SKILLS GAPS AFFECTING THE ONLINE GAMING INDUSTRY IN MALTA

AN ANALYSIS OF SURVEY RESULTS



1 Executive summary

Context

The gaming industry in Malta has grown markedly over the last years, and it sustained its contribution to the growth of the Maltese economy. During the first half of 2019, it generated just over €779 million in terms of gross value added (GVA), accounting for over 13% of the economy. This represented a 10% growth over the corresponding period of 2018 when the industry had already increased its GVA by 12%. As at the end of June 2019, the gaming industry directly accounted for 7,011 jobs in full-time equivalent terms. A survey carried out by the Malta Gaming Authority (MGA) for the year 2018 indicated that when taking indirect employment into account, the total employment in the gaming industry was estimated to be around 9,800 FTE jobs¹.

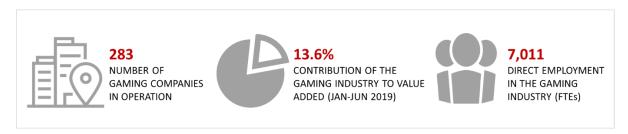


Figure 1: Key highlights (end-June 2019)

The continued growth of the industry registered over the past years, both in terms of employment and of the number of firms present on the local market, led to a high number of job openings. Gaming companies are searching for candidates with various backgrounds and skills including ICT, statistics and mathematics, marketing, law, finance and others. Furthermore, these areas of specialisation are experiencing strong demand from other growth sectors of the domestic economy and also internationally. For this reason, the demand for human resources cannot be satisfied exclusively through home-grown talent but also requires attracting human capital from abroad. As at the end of June 2019, 68.6% of all employees in the online gaming industry were non-Maltese. Although the share of foreign employees decreased by nearly two percentage points year-on-year, this highlights the need for expatriate workers to sustain the growth of the industry. In light of these developments, it is becoming increasingly important to ensure that the employees' skills are effectively aligned to the needs of the local labour market.

In order to obtain a better understanding of the skills gap in the gaming industry, the MGA has conducted the first survey on the subject in 2018 for the preceding year (2017). This report highlights the key findings of a survey carried out by the MGA in 2019 (for 2018) and outlines the main elements of similarity and contrast with the previous results, where relevant.

The results reflect the aggregates and averages of replies received from 238 individual respondents. All survey participants were given equal weight to reflect the individual opinions expressed in a fair manner. The results of the survey were also analysed by applying weights reflecting the employment levels in the respondents' firms.

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¹ MGA, Interim Performance Report 2019.



2 Key findings

- A total of 730 unfilled positions have been reported by the online gaming companies in Malta as at the end of 2018;
- ➤ 68% of unfilled vacancies are primarily at the operational level;
- The majority (69%) of the vacancies remained unfilled for no more than three months;
- Lack of work experience (28%), competition from other firms (27%) and lack of qualifications (21%) are the main reasons for unfilled vacancies;
- According to the survey results, more than one-third of the operators recruit personnel employed by other firms in the sector;
- ➤ 35% of firms engage in in-house training activities or mentoring in order to tackle skill shortages;
- The recruitment of workers immediately after the completion of their formal education was reported by 9% of the surveyed firms, confirming the potentially stronger role which could be played by educational institutions;
- Several policy efforts have been made to ensure that training courses are aligned with the industry's needs. In 2017, the European Gaming Institute of Malta (EGIM) was launched following an agreement signed between the MGA and Malta College of Arts, Science and Technology (MCAST). In 2018, 56 students applied for the iGaming Diploma at MCAST, and an additional 43 enrolled between January and mid-November 2019;
- By mid-November 2019, 58 students enrolled for the Award in iGaming course at the iGaming Academy a joint collaboration between the MCAST and EGIM;
- In 2019, 21 students were selected and matched with seven companies through the Gaming Malta's Student Placement Programme, an initiative that aims to reduce the mismatch which exists between the supply and demand for gaming skills in the Maltese labour market; and
- The majority of the surveyed companies expressed their satisfaction with the training offerings in Malta; however, between 15% and 20% of the respondents indicated that more needs to be done with respect to the availability, quality and value for money of the training opportunities in Malta.

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3 Size, nature and causes of unfilled vacancies

The analysis of the vacancies was classified into six main job roles relevant to the gaming industry, as shown in Figure 2. Operators could also report additional vacancies which did not fall under any of the six main categories. The various job roles were based on desk research and were corroborated through the interviews held with the operators². On the other hand, job levels in the sector were described as top management, middle management and operational level (see Annex 1). Thus, the analysis presented in this report caters for job roles, job levels and firm size.



Figure 2: Job categories within the online gaming industry

3.1 Unfilled vacancies

The results of the survey conducted by the MGA during the first quarter of 2019 show a total of 730 unfilled vacancies as at the end of 2018. While arithmetically this represents a decrease of 7% when compared with 781 vacancies reported a year earlier, in practice it represents a stable situation when considered in terms of the margins of error inherent in this type of survey exercise. In line with the result of the previous survey, around 68% of the vacancies relate to operational jobs that could typically be filled by those just leaving formal education. Just above a quarter of the vacancies relate to middle management positions, which would require more experience. Only 5% of the vacancies relate to top management positions.

	Top mngmt	Middle mngmt	Operational	Total
Game operation and development	8	19	65	92
Data and analysis	1	7	25	33
Marketing	13	75	185	273
Legal and compliance, risk and fraud	6	34	42	82
Technology	1	47	80	128
Finance, payment and HR	8	13	29	50
Others	1	0	71	72
Total	38	195	497	730

Table 1: Job vacancies in the online gaming industry

The majority (69%) of the vacancies remained unfilled for no more than three months. This means that more than 500 positions are typically filled within 90 days. Around one-fifth of the positions in the gaming industry remained open for a period between three to six months, while 10% were left unfilled for over six months. It can be interpreted that jobs in some areas take longer to fill due to

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² Study commissioned by the MGA, February 2016.



difficulties with finding talent with the right skills. Vacancies in micro firms³ tend to remain vacant for longer when compared with those of other firms, with 24% of job openings remaining unfilled for longer than six months.

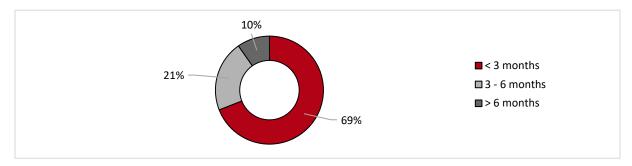


Chart 1: Unfilled vacancies by period

The predominant area of vacancies as at the end of 2018 was that involving marketing jobs, which accounted for 37% of job openings. This category includes jobs in customer care and digital marketing. These vacancies target mainly professionals with an e-commerce background and marketers with insight into player psychology. Vacancies within the technology category were also significant, accounting for 18% of the total vacancies. Job openings within game operation & development reported the highest drop when comparing year-on-year results. They constituted around 13% of the total number of vacancies. In 2017, vacancies in that category accounted for the highest share of all vacancies, as shown in Chart 2. Jobs characterised by a strong demand elsewhere in the economy, falling within the legal and compliance, risk and fraud category, constituted for 11% of all vacancies as at the end of 2018. Vacant posts relating to data analysis were relatively small when compared with the other categories. This area requires highly specialised human capital quite specific to gaming, and therefore, it is not subject to competitive forces from other economic sectors.



Chart 2: Distribution of job vacancies

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³ The results of the survey were analysed against the National Statistics Office (NSO) metadata, which classify company size according to the number of Full Time Equivalent (FTE) employees. Firms with up to 10 FTE employees are classified as micro firms, those comprising up to 49 workers are considered to be small firms, those which have up to 249 employees are classified as medium enterprises while those which have 250 or more employees are categorised as large firms.



When considering results by firm size, top manager positions remain mostly vacant in micro and medium firms. Such vacancies pertain mainly to the game operation and development category. Small and larger firms also hold open some vacancies for top managers. Nearly all vacant posts in small firms belong to the finance, payment and HR category whilst large firms are mostly in search of candidates who can fill in marketing jobs.

Job positions in the middle management level were reported mostly by medium-sized firms, with the highest number of vacancies belonging to the marketing and technology categories. Other firms reported job openings primarily in marketing positions.

Large firms reported a substantial number of vacancies at the operational level, standing at 80% of all vacancies in these firms, with the highest number of jobs belonging to the marketing category. Medium firms also reported vacant posts at this level, albeit distributed evenly between various units. Small firms mostly struggle with finding the right candidates to fill in technology jobs at the operational level. Micro firms reported vacancies at the operational level as well, mostly within the marketing and technology units.

This analysis indicates that there is significant potential for the local education system to contribute to addressing the issues of job vacancies by teaching skills related to digital marketing and gaming-specific marketing skills in Malta. Given the nature of the industry, marketing jobs differ from other industries and require an in-depth understanding of gaming products, branding, customers' profiles, etc. By proceeding in this manner, a talent pool of human capital that could take up unfilled vacancies in higher organisational levels in the future would be created, while also partly replacing the flow of foreigners with upcoming local talent.

3.2 Main causes of unfilled vacancies

Gaming firms are constantly searching for experienced workers. The lack of job experience (28%) tops the list of the main causes of unfilled vacancies, as shown in Chart 3. The lack of appropriate qualifications follows close behind, with 21% of the responses. These percentages are somewhat lower than those reported in 2017, which stood at 33% and 24% respectively. Unsurprisingly, competition from other firms is another main reason for the persistence of job vacancies. It is important to note that only 9% of the firms indicated a general lack of interest by workers in the sector as a cause of vacancies, in line with the 2017 results. The remaining operators indicated other reasons for open vacancies, like difficulties with finding candidates with the right attitude and cultural fit in the organisation or long recruitment processes which hinder companies from securing the right applicants.

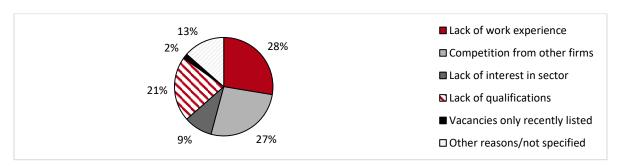


Chart 3: Main causes of unfilled vacancies

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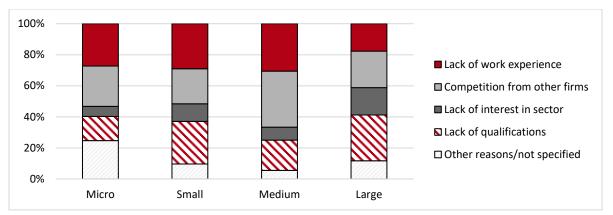


Chart 4: Main causes of unfilled vacancies by firm size

Lack of experience as the main cause of unfilled vacancies was reported by firms of all sizes, as shown in Chart 4. In the case of large firms, however, competition from other employers and lack of appropriate skills emerge as even more important issues.

Responses from medium-sized firms highlight competitive packages and wages offered by other firms, presumably the larger ones, as considerable causes of unfilled vacancies.

Furthermore, nearly one-third of the operators expressed their dissatisfaction with the speed of the labour market's adjustment to changes in the demand for skills. Medium-sized and large firms, which are characterised by a more dynamic working environment than smaller firms, tend to be less satisfied in this regard, as shown in Chart 5.

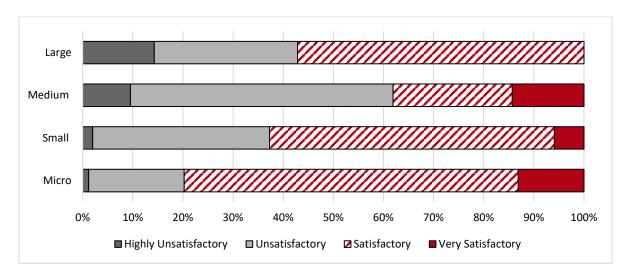


Chart 5: Speed of labour market

These results confirm the potentially important contribution of the education sector in addressing the human capital requirements of the online gaming industry in Malta. Investment in human capital through technical education would lead to a larger pool of experienced workers in future years. Furthermore, the strong interest of workers in the sector indicates the existence of a pool of people that could be attracted to receive gaming-related training.

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4 Recruitment strategies

Over the past two to three years, most firms (around 35%) continued to recruit workers who were already employed by other firms in the online gaming sector, as shown in Chart 6. Around a quarter of the respondents, typically from larger firms, indicated recruitment from abroad as another important source of recruitment. The sourcing of experienced talent from firms in another industry is practised by 20% of the companies; five percentage points less when compared with the 2017 results. The recruitment of workers who have just finished their education was reported by 9% of the surveyed companies, edging downwards from the 2017 results. On the other hand, the sourcing of candidates from secondary and post-secondary institutes, while remaining relatively low, rose by five and two percentage points respectively between 2017 and 2018. This can be seen as a result of the various measures implemented by the Government over the past year, as reviewed in Section 6.

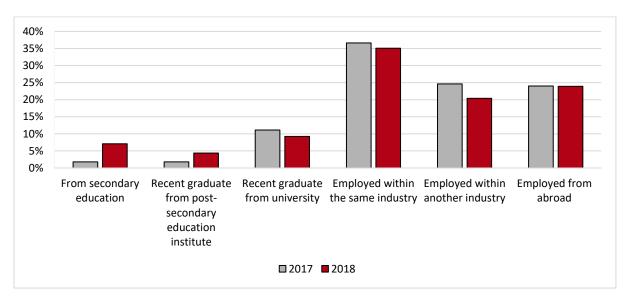


Chart 6: Sources of recruitment over the past two to three years

Large firms prefer recruiting experienced employees from within the same industry, from other industries or from abroad, as shown in Chart 7. Only 13% of all recruits are recent graduates from university. These results confirm the potentially stronger role which could be played by local educational institutions in servicing the needs of the online gaming industry.

On the other hand, micro and small firms have a strong preference for candidates from the same industry who, in most cases, know the job well and require less training to reach the companies' expectations.

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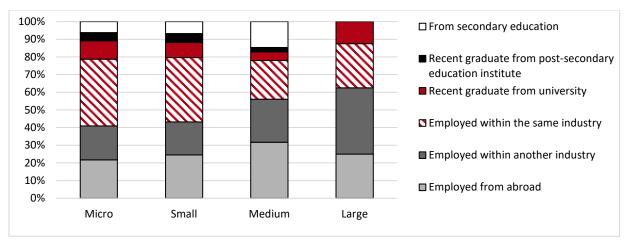


Chart 7: Sources of recruitment over the past two to three years by firm size

5 Training and development activities

Against this background of persistent job vacancies, most respondents indicated that they had taken steps to create the skills they require, as shown in Chart 8. This is in line with the results of the 2017 survey. The relatively minimal 6% of respondents who reported no activity in this regard mainly belong to small and micro firms with a limited amount of resources dedicated to human capital formation, or larger firms which can readily tap into foreign talent pools.

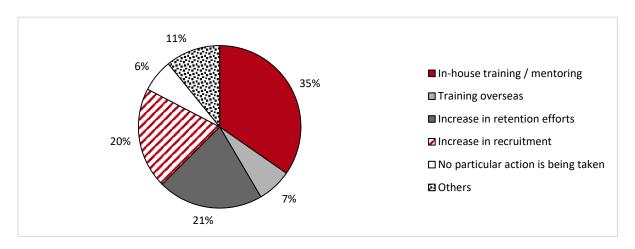


Chart 8: What kind of initiatives are being undertaken to fill in the existing skills gap?

Out of all the respondents to the MGA's survey, 35% indicated that they invest in in-house training or mentoring in order to tackle skill shortages. Furthermore, the responding companies said that to fill in the existing skills gap, they had increased not only their recruitment (20%) but also their retention efforts (21%). Training overseas was also mentioned as a strategy to address the skills gap, particularly by micro firms.

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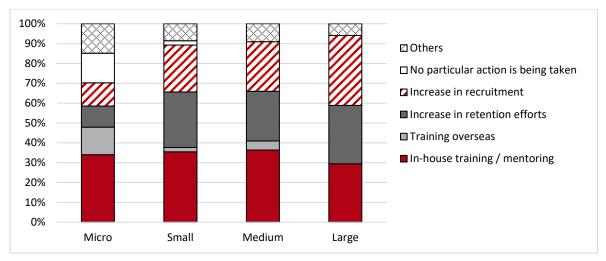


Chart 9: Initiatives undertaken to fill in the existing skills gap by firm size

Although most of the survey respondents tried to fill their existing skills gap by increasing recruitment, it is evident that this strategy is mostly preferred by large firms. In fact, 35% of large firms put more effort into recruitment in order to be able to compensate for higher staff turnover. On the other hand, firms of all sizes recognise the need to retain trained and qualified workers. Larger firms are more likely to concentrate on this strategy.

Different business sizes undertake various kinds of initiatives to fill in the existing skills gap. Table 2 outlines some of these initiatives:

Company size	Initiatives
	Online training
Micro	Outsourcing
	Professional development
Relocation packages	
Smail	Intrapreneurship initiative and employee empowerment
	Building a strong culture to attract staff from other firms
Medium	Looking at alternative locations and freelance
	Internal recruitment
Large	Social media campaigns

Table 2: Other initiatives to close the skills gap

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6 The educational offering to the online gaming industry in Malta

The survey obtained the respondents' opinions regarding the value for money, quality and availability of the training opportunities in Malta when compared to other jurisdictions with which the operators had experience. While the large majority of responses pointed to at least a degree of satisfaction with the outcomes, between 15% and 20% of the respondents indicated that more needs to be done with respect to the availability, quality and value for money of training opportunities in Malta (see Chart 10).

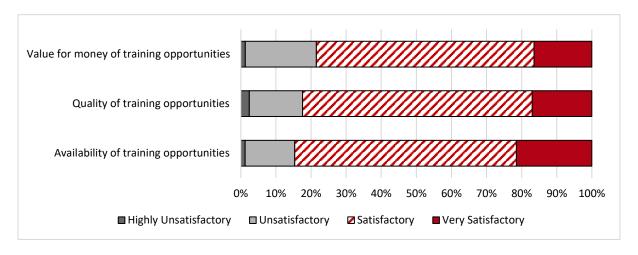


Chart 10: Training opportunities in Malta

In terms of the survey results reported above, this may be interpreted in terms of the need for stronger efforts towards apprenticeships and on-the-job educational experiences to make up for the lack of experience, which is in strong demand from employers. When considering the various restrictions pertaining to promotion and advertising in the industry, there is also further scope for specialised courses covering specific requirements of different gaming jurisdictions, gaming products and player behaviour.

Larger firms, in particular, tend to be less satisfied with the quality of training opportunities, with one-fifth of them rating the courses as "unsatisfactory". It has to be acknowledged that such companies have more resources to offer their own tailor-made in-house training which satisfies the basic needs of the company. They might also send their employees abroad to reputable training organisations. The respondents recognised that significant progress had been achieved over the years in providing quality education to the online gaming sector in Malta and the overall increase in the iGaming courses offered. However, the companies lamented that most of the courses are very generic and geared towards casino-type games or sports betting. Their relevance to other gaming products is very low.

Several policy efforts have been made to ensure that training courses are aligned with the industry's needs. In November 2017, the EGIM was launched following an agreement signed between the MGA and MCAST. This strategic initiative aims to develop further the talent pool in the gaming industry and create more long-term careers for both local and foreign students through educational programmes which will enhance the sustainability and growth of the workforce in the sector. In 2018, 56 students applied for the iGaming Diploma at MCAST and an additional 43 students enrolled by mid-November 2019. The course is designed to provide the basic knowledge and skills required to consider working

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in the gaming industry, these being pre-requisites for the follow-up course - a two-year Level 4 Advanced Diploma Programme. At this level of study, students will be introduced to fundamental subjects in iGaming, web development, multimedia and basic data analysis. This course also includes a two-week work exposure to help students form a clear idea of the nature of the ICT vocation they intend to follow. In addition, by mid-November 2019, 58 students enrolled for the Award in iGaming course at the iGaming Academy (IGA), which is an MQF accredited course developed in collaboration between the MCAST, EGIM and IGA for students looking to further their career in the online gaming industry or gain a greater understanding of the sector.

Cognisant of the employment challenges on the local market faced by gaming companies and the need for the necessary work experience students require to pursue a career in the industry, the Government and Gaming Malta initiated the Student Placement Programme. This initiative aims to reduce the mismatch which exists between the supply and demand for gaming skills in the Maltese labour market. In 2019, a total of 21 students were selected and matched with seven companies participating in the programme. The majority of the students had applied for a work placement in technology-related departments. Students selected for the programme have the opportunity to gain the experience needed by applying their academic and vocational knowledge on the job in a workplace scenario during an internship period of 11 weeks.

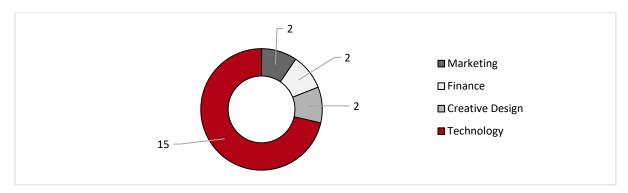


Chart 11: Student Placement Programme - number of students by placement category

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Annex 1 Job levels and categories

Below are the levels identified for the purpose of the survey:

- **Top management** including C-level positions or equivalent;
- **Middle management** including Heads, Managers, Senior Officers and Senior Executives or equivalent; and
- **Operational level** including Executives, Officers, Administrators, Administrative Assistants or equivalent.

Below is a non-exhaustive list of the typical job roles included within the categories listed below:

- Game operation and development: Head of Poker, Poker Manager, Casino Coordinator, Casino Campaign Manager, Mobile Product Manager, Head of Sportsbook, Sportsbook Manager/Product Development, Odds Compiler Specialist, Senior Bookmaker, Senior Trader.
- Data and analysis: Head of Analytics, Analytics Manager, Business Data Analyst, Data Warehouse Architect, Head of BI, BI developer.
- Marketing: CRM Manager, Head of Brand, Digital Marketing Manager, Head of Affiliates, Head of SEO, Chief Commercial Officer, Head of Customer Care, Sportsbook Marketing Manager, Digital Content Manager, Copywriter, Social Media analyst, Graphic Designer.
- Legal and compliance, risk and fraud: Legal Compliance Manager, Legal Counsel, Chief Risk Officer, Fraud Manager, Fraud Analyst.
- Technology: Senior Software Developer, Front-end Developer, Back-end Developer, Web Developer, Web UX/UI Designer, Senior QA-Engineer, Platform Engineer, Software Engineer.
- **Finance, payment and human resources**: Chief Financial Officer, Payments and Reconciliation Analyst, HR Manager, Recruiter, Trainer.

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Annex 2 Job positions and required skills set

Below is a list of the main job positions within each category and an overview of the generic and industry-specific skill set required for these job positions.

Game operation and development

Jobs in the iPoker sector:

Job overview	Generic skillset	Skills specific to gaming		
Mobile Product Developer				
 Builds, maintains and delivers product launches and enhancements, elements of business analysis, UX, development and product management, all within mobile gaming Creates new apps, produces requirements and full specifications, and then ensures that the Web design team produce an outcome that meets all business needs Keeps up to date with mobile 	 Technical degree/qualification Strong understanding of mobile and web-based technologies Experience in UX and UI and able to wireframe Strategic and analytical thinking Customer-focused Communication and presentation skills Problem-solving skills 	 Thorough understanding of the target audience, the mobile casino, poker and bingo players Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming 		
technology	Head of Dalian			
	Head of Poker			
- Drives front-end product development across desktop and mobile platforms	Management skillsCommunication skillsCustomer-focused	- Knowledge of gaming software applications and gaming operations		
Overall management of poker productsCommunicates with a number	 Understands working in an online environment Interpersonal skills 	Understands poker and target audience Familiar with laws and		
of key stakeholders, including the marketing team and backend functionality	- Marketing skills- Basic software development knowledge	regulations governing remote gaming		
Poker Manager				
- Responsible for the direction that keeps the regular players coming back, while attracting new players with a mix of games, tournament structures, and events that offer	 Creative analytical thinker Customer-focused Communication, interpersonal and relationship-building skills, and maintaining skills 	 Knowledge of gaming software applications and gaming operations Understands poker and target audience 		

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something for both beginners	- Understands working in an	- Familiar with laws and
and seasoned players	online environment	regulations governing
- Responsible for revenue		remote gaming
generation in accordance with		
business objectives		
- Acts as a key stakeholder and		
poker expert to the internal		
development team		
- Steers and provides inputs to		
product roadmap		
- Plans and schedules all poker		
tournaments		

Jobs in the iCasino sector:

Job overview	Generic skill set	Skills specific to gaming
	Casino Coordinator	
- Defines marketing strategy	- Communication skills	- Understands the casino
- Ensures customers are looked	- Organisational skills	product, its development
after from their first-ever touch	- Teamwork and interpersonal	process and the online
point onwards	skills	gaming industry
- Works with Marketing Manager	- Analytical and problem-	- Knowledge of gaming
to ensure customers receive	solving skills	software applications
relevant offers and	- Marketing skills	- Familiar with laws and
communications	- Customer-focused	regulations governing
- Reports on casino performance	- In-depth understanding of	remote gaming
to the team and Managing	target audience	
Director		
- Improves reporting with		
insights that help further		
develop the product and		
offering, and customer		
experience		
- Oversees any product and		
game launch plans		
- Ensures that project deadlines		
and key milestones are met		
Casino Cam	npaign Coordinator/Marketing Mar	nager
- Responsible for the	- Market analysis skills	- Understanding of online
implementation, monitoring	- Time management skills	casino and customer
and evaluation of campaigns	- Strategic analytical thinking	behaviour in online
- Develops the casino marketing,	- Customer-focused	gaming industry
business development and	- Organisation skills	- Knowledge of gaming
brand strategy	- IT skills	software applications

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- Responsible for designing a	- Communication skills	- Familiar with laws and
customer loyalty programme	- In-depth understanding of	regulations governing
which is in line with the	target audience	remote gaming
company's strategy to attract,	- Business development skills	
develop and retain the right	- Management skills	
target of customers		
- Accountable for developing		
new business opportunities,		
managing relationships with		
business partners and key		
customers		

Jobs in the iBetting sector:

Job overview	Generic skill set	Skills specific to gaming		
Head of Sportsbook				
 Overall product management responsibility for the sportsbook products In close cooperation with the Brand Managers, the Head of Sportsbook's responsibility is to ensure the best possible sportsbook experience for customers Stays up-to-date with the latest market developments and competitors Manages relationships with suppliers in sportsbook-related questions and relations with 	 Communication skills Organisational skills Teamwork and interpersonal skills Analytical and problemsolving skills Marketing skills Customer-focused In-depth understanding of target audience 	 Understands the casino product, its development and the process of the online gaming industry Knowledge of gaming software applications Familiar with laws and regulations governing remote gaming 		

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Sportsbook Manager/Product Development

- Leads all activities associated with the measurement, analysis and reporting of the performance of the sportsbook platform
- Understands business strategy and competitive position
- Works closely with other product owners to help shape plans for evolving the overall sportsbook customer experience

- Management skills
- Communications skills
- Customer-focused
- Interpersonal skills
- In-depth understanding of target audience
- Business development skills
- Strong knowledge of online product development and online customer behaviour
- Familiar with laws and regulations governing remote gaming
- General understanding of sports betting

Odds Compiler Specialist

- Monitors odds for matches available in the sportsbook
- Compiles odds, evaluates risks, proposes betting fixtures, analyses profit/loss and betting behaviour
- Reviews operational management and compliance
- Operates the day-to-day sportsbook in collaboration with the team
- Assists in the planning and coordination of product launches and improvement programs

- Strong mathematical and analytical skills
- Statistical skills
- IT skills
- Communication and interpersonal skills
- General understanding of sports betting
- Familiar with laws and regulations governing remote gaming

Senior Bookmaker

- Leads a small team which compile sports odds
- Proactively trades on sports markets, monitors liabilities and makes necessary price changes to ensure maximum profitability
- Ensures sports offer is kept up to date

- Team player
- Eye for detail
- Critical and analytical thinking
- Organisation skills
- Communication skills
- Time management skills
- Understanding of sports betting
- Familiar with laws and regulations governing remote gaming

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 Analyses profit/loss and general betting behaviour from shops/clients Monitors competitors' offers Manages company liabilities Analyses market trends and helps to increase the sportsbooks' current portfolio of markets Supports and maximises the growth in profitability of the products by providing effective day-to-day trading and liability management of sports markets 	Senior Trader - Statistical, mathematical and market analytic skills - Communication skills - Time management skills - Customer-focused - Risk management skills - Strategic and logical thinking	- Understanding of sports betting - Familiar with laws and regulations governing remote gaming
	Live Trader	
 Sets up and runs live betting markets Compiles odds for specific matches and sports during the match Settles, checks and ensures the correct working of live betting processes and makes sure the product is competitive in terms of both odds and range of bets 	 Mathematical, statistical and analytical skills Logical mind-set Communication skills 	Understanding of sports betting Familiar with laws and regulations governing remote gaming

Data and analysis

Jobs in the data analytics sector:

Job overview	Generic skillset	Skills specific to Gaming			
	Head of Analytics				
- Works closely with the BI Team	- Degree or equivalent within	- Knowledge of gaming			
and liaises with the Data	financial, mathematical or	software applications			
Warehouse Architect	economic discipline	and gaming operations			
- Provides guidance on the BI	- Leadership skills	- Familiar with laws and			
strategy and assists different	- Business development skills	regulations governing			
departments with analytics on	- Problem-solving and	remote gaming			
reporting and business needs	analytical thinking				

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- Responsible for developing reports	- Strong communication and	
and dashboards, and building	presentation skills	
Prototype Analytical Data Models		
- Develops new metrics and		
indicators to enhance aspects of		
player behaviour		
- Assists the enhancement of the in-		
house data warehouse		
	Analytics Manager	
- Builds the necessary systems to	- Degree or equivalent with	- Knowledge of gaming
keep high-quality data at hand at	financial, mathematical or	software applications
all times for the business	economic discipline	and gaming operations
- Implements company-wide	- Data analytics skills	- Familiar with laws and
analytics tools and customer	- Vast experience with	regulations governing
retention schemes	manipulation using a variety	remote gaming
- Suggests ways of improving the	of tools	
product via a number of research	- Problem-solving skills	
techniques	- Critical thinking	
- Mentors junior analysts and drives		
day-to-day decision-making		
	Business Data Analyst	
- Takes huge volumes of data and	- IT/Business and Computing	- Knowledge of gaming
turns that data into real business	related qualification	software applications
insights that will enable growth of	- Knowledge of working in an	and gaming operations
the business	online environment	- Familiar with laws and
- Identifies how site development	- Statistical analysis and	regulations governing
and changes drive changes in	hypothesis testing skills	remote gaming
customer behaviour	- Data analytics skills	
- Utilises various research methods	- Problem-solving skills	
to suggest improvements based on	- Critical thinking	
the data		
	ata Warehouse Architect	
- Works within a multi-disciplinary	- Maths/Computing/Technical	- Knowledge of gaming
team to deliver, develop and	related degree	software applications
manage a multi-layered data	- Statistical, mathematical	and gaming operations
warehouse with data sets specific	and analytical skills	- Familiar with laws and
to the gaming industry	- Knowledge of data	regulations governing
- Manages the data capture,	integration products, data	remote gaming
loading, transformation and data	warehouse management	
integration processing, and	and script language	
scheduling of the data processing - Works closely with the BI Architect	- Problem-solving skills - Communication skills	
,		
to design and deliver user-facing	- Extensive SQL query writing and optimisation	
	and optimisation	

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data models that promote speed,	
accuracy and ease of use	

Jobs in the BI sector:

Job overview	Generic skillset	Skills specific to Gaming
	nd of Business Intelligence	· · · · · · · · · · · · · · · · · · ·
 Leads a team to develop analytical decision frameworks, design datasets, track and measure strategic initiatives Works across the organisation and with clients to ensure that the right data is collected and processed to enable smart, datadriven decisions Works with business partners to interpret results, devise action plans and evolve business 	 Mathematical/Statistical related degree Familiarity with database management systems, data integration tools, reporting tools, and analysis/dashboard tools Statistical skills, IT skills, and research skills Presentation skills and communication skills Ability to analyse digital 	 Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming
execution	customer acquisition	
	BI Developer	
 Works with a team of analysts and data development professionals Helps to create and manage company insights across its operations Designs and develops the data warehouse platform Provides reporting and dashboard solutions in conjunction with business needs Data modelling and data integration of all business data including internal, third party and migration 	 Maths/Computing/Technical related degree Knowledge of SQL and working within Agile and Scrum environments Knowledge in working with data integration tools Coding ability with languages such as .NET, Java and/or Python Strong communication skills and interpersonal skills 	 Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming

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Marketing

Job overview	Generic skillset	Skills specific to Gaming
	nior Software Developer	
 Responsible for the ongoing development and maintenance of the software Maintains the database structure for the company's applications Develops enterprise quality systems for use in a highly distributed environment Supports the development team by providing prototyping and technology explorations to help identify key technologies for future projects 	 IT-related degree/qualification Strong software design and debugging skills Web development knowledge, using software such as Spring MVC, Spring Web Sockets and AngularJS Development using enterprise technologies and agile development methodology Integrating with SQL and Non-SQL databases Analytical, evaluative and problem-solving skills 	 Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming
	Front-end Developer	
 Responsible for implementing front-end features on online channels Develops and tests across multiple browsers, platforms and devices, including smartphones and tablets Develops cross-browser and cross-platform compatible solutions 	 IT-related degree/qualification Understanding of cross-browser and cross-platform issues, experience with JQuery Advanced knowledge of web and mobile UX/UII HTML5, LESS and SASS experience, coding valid XHTML and CSS mark-up, agile methodologies and working with version control systems such as GIT and JavaScript frameworks to create rich interactive content Good understanding of Web Accessibility 	 Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming
Back-end Developer		
 Responsible for defining the architecture and future direction of the back-end system 	- IT-related degree/ qualification	 Knowledge of gaming software applications and gaming operations

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- Reports directly to the CTO with a focus on database applications and development architecture
- Responsible for mobile application support and a technology review of the existing portfolio
- Plans, designs, develops, debugs, implements and supports webbased applications and services
- Knowledge of systems such as .NET, C#, MVC, SQL and WCF, and of frameworks such as NUnit, StructureMap, Moq or similar
- Experience using versioning control systems
- Communication skills
- Analytical, evaluative and problem-solving skills

 Familiar with laws and regulations governing remote gaming

Web Developer

- Helps imagine, prototype, build and maintain the user interfaces in different platforms, including websites, web applications and online games' interfaces
- Works with the designers to bridge the gap between graphical design and technical implementation
- IT-related degree/ qualification
- Proficient understanding of web markup, HTML5 and CSS3, PHP, JavaScript, UI/UX principles, AJAX, JQuery and Websocket
- Analytical, evaluative and problem-solving skills
- Knowledge of gaming software applications and gaming operations
- Familiar with laws and regulations governing remote gaming

Web UX/UI designer

- Focuses on the conception, design and implementation of interactive user interfaces using current web technologies, also for mobile devices
- Analyses business requirements, gathers analytics data, creates and builds prototypes and verifies them through user testing and A/B testing
- IT and/or Marketing related degree/qualification
- Expertise in use case development, mock-ups and fully interactive prototypes
- User experience design for web applications that leverage emergent technologies
- Strong conceptualisation and visual communication ability
- Drawing and design skills and sketchbook technique
- Understanding of responsive design practices, mobile applications and mobile optimisation
- Analytical, evaluative and problem-solving skills

- Knowledge of gaming software applications and gaming operations
- Familiar with laws and regulations governing remote gaming

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Senior QA Engineer - Works as part of an Agile team - IT-related degree/ - Knowledge of gaming following developments, from qualification software applications conception to release - Experience with high and gaming operations - Creates test strategies, test plans performance, high - Familiar with laws and and test cases to cover all features throughput and/or high regulations governing under development availability systems remote gaming - Implements automated tests - Knowledge in building - Defines the QA processes in use by automated tests, such as the team .NET and/or SoapUI or WCFTestClient - Knowledge of agile methodologies and testing - Analytical, evaluative and problem-solving skills **Platform Engineer** - Develops and owns critical, high-- Experience in computer - Knowledge of gaming performance, and scalable systems and engineering software applications platform frameworks and fields and gaming operations components - Proficiency in infrastructure - Familiar with laws and - Responsible for systems modelling, analysis, design concepts regulations governing simulation and analysis and implementations remote gaming - Working experience in C, C++, Linux OS and Windows OS - Knowledge in specifying and deploying scalable, highly available hardware and network platforms - Knowledgeable with Microsoft Team Foundation Server, Visual Studio, .NET, C# and SQL Server - Analytical, evaluative, and problem-solving skills **Software Engineer** - Ensures the availability of products - Degree in Computer - Knowledge of gaming and services Science/Engineering or software applications - Responsible for the correct related subject and gaming operations operation and recovery of - Database knowledge and Familiar with laws and hardware and software systems regulations governing experience - In-depth knowledge of SQL - Liaises with operators, developers remote gaming and third-party providers to - Strong knowledge in Windows Server

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establish effective testing and	applications, virtualisation	
implementation procedures	technologies and IT	
- Resolves support issues with	infrastructure to include	
internal and external clients	servers, networking and	
- Develops and maintains productive	storage	
client relationships	- Analytical, evaluative, and	
	problem-solving skills	

Technology

Job overview	Generic skillset	Skills specific to Gaming
	CRM Manager	
 Creates and coordinates multiple online campaigns, and provides weekly reports on same Works closely with the Affiliate Manager Establishes and maintains scalable processes that ensure best practices in campaign and lead management Works with the design team to create high performing ad content and affiliate collateral Researches for product development in other areas related to online gaming Helps create and improve UI/UX by providing user behaviour data (analytics and surveys) to design team 	 Leadership skills Business development skills Ability to design and execute marketing strategies Strong communication skills, both verbal and written Strong presentation skills Strong interpersonal skills and building/maintaining relationships In-depth understanding of the target audience Analytics skills 	 Knowledge of gaming software applications and gaming operations Familiar with laws and regulations governing remote gaming In-depth understanding of online gaming customer base and how to attract and retain
	Head of Brand	
 Defines and presents the overall brand/project strategy and direction to the Board of Directors Project management, execution, delivery, measuring and reporting of the approved brand/project strategy and direction Brand/project departmental structuring, recruitment, direction, leadership, management and training of staff 	 Leadership skills Communication skills Analytical, evaluative and problem-solving skills Strong presentation skills Business development skills Management skills Time management skills 	 In-depth understanding of the online gaming industry and the company brand Familiar with laws and regulations governing remote gaming

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-	Develops an ROI measuring
	dashboard for all efforts so that
	the Board of Directors understand
	impact and can refine/optimize
	the programme

 Holds, documents and presents monthly, quarterly and annual projects and staff assessments as well as any necessary proposed revision of strategy and direction, based on facts, assessments and conclusions at hand

Digital Marketing Manager

- Manages all aspects of CRM, SEO, social media and website management
- Manages the design process and builds the company websites with a clear emphasis on user experience and visual design
- Overall management of SEO, web statistics and keyword strategies as well as content
- Creates and delivers strong creative and promotional content across all channels, including social media

- Strong knowledge of managing UX projects in areas such as responsive build and visual design
- Digital marketing skills and knowledge in SEO and social media advertising
- Knowledge in areas of retention, acquisition, reactivation and churn prevention
- Presentation skills
- Communication skills
- Business development skills
- Analytical, evaluative and problem-solving skills

- Understanding of the online gaming industry and the company brand
- Knowledge of gaming software applications and gaming operations
- Familiar with laws and regulations governing remote gaming
- Understanding of online gaming customer base

Head of Affiliates

- Maintaining stimulating relationships with the current affiliates
- Developing and monitoring affiliate promotions and materials
- Identifying and recruiting new affiliates
- Maintaining on-going communication campaigns

- Knowledge of working in an online environment
- Strong negotiation skills
- Problem-solving and decision-making skills
- Creative digital marketing
- Communication skills
- Analytical and evaluative skills
- Programming skills

- Online gaming-focused affiliate management skills
- Knowledge of different gaming applications
- In-depth understanding of the online gaming industry and the company brand

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-	Identifying and implementing
	other and new opportunities to
	enhance the affiliate programme

- Keeping affiliates up-to-date on new products and programme enhancements
- Leadership skills
- Statistical skills
- Strategic planning and execution skills
- Familiar with laws and regulations governing remote gaming
- Understanding of online gaming customer base

Head of Search Engine Optimisation (SEO)

- Manages the processes necessary to continuously improve the onsite SEO for all brands and their specific markets
- Participates in projects, ensuring optimized on-site SEO procedures and standards
- Provides advice to SEO content managers concerning on-site SEO optimization
- Plans new implementations of functions and SEO changes, in cooperation with other departments

- Degree in Marketing/ Computer Science/ Engineering
- Understanding of all SEO processes
- Basic web technology skills
- General understanding of web analysis and internet marketing
- Project management skills
- Analytical, problem-solving skills and organisation skills

- Understanding of online gaming and online gaming branding
- In-depth understanding of customer base
- Familiar with laws and regulations governing remote gaming

Chief Commercial Officer (CCO)

- Drives development and execution of a commercialization strategy of the company
- Responsible for revenue growth within the organization
- Strong leadership skills
- Strategic thinking skills
- Analytical, evaluative and problem-solving skills
- Sales management skills
- Business development skills
- In-depth understanding of the remote gaming industry and the company brand
- Familiar with laws and regulations governing remote gaming
- Understanding of online gaming customer base

Head of Customer Care

- Manages all contact points with customers
- Keeps customers active and engaged in the brand
- Analyses customer data to conduct the most effective CRM campaigns
- Ensures that all customer journeys and touchpoints, both on web and
- Experience in customer service and sales management
- Leadership and motivational skills
- Communications skills
- Strong reporting and presentation skills
- Understanding of the online gaming industry and the company brand
- Knowledge of gaming software applications and gaming operations
- Familiar with laws and regulations governing remote gaming

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mobile, are considered within CRM	- Good at using CS-Tools and		
planning	MS Office		
- Analyses customer segmentation			
Spor	tsbook Marketing Manager		
 Takes campaigns from conceptualisation to completion, optimising in between and learning how to improve them, in order to increase ROI Collaborates closely with other stakeholders and internal 	 Knowledge of branding and communications Marketing skills Business development skills Customer-focused In-depth understanding of target audience 	 General understanding of sports betting Solid understanding of retention, reactivation and conversion methods, as well as operating, attracting 	
departments to ensure that the site experience and customer journeys are consistent - Maximises both usability and accessibility across multiple devices		and retaining customer loyalty in an online transactional environment Knowledge in online customer behaviour Familiar with laws and regulations governing remote gaming	
	Pigital Content Manager		
 Manages a team of copywriters and social media executives to deliver a wide range of online content Develops and delivers upon a content plan, assuring that the websites are updated regularly with relevant and engaging copy, while adhering to brand guidelines Oversees content production of both internal and external resources, taking on full responsibility for quality control, time management, and prioritization of tasks 	 Digital marketing management skills Web content and editorial knowledge Strong communication and presentation skills Creative writing skills Knowledge in digital content writing/editing software Experience in content management systems Understanding of SEO and web analytics principles 	 Understanding of online gaming industry, software, applications and branding Understanding of customer base Familiar with laws and regulations governing remote gaming 	
Social Media Analyst			
 Acts as knowledge centre for the social media activity Develops reports on social media traffic and campaign performance Identifies direct and indirect social media feedback 	 Knowledge of all social media applications Strong communication and presentation skills Customer-focused Basic IT, marketing and advertising skills 	 Understanding of online gaming and branding In-depth understanding of customer base 	

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- Keeps up-to-date with emerging	- Analytical skills	- Familiar with laws and
trends, measurement tools and	,	regulations governing
keywords		remote gaming
,	Graphic Designer	
- Creates design solutions that have	- Understanding of company	- Up-to-date knowledge
a high visual impact	brand	of industry software
- Works to a brief agreed with the	- Creative thinking	- Affinity with online
creative director or account	Communication skills	gaming branding
manager.	- Strong presentation skills	- In-depth understanding
- Develops creative ideas and	- Knowledge of graphic design	of customer base
concepts, choosing the	- Understanding of web	- Familiar with laws and
appropriate media and style to	content/development	regulations governing
meet the brand's objectives		remote gaming
	Copywriter	
- Writes creative, personal and	- Excellent writing and editing	- Understanding of
effective copy	skills	online gaming
- Creates content on a large variety	- Communication and	- In-depth understanding
of subjects, in a number of	presentation skills	of customer base
different media, such as social	- Creative thinking	- Familiar with laws and
media, banners, articles for web	- Basic IT skills	regulations governing
and print	- Marketing and advertising	remote gaming
	knowledge	
	- Knowledge of branding	

Legal and compliance, risk and fraud

Job overview	Generic skillset	Skills specific to Gaming
	Chief Risk Officer	
- Implements fraud prevention	- Knowledge and experience	- Strong knowledge of
strategy and sets up anti-fraud	of online payments, banking	gaming operations
workflow within the several	and payments processing	- Familiar with laws and
departments of the company to	- IT skills	regulations governing
ensure effective monitoring of	- Management skills	remote gaming
anti-fraud activities throughout	- Motivational skills	
the company and solve queries	- Ability to work with	
about antifraud operations	numerous internal and	
- Provides and implements a	external cross-functional	
strategy regarding customer	teams	
registration, verification, due	- Ability to introduce creative	
diligence, Know Your Customer	anti-fraud solutions	

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(10.0)		I	
(KYC) and AML policies and	- An understanding of the link		
processes	between payments		
	functionality and fraud		
	prevention		
	- Critical and analytical		
	thinking		
	Key Official		
- Represents the licensee with the	- IT skills	- Excellent knowledge of	
MGA	- Knowledge of anti-money	gaming operations	
- Ensures that all games are carried	laundering regulations	- Familiar with laws and	
out fairly and that the interest of	- Risk management and	regulations governing	
the players is always protected	security issues	remote gaming	
- Prepares monthly reports for the	- Conflict resolution skills		
MGA and ad-hoc reports on any	- Communication skills		
changes to the operations, not	- Analytical thinking		
limited to changes to Terms and			
Conditions, downtime of IT			
systems, installation of new			
hardware, affiliates and change of			
personnel			
· ·	gal Compliance Manager		
- Manages the overall compliance	- Solid understanding of legal	- Knowledgeable in	
structure and plan as well as is	and technical concepts.	gaming operations	
responsible for executing different	- Project management skills	- Familiar with laws and	
compliance projects	- Communication skills	regulations governing	
- Licenses applications, compliance	- Problem-solving skills	remote gaming	
planning/monitoring/reporting,	- Creating and maintaining		
AML and security audits	structure		
- Liaises with gaming authorities	- Ability to work on own		
- Builds processes and routines for	initiative and carry		
maintaining compliance in	a project from start to		
different jurisdictions	completion		
Legal Counsel			
- Drafts, reviews and negotiates	- Critical and analytical	- Knowledge of anti-	
contractual documentation	thinking	money laundering and	
- Advises on and drafts legal, fiscal	- Communication skills	gaming legal operations	
and general Group policies and	- In-depth knowledge of legal	- Knowledge of all legal	
procedures	regulations	regulations governing	
- Drafts rules and procedures	- Relationship building	gaming	
- Implements legal, regulatory and	- Organisational skills	2~0	
ethical requirements	- Eye for detail		
- Trains, educates and raises staff	- Time management skills		
awareness about legal matters	Time management skins		
awareness about legal matters			
a wareness about regar matters			

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Fraud Manager

- Responsible for the organisation's fraud strategy, including devising new procedures and building innovative fraud solutions
- Builds and maintains relationships with key internal stakeholders, reports regularly to the board and manages third party vendor relationships
- Manages the organisation's Anti-Money Laundering policy and is responsible for a multi-disciplinary team
- In-depth knowledge of fraud prevention and detection, including knowledge of the technology behind fraud management tools
- Critical thinking and analytical skills
- Manages fraud strategies within high volume transaction online environments
- Knowledge of antimoney laundering and gaming legal operations

Fraud Analyst

- Works through a number of predetermined fraud queues to identify potentially fraudulent accounts, and places all appropriate restrictions
- Conducts other investigations, including validation using a number of sources such as banks, credit card issuers, phone matches, IP search, various websites, etc.
- Reviews a variety of documentation including ID cards, passports, credit card statements, bank account statements and customer responses, in order to determine the legitimacy of the account and account holder
- Liaises with relevant banks and payment processors to respond to identified cases of fraudulent activity

- Identifies problems and issues by performing relevant research using the appropriate tools
- Able to make discretionary decisions based on research
- Strong judgement and decision-making skills
- IT skills

- Investigates accounts delivered to agent through fraud queues in admin tools, for possible fraudulent activity
- An analytical problem solver with regard to chargebacks, colluders and chip dumpers
- Familiar with laws and regulations governing remote gaming

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Finance, payment and human resources

Job overview	Generic skillset	Skills specific to Gaming
	ef Financial Officer (CFO)	
 Manages the Finance department, including treasury, invoicing, admin and accounting Works closely with the CEO and Board to deliver strategic, analytical and development activities Preparation of monthly, quarterly and annual statements, budgeting, management reporting and cash flow forecasting 	Strong team management skills Communication and interpersonal skills A creative mindset, with the ability to generate operating margins Critical and analytical thinking	 Knowledge of gaming rules and regulations Fully versed in consolidation and tax issues across European legislations
	Recruiter	
- Responsible for hands-on recruitment and the full recruitment lifecycle, from establishing role descriptions, writing advertisements and identifying talent, through to conducting interviews	 Organisation skills Data-led and results- orientated Communication and stakeholder management skills Well-versed in multi-channel and social recruiting Talent mining skills Relationship building skills 	 Knowledge of gaming rules and regulations Knowledge of relevant skills required for gaming roles
Paymer	nts and Reconciliation Analyst	ı
- Analyses, studies and is familiar with the betting software and the various third-party payment gateways offered to customers - Identifies a suitable, effective and professional way for each of the payment gateways to be integrated in the automatic reconciliation system being developed - Manages and coordinates further development of the automatic reconciliation system - Effectively identifies non-reconciling items, to be handed over to the relevant team members for further investigations	 Knowledge of accounting and reconciliation software Analytical mind Attention to detail Excellent organisational skills Able to work on own initiative and to plan workload Has a pragmatic approach 	 Strong knowledge of gaming operations Familiar with laws and regulations governing remote gaming

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