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**Where Do You See Yourself in  
Four Years Time? Exploring  
the Workforce Landscape and  
Labour Market Dynamics  
within Entrepreneurial  
Ecosystems**

*By Ross Brown and Augusto Rocha*

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## **Abstract**

This chapter introduces an innovative approach for data collection and analysis to understand the dynamics of how the workforce evolves in a video game entrepreneurial ecosystem (EE), including the composition of the workforce skillset and gender split. The spatial focus of the study is the Scottish peripheral city of Dundee, a key hub for the computer games industry in the UK. We extracted information from an employment-related social media platform, LinkedIn, to collect local community data in Dundee. The data collection provided an organic exploratory overview of the EEs labour market dynamics and configuration, including gender balance, seniority level composition and skills structure. The study provided powerful insights into the capacity of an entrepreneurial ecosystem to build community strength and entrepreneurial resilience within a specific region.

## 1. Introduction

Since the turn of the 21<sup>st</sup> Century, we have witnessed the increasing importance of creative industries (CIs) in large parts of the world's economy both in terms of employment and revenues (Gong and Hassink, 2019). This has been particularly evident in countries such as the UK which hosts a vibrant and thriving CIs sector (Nesta, 2016). CIs are of particular interest to business and management scholars because of their post-industrial characteristics, such as their flexible organisation, extensive use of technologies, and the employment of creative and technical talents (Khlystova et al, 2022). In the UK, CIs are defined as industries based on "individual creativity, skill and talent" with the potential "to create wealth and jobs through developing intellectual property" (DCMS, 2010, page 1). They encompass a diverse array of disparate industries and sectors such as arts, design, theatres, cinemas, antique shops and computer games (Lee, 2014). Scholars such as Vorley et al (2008) maintain that while there are myriad definitional parameters (and ambiguities) in the literature associated with CIs "the productive task ahead is not to sink into endless efforts" at defining CIs but instead "to acknowledge the polyvalency" and address specific research agendas to explore this phenomenon (Gibson and Kong, 2005, p. 546).

Towards this end, this chapter wishes to tease out the labour market dynamics of the CIs within a particular spatially delineated area by examining the computer games entrepreneurial ecosystem (henceforth EE) within the city of Dundee in Scotland. To do so, following others (see Spigel, 2022), we wish to explore the efficacy of a novel form of empirical data for exploring these patterns using data from a employment-related social media (ERSM) platform. There are strong grounds for this empirical study and related conceptual approach. Despite being comparable in size to the global film industry, and

having a pervasive impact upon popular culture, the video games industry has received relatively little attention from social scientists (Johns, 2006). While most analysis of different spatially bounded EEs are typically industry-agnostic (Spigel and Harrison, 2018), some authors suggest that the peculiar technological, organisational, institutional and policy contexts of an EE allow the framing of specific industrial “sub-ecosystems” (Malecki, 2018). In the growing entrepreneurship literature on EEs, the concept is viewed as being fundamentally “systemic and spatial” in nature (Malecki, 2018, p. 7; Alvedalen and Boschma, 2017) comprising “a constellation of interconnected organizations, institutions, actors and actions facilitating entrepreneurial activity within a localised spatial environment” (Brown et al, 2022, p1). While there is an abundance of research on the growth of CIs agglomerations (i.e., cultural clusters), applying a EE systemic perspective to creative entrepreneurship remains somewhat unexplored (Loots et al, 2021). So, by adopting the EE conceptual lens we will help to examine the historical, institutional and socio-economic environment shaping the labour market dynamics of the city’s EE.

The rationale for our peripheral regional focus in the study also has a strong empirical grounds. It is well established that CIs tend to cluster in certain spatial locations (Lazzeretti et al, 2008). Indeed, most prior research on CIs tends to examine this sectoral domain in leading edge locations (see, for example, Cohendet et al, 2018) rather than more peripheral locations (Gibson, 2010). Peripheral areas on the other hand are frequently portrayed negatively in terms of innovation and creativity (Baeza-González, 2021), often witnessing key constraints such as a lack of investment for start-ups (resulting in a dependency on working in other jobs restricting time devoted to their projects) lack of networks and poor market access (Sutherland, 2013; Collins and Cunningham 2017; Muñoz et al, 2023). Despite this, policy makers in the UK see the creative industries as a key

mechanism for regenerating inner cities and stimulating flagging urban economies such as Dundee (Turok, 2004; Lee, 2014). Currently Scotland accounts for a disproportionate share of the UK wide industry, with 6,400 employees or 11% of the UK wide total with Dundee being a key node of the Scottish computer games sector. There were 446 permanent and full-time equivalent development staff working in 37 discrete, verified and active games companies in the Dundee games industry for the period ending December 2021. This compares to 395 development staff working in 32 games companies in April 2020 (Gibson and Wilson, 2022). Therefore, this work has potentially important implications for policy makers in Scotland.

In order to examine Dundee's computer games EE this paper reports an innovative empirical study of the labour market dynamics within the city. Following calls for more innovative metrics and data sets to help us better understand EEs (Feldman et al, 2022; Rocha et al, 2022), the study extracted information from the ERSM platform "*LinkedIn*" to collect local labour market data in Dundee. The data provided an organic overview of the EE configuration, including gender balance, seniority level composition and skills structure. Taken together, we are able to obtain a good exploratory grasp of the main facets and overall complexion of Dundee's computer games EE. The study also provided powerful insights into the capacity of an EE to build community strength and entrepreneurial resilience within a specific regional EE.

By way of preview, the study found the Dundee computer games EE displayed signs that it remains at a nascent stage with signs of limited depth and resilience. Individuals working for companies located in the Dundee video games cluster changed jobs on average every four years (based on 92.5% of the sample). This compares to around two years (or

less) for tech-based firms in more dynamic regional economies<sup>1</sup>. This is suggestive of a relatively weak labour market featuring low levels of dynamism within the Dundee EE, especially as labour market circulation can help fuel the local ecosystem through a process of “entrepreneurial re-cycling” (see Spigel and Vinodrai, 2021). Our profile of the labour market also reveals a relatively weakly established skills demographic, featuring low levels of female participation, especially in positions of seniority within the EE’s company base.

The remainder of the chapter unfolds as follows. First, we review the cognate literature on EEs. Second, the methodology deployed is briefly discussed. Third, the exploratory findings from the study are outlined and discussed. Fifth, the conclusions, policy implications and research suggestions are explicated.

## **2. Literature Review**

The literature on EEs has expanded significantly in recent years and is now resembling a unique sub-discipline within the field of regional entrepreneurship research. However, according to some scholars there remains a degree of confusion as to the precise meaning of EE terminology in the literature (Wurth et al, 2022). For the avoidance of doubt, herein EEs are defined as “combinations of interconnected organizations, institutions, actors and actions which are arranged in such a way that they facilitate and perpetuate entrepreneurial activity within regional environments” (Haarhaus, et al, 2020, p.1). Being located at the intersection of entrepreneurship and economic geography the EE literature has managed to provide a useful cross-disciplinary platform for exploring the importance of contextual and relational factors shaping the entrepreneurial process (Lange and Schmidt, 2021). Regional policymakers have also eagerly embraced the concept, marking it out as the latest regional

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<sup>1</sup> <https://www.linkedin.com/pulse/millennials-switch-jobs-silicon-valley-twice-often-national-kunov>

policy “blockbuster” (Stam, 2015; Brown and Mawson, 2019) ensuring the concept joins a long list of the hot spatial concepts over the last 20 years bridging the chasm between academia and public policy including, *inter alia*, clusters, innovation systems, smart specialisation and related variety (Rocha et al, 2022).

There are a number of distinctive features within the overall body of literature examining EEs (Wurth et al, 2022). Early work on EEs tended towards descriptively examining these phenomena and their main component parts by adopting “cartographic, structural and systemic perspectives” typically within the confines of their own territorial domain (Theodoraki and Catanzaro, 2022, p. 384). However, in recent years there has been growing trends towards understanding the main causal mechanisms that achieve outputs within EEs. EEs provide the context and support for start-ups to emerge and for innovative firms and ventures to grow. Depending on their level of maturity and the particular configuration of the elements, they are said to produce not only different levels of outputs but also different types of outputs (Brown and Mason, 2017). Research on EE has in recent years heavily concentrated on “gazelles” or “unicorns” and those companies with venture capital investments, despite these being, by in large, quite rare aspects of EE (Acs et al, 2017). Empirical evidence is emerging demonstrating how different ecosystem configurations lead to different entrepreneurial outputs, especially in terms of start-ups. The link between ecosystems and entrepreneurial activity in general, usually proxied by start-up rates, has been examined from different angles (Vedula and Kim, 2019). These include how ecosystems support the university spin-offs (Johnson et al., 2019), the interplay of government initiatives (Jung et al., 2017), and the role ascribed to institutions such as business accelerators and open creative labs spaces with other ecosystem elements enables the formation of new ventures (Brown et al, 2019; Goswami et al, 2018; Kuebart, 2021).



While the focus on entrepreneurs and start-ups overwhelmingly remains the main unit of analysis within this research domain<sup>2</sup>, there are increasing signs human capital is now being taken more seriously as a key entrepreneurial ingredient behind the dynamism of different EEs (Spigel, 2022). This is important because how human resources are “acquired, developed, and coordinated in EEs” is unclear and has hitherto “received scant attention in the literature” (Roundy and Burke-Smalley, 2022, p. 2). While to date there are very few studies specifically examining the labour market dynamics of EEs, one notable exception looked at the nature and dynamics of the labour market in Waterloo in Canada (Spigel and Vinodrai, 2021). Interestingly, Spigel and Vinodrai (2021) interrogated this EE with data drawn from a ERSM platform which are increasingly popular way of studying large-scale trends in employment because they offer highly detailed data at the individual level. They examined the nature of human capital re-deployment following the closure of a key anchor firm, makers of the Blackberry mobile phone, Research in Motion. A total of 30,024 former Blackberry workers were listed on the platform, including 5,292 former Blackberry workers who classified themselves as either engineering and IT workers. Since its collapse the city’s economy has grown steadily, largely through the development of an increasingly dynamic EE. Part of this growth is due to the recycling of workers from Blackberry into the local ecosystem. Spigel and Vinodrai (2021) found approximately one-quarter of technology workers who left Blackberry now work in high growth start-ups in the Waterloo EE as opposed to migrating to other regions or working for lower growth firms in the region. By contrast, very few (i.e. 1.5%) ex-employees embarked on an entrepreneurial journey to found high-growth technology ventures in Waterloo (Spigel and Vinodrai, 2021). This kind

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<sup>2</sup> Some scholars note how this also remains the dominant focus of policy makers when designing policies to support EEs (Brown and Mawson, 2019).

of in-depth analysis of the labour market within Waterloo offers very interesting insights into the temporal dynamics of human capital re-deployment in EEs.

One of the most promising new directions for deploying new methodological techniques in the field of EEs, as shown above, is the use of social media and other non-governmental data sources (Feldman and Lowe, 2015; Rocha et al, 2022; Feldman et al, 2022). Social media sites like Twitter, LinkedIn, and Instagram have the potential to “shine new light” on entrepreneurs and their ventures, but also “what they are doing and how they interact” both with each other actors spanning EE (Spigel et al, 2020, p. 490). Importantly, these newer sources of data help to help scrutinise the levels of participation of females and other under-represented groups such as ethnic minorities within the entrepreneurial process more widely. For example, research examining entrepreneurial networking in Edinburgh using MeetUp data discovered that males were highly over-represented in these events (Rocha et al, 2022). Similarly, other research using social network analysis in Chicago and Orlando corroborates these findings by revealing high-growth technology entrepreneurs were predominantly white, male and strongly connected to technology commercialisation and acceleration programmes (Neumeyer et al, 2019).

Indeed, as a whole research on EEs shows that there are persistent and systemic gender and ethnic variances between different cohorts for things like propensity to commence start-ups, levels of entrepreneurial re-entry and ability to secure venture capital/business angel finance (Brush et al, 2019; Simmons et al, 2019). There appear good reasons to use these newer forms of analysing EEs to help explore the labour market dynamics of these fast-moving entrepreneurial phenomenon. These new forms of data on the labour market also offer scholars’ powerful opportunities to help shed light on some of

the overlooked aspects such as the differential access within EEs between different genders and ethnic groups, especially across different levels of seniority within organisations.

### **3. Methodology**

Despite Scotland being recognised as a top international hub for games development, little is known about its skills composition due to a range of issues limiting available metrics representing its ecosystem landscape (Mullen & Hruskova, 2022). This lack of reliable and up-to-date data make it hard to fully – or even partially – grasp economic performance and ecosystem fabric of the video games sector. In an attempt to mitigate these challenges, recent studies have been calling for plurality related to data sources (Credit et al., 2018; Rocha et al., 2021; Spigel et al., 2020), including experimenting with ‘big data’ in an attempt to bypass data limitations in the video games sector (Nesta, 2016). To empirically embrace these calls for new sources of data, we collected information from the ERSM platform LinkedIn comprising two search rounds, both occurring in February 2020. LinkedIn is a professional social networking site in which users list their personal and professional experience to both connect with others whilst also acting as a tool for job hunting. This ERSM holds information about individuals professional background, acting as a social networking site to showcase careers, job search, recruitment, among other work talent related features. In recent years, an increase in how recruitment through professional social media platforms has changed the job market landscape (Spigel et al, 2020; Obukhova & Kleinbaum, 2022) making it possible to access individual level data previously inaccessible through traditional methods (Spigel & Vinodrai, 2021; Spigel, 2022).

There were two elements to our data analysis. The first round comprised data regarding individuals working in the ‘Computer Games’ industry and located in ‘Dundee’.

The data was collected in February 2020, resulting in 562 profiles (Table 1). The platform has several filters, including industry and location. As these profiles are maintained by individuals, an issue arises in terms of consistency and completeness of all data collected. After removing 42 profiles without available content, a total of 520 observations were left for analysis. During the data preparation stage, we calculated how long people stayed in their jobs based on their previous and current professional experience. We estimate that LinkedIn employees comprise approximately two-thirds of all employees in the Dundee computer game EE. Therefore, although these findings are preliminary, they provide a good overall proxy for job churn, retention and cluster resilience in the local EE.

[Insert Table 1 about here]

In the second phase, in order to understand levels of job quality based on job roles, we categorised individuals based on their job seniority level. LinkedIn uses job titles to determine job seniority in terms of rank and influence<sup>3</sup>. We grouped these different job seniority levels into 6 categories: *Top management* (Owner, Partner, CXO, VP); *Multifunctional Management* (Director, Manager); *Development Contributor* (Senior, Entry<sup>4</sup>); *Self-employed and/or Freelancer* (same category on LinkedIn); *Intern/Volunteer* (Training, Unpaid); *Unclassified Job* (no role assigned). Additionally, we attempted to mitigate the lack of gender data by applying a name-based gender API to those profiles containing a first and second name (Carsenat, 2019). To improve the quality of our sample, 11% of profiles were excluded for gender analysis as their results failed to be higher or equal

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<sup>3</sup> For job seniority descriptions on LinkedIn: <https://business.linkedin.com/content/dam/me/business/en-us/marketing-solutions/resources/pdfs/linkedin-targeting-playbook-v3.pdf>

<sup>4</sup> LinkedIn determines these categories based on job title. Entry level jobs for the video games sector comprised mainly junior developers (e.g., Junior Programmer; Junior Game Designer; QA Technician)

to 95% accuracy in terms of gender matching. This process enabled us to estimate the levels of gender imbalances with the Dundee computer games EEs by the level of seniority.

#### **4. Indicative Findings and Discussion**

We now wish to sketch out the landscape of the labour market dynamics within Dundee's computer games industry. In doing so we do not provide a detailed set of empirical findings but instead, following others (Rocha et al, 2022), our core aim is to provide a preliminary picture of how scholars and policy makers can deploy this type of novel methodological approach to help yield practicable and actionable insights to inform policy making within EEs. As a result, these findings should be viewed merely as indicative rather than being exhaustive. Therefore, this exploratory data analysis is used to illustrate how these newer forms of data can help yield important insights into the temporal development of labour market changes within EE.

One of our main observations from our analysis is the insights it provides into the dynamism of the computer games labour market in Dundee. One important indicator of labour market dynamism is the level of churn and circulation of human capital within the local economy. Ever since the seminal work in Silicon Valley by AnnaLee Saxenian (1994), mobility within the local labour market is recognised to be of collective benefit as the movement of the highly skilled workers within EEs is a key mechanism for technology transfer and the formation of interfirm linkages. Scholars hold that mobility is also likely to be faster in high-tech economies, because the demand for the highly skilled in clusters drives higher than normal rates of staff turnover, providing greater job opportunities for individuals (Lawton-Smith and Waters, 2005). Social networks (and related social capital) are argued in the literature to be a key mechanism through which these activities are

facilitated and the development of which is key to innovation-based local economic development (Waters and Lawton-Smith, 2008).

For these reasons we observe that Dundee's computer games EE displays relatively low levels of churn, broadly indicative of less fluid and more anaemic labour markets. In this context, the average duration of people remaining within their current job is roughly four years. Individuals working in the Dundee video games cluster changed jobs after four years on average (based on 92.5% of the population). Every 2.6 years, about half of these people changed jobs. While this is broadly in line with the UK labour market average, by contrast in more dynamic labour markets such as Cambridgeshire and Motorsport Valley it is considerably below these levels (Lawton-Smith and Waters, 2005). If we compare this with even more dynamic labour markets, such as locations like Silicon Valley, the variation is even more marked. For example, young people in major employers such as Google, Apple and Twitter in Silicon Valley change jobs in less than every two years<sup>55</sup>. The relatively low level of churn evident in Dundee's games EE may be a function of the lack of high growth firms (HGFs) who typically drive labour market churn within local economies (Fotopoulos, 2022). Indeed, while being small numerically (6-10%) often HGFs or so-called "gazelles" (Brown et al, 2017) are "outstanding job creators" producing over half of all new employment (Henrekson and Johansson, 2010, p. 227). A lack of HGFs may help explain the low churn which may be particularly impactful for technical workers who look to retain their employment locally rather than via outmigration (Spigel and Vinodrai, 2021).

While churn rates are a sign of the fluidity within the labour market, we now examine proxies for the depth of the local EE in terms of the composition of seniority levels

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<sup>55</sup> <https://www.linkedin.com/pulse/millennials-switch-jobs-silicon-valley-twice-often-national-kunov>

within the stockpile of human capital. One plausible supposition is that a deep reservoir of human capital would result in a large proportion of employees inhabiting positions of high seniority within companies in dynamic local labour markets. As we can see from Table 2 below the single largest category of employment is entry level employees (32.5%). This is typically the classification denoting people with the least level of seniority within organisations and perhaps those with the least levels of human capital and/or specialist knowledge. Relatedly, those in senior positions within the top management team (TMT) are relatively small in number. This demonstrates that the senior decision makers within the Dundee games EE is a very small in number comprising less than 7% of all employees. Beneath this strata of management, is multifunctional managers and they are also relatively sparse consisting of just 13% of employees. Specialist technically skilled personnel such as games designers and programmers make up around 20% of all employees in the games EE. This is significant because it is these specialist types of employees who potentially are the most important for potentially spawning new entrepreneurial ventures in the EE.

[Insert Table 2 about here]

It is well known within the literature on entrepreneurship that diversity is a key hallmark of a thriving, resilient and inclusive regional economy (Roundy et al, 2017). As Richard Florida stated some twenty years ago, regions that "wish to encourage economic creativity must also encourage diversity" (Florida, 2003, p. 40). In terms of literature on regional development, evidence suggests diversity may help raise productivity and wages through innovation, knowledge spillovers, entrepreneurship, market access and enhanced trade channels (Nathan, 2015; Tavassoli et al., 2021). On the other hand, regions with low levels of diversity will perform less effectively and be less inclusive.

To investigate levels of diversity within the location under investigation we explored the employment LinkedIn data to explore the gender balance within the Dundee computer game EE. What this reveals is significant gender imbalance across the labour market in the Dundee EE with far more male than female representation across all levels of seniority. Interestingly, the level of seniority featuring the greatest levels of female participation was in the area of entry-level employees where 17 per cent of employees were female. Again, these will typically be the least senior positions within organisations who will often be the most precarious in terms of employment conditions and job security. The next category of employee featuring female participation was multifunctional management, but this still only comprised 16 per cent female employees. When we look at the TMTs across the sector this figure falls significantly where female participation is less than 7 per cent.

This very low representation of females in top managerial positions is likely to perpetuate this gender imbalance. For example, there is evidence that homophily plays a role in access to capital, in that venture capital firms with women partners are more likely to invest in companies that have women CEOs (Brush et al, 2019). Therefore, this male-dominated working environment may be stuck in a vicious cycle where females may be overlooked due to unintentional bias when recruiting new employees, especially at levels of high seniority where TMTs often rely on relational connections when making recruitment decisions (see Ruef et al, 2003). This is important because new evidence also suggests the job networking behaviours for females is distinctive to men, with the former aiming their scouting activities at finding employers and career options that give women a fairer chance at professional success (Obukhova and Kleinbaum, 2022). As noted by other scholars, while in theory EEs offer equal opportunities for entrepreneurs and employees alike, research



frequently finds that when it comes to many aspects of these ecosystems, women face strong disadvantages (Brush et al, 2019).

## **5. Conclusions**

This article aimed to unpack some key facets of the labour market dynamics of Dundee's computer games EE. Using a novel source of data from the ERSM platform LinkedIn we were able to shed some light on some of the important aspects and limitations within Dundee's EE. New social media and networking sites such as LinkedIn and Twitter offer promising avenues for deriving new metrics for networks, culture and labour market dynamics in EE research (Credit et al, 2018). We found relatively low levels of churn suggestive of a fairly sluggish labour market and our labour market profiling revealed a relatively weak skills demographic dominated by entry-level employment, featuring low levels of female participation, especially in positions of seniority within the EE's company base. Given the city's peripheral status and relatively marginal role in the computer games industry, we can speculate that this truncated labour market picture is likely to endure over time. However, developing this kind of overview does provide scholars with greater understanding into the labour market dynamics of a fairly nascent EE, while simultaneously offering policy makers instructive insights to help interventions in this local sector.

This study clearly has limitations given the fact that it relies solely on people who are registered on the ERSM platform investigated. That said, the benefits of this type of innovative data source are varied. First, it captures the nature of the labour market's dynamics in real-time providing policy makers with timely insights. Second, it enables temporal trends to be investigated which is useful for tracking important dynamics on a longitudinal basis. For example, female participation can be monitored so that new

initiatives to increase participation can be evaluated for their efficacy in changing these trends. Finally, and importantly for scholars, these types of data sources are ubiquitous, and are available in most developed economies which enables useful comparative research to be conducted. These comparisons examining the nature and dynamics between different EEs in different spatial contexts offer rich insights into the differential composition of labour markets across different locations. Given the innovative nature of these newer forms of data sources, a fertile research agenda awaits scholars to better comprehend the dynamic evolution of labour markets both within (and across) these complex spatial entrepreneurial configurations.

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**Table 1 - General work talent stats from individuals working in the Computer Games industry based in Dundee**

<b>Number of profiles</b>	562 observations
<b>Inconsistent profiles (no data available)</b>	42 profiles
<b>Data analysis</b>	520 profiles
<b><i>Stats about time spent in a job position</i></b>	
<b>Average</b>	1484 days
<b>Mean</b>	955 days
<b>Lowest</b>	57 days (12), 88 days (4), 118 days (6), 149 days (8), 179 days (15)
<b>Highest</b>	6996 days, 7057 days, 7302 days, 8276 days, 10559 days
<b>SD</b>	1413.1
<b>Vcoef</b>	0.95
<b>Range</b>	10502
<b><i>Distribution</i></b>	
<b>.05</b>	149 days
<b>.10</b>	210 days
<b>.25</b>	363 days
<b>Median</b>	955.5 days
<b>.75</b>	2370 days
<b>.90</b>	3378 days
<b>.95</b>	3802.5 days

**Table 2 – Work talent composition by aggregate and LinkedIn job seniority categories**

<b>Aggregated seniority categories</b>	<b>LinkedIn seniority categories</b>	<b>Work talent total/percentage</b>	<b>Aggregated total/percentage</b>
<i>Top management</i>	Owner	18 (3.5%)	36 (6.9%)
	Partner	2 (0.4%)	
	CXO	11 (2.1%)	
	VP	5 (1%)	
<i>Multifunctional management</i>	Director	37 (7.1%)	68 (13.1%)
	Manager	31 (6%)	
<i>Development contributor</i>	Senior	112 (21.5%)	281 (54%)
	Entry	169 (32.5%)	
<i>Self/Employed and/or Freelancer</i>	Self Employed/Freelancer	14 (2.7%)	14 (2.7%)
<i>Intern/Volunteer</i>	Training	9 (1.7%)	11 (2.1%)
	Unpaid	2 (0.4%)	
<i>Unclassified</i>	No role	110 (21.2%)	110 (21.2%)



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