Percentage of companies sending Art disciplines externally (full or partial outsourcing)

It is a fact that the majority of Developers/Publishers are using Service Providers to produce part if not all 3D assets. The percentage drops to nearly half when we talk about externalizing 3D levels, UI/UX, and VFX which are considered as being more complex to outsource.

The figures presented in the table show a **high increase compared to last year**. This is due to the fact that we combined Developers/Publishers who outsource entirely their art with those that only outsource partially. The question with relation to this was modified, thereby allowing Developers/Publishers who outsource partially to respond more accurately.

Highest percentage of disciplines
that are outsourced entirely by
Developers /Publishers:

29% Motion Capture
27% 3D props
26% 3D vehicles

75%

of Developers / Publishers
use a mix of internal and
external resources to
produce 3D environments,
weapons and animation

Disciplines	2019	2020	
3D Vehicles	86%	95%	↑
3D Props	93%	93%	
3D Weapons	90%	91%	↑
3D Characters	88%	91%	↑
Animation - Cinematics	65%	85%	↑
3D Animation	60%	80%	↑
Motion Capture	49%	80%	↑
2D Characters	53%	80%	↑
Animation - Cutscenes	52%	78%	↑
2D Weapons	55%	75%	↑
2D Props	56%	75%	↑
2D Vehicles	56%	74%	↑
2D Animation	41%	73%	↑
Concept Art	40%	70%	↑
2D Levels (Mood Concepts)	37%	68%	↑
2D Environments	39%	67%	↑
3D Levels	36%	57%	↑
UI/UX	23%	57%	↑
VFX	27%	50%	↑

EXTERNAL DEVELOPMENT INDUSTRY OBSERVATIONS

Percentage of companies sending Engineering disciplines externally” (full or partial outsourcing)

Similar to the previous slide, this year’s survey question was clarified for Developers / Publishers that outsource entirely their engineer vs those that outsource partially. Web development remains as top spot as it is less connected to gameplay than other engineering tasks. We noticed that rapid prototyping, an area that used to be mainly done internally, is beginning to rely more on external development with 23% of Developers / Publishers leveraging these services.

21%

of Developers/Publishers
exclusively outsource
100% of their web
development needs

38%

of Developers/Publishers
are performing full SKU
console development
with a mix of internal and
external resources

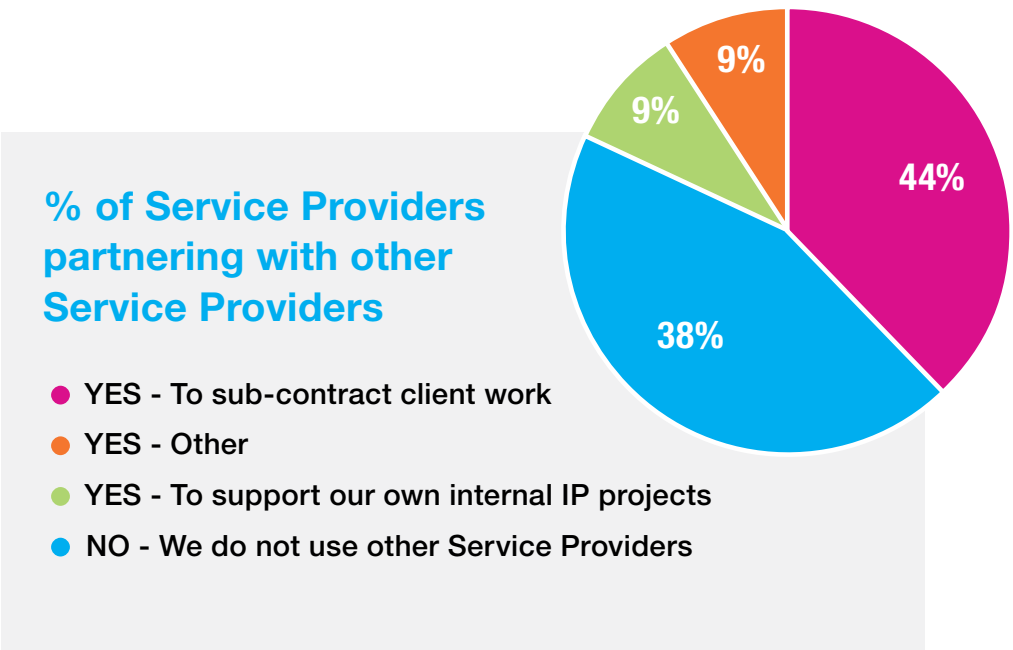
Disciplines	2019	2020	
Web development	47%	49%	↑
Full SKU console development	14%	43%	↑
Player Telemetry (tracking & analysis)	20%	42%	↑
Console game modes	18%	41%	↑
Tools development	31%	41%	↑
Front-end development	20%	37%	↑
Server-Side development	16%	36%	↑
Engine development	12%	34%	↑
Level Design/Building	14%	29%	↑
Rapid prototyping	6%	23%	↑

EXTERNAL DEVELOPMENT INDUSTRY OBSERVATIONS

Service Providers Utilizing Each Other's Services

At XDS 2019 we observed an increase in the number of Service Providers attending the event in order to discover services. As a result in this year's survey, we asked if they engage with other Service Providers, and why. A total of 62% responded that they do work with others. Of that, 44% sub-contract client work to other Service Providers and 9% leverage services for their own IP development, while 9% indicated "Other".

Although this number seems surprisingly high on the surface, there could be a variety of reasons these partnerships takes place — sometimes with competitors. Developers/Publishers should take note of this heightened activity.



DEVELOPMENT

23% of Services Providers are working on **THEIR OWN GAME IP**. An additional 28% are considering doing the same.



Anecdotal reasons given for WHY some Service Providers engage with other Service Providers

- "To join forces to be able to manage and collaborate on larger projects."
- "When client projects demand sub-tasks that are better suited to niche Service Providers."
- "To partner with others offering engineering services for clients that have co-dev or full-SKU needs."
- "To allow us to add bandwidth and expand our pipelines."
- "In order for my company to be able to offer more services."
- "To work with freelance artists from all over the world."

OVERVIEW ON THE BUSINESS RELATIONSHIP

How do you meet the majority of your partners?

If games industry events are to remain a strategic opportunity for Developers/Publishers to meet new partners, the reputation of Service Providers is becoming more critical in order for them to be considered by decision makers. Developers/Publishers have minimal bandwidth to reach out to Service Providers who are less known, or do not come highly recommended. Therefore there is often less risk in selecting reputable partners that they know well, or come as a referral.

Reported by Service Providers	2018	2019	2020	
Referrals	30%	29%	35%	↑
Games industry events	35%	29%	32%	↑
Online research	13%	25%	16%	↓
Buyer reaches out	14%	16%	8%	↓
Internal company resources	8%	1%	8%	↑
Other	2%	0%	1%	↑

Reported by Developers / Publishers	2018	2019	2020	
Internal referrals and company resources	32%	28%	42%	↑
Games industry events	36%	44%	22%	↓
External referrals (industry wide)	21%	6%	17%	↑
Networking sites	6%	4%	6%	↑
Other	-	14%	6%	↓
Online search engine	-	2%	3%	↑
External partner reach-out / cold-call	2%	0%	3%	↑
Industry news/media	-	2%	3%	↑



TOP FACTORS

Service Providers consider when accepting a new client project:

- 1 Potential for future projects
- 2 Prestige of project/client
- 3 Rates the client can pay

(factors are consistent YoY)

Games Industry Events

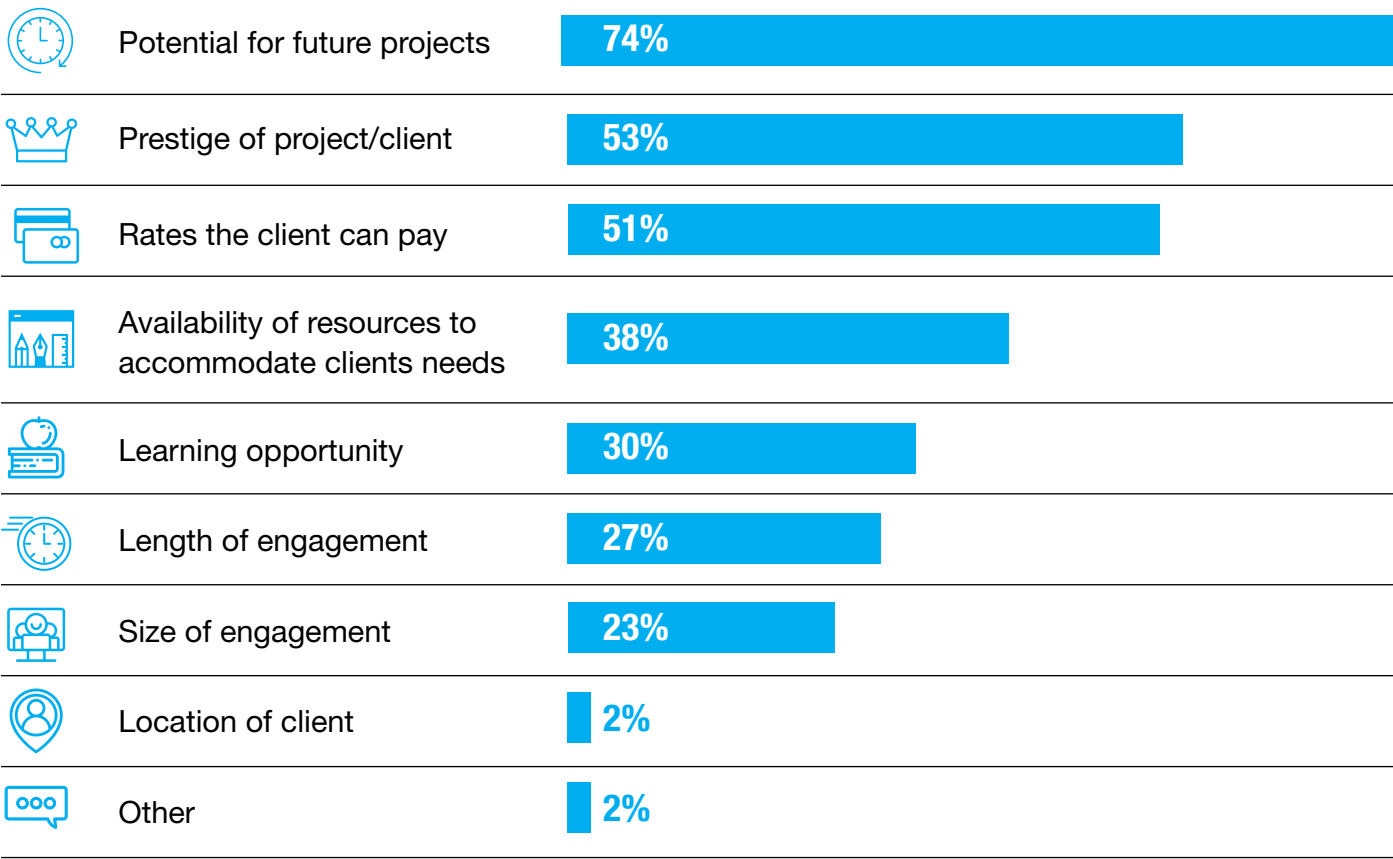
Find your next partner at XDS 2020!

XDS

OVERVIEW ON THE BUSINESS RELATIONSHIP

Factors for Service Providers Deciding Upon Client Partners

Service Providers are seeking client partners that are outsourcing a high volume of work as these clients tend to come with greater assurance of future business. In a changing environment Service Providers have a better chance of securing significant, if not all of their business. In second place, prestige and rates are considered nearly equal in importance.



70%

of Services Providers
expect to renegotiate
rates with their clients
within the next year.

OVERVIEW ON THE BUSINESS RELATIONSHIP

Developers / Publishers: Factors considered when selecting an external partner for a project

The **“what”** behind the important factors
Developers / Publishers consider when
selecting Service Providers.

Quality of Work remains the top criteria when evaluating Service Providers (90% of Developers / Publishers place this criteria in their top 3). Rates return to 2nd spot alongside track record (39% include these in their top 3). This affirms that a decision maker's focus is to ensure deliverables are of the highest quality at a controlled cost, with a track record that provides consistency.

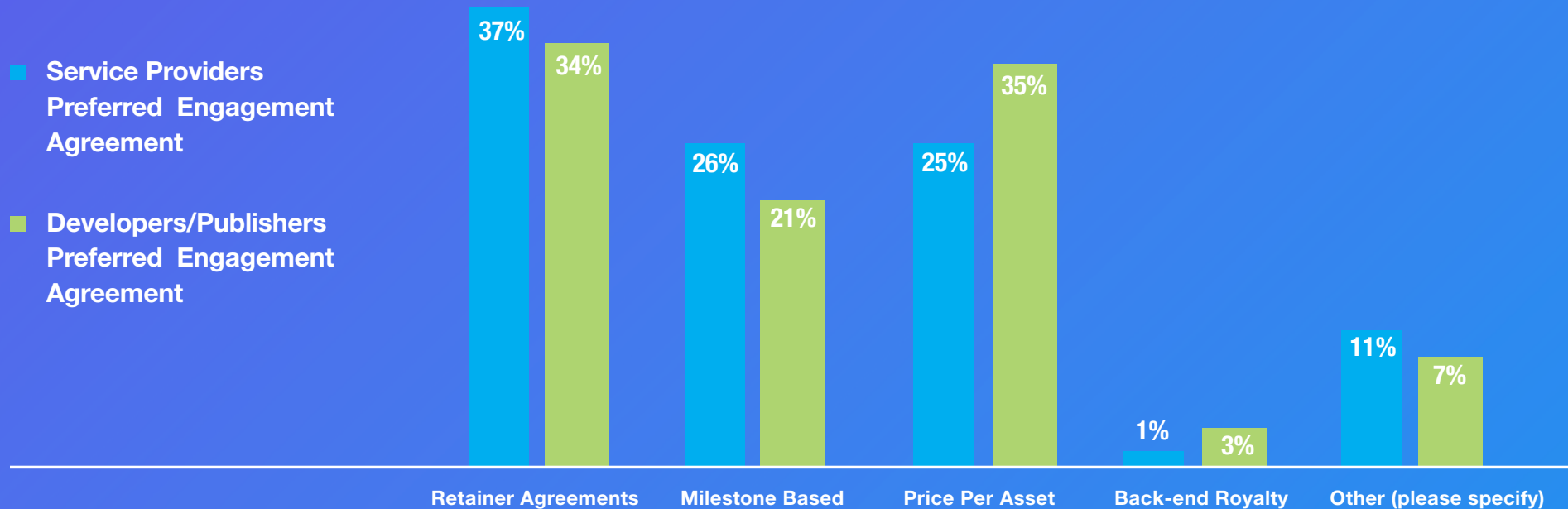
	2018 RANKING	2019 RANKING	2020 RANKING	
Quality of Work (Assets, code, etc.)	1	1	1	
Rates	2	4	2	↑
Track record (previous clients, projects)	5	5	2	↑
Team skill sets	3	2	4	↓
Language/Communication Skills	6	3	5	↓
Current established relationship	—	—	6	
Security requirements	7	8	7	↑
Reputation in industry	4	6	8	↓
Geographic and/or time zone proximity	—	12	9	↑
Size of company	10	14	10	↑
Studio leadership	9	10	10	
Financial stability	—	10	12	
Partner's diversity & inclusion objectives	—	—	13	



LEARN MORE

Throwback! From XDS 2016, **“How to Sell Your Company's Services”** shares key fundamentals from top buyers at EA, Sony, Microsoft and Zynga.

OVERVIEW ON THE BUSINESS RELATIONSHIP



Contractual relationships

This year we wanted to understand similarities and contrasts between Service Providers and Game Developers/Publishers with respect to the preference for engagement agreement type. Results show preferences are nearly aligned, with the exception of Price Per Asset type for Game Developers/Publishers. When analysing anecdotal comments, respondents expressed that their preference for the type of agreement depends on the situation and the type of service required. Half of Service Provider respondents who chose "Other" indicated a preference for Time and Materials agreement type.

It is worth mentioning that the current reality differs from their expectations with many more Price Per Asset agreements in play, and fewer retainer agreements (41% and 17% respectively)

TOP ISSUES

encountered with external development in 2020

Returning from 2019, Developers / Publishers once again reported the #1 issue faced with Service Providers is poor quality deliverable. Communication issues dropped significantly from 1st place to 4th, indicating that Service Providers' communication is improving. However Communication issues directed at Developers/Publishers has risen to 3rd place, not to mention the impact of Shifting project schedules and delays at top spot.

Reported by Service Providers

	2018 RANKING	2019 RANKING	2020 RANKING	
Shifting project schedules and delays	1	1	1	
Excessive Iteration (unplanned)	-	2	2	
Communication challenges	4	5	3	↑
Differences between internal and client time estimates	3	5	4	↑
Inadequate documentation and direction	2	3	5	↓
Pipeline set-up / Acquisition of Client	—	—	6	

Service Reported by Developers / Publishers

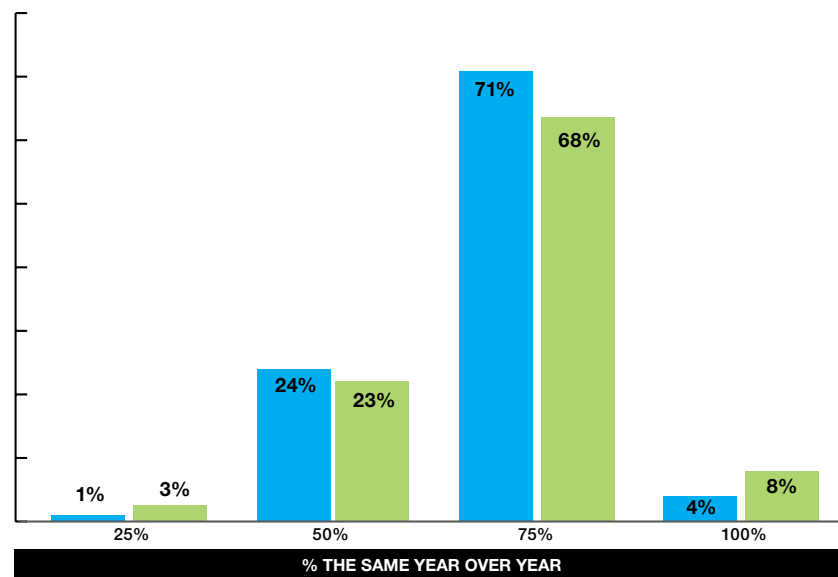
	2018 RANKING	2019 RANKING	2020 RANKING	
Poor quality deliverables	1	3	1	↑
Partners lack capacity	5	4	2	↑
Iteration issues (volume, speed)	2	1	3	↓
Communication challenges	3	1	4	↓
Pipeline set-up	4	5	5	
Loss of talent	-	5	6	

OVERVIEW ON THE BUSINESS RELATIONSHIP

Developers/Publishers Frequency of Changing Partners Year-over-Year:

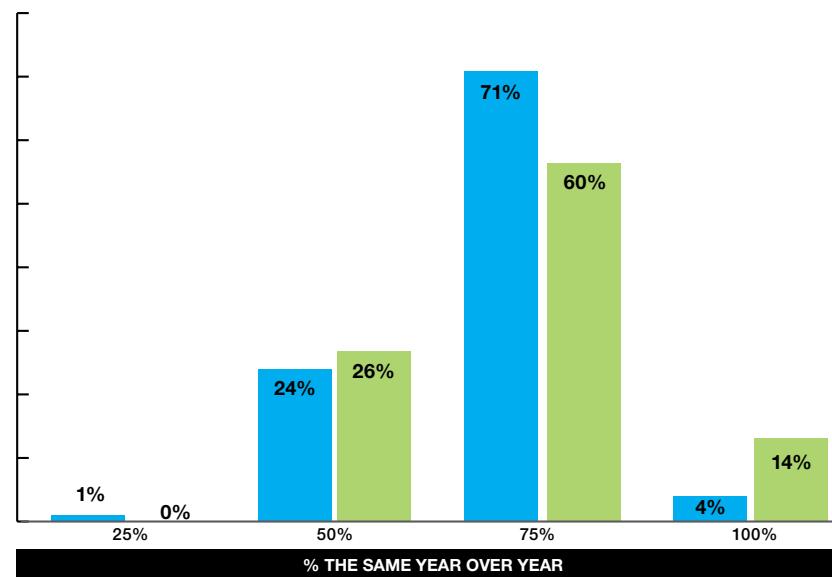
ART PARTNERS

■ 2019 ■ 2020



ENGINEERING PARTNERS

■ 2019 ■ 2020



Developers / Publishers keep the majority of their external partners year over year, showing a desire to capitalize on the initial investment both parties make with respect to knowledge share, compounded experience and a healthy business relationship that ensures a long term collaboration, as long as their portfolio of partners is diversified enough.

44%

of Developers / Publishers **do NOT foresee switching their most frequently used partners in the next 2-years** due to their external development strategy.

(6% increases YoY)



The **most popular reason** why Developers / Publishers would change Service Providers in the next 2-years is to **diversify work with other partners.**

PIPELINE AND INFRASTRUCTURE

Ranking of Regions

The data below displays the ranking of regions based on standard of studio pipeline setup and infrastructure (1 = highest standard, 4 = lowest standard). The data should be taken cautiously as time zones such as South America is only represented by 7 Service Providers, which may not be a strong enough representative for the region. North America takes 1st place for overall region ranking with Europe close behind.

EXPERTISE	KPI	NORTH AMERICA	EUROPE	ASIA	SOUTH AMERICA
Dedicated IT resources	Internal / internal & external	3	1	2	3
Internet speed range	100GB +	1	2	3	4
Network speed range	1,000MB +	2	1	3	4
Age of workstations	<1 year / 1-2 years	1	3	4	2
Enterprise class storage	Yes	1	3	2	4
Varied areas of expertise*	Yes	2	1	4	2
Overall ranking		1	2	3	4

*Expertise includes support networking, storage, VM Infrastructure, and Linux. No data was reported for Australia or Africa.

3 MOST IMPORTANT FACTORS

Developers / Publishers look for when setting up a pipeline



Technical skills of artists
(moved to top spot)



Dedicated IT staff



Robust internet connectivity

TOP TOOLS

Tools commonly used to support external development

Shotgun has emerged as a project management tool for Service Providers, wherein Basecamp has disappeared from the list. Aspera has climbed up the charts for file transfer, replacing Perforce on both sides of the house. Google has also made an appearance with a presence in project management and file transfer. We also welcome Airtable as both an emerging and future tool as identified by Developers / Publishers.

Top Emerging Tools

BY SERVICE PROVIDER:



BY DEVELOPER/PUBLISHER:



Top Future Tools

BY SERVICE PROVIDER:

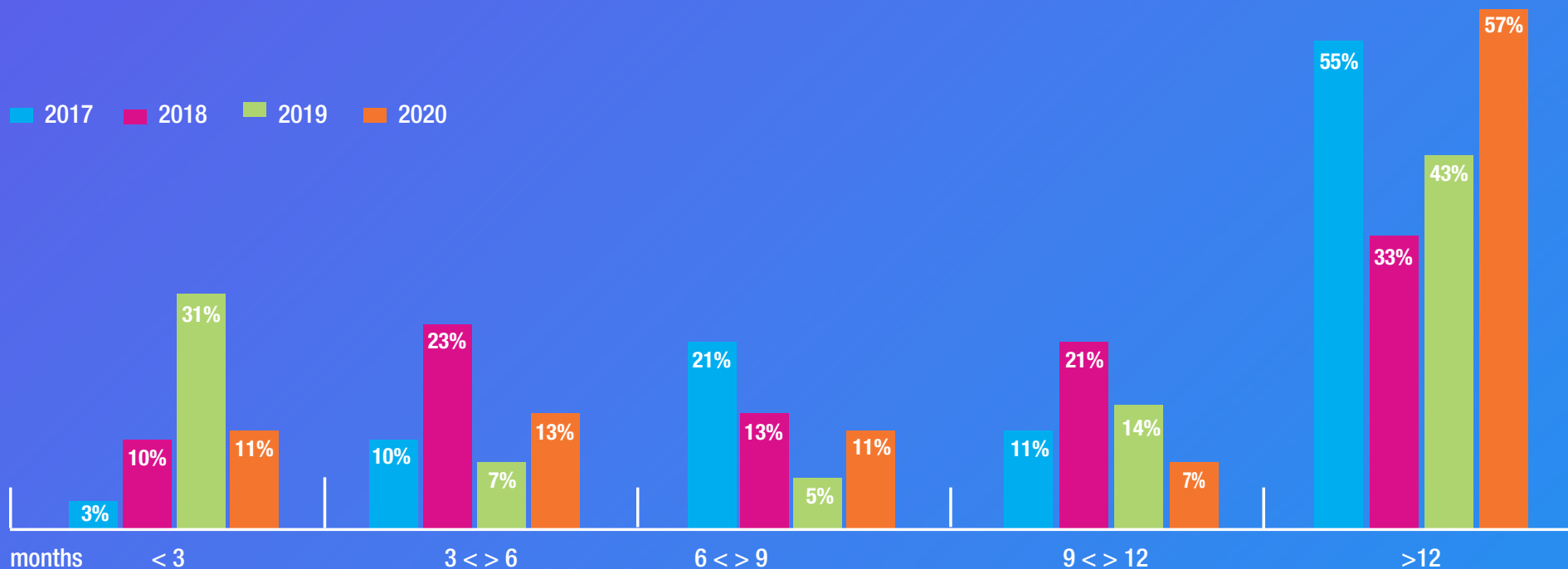


BY DEVELOPER/PUBLISHER:



	SERVICE PROVIDERS	DEVELOPERS / PUBLISHERS
Project Management	1 Jira 2 Shotgun 3 Trello	1 Jira 2 Shotgun 3 Google sheets
Communication	1 Slack 2 Skype 3 Email	1 Email 2 Slack 3 Skype/Teams
File Transfer	1 Dropbox 2 FTP 3 Aspera	1 Aspera 2 Google Drive 3 Dropbox
Art Review	1 Shotgun 2 Email	1 Shotgun 2 Jira 3 Email
Code Review	1 Perforce 2 Github	1 Jira 2 Internal tool
External Company DB	1 Pipedrive 2 Hubspot 3 Salesforce	1 Aitable 2 Internal tool
Engines	1 Unreal 2 Unity 3 Proprietary	1 Unreal 2 Proprietary 3 Unity
Code Version Control	—	1 Perforce 2 Git 3 Internal tool

PROJECT DISCIPLINES AND PLATFORMS



Percent of project engagements by duration

As in previous years, it is interesting to see the high percentage of projects reported to be 12 months in duration or greater, perhaps benefiting from longer term financial commitments, staff/knowledge retention, etc. 48% of all reported projects are for Production purposes while the remaining 52% of them are for R&D, Pre-Production, DLC and Live Services.

of external projects:

58%
are photo realistic style
36%
are stylized

the most prevalent
external team size is

6–10 PEOPLE
at **24%**

PROJECT DISCIPLINES AND PLATFORMS

Types of Engagement

For this year’s survey we adjusted the distinction between art and engineering, combining “art development full pipeline” with the “co-development” into the category of “with full tool/engine pipeline integration”. It was unexpected to see the decrease in the percentage of projects sharing engines fully in favor of non-shared engine projects.

It is to be noted that most reported projects are 3D art outsourcing. Also for projects of 9 to 12 months in duration, the percentage of projects sharing tools/engines goes up to an impressive 75%.

	2018	2019	2020
Without tool/engine pipeline	25%	27%	40%
With partial tool/engine pipeline integration	33%	32%	30%
With full tool/engine pipeline integration	42%	40%	30%

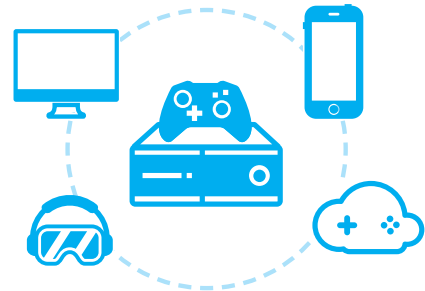
Projects and platforms

This year we introduced the distinction between past, current and new consoles, thereby splitting the data into three wherein it was combined in the previous reports.

Console platform projects remain at top spot this year while mobile/tablet returns to its position from 2018.

Cloud-based platforms were also added to this year’s report.

	2018	2019	2020
Last-Gen Console (Xbox 360, PS3)	58%	59%	3%
Current Console (Xbox One, PS4, Switch)			34%
Next-Gen Console (PS5, Scarlett)			10%
Browser/PC	25%	29%	32%
Mobile/Tablet	15%	5%	17%
VR/AR	2%	6%	3%
Cloud-based (Stadia, Apple Arcade, etc.)	—	—	1%



Projected areas of growth in demand in the next 12-18 months

Across all services lines, 3D art, Concept Art and Cinematic VFX are perceived by Developers/Publishers being the greatest in demand in the past year, with Keyframe Animation and Audio making a fresh appearance. Engineering reached the top 5 in future estimated growth likely due to an increased need for games to be adapted for new platforms and consoles.

GROWTH IN DEMAND

expected by
Developers / Publishers:

73% 3D art

55% concept art

SERVICE PROVIDERS	2019 RANKING	2020 RANKING	
Audio Services	2	1	↑
Art	—	2	↑
Engineering	1	3	↓
Keyframe Animation	—	4	↑
Cinematic / VFX	3	5	↓

DEVELOPERS / PUBLISHERS	2019 RANKING	2020 RANKING	
3D Art	1	1	
Concept Art	3	2	↑
Cinematic / VFX	5	3	↑
Engineering	—	4	↑
Keyframe Animation	—	5	↑

THE FUTURE OF EXTERNAL DEVELOPMENT

Main drivers in demand for services over the next 3 years

Demand for External Development continues to increase year-over-year and there is absolutely no sign of it slowing down. This can be explained by the continued growth of the industry, especially in mobile where games are becoming richer and deeper, fed by higher volumes of content. Growth is also propagated by continually increasing player expectations for more original content and longer play time. Note the significant discrepancy between how Service Providers and Developers/Publishers perceive the impact of new consoles and platforms - perhaps reminiscent of what was once observed for VR/AR.

97% of Developers / Publishers expect to see a **GROWTH IN DEMAND** in external development

SERVICE PROVIDERS	2019 RANKING	2020 RANKING	
New consoles / New Platforms	4	1	↑
Demand for more content	1	2	↓
Competition for niche skills in client markets	—	3	↑
Need for developers to decrease development costs	3	4	↓

DEVELOPERS / PUBLISHERS	2019 RANKING	2020 RANKING	
Demand for more content	1	1	
Richer/Deeper games	2	2	
Need for developers to decrease development costs	—	3	↑
New consoles / New Platforms	3	4	↓

THE FUTURE OF EXTERNAL DEVELOPMENT

Main concerns about the future of external development

Both Service Providers and Developers/Publishers look at the future of game development with excitement, but also with anxiety due to tomorrow's challenges to overcome. Higher content volumes, greater pressure to lower production costs, competition for talent, the entry of new disruptive technologies and business models and a constantly changing Service Providers landscape including impact of consolidation.

SERVICE PROVIDERS

Competition for market share

Competition with pricing

Maintaining quality

M&A / Loss of independence

Availability of talent / Retaining, recruiting, training talent

Labor cost increase / Fair compensation for employees

Security and pipeline constraints

AI, procedural and machine learning adaptation

Decrease of production budget allocated to external development.

"Competition due to increase of experience in East Europe, India and Asia."

"Competition for pricing in the context of increased labor costs could lead to lack of fair compensation for our employees."

DEVELOPERS / PUBLISHERS

Consolidation leading to rise in prices

Consolidation leading to loss of talents

Maintaining quality

Lack of availability, bandwidth

Lack of flexibility, scalability

Communication

Fair work life balance and fair compensation for Service Providers' employees

AI, procedural and machine learning adaptation

Security and pipeline constraints

"M&A leading to market consolidation with the fear of price hikes and quality drop."

"Market concentration brings concerns about losing availability and flexibility due to an increased demand from Developers/Publishers."

XDS 2019 SERVICE PROVIDER INDEX

The following is an index of Service Provider companies that attended XDS 2019.

AFRICA

Balisti Studios

South Africa
<https://www.balististudios.com/>

AMERICAS

ALCHEMY VFX

Canada
<http://www.alchemyvfx.com/>

NGD Studios

(Nimble Giant Entertainment)
Argentina
<https://nimblegiant.com/>

Globant

Argentina
<https://www.globant.com/>

Arcolabs

Brazil
<http://www.arcolabs.com.br/>

Diorama Digital

Brazil
<https://dioramadigital.com/>

Flux Games

Brazil
<https://www.flux-games.com/>

Kokku

Brazil
<http://www.kokkuhub.com/>

Lumen Games

Brazil
<http://lumen.games/>

Oktagon Games

Brazil
<https://www.oktagon.com.br/>

PUGA Studios

Brazil
<http://pugastudios.com/>

Anemone Hug Interactive

Canada
<http://anemonehug.com/>

AptitudeX

Canada
<https://www.aptitudex.com/>

Behaviour Interactive

Canada
<https://www.bhvr.com/>

Beyond Capture

Canada
<https://www.beyond-capture.com/>

BKOM Studios

Canada
<https://www.bkomstudios.com/>

Game On

Canada
<http://www.gameon.studio/>

GlobalStep

United States
<https://www.globalstep.com/>

Keywords Studios

Ireland
<https://www.keywordsstudios.com/>

MOOV

Canada
<https://www.moovstudio.com/>

Nuare Studio

Canada
<https://nuare.com/>

Player Research Canada

United Kingdom
<https://www.playerresearch.com/>

Pole To Win

United States
<https://www.ptw.com/>

SideFX

Canada
<https://www.sidefx.com/>

Skybox Labs

Canada
<https://skyboxlabs.com/>

Snowed In Studios - A Keywords Studio

Canada
<http://snowedin.ca/>

Sprung Studios UX/UI Design

United Kingdom
<https://www.sprungstudios.com/>

Sunny Side Up Creative

Canada
<https://sunnysup.com/>

TAKEOFF CREATIVE

Canada
<https://www.takeoffcreative.com/>

The Sequence Group

Canada
<https://thesequencegroup.com/>

Triple Boris

Canada
<https://tripleboris.com/>

VOLTA - A Keywords Studio

Canada
<https://www.volta.ca/>

Waterproof Studios

Canada
<http://waterproofstudios.com/>

Efecto Studios

Colombia
<http://efectostudios.com/>

Mad Bricks

Colombia
<http://madbricks.co>

Teravision Games

Colombia
<http://teravisiongames.com/>

CGBot

United States
<https://cgbot.com/>

5518 Studios, Inc

United States
<https://5518studios.com/>

AccelByte

United States
<https://www.accelbyte.io/>

ANIMATION VERTIGO INC

United States
<http://www.animationvertigo.com/>

Art Bully Productions

United States
<http://www.artbully.co/>

Bay Cities

United States
<https://www.bay-cities.com/>

Beholder Design

United States
<http://www.beholderdesign.com>

Brain Zoo Studios

United States
<http://www.brainzoostudios.com/>

Brazen Animation

United States
<http://www.brazenanimation.com/>

Concept Art House

United States
<https://www.conceptarthouse.com/>

Digital Development Management

United States
<https://www.ddmagency.com/>

dRaster

United States
<http://nira.app>

Enter Capital

United States
<http://entercapital.com>

Faceware Technologies

United States
<https://www.facewaretech.com/>

Formosa Group

United States
<https://formosagroup.com/>

Frame Machine

United States
<https://www.framemachine.tv/>

GameSim - A Keywords Studio

United States
<https://www.gamesim.com/>

Garage 227 Studios

Brazil
<https://www.garage227studios.com/>

Gimbal Zen

United States
<http://www.gimbalzen.com>

Hexany Audio

United States
<https://hexanyaudio.com/>

House of Moves

United States
<https://www.moves.com/>

Lionbridge

United States
<https://www.lionbridge.com/>

Liquid Development - A Keywords Studio

United States
<http://www.liquiddevelopment.com/>

XDS 2019 SERVICE PROVIDER INDEX

Logrus IT United States https://www.logrusit.com/	Side LA (Pole To Win America) United States http://www.side.com/	ASIA	Aapthi Technologies India https://aapthitech.com/	Glow Production Malaysia https://www.glow-production.com/
Melted Logic United States http://www.meltedlogic.com	Softtek Mexico https://www.softtek.com/	Adia Entertainment China http://www.adiaentertainment.com/	Firebolt Entertainment India http://fireboltentertainment.com	Lemon Sky Studios Malaysia https://www.lemonskystudios.com/
MocapNow United States http://www.mocapnow.com/	Somatone Interactive United States https://www.somatone.com/	Alchemy (Shanghai) Information Technology China http://alchemyart.com.cn/	GameShastra India https://www.gameshastra.com/	Passion Republic Malaysia https://www.passionrepublic.com/
MZ Unlimited LLC // Arcolabs United States http://www.mzunlimited.com/	Sperasoft - A Keywords Studio United States https://sperasoft.com/	Arts United China https://www.arts-united.com/	Lakshya Digital India https://lakshyadigital.com/	Pixel Mafia Philippines https://www.pixelmafia.com/
Neko Productions United States http://www.nekoproductions.com/	SuperAlloy Interactive United States https://www.superalloyinteractive.com/	BOSi Art Studios China https://www.bosiusa.com/	Little Red Zombies Studios India https://www.littleredzombies.com/	Secret 6 Philippines https://secret6.com/
Pole To Win America United States https://www.ptw.com/	Tech Round United States http://www.tech-round.com/	Mineloder Software China https://www.mineloder.com/	Pixelot Labs India http://pixelotlabs.com/	ArtVostok Studio Russia https://artvostok.artstation.com/
Psyop United States http://www.psyop.com/	Technicolor United States https://games.technicolor.com/	NXA Studios China http://www.nxastudios.com/	Yellow Cloud India http://yellowclouds.co.in/	Blacksteinn Russia http://blacksteinn.com/
RAD Game Tools United States http://www.radgametools.com/	The Audio Hive United States http://theaudiohive.com/	Original Force, Ltd. China http://www.of3d.com/	Everidea Interactive Indonesia https://everidea.id/	TRACE studio Russia https://trace-studio.com/
Red Cerberus Brazil http://www.redcerberus.com/	The Halp Network United States https://www.halpnet.com/	Red Hot CG China http://redhotgameart.com/	GameLevelOne Indonesia http://www.gamelevelone.com	Rocksalt Singapore (Pte) Ltd Singapore http://www.rocksaltinteractive.com/
Red Pipe Studios Sweden http://www.redpipe.se/	The Mill United Kingdom https://www.themill.com/	Sheer Tianyi Technology LLC China http://en.sheeren.com/	alt Inc. Japan https://alt.ai/	Kudos Productions Taiwan http://www.kudos3d.com/
Ryzin Art United States https://ryzinart.com/	West Studio United States https://www.weststudio.com/	Snark China http://www.snark.com.cn/	KIRARITO Japan http://www.kirarito.co.jp/	XAC Taiwan http://www.xac-inc.com/
Seat 7 Entertainment United States http://www.seat7entertainment.com	XLOC - Keywords Studio United States http://www.xloc.com/	Virtuos China https://www.virtuosgames.com/	Wizcorp Inc, a Keywords Studio Japan https://www.wizcorp.jp/	Glass Egg Digital Media Vietnam https://www.glassegg.com/
Shortlist United States https://shortlist.co/		Winking Entertainment China https://www.winkingart.com/	All Pixels by Streamline Studios Malaysia https://www.allpixels.com/	

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EUROPE

RABCAT GAME ART

Austria
<http://rabcat-gameart.com/>

FuryLion Group

Belarus
<https://furylion.net>

DragonFly Studio

Bulgaria
<https://www.artstation.com/>

Volmi Games

Cyprus
<http://volmigames.com/>

Plan A Collective

Czech Republic
<https://planacollective.com/>

MOOD

Denmark
<https://www.moodvisuals.com/>

Ringtail Studios

Estonia
<https://www.ringtail-studios.com/>

KARAKTER Design Studio

Germany
<https://karakter.de/>

metricminds

Germany
<http://metricminds.com/>

Remote Control Productions

Germany
<http://www.r-control.de/>

Nemesys Games

Hungary
<https://www.nemesys.hu/>

Goodname UAB

Lithuania
<https://goodname.lt/>

cView Studios

Malta
<https://cview-studios.com/>

GetSocial - A Keywords Studio

Netherlands
<https://www.getsocial.im/>

QLOC

Poland
<https://q-loc.com/>

AMC Studios

Romania
<https://amcstudio.ro/>

Siege Entertainment

Serbia
<https://www.siege-entertainment.com/>

elite3d

Spain
<https://www.elite3d.com/>

Goodbye Kansas

Sweden
<https://goodbyekansasstudios.com/>

Airship Images

United Kingdom
<https://airship-images.com/>

Atomhawk

United Kingdom
<https://atomhawk.com/>

Catalis Group

United Kingdom
<https://www.catalisgroup.com/>

Centroid

United Kingdom
<https://www.centroid3d.com/>

Cubic Motion

United Kingdom
<https://cubicmotion.com/>

d3t - A Keywords Studio

United Kingdom
<https://d3ttld.com/>

Fire Without Smoke

United Kingdom
<https://www.firewithoutsmoke.com/>

GameBench Labs

United Kingdom
<https://www.gamebench.net/>

Linx Agency

United Kingdom
<https://www.linxagency.co.uk/>

Opus Artz

United Kingdom
<http://opusartz.com/>

Pinewood Studios

United Kingdom
<https://www.pinewoodgroup.com/>

REALTIME UK

United Kingdom
<https://www.realtimeuk.com/>

Relentless Radical

United Kingdom
<http://www.ronashtiani.com/>

Spov Ltd - A Keywords Studio

United Kingdom
<https://kevurugames.com/>

Studio Gobo - A Keywords Studio

United Kingdom
<https://www.studiogobo.com/>

Sumo Digital

United Kingdom
<https://www.sumo-digital.com/>

Testronic

United Kingdom
<https://www.testroniclabs.com/>

The Multiplayer Guys

United Kingdom
<http://themultiplayerguys.com/>

The TrailerFarm

United Kingdom
<https://thetrailerfarm.com/>

Kevuru Games

Ukraine
<https://kevurugames.com/>

N iX Game and VR Studio

Ukraine
<https://gamedev.n-ix.com/>

Room 8 Studio

Ukraine
<https://room8studio.com/>

Ulysses Graphics

Ukraine
<http://www.ulysses-graphics.com/>

OCEANIA

Next-Gen Dreams 3D PTY LTD

Australia
<https://www.next-gendreams3d.com/>

Plastic Wax

Australia
<http://www.plasticwax.com/>

GLOSSARY OF TERMS

The following definitions may be subject to the context in which they were used in this report.

Co-Development

Cooperative engagement where significant parts of development are shared by a client and Service Provider

Conventional Art External Development (without tool pipeline)

A Service Provider builds art content without any tools to integrate or export the assets to the developer

Conventional Art External Development (with partial tool pipeline)

A Service Provider builds art content with the support of tools that allow them to export content, or use a viewer to check their work

Developers / Publishers (buyers)

Companies that develop video games and/or publish games that they own, or publish games on behalf of other developers

External Development

The practice of video game developers and publishers (buyers) leveraging third party Service Providers (sellers) in any aspect of development

Full Development

A developer requires a full game to be developed by Service Providers

Developer / Publisher (buyer)

An individual under the employment of a video game developer responsible for managing, influencing or decision making for external development.

Integrated Art Development

A developer's full technical pipeline is used by the Service Provider

Photo Real Art

Art that is intended to simulate aspects of the real world, whether organic or inorganic, as realistically as possible

Service Provider (seller)

A third party external partner hired to contribute to certain or all aspects of game development

Stylized Art

Design according to a style or stylistic pattern rather than according to nature or tradition



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Special thanks to:

Kelli Brunton for visual communications

5518 Studios for providing illustrations



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XDS20