igda® international game developers association

Developer Satisfaction Survey 2017

Summary Report

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INTRODUCTION

As part of its mission to support game developers around the world, the IGDA regularly conducts a Developer Satisfaction Survey in partnership with Western University and TÉLUQ. We're releasing the results from our fifth survey, conducted in the first quarter of 2017, and while we're encouraged to see positive movement in some areas, the DSS should be troubling for every person who loves the creation, business, or play experience of games.

Game developers continue to recognize the need for diversity in the workplace, in the industry, and in game content, with developers scoring these items as important in higher rates than ever before. However, while the overwhelming majority of game developers recognize the importance of diversity, game development as a profession can still be unwelcoming, with half of survey respondents asserting that they do not believe there is equal treatment of developers, and half of respondents witnessing or experiencing inequity.

Also concerning are the statistics around tenure in the industry, number of employers over the past five years, and intent to stay with current employers. Respondents report an average of 2.2 employers in the past 5 years, and self-employed contractors report working the most hours and also receiving the least compensation. Put simply, game development is at risk of losing the most experienced talent in the industry, and without proper support and protection, freelancers may bear the burden of the industry's changing talent profile.

The results of the DSS are a call to action for the IGDA, and for game developers around the world. I believe that there is a greater need for the IGDA than ever before, both to support developers as they manage their careers and to advocate on issues that impact developer satisfaction and the quality of the games that we create.

Using data from the DSS and our members, studio affiliates, and partner affiliates as a guide, the IGDA will expand its programs in 2018 to help game developers find long-term satisfaction in their chosen careers, including expanded professional and personal support for individual developers, studios, and our 150+ Chapters and Special Interest Groups.

I hope that you'll join us as we continue to work towards a better industry for game developers around the world, and to support fulfilling and sustainable careers in game development for anyone with the desire and aptitude to pursue it.

Jen MacLean

Executive Director, IGDA

OVERVIEW

The 2017 IGDA Developer Satisfaction Survey was live from February to March, 2017. It accrued 963 valid responses.

The survey was targeted broadly and captured responses from people with various connections to the industry (Table 1). Most of the survey respondents said that they make games in core creation or development roles. This was followed by a smaller proportion who make games as a portion of their work (i.e., academics, those in transmedia companies, students concurrently making games). A third group of respondents work in studios in supportive or ancillary roles to game creation. These three respondent groups were asked the most survey questions regarding the nature of their work and form the core of this report. Other respondents answered select question sub-sets (i.e. for students or the unemployed) and/or answered general questions about demographics, diversity and industry trends.

Table 1: What is your connection to the game industry?

	% of respondents
Makes games in a core development role (includes QA)	64.8
Portion of work is games-related or to make games (includes academics who make games); or makes games for commercialization on the side	14.4
Supports the development of games in administrative, support or ancillary roles that are not game creation (e.g., admin, HR, technical support)	8.9
Currently unemployed	3.5
Looking for first job in the industry	3.1
Makes games as a hobbyist	1.6
Academic studies/teaches about the game industry	1.2
Fine artist using games as a medium	0.9
Involved in the production of game-related events	0.7
Game journalist or critic	0.7
External investor	0.4
Total	100
Student studying to make games or about games/game industry	16.5*

Source: IGDA DSS 2017;

*Students counted separately; those working on games for pay or goal of pay are included in main figures here

Most answered the survey in English (71%). Other languages were represented as follows: Taiwanese Chinese (20%), Japanese (2%), Spanish (2%), German (2%), French (1%), Simplified Chinese (1%), Italian (<1%).

A large portion of respondents were working in the United States (42%) and participants from North America make up more than half the sample. While North America plays a large role in the global video game industry, developers in this part of the world are likely overrepresented in the picture painted here while some important regional and national variation cannot be summarized accurately. The distribution of the sample on some additional key dimensions are included in Table 2.

This report is a summary of the primary observations from the 2017 survey data and, outside of a few select occasions, does not attempt to compare this data to prior IGDA surveys. The first part of the report includes sections answered by all respondents: Demographics, Diversity, Education, and Business Trends and Future Outlook. The second part of the report paints a profile of the work experiences of particular groups of workers who are making games for pay (employees, freelancers, and the self-employed) as well as the currently unemployed and students.

Table 2: Key Sample Characteristics

	% of respondents
Company Type	
1st Party	9
2nd Party	24
3rd Party	19
Independent	33
Other	14
Company Size	
≤10	38
11-50	18
51-100	9
101+	35
Occupation	
Management	28
Programming	27
Design	16
Art	9
Audio	3
QA	2
Admin	4
Other	5
Employment Type	
Employee	66
Self-employed	19
Freelancer	10

Source: IGDA DSS 2017

DEMOGRAPHICS

This data presents the prototypical game industry worker as being a 32 year old white male with a university degree who lives in North America and who does not have children. More demographic characteristics are discussed in the diversity section below.

Snapshot: Country of Origin & Country of Work

Many respondents were born in the United States. They made up 40% of the sample (Figure 1). Canada had 9%, and Mexico had less than 1%, bringing the overall North American representation to 49%. Asia represented 22% of survey respondents with Taiwan listed as the second most common country of birth (16%), overall. It should be noted that there was significant engagement with the survey from the Taiwanese game development community this year; a volunteer translated the survey into Taiwanese Chinese and this with publicity through localized networks greatly increased participation from that region. Europe accounted for 19% of respondents, Australia and Oceania accounted for 5%, Latin America (including Mexico) made up 4%, and Africa represented 1%.

Many respondents also worked in the United States (42%). This was followed distantly by those working in Taiwan (15%), Canada (10%) and Australia (4%). Country of work is shown alongside country of origin in Figure 1 to give a rough indication of the international mobility of game developers. For the most part national labour markets seem to be serving their own populations. Only 14% of respondents consider themselves to be immigrants. Some countries, such as the US and Canada seem to import game developer labour while others, such as the United Kingdom and Germany seem to export labour.

Snapshot: Marital Status

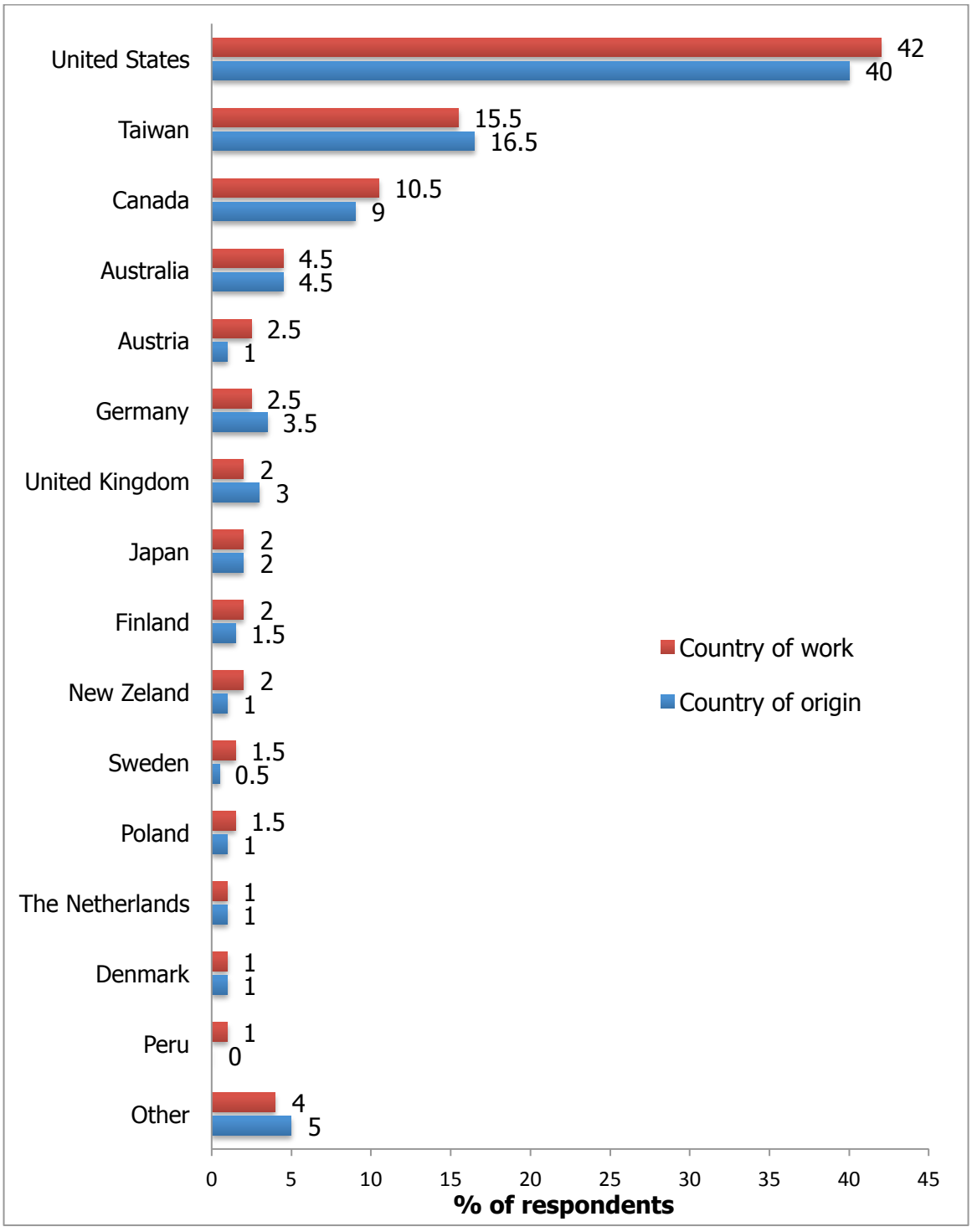
Slightly more respondents reported being married or partnered (50%) than single (44%). Another 4% were separated or divorced and 3% responded 'Other'.

Snapshot: Children & Elder Care

Only 29% of respondents had children. Most said they had school aged children (13%), or pre-school aged children (12%), while 5% said they had adult children. Note that these statistics include respondents who said they were students in the game industry. The rate of children among employed developers is higher (see employment profiles below).

Most were not responsible for elder care (84%). There was, however, a notable group of 16% that was responsible for their older family members who either lived with them or lived separately.

Figure 1: Countries of Origin and Work (rounded to nearest 0.5%)

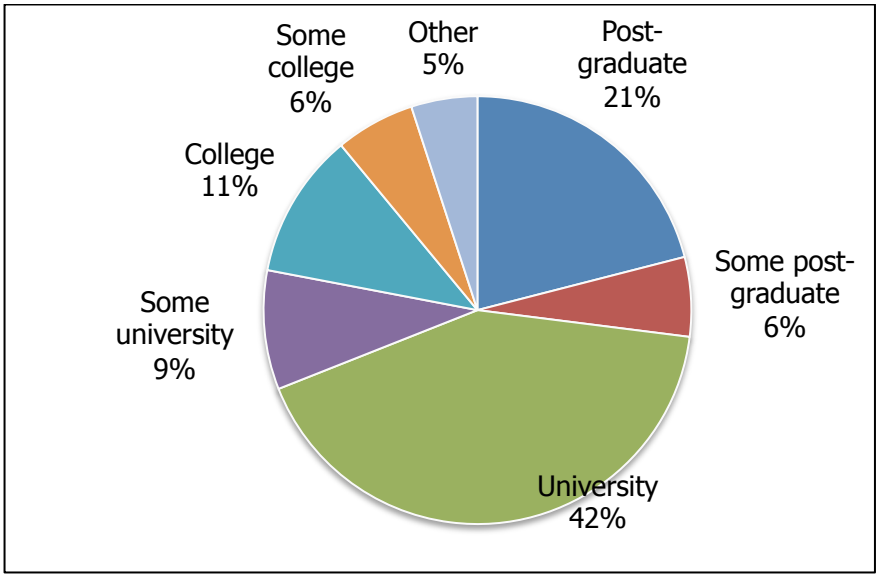


Source: IGDA DSS 2017
Note: Country included if it represented 1.0% or more of the respondents for 'Country of Work'

Snapshot: Educational Background

With the increase in formal academic programs targeted to game development studies, it is not surprising that people who work in the game industry are highly educated. A full 95% of respondents had some college/vocational/trade school or above (Figure 2). The remaining 5% had professional certification, an apprenticeship or less than college.

Figure 2: Highest Educational Attainment



Source: IGDA DSS 2017

Snapshot: Specialized Degree in a Game Related Discipline

Nearly one half of survey respondents (44%) had a specialized degree that was somewhat relevant to game development and another third (34%) had a degree that was directly related to game development. The remaining 22% had educational backgrounds that they said were not relevant to game development. It is important to remember that a number of survey respondents did not work directly in game development, but rather worked in occupations related to the game industry more broadly.

Aside from a degree or diploma, half of the respondents had also taken supplemental training in game development, including courses at the high school (4%), college (8%), university (10%), and post-graduate (6%) levels, professional certifications (10%), internships (9%), as well as training by their employers (10%). An additional 2% said they had completed online courses for their game related training. Half of the group reported that the training was accredited in some way.

DIVERSITY

Respondents were instructed when taking the survey to "consider diversity in terms of demographic characteristics such as sex, gender, race, ethnicity, sexual orientation, etc."

Throughout this section we occasionally make reference to US population statistics. People who were either born in the US (40%) or who worked in the US (42%) made up a large portion of the DSS 2017 sample. However, it is important to note that the population distribution in the other countries represented in this data will differ quite substantially and many who would be identified as minority groups in the North American or Western European context would not be so in their country of origin (recall for instance that only 146 identified as immigrants and there was a large group of respondents who were born in and working in Taiwan).

Snapshot: Age

Survey respondents ranged in age from 18 to 67. The 30 to 34 age bracket made up 24% of the sample, followed by the 25 to 29 age bracket (20%). Only 17% of respondents identified as being in their 40s and 5% said they were older than 50 years. This is strikingly different from the general labour force in the US (mean age = 42) and other industrialized countries. Note that this statistic includes students but they are a small proportion of the sample. See the employment type profiles below for the average age of employed developers.

Snapshot: Gender

Survey respondents were predominately male (74%). Only 21% identified as female, 2% identified as male to female transgender and fewer than 1% identified as female to male transgender. An additional 2% selected 'Other' as their response. This is in contrast to the biological sex distribution of the 2016 United States Census where 49% were reported men and 51% were reported women. The US census only considered biological sex; however a recent study from the University of California estimated that 0.6% of adults in the US are transgender.

Snapshot: Race/Ethnicity/Ancestry

The majority identified as white/Caucasian/European at 68%. Respondents were able to select up to 3 options for this question. As such, when respondents who *only* selected white/Caucasian/European were calculated this statistic dropped to 61%. The next most frequently selected category was East/South East Asian (18%), followed by Hispanic or Latino (5%). Pacific Islanders constituted 3% of respondents, Arabian or West Asian made up 2% of respondents, Aboriginal or Indigenous peoples also represented 2% of the group, and

Black/African American or African made up 1%. This is inconsistent with the 2016 US census data which reported that 61% of the US population was white, 13% was black, 18% was Hispanic, and 6% was Asian.

Note that the decreased percentage for white/Caucasian/European developers (from 81% in 2016) and the rise in respondents from East/South East Asia (from 8% in 2016) should not be interpreted as a rapid decline and a rapid rise in these populations among game developers. Rather these statistics mean that more people from East/South East Asia took the survey in 2017 (which we can confirm due to the high response rate from Taiwan and the known engagement of that population with the survey this time around). Therefore, they contribute to a larger percentage of the total sample of participants. This is a limitation in survey research when the total population is not known and we cannot engage in non-random sampling that would be representative of each group or region.

Snapshot: Sexual Orientation

Regarding sexual orientation, 81% of respondents identified as heterosexual, 5% as homosexual, 11% as bisexual and 3% as other. These numbers are slightly higher than reported statistics for the United States where an estimated 3.5% of adults identify as lesbian, gay or bisexual.

Snapshot: Disability

In the 2017 DSS, 25% of respondents identified as having a disability. The most frequently selected category of disability was psychiatric or mental illness (7%). The next two most commonly selected categories were visual impairment (4%) and intellectual or learning disability (3%). This is slightly higher than the total population, where 19% of adult Americans have some type of disability.

Snapshot: Attitudes toward Diversity

The number of respondents who felt that *diversity in the workplace* was very or somewhat important was at its highest in the history of the DSS; 81% of respondents felt that it was 'very important' or 'somewhat important' compared to 78% in 2016, 63% in 2015 and, 75% in 2014. Similarly 84% felt that *diversity in the game industry* was important, compared to 80% in 2016, 66% in 2015, and 79% in 2014. Slightly less than half of respondents (42%) felt the game industry had increased in diversity over the past two years. This is a small decrease from 2016 where 47% felt that the industry had become more diverse in the two years prior. One third (33%) reported that diversity had stayed the same. This is consistent with the 2016 and 2015 data (30% and 31% respectively). A small group felt that the industry had become less diverse (3%), and this was the same in 2016 and 2015 (3% and 2% respectively). The 'not

sure' option was selected by 22% of respondents, a slight increase from 2016 (19%), although much less than 2015, where 30% were unsure.

Diversity in game content was also deemed important; 85% of respondents indicated that it was either 'somewhat' or 'very' important to the game industry compared to 82% in 2016 and 71% in 2015.

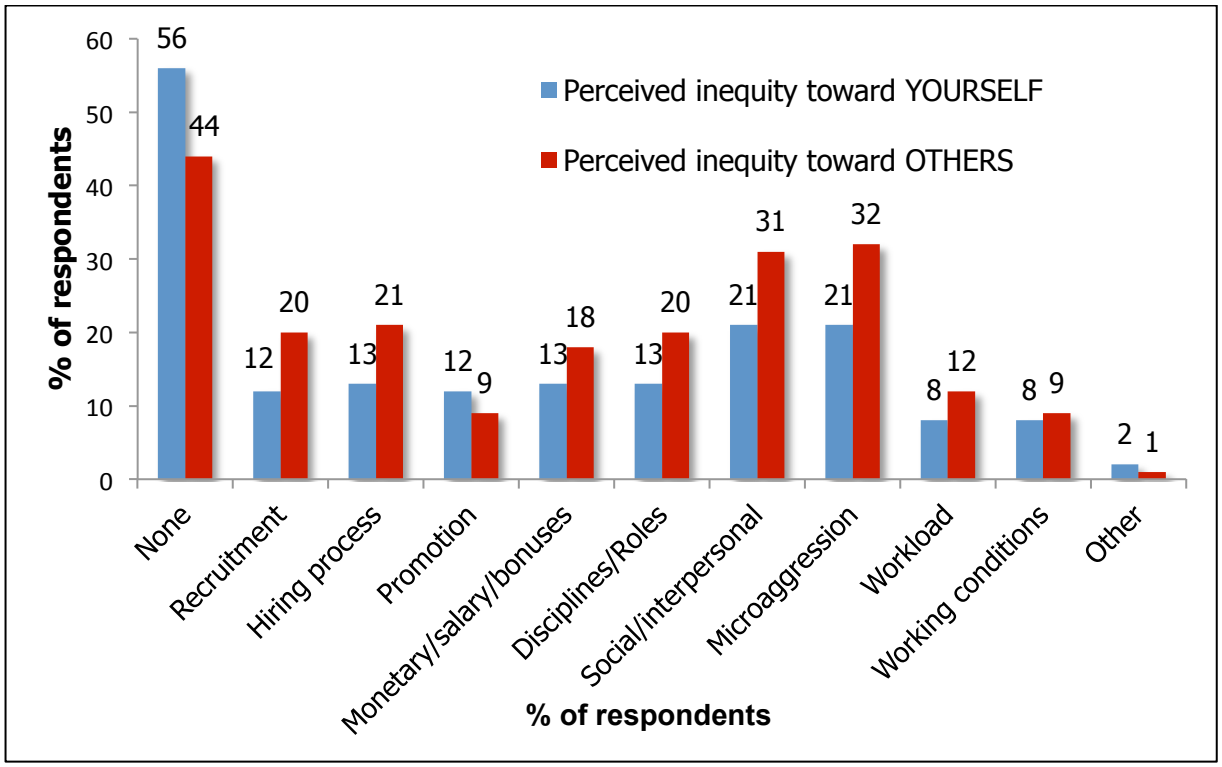
Snapshot: Discrimination

Fourteen percent of respondents reported that their company had no policies whatsoever directed toward diversity or equality. Among those whose company did have some form of policy, most said that their company had a 'general non-discrimination policy' (57%), an 'equal opportunity hiring policy' (49%) or a 'sexual harassment policy' (48%). Only 26% said that their company had a 'formal complaint procedure', and 21% reported a 'formal disciplinary process' related to equality and diversity policies. These numbers were similar in 2016. It is also worth noting that one quarter of respondents (25%) did not know if their company had these or other types of diversity related policies.

That said, only about half of respondents felt that these policies were adequately enforced (56%), and another 34% were not sure. The efficacy of these policies or other informal initiatives is also called into question by responses to the question, 'Do you feel there is equal treatment and opportunity for all in the game industry?' In the 2017 DSS, 50% of respondents answered 'no', 33% said 'yes', and 17% were not sure. This was a slight improvement over the 2016 data, where 58% answered 'no,' and only 26% answered 'yes'.

Figure 3 shows the responses to two questions that asked, 'Have you perceived inequity towards *yourself* or towards *others* on the basis of gender, age, ethnicity, ability, or sexual persuasion in any of the following areas?' Similar to 2016, the majority of respondents (56% and 44%, respectively) answered 'none' to both questions. Of those who did report inequity towards themselves or others, social, or microaggressions were the most commonly reported (see Figure 3 below). Overall, respondents reported witnessing inequity towards others at greater rates than directly experiencing it themselves.

Figure 3: Perceptions of Inequity toward Self and Others



Source: IGDA DSS 2017

TRENDS AND OUTLOOK ON THE GAME INDUSTRY

Snapshot: Game Genres

Action games were the genre being developed the most across those who identified as being employees (49%), self-employed (52%), and freelancers/contractors (43%). The second most selected genre differed across employment type. Among employees this was strategy games (34%), among the self-employed this was casual games (40%), and among freelancers this was role-playing games (38%).

Table 3: Game Genres Being Developed by Employment Type

	% Respondents by Employment Type		
	Employed	**Self-Employed**	**Freelance/Contract**
Action Game	50	52	43
Action Adventure	26	27	18
Adventure Game	19	31	33
Role Playing Game	29	35	38
Sports Game	13	6	18
Strategy Game	34	36	20
Simulation Game	20	25	30
Serious Game	12	16	33
Casual Game	32	40	35
Art Game	5	12	15
Party Game	8	7	13
Exercise Game	3	2	5
Other	8	6	8

Source: IGDA DSS 2017

Snapshot: Important Platforms for the Future

When asked to rank the importance of a long list of development platforms to the future growth of the game industry, PC was selected as 'very important' by the most respondents; consoles, and both Android and iOS devices followed. The top ten responses were similar in 2016 and 2017 with one exception; while 41% said proprietary platforms were very important in 2016, only 2% said this in 2017. The top ten responses are listed in Table 4.

Table 4: Top Ten Platforms Deemed 'Very Important' for Future Growth

Platform	% of respondents
PC	74
Consoles	67
Android	52
iOS	51
Analog Games	32
Mac	22
Web-based Application	22
Pervasive games/ARGs/Big Games	21
Social Network Games	19
Dedicated Handhelds	19

Source: IGDA DSS 2017

Snapshot: Common Distribution Platforms

When asked to list the distribution methods used by their company, Apple, Google Play, and Steam were the top three across all employment types (Table 5).

Table 5: Distribution Methods Used by Companies by Employment Type

Method	% employee	Method	% self-employed	Method	% freelance
Apple	58	Steam	57	Steam	45
Google Play	57	Google Play / Apple iOS	46 (tie)	Google Play	43
Steam	46	Studio or Personal Web Site	38	Apple iOS	40
Playstation	37	Amazon	15	Studio or Personal Website	25
Retail Chains	33	Playstation Network / Fan Conventions	14 (tie)	Amazon	10
Xbox Live Arcade	32	Xbox Live Arcade	11	Retail (independent or chain) / Playstation Network / Xbox	8 (tie)

Source: IGDA DSS 2017

Snapshot: The Future of Game Development

'Advancement in game design' (62%) continued to top the list of topics that respondents felt were most important to the growth of the industry. This was followed closely by 'more diversity in game content' (58%), and 'advancement in storytelling in games' (51%). Advancement in storytelling was more often selected in 2017 than 2016 by a small margin of 5%.

Table 6: Ranking of Future Growth Factors

Factors	% of respondents
Advancement of game design	62
More diversity in game content	58
Advancement of storytelling in games	51
Better discovery of games	42
More funding for game development	39
Better monetization of games	21

Source: IGDA DSS 2017

Snapshot: Localized Versions of Games

This year, the vast majority of survey respondents felt that having a localized version of a game is important to its success; 52% of respondents felt that it was 'very important' and 33% felt that it was 'somewhat important'. This is up 5% from the DSS 2016, and 15% from the DSS 2015.

Snapshot: Society's Negative Perceptions of Industry

Game developers were divided regarding how society views the industry; 38% felt that society has a negative view, 37% felt that society has a positive view, and 25% felt that there is a neutral view. From a list, respondents were asked to select factors that they thought contributed to the negative perception of the game industry (Table 7). When compared to the DSS 2016, all of the factors were selected less frequently in 2017, with the exception of 'perceived link to obesity', which remained the same.

Table 7: Factors Influencing Negative Perception of the Game Industry

Provided Factors	% 2016	% 2017
Sexism among gamers	67	57
Sexism in games	60	55
Perceived link to violence	60	55
Working conditions	57	54
Perceived link to obesity	46	46
Racism among gamers	45	40
Sexism in the workforce	41	39
Lack of overall diversity	43	38
Racism in games	29	24
Racism in the workforce	20	17
Other	13	12
I don't think there is a negative perception of the game industry	4	7

Source: IGDA DSS 2017

Snapshot: Preferred Employer

Respondents were given the opportunity to give an open-ended answer to the question, 'Which developer or publisher would you most like to work for?' There was a wide range of responses to this question, but for the first time in four years, Blizzard has beaten out Valve with 8% of the vote. Valve received 6%. The next most common answers were Nintendo (4%), and Bethesda (4%).

EMPLOYMENT OVERVIEW

The following section of the report only uses data from those respondents who said that they were involved in making games for pay. This includes those in support roles to core development (HR, marketing, administration, etc.) as well as those in quality assurance and testing roles. This excludes students not yet in the industry, academics studying the industry who do not make games, game journalists, event planners, etc. As such, the figures presented for demographics characteristics will differ from those presented for the whole survey sample above. In addition, following a broad overview, the report separately discusses the characteristics of three types of workers: employees, freelancers and the self-employed.

Snapshot: Employment Status

Of the respondents who were involved in making games for pay, the majority worked in the industry as permanent (70%) or temporary (3%) employees. A further 19% reported being self-employed, and 8% reported that they were freelancers or independent contractors. The vast majority (89%) worked in the industry on a full-time basis, while the remainder (11%) worked part-time. The section that follows this overview will provide details about the work experiences for each of these employment types. This is because the nature of their work can be quite different.

Snapshot: Games as Primary Business

Most respondents worked at or operated companies wherein games and game-related products and services are the primary business. The majority (78%) reported that games made up 100% of the work at their company and 13% reported that games made up at least half of the work that they do.

Snapshot: Employment Volatility

While 70% of respondents indicated that they were permanent employees, when asked about the number of employers they have had in the past 5 years, the response average among employees was 2.2. Surprisingly, this is not so different from freelancers/contractors for whom the average was 3.6. This indicates that employees are often hired and let go while freelancers seem to maintain stable relationships with a core set of clients. The average among the self-employed was 2.9, who were asked how many employers they have had in the past 5 years not counting themselves. Coupled with the fact that 66% of self-employed respondents said that they had worked for other game-related employers in the past, this suggests that many self-employed developers start their own businesses after working in the industry and that this is a relatively recent shift for many of the respondents.

Snapshot: The Unemployed

Just fewer than 4% of the survey sample (20 respondents) indicated that they were currently unemployed in the game industry. Among the unemployed group 50% were permanently laid off, 20% had ended a contract and had not found a new one, and 10% said they were in between contracts.

One quarter (25%) of unemployed respondents have been unemployed for more than one year, 55% have been unemployed for between 3 and 12 months. The remaining 20% had been unemployed for 2 months or less. The majority wanted to find another job in the game industry (89%).

A PROFILE OF EMPLOYEES

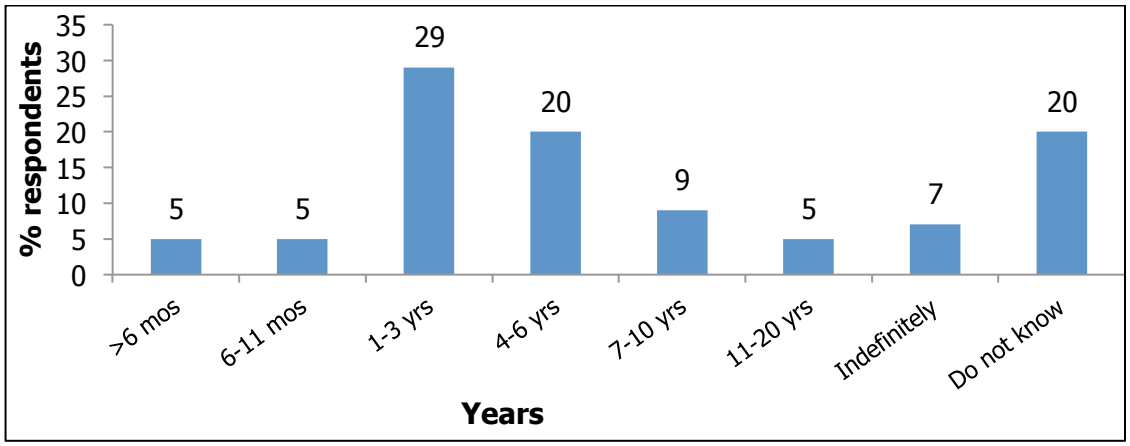
Snapshot: Demographics

The typical employee in this sample was 35 years old, identified as white or as multiracial with white (71%), was male (79%), and was working in the United States (44%). He was heterosexual (86%) and likely to be married or in a long-term relationships (57%; 37% reported being single). He did not have children (69%), and did not identify as having a disability (79%). He had a university degree (45%) probably in computer science (16%) or game design (13%).

Snapshot: Experience and Job Security

The majority of employees in the industry were relatively inexperienced. Just under half (49%) indicated that they have been in the industry for six or fewer years, while 36% had worked in the industry for ten years or more. Almost three-quarters (70%) had had one or two employers in the past five years and, over one quarter (27%) had had three to five employers in the past five years. Industry churn was also reflected in the limited expectation among employees to remain with their current employers for the long term. Most respondents seemed to expect high job mobility (Figure 4).

Figure 4: Years Expected to Remain with Current Employer



Source: IGDA DSS 2017

Snapshot: Company Type

The majority (87%) of the permanent and temporary employee respondents worked in typical game development studios. The top three company types were as follows:

- Developer who is fully owned by a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game platform – *a second party developer* (42%);
- Developer who is not owned by or dependent on a single publisher and engages primarily in self-publishing – *an independent studio* (23%); and
- Developer who develops games under contract with one or more publishers for one or more platforms, but is not directly tied to a primary consumer product/game platform – *a third party developer* (17%).

Snapshot: Job Role

Programming/software engineering was the most common job held by the employees in this sample with 27% indicating that this is their primary role. This role was followed by game designer (16%), producer or project manager (11%), senior management (9%), and visual artist (5%).

Snapshot: Company and Team Size

Employees were most likely to work at relatively large companies; 30% worked at companies with between 101 and 500 people, and 18% worked at companies that had more than 500 people. However, medium-sized studios with 11 to 50 people were also well represented at 22%. Only 18% worked at companies with ten or fewer people. Development teams were

somewhat smaller; 31% reported that the development team at their current company was between 11 and 50 people; and 45% reported development teams of ten or less people. A slightly smaller group (24%) had development teams of more than 50 people. Most employee respondents only worked on a few projects at a time; 51% worked on one project at a time and another 43% worked on between two and five projects at a time.

Snapshot: Salaries

Slightly more than three quarters (77%) of respondents said that their income was comprised completely from their work in the game industry, and only 6% said that they earned 50% or less of their income from their game related work.

Most employees (54%) made over $50K USD per year, with the most common salary being between $75K and $100K USD per year (15%), or between $50K and $75K USD per year (15%).

Over three-quarters of employee respondents (88%) indicated that their company offered some type of raise as part of their compensation. Most often (36%) these raises were provided based on a combination of factors that included a fixed percentage allocation, a formula for merit, and the judgment of management, though 23% said that raises were based solely on the discretion of management. An additional 12% indicated that they did not get raises at all and another 11% were not sure.

Snapshot: Incentives and Overtime

Incentives and bonus payments were a popular method of compensation; 40% of respondents indicated that they received lump sum payments, 24% indicated that they received company equity and another 20% received royalties tied to game success. About one quarter (26%) did not receive incentives or bonus payments at all.

When employees worked beyond normal office hours (i.e., overtime or crunch), 37% received no additional compensation. Of those who did, this additional compensation came most often in the form of perks like meals (37%) or future time off (32%). Only 18% received paid overtime.

Snapshot: Benefits and Time Off

Regarding benefits, most employees (76%) were provided health coverage by their employer, but fewer employers provided life insurance (44%) or a retirement/pension program (51%). Almost one third (30%) of employee respondents did not have any form of life insurance, and 21% had no form of retirement plan. A number had purchased these services individually

through private vendors (26% for life insurance, and 22% for retirement programs).

Regarding time off, many companies (58%) provided a packaged policy where time off for sick leave, vacation, personal days and holidays were treated as one. Among this group, most employees (49%) reported between two or four weeks of paid time off, 12% reported five weeks, and 24% reported an open policy whereby they could take as much time as they needed or wanted. Among those whose companies treated days off for different reasons separately (35%), the largest portion reported an open policy for sick days (21%) and one week of vacation time (19%).

When an employee has a child, 35% of respondents said their company pays for pregnancy leave and 33% reported employer paid paternal leave (these numbers rose to 53% and 48% when combination government-employer programs were included). However 30% did not know their company's policy on pregnancy leave, and 32% did not know their company's policy on parental leave.

Snapshot: Hours of Work

Just under half of the respondents (49%) indicated that they worked 40-44 hours per week during a regular schedule. Forty hours is a typical 'standard' workweek, at least by North American standards, while European standards more likely range from 35-40 hours. Nineteen percent of respondents indicated that they worked between 45 and 59 hours per week during regular schedule, and another 9% worked between 50 and 59 hours per week in the regular schedule.

These statistics indicate an upward pressure on the 'typical' regular schedule. As well, crunch was still a problem: 51% said that their job involves crunch time, and another 44% reported working long hours or extended hours that they do not refer to as crunch. Forty-three percent said they were in crunch more than twice in the last two years; and 53% said that crunch time was expected at their workplace. During crunch, many employees reported working between 50 and 59 hours (37%) or between 60 and 69 hours per week (29%). A sizeable minority (14%) reported working more than 70 hours a week in crunch.

Snapshot: Career Path and Advancement

Although 46% of respondents indicated that their company had either 'good' (31%) or 'excellent' (15%) potential for promotion or career advancement, 24% reported that this potential was neutral, and an additional 30% said 'fair' or 'poor'. Respondents seemed relatively divided about whether their profession had a clear career path. Almost half said that their profession *did* have a clear career path (44%), but the remainder said that there was no clear career path (39%), or that they were not sure (17%).

A PROFILE OF FREELANCE/CONTRACTORS

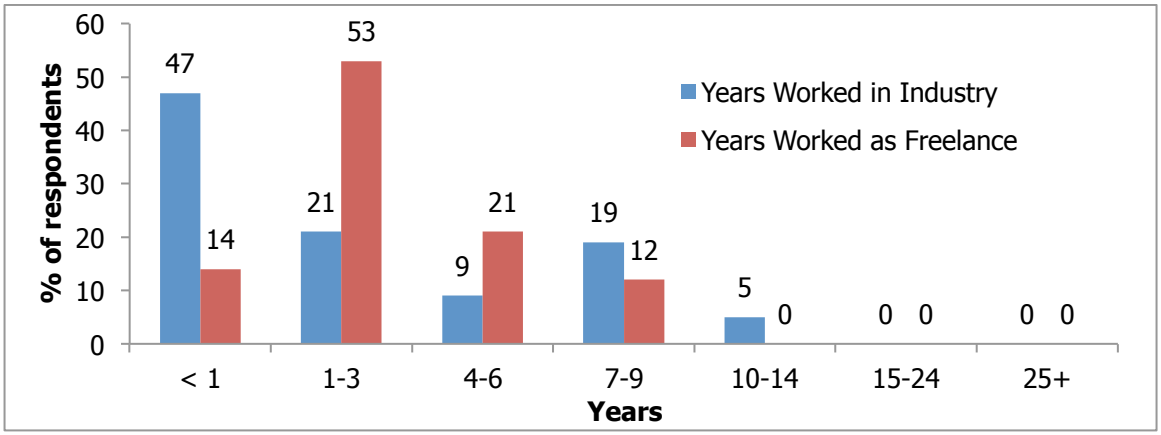
Snapshot: Demographics

The typical freelancer in this sample was 33 years old, identified as white or mixed-racial with white (69%), was male (55%) and worked in the United States (34%). He was heterosexual (70%), was slightly more likely to be single (47%) than married (41%), but he probably did not have children (81%). He did not report a disability (72%) and likely had a university degree (41%), in computer science (18%) or game design (13%).

Snapshot: Experience and Job Security

Most freelancers had not been working in the game industry for long and many respondents indicated that they had been freelancing for only a few years (Figure 5). About one third (34%) had previously been a permanent or temporary employee at a game-related company and another 17% had been both an employee and self-employed. A large portion of freelancers felt that they would stay in the industry indefinitely (41%) and a further 40% did not know how long they would remain. Only 5% said they would move on within the next six years.

Figure 5: Years in Industry and as Freelance



Source: IGDA DSS 2017

As alluded to in the overview earlier, the majority of freelancers seemed to concentrate their work with a handful of employers; 35 reported having only one or two employers/clients in the past five years and a further 43% reported having three to five employers. Similarly, most

freelancers were only working on two to five project at a time (58%), but working on only one project at a time was also common (42%). For the freelancers working on multiple simultaneous projects, those contracts were most often with different employers (81%).

Freelancers were asked to report the length of either current or typical contracts. The data across these two questions pointed to short contracts; 'less than 3 months' and '3-6 months' were the most common responses (31% and 19% respectively). Surprisingly, a sizeable portion (31%) reported that they did not know the length of their current or typical contract.

Snapshot: Company Type

Freelancers were most likely to work for independent studios (42%) – those which are not owned by or dependent on a single publisher and engage primarily in self-publishing. This was followed distantly by companies that do not exclusively make games (16%), and second party developers (8%).

Snapshot: Job Role

Most freelancers in this sample were programmers/software engineers/technical designers (29%), game designers (14%), visual artists (10%), or writers (10%).

Snapshot: Company Size and Composition

Freelancers were most likely to be found at small to mid-sized companies; 64% work at companies with between two and ten people. Another 13% worked at companies of between 11 and 50 people, and 8% worked at companies of 51 or more. In line with this, freelancers were most likely to work on small development teams of two to five (40%), or six to ten (23%) people. Freelancers overwhelmingly tended to work from home in a dedicated space (73%), at an employer's studio (20%), in various ad hoc spaces in their own homes (20%), or in co-working spaces (20%) (note: numbers total more than 100% because multiple selections were allowed).

Snapshot: Salaries

Overall, freelancers in this sample earned significantly less than their employee counterparts. Over half (63%) reported earning less than $15K USD per year, and only 6% reported making more than $50K USD per year. Freelancers were paid an hourly wage (25%), per deliverable (19%), by the day (14%), or on ongoing retainer (8%). Many freelancers arranged a combination of these compensation practices (25%).

Snapshot: Incentives and Overtime

Generally, freelancers did not negotiate incentives or bonuses as part of their compensation (69% had none), but 13% did say that they negotiated royalties or shares tied to the success of the game, or company equity (8%). Similarly, most freelancers (58%) did not negotiate extra compensation for overtime hours worked beyond normal office hours. About half of freelancers (51%) reported that they had not been expected to work unpaid hours on a contract in the past two years, but that left 37% who had been expected to work unpaid hours and 11% who were not sure.

Snapshot: Benefits and Time Off

Regarding benefits, employer coverage of health care and life insurance for freelancers was rare (0% for health and 3% for life). Rather, freelancers in this sample reported relying upon government provided health coverage (37%) and/or individual or private coverage (16%). Another 37% relied on parents or partners for their health coverage. Unlike health coverage, most freelancers (61%) did not have life insurance at all. If they did, it was a private plan obtained individually (29%). Similarly most freelancers (45%) did not have a retirement or pension program. If they did have a plan, it was also likely to be through a private individual plan (30%).

Regarding time off, only a handful of freelancers reported contracts that included paid time off (3%) or accounted for time off as additional pay (3%). Indeed, most reported taking very little time off at all. Almost one quarter (24%) reported taking no time for sickness and 41% reported taking less than one week. The number of weeks for vacation varied; 27% reported not taking any vacation, 8% reported one week of vacation, 11% reported two weeks, and another 11% reported three weeks.

IP and Credit

Most freelancers (80%) worked for hire and said their employer owned the IP. In terms of receiving public credit for their contribution to the game, 27% reported that they received no credit for their contribution to a game, 57% said their name was included in the game credits, and another 11% reported that their name was included in promotional material or press.

Hours of Work

Twenty-six percent of freelancers reported working between 40 and 44 hours in a regular workweek and 34% reported working less than 30 hours in their regular work schedules.

Freelance work did involve crunch time. One third of respondents indicated that they

engaged in crunch, 38% reported that they had experienced crunch more than twice in the past two years, and 47% reported that crunch time was an expected or normal part of their job. As well, of those who said they did not engage in 'crunch', 31% said that their work required long hours or extended overtime, but they just did not refer to it as 'crunch'. Almost 30% of freelancers reported working 50-59 hours per week during crunch, while 21% reported working 60-69 hours.

Snapshot: Why Freelance?

Sometimes people choose to work on a temporary or contract basis. Other times this is the only option for them given their circumstances and the realities of their regional or national labor markets. This survey captures both of these dimensions. Most respondents said they worked freelance for reasons related to personal control over their work and life, but many also said they could not find permanent employment at an established studio (Table 8):

Table 8: Ranking of Why Respondents Work Freelance

	% of respondents
To have more control over working conditions like hours	62
To have more control over the content of my work	48
To make the games that I want	43
Could not find a permanent job at an established studio	43
To work on more varied projects/games	41
To work on a smaller team	29
To have more control over my employment stability and/or risks	26
Other	19
I don't live near an established studio and did not want to move	17
Established studios closed or left the area and I do not want to move	7

Source: IGDA DSS 2017

A PROFILE OF THE SELF-EMPLOYED

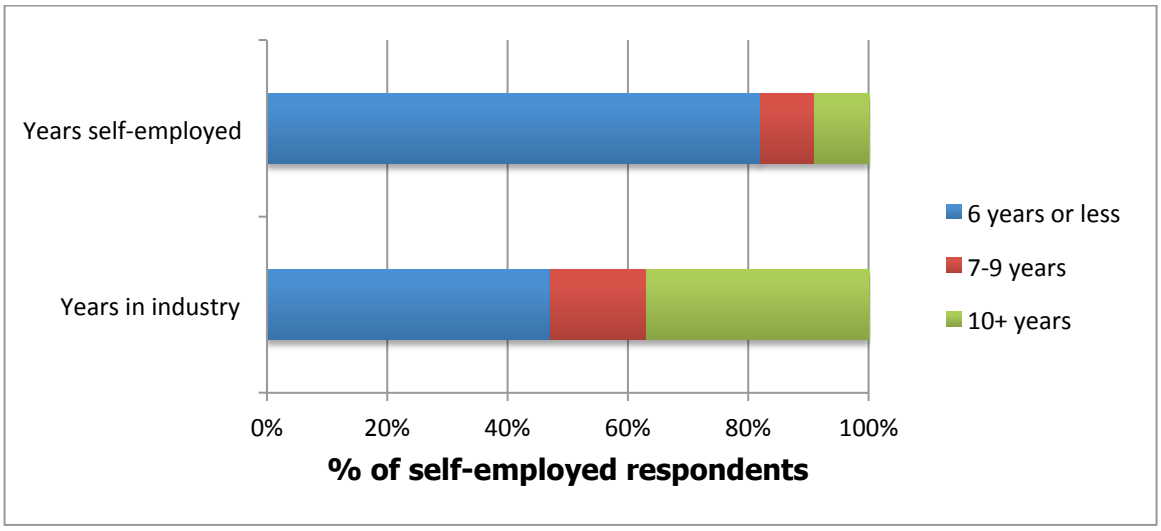
Snapshot: Demographics

The typical self-employed developer in this sample was 36 years old, identified as white or multi-racial with white (73%), was male (77%), and worked in the United States (36%). He was heterosexual (79%), married or in a long-term relationship (49%), and probably had no children (62%). He was unlikely to report having a disability (73%). He had a university degree (38%), probably in computer science/software engineering (27%) or game design (14%).

Snapshot: Experience and Job Security

The responses from self-employed developers reflected a slight polarization in terms of experience (Figure 6). Slightly less than half of respondents (42%) reported working in the industry for six years or fewer (21% between one and three years, and 21% between four and six years). Sixteen percent had been working in the industry between seven and nine years. Another 37% had worked in the industry for ten years or more. That said, it seems that the decision to become self-employed has been a more recent one as 82% reported being self-employed for six years or less. Only 9% reported being self-employed for more than ten years. Fitting this conclusion, most self-employed respondents had worked as permanent or temporary employees in the past (57%) and 9% had worked as freelancers. Most respondents saw themselves staying in the industry indefinitely (54%), although slightly more were unsure if they would remain self-employed (37%) than those who saw themselves remaining self-employed indefinitely (32%).

Figure 6: Comparison of Years in Industry and Years Self-Employed



Source: IGDA DSS 2017

Snapshot: Company Type

The majority (71%) of the self-employed respondents identified as independent developers who engaged primarily in self-publishing. This category was followed very distantly by work-for-hire game developer (6%) and third-party developer (6%).

Snapshot: Job Role

In addition to their role as owner, many self-employed respondents identified as programmer/software engineers (30%), producer or project manager (15%), game designer (13%), or general senior management (11%).

Snapshot: Company Size and Composition

The self-employed respondents in this sample typically owned small companies, which were one-person shops (35%) or they employed/contracted two to five people (45%). A smaller proportion said they employed/contracted six to ten people (14%), or 11 to 50 people (5%). Development teams were most often comprised of between two and five people (70%), or six to ten people (29%).

When staffing their teams, the self-employed reported hiring employees more often than deploying contractors. Fourteen percent deployed only contractors, 19% reported that they use 50% contractors, and 50% employees, and 31% reported that 100% of their workers were employees.

The small company size results in fewer projects running at one time: 52% said one project at a time is normal, while 46% said they have two to five projects running at one time.

Most self-employed respondents worked from a dedicated home office (63%) and their employees were likely to do the same in their own homes (60%). However, 48% said that there was a company studio or office where their employees worked.

Snapshot: Salaries

Seventy-one percent of self-employed respondents said their company was self-funded, and this created a number of financial barriers. Though they likely worked at their own company full time (61% reported that 90% to 100% of their income came from their work in the game industry), they were not making much money. Nearly half (45%) reported that their annual income in the previous year (2016) from game related work was less than $15K USD. In addition, 53% percent said that they always forego a salary or wage in order for their company to have what it needs. Only 21% said that they never had to forego their salary or wages.

About one quarter (24%) reported relying upon friends and family for funding, 12% reported that their work was crowd-funded, 9% relied upon investors, and 7% said they were funded by public granting agencies.

Snapshot: Incentives and Overtime

While in the 2015 DSS data, 40% of self-employed respondents reported that they did not provide raises to their workers, in both 2016 and 2017 this percentage declined. In 2016 only 26% did not provide raises, and in 2017 30% did not provide raises. In the 2017 DSS 37% provided raises and these were determined based on a combination of managerial discretion, a fixed percentage, and a formula for merit.

Similarly, 31% did not provide incentive or bonus payments. Among those who did provide incentive or bonus payments, 33% provided royalties or shares tied to a game's success, 24% provided a lump sum bonus, and 10% provided company equity.

During periods of overtime and crunch, 30% reported that they did not provide compensation when their employees/contractors worked beyond their normal hours. This is similar to the 2015 sample where 37% did not provide compensation for overtime, although it is a departure from the 2016 sample where only 16% did not provide overtime compensation. Among those employers who did provide compensation in 2017, this took the form of perks (30%), time off (19%), a combination of money and comp time (15%), or a lump sum bonus (7%).

Snapshot: Benefits and Time Off

Self-employed respondents took very few sick days; 23% took zero time off for illness, and an additional 40% took less than one week. Vacation was slightly more common; 35% took between one and two weeks, although 20% took less than a week or none.

Most self-employed respondents did have a form of health coverage, though 13% said that they did not. Rather than a company plan (14%), most self-employed developers relied upon government plans (34%), or a private plan (26%). A greater percentage of the self-employed had neither life insurance (58%), nor a pension program (50%). Among those with life insurance or a pension plan, most relied upon a private insurer for life insurance (23%) and the government for a pension plan (30%).

Snapshot: Benefits and Time Off for Employees

Given that most self-employed respondents do not have company benefits plans for themselves, it is not surprising that few offer these to their employees or contractors. Less than one-quarter (20%) offered health insurance, 6% provided life insurance, and only 15% provided a retirement or pension plan.

Common perks that the self-employed did offer to their employees or contractors included free drinks (49%), conference travel (37%), fancy coffee or espresso (31%), an open pet policy (31%), or a gaming/arcade lounge (25%). The majority allowed flex hours (86%), or telecommuting (81%).

Regarding time off, 35% said that they did not provide paid time off to their employees or contractors; 45% said they had a packaged policy that covered all paid time off, and 17% reported that they allocated sick and vacation time separately.

Hours of Work

On average self-employed respondents reported longer regular workweeks than their employee and freelance counterparts; 24% reported working 40-44 hours per week, 15% reported working 45-49 hours, and 13% reported working 50-59 hours.

Crunch was also common among the self-employed; 37% indicated that they did crunch. This is a decrease from the 2016 data where 50% indicated that their job involved crunch; however, in 2017 an additional 46% said that their job required extended hours of work that they just did not refer to as crunch. Over one third (37%) reported that they had experienced crunch more than twice in the past two years, and 38% felt that crunch was a necessary part of their job.

The hours per week during periods of crunch were higher for the self-employed than for employees or freelancers; 51% reported working between 50 and 69 hours during crunch, and 30% said they work more than 70 hours a week during crunch.

CONCLUSION

The Developer Satisfaction Survey is an important source of actionable information for the entire game development community. These data points also provide the IGDA with a better indication of whom the association represents and their concerns, interests and issues.

Developers are still young, male, white and most of them do not have children or elder care responsibilities. They are highly educated and three quarters have been trained in specialized programs relevant to game design or game development. As such, important representational challenges remain. These include immediate negative outcomes such as inequity and discrimination for women, ethnic minorities and older workers, but also have implications for the maturation of the industry, innovation in game content, art and design, perpetuating negative occupational identities and norms, and working conditions such as hours and overtime. Though this was a slight improvement over prior years, half of the respondents felt that there is not equal treatment and opportunity for all in the industry. Added to this, 44% of respondents perceived inequity towards *themselves* and 56% towards *others* on the basis of gender, age, ethnicity, ability, or sexual persuasion.

In juxtaposition, the reported value placed on diversity by the 2017 respondents was the highest ever across the DSS (2014-2017); diversity in the game industry, diversity in the workplace and diversity in game content were rated as important by 81-85% of respondents.

The vast majority of respondents worked in the industry on a full-time basis. As also noted in the conclusion of the DSS 2016 Summary Report, this does not mean that developers are in stable employment. The rate at which employees and freelancers change employers/clients remains consistent with prior years of the DSS (2.2 switches on average during the past 5 years for employees, 3.6 for freelancers/contractors). The conclusion then remains that employees are often hired and let go while freelancers seem to maintain consistent-but-rotating relationships with a small set of clients. As such, concerns persist about the misclassification and misuse of freelance/independent contract labour. Companies may be skirting the definitions of freelance or independent contractor to hire de facto employees while avoiding regulatory regimes and payroll costs. This issue has been called 'false' or dependent self-employment.

As also concluded in 2016, the data continue to support the "spiral staircase" model of career advancement within project-based industries. Developers switch jobs, projects and studios to

enhance their reputation and get hired on more prestigious projects. Though they gain informal but highly valued status along the way, this environment of precarity places a large burden on workers.

Working on multiple projects remains common for a large minority of developers; though 51% of the respondents only work on one project at a time, 43% work on two to five projects. This is the case for employees, the self-employed and freelancers. These multiple assignments are an important issue in project management and could present a challenge for team building and individual work organization, work pace, work intensity, stress and health.

Salaries are still individually negotiated or established, and are part of a multi-layered compensation system where some components are universal as a minimum and others are variable, uncertain and meritocratic. Studios rarely have a clear policy and criteria for the salary level. As well, unlimited and unpaid overtime remains a concern even as some studios seem to be improving both in terms of crunch hours and its compensation.

Freelancers in this sample make significantly less than their traditionally employed counterparts. Most do not have any incentives or bonuses as part of their compensation (69%), while 13% negotiate royalties or shares tied to the success of the game. Similarly, most freelancers (58%) do not negotiate extra compensation for overtime or hours worked beyond normal office hours.

Self-employed respondents likely work full-time at their own indie company. Despite some high-profile successes in recent years, the life of a self-employed indie developer is not easy; half reported less than $15K USD as an annual income in 2016 (the year prior to the DSS 2017). More than half (53%) had to forego a salary or wage in order for their company to have what it needs. That said, when compared to the 2015 and 2016 DSS, the self-employed respondents in this sample reported providing raises and bonuses to their employees more frequently.

While there is a general decrease in regular and crunch hours of work in the industry over the past 15 years, crunch time is still part and parcel of the trade. The frequency and intensity of crunch may vary slightly across employment groups, but over half of the respondents across the board from each of freelancers, employees and the self-employed said they crunch. This is often more than once per year and they put in at least 50% more hours during crunch than the standard work week of 40 hours.

Therefore, the issue of crunch remains a significant challenge as do the following:

- The demands on employees' contributions versus fair compensation for their time spent at work (i.e., compensation for "crunch" time). A growing concern should be the lack of retirement savings among developers.

- The continued underrepresentation of women, ethnic minorities and older workers and the associated challenges of equity and discrimination. There may be particular challenges with the fact that out of the three employment sub-groups, women seem most likely to be freelancers.
- A strong desire by employees to give their effort to an employer, sharply contrasted by high rates of job changes over short periods of time.
- The diverse experiences and challenges of different workers in the industry (i.e., salaried employees, freelancers and the self-employed) and the need to devise suitable approaches to support each group.

LIMITATIONS AND NEXT STEPS

This Summary Report addressed only the most salient points and engaged in limited comparison among questions or to past surveys. Look for past reports on the IGDA website or the authors' website. You can also sign up to receive future surveys at gameqol.org.

The number of developers who took the DSS 2017 was significantly fewer than in 2015 or 2016 and there continues to be considerable drop-out across the survey (i.e., people start, but do not finish). We continue to tweak the survey to provide for a better experience and to find a balance between comprehensive questioning and survey length. We will continue in our attempts to reach a broader international audience and to achieve a large representative sampling of the game community. Sign up now to receive alerts about future surveys and please help us spread the word!