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Licensing and Regulation. An insight.

Licensing of gambling activities has been with us in many forms for hundreds of years. Experienced operators in the world of conventional bricks and mortar gambling are used to the oversight and the often invasive nature of active gambling regulation. The development of online gambling though has introduced significant numbers of new entrants who are often bewildered by the intrusion of gambling regulators and this article will throw some light on the reasons for such intervention and what to expect. It will also explain the differences between the regulation of bricks and mortar and online but these differences are increasingly getting smaller and so they should.

Gambling is often referred to as the second oldest profession in the world; whether that is true or not is open to debate but it does convey the message that gambling has been around for a very long time indeed. I will not go into the merits of whether that is a good thing or not, that is not the point of this article and that argument can be left to others at another place at another time. What is true is that like so many activities which can be highly attractive there are clear reasons for those activities to be regulated so that the vulnerable can be offered certain measures of protection - against themselves quite often. Whilst I again appreciate that there are counter arguments to this again I shall defer that debate to others at another time.

This article and the presentation at the I-Gaming Super Show is about what you can expect if you have decided to operate in the real world, in the major economies and they set out the rules whether you agree with them or not. However as we shall see Regulators are not entirely insensitive to market forces and this is an important factor when deciding where to operate both from and into.

It seems a truth that the larger the market for gambling services the more inclined the authorities are to tax more heavily, sometimes to the point where the business model is destroyed. This is particularly true of the online gambling model with several recent failures where the optimism of the government to see the industry as a cash cow has been overdone. It is perhaps unfair to completely condemn the governments in this as without the lure of the tax revenues the market would probably have remained closed but one has to give them time to understand where the appropriate rate should be set and Italy provides a fine example of a regime constantly modifying itself until the right balance is struck. Smaller countries such as Denmark have also realised that in order to stimulate the market a reasonable regime should be put in place whereas France realises that it probably got it wrong and the launch of that market has been something of a damp squib.

Of the offshore hubs such as Malta, the Isle of Man and my own jurisdiction of Alderney the game has changed substantially and those offering a regime without tax or minimum tax are winning the business as the threat of double taxation can destroy the prospects for any operator. But the reasons for choosing one of these hubs remains compelling as by utilising these hubs it is possible to create a technical hub providing services efficiently to all the major markets without incurring the heavy costs of being domiciled in one or more of those markets.

Since my first involvement in the online gambling industry some 10 years or so ago many things have changed and not least amongst them has been the business models which have evolved in have responded to the changing regulatory environment. The inexorable rise of licensing regimes on a country by country basis have made many realise that the B2C business requires significantly deeper pockets and the ability to harness the power of a brand name and for many that is unattainable hence their move to become technological suppliers rather than dealing with the players directly. Whatever the business model the process of getting licensed in a reputable jurisdiction are much the same and we will explore what is involved here.

The three basic rules of Regulation.

The first thing to understand is the reasoning behind regulation and licensing and which underpins the basic premise of offering the protection mentioned above and most regulators will

hang their shingle out espousing the following;

- The exclusion of criminality.
- Protection of minors.
- The fairness of the games or activities.

Essentially if Regulators can cover those bases they feel they have done their job and so it follows that once one understands these three basic tenants everything regulators do fall into some sort of logic albeit that there are different measures used to achieve the same things and to varying degrees of thoroughness.

Step 1: The exclusion of criminality and ‘fitness to hold’

This point rightfully comes in at number 1 as this is in all cases the first thing that competent regulators check for when processing an application for a licence. Operators from the bricks and mortar world will know just how intrusive and personal this gets and just because we are dealing with the online world makes not a jot of difference and why should it. In fact there are clear signs that the approach taken in the earlier days by some jurisdictions was far from adequate and it was more about attracting inward investment than it was providing a secure and robust licencing regime. One only has to look at some of the Central American countries where no checks were carried out at all or perhaps in the Caribbean where the checks were cursory at best and more a matter of ‘if the cheque cleared’.

But the chickens are coming home to roost and we are seeing significant numbers of operators making the migration to reputable jurisdictions citing a number of reasons. It is harder and harder to get payment processing, harder to get banking facilities and of course the traditional markets are closing up for them they are saying you work from those jurisdictions and you will not be allowed here. The final nail in the coffin is that they are unable to tie up with operators with reputable licences for fear of cross contamination.

So what do the regulators check for and how do they do it?

Primarily they check both shareholders, often with a minority shareholding as little as 3% or similar and key individuals who will hold executive positions on the operational side. Both will have to submit to detail background checks using law enforcement assets, bank references and professional references. Any licenses currently held with a regulator of good standing will help and enable the regulators to exchange intelligence. Spouses and partners will not necessarily be excluded nor will children for that matter and bank statements and details of one’s personal financial situation have to be provided and maintained. Any criminal activity deemed relative will have a bearing on the ‘fitness to hold’ tests and it has been known for executives and shareholders to be dumped unceremoniously from the process if they are getting in the way. However personal checks are not the only matters which come under this section and a variety of other metrics will be investigated to prove ‘fitness to hold’ such as sufficient funds to support the business plan, the competency of that business plan, particularly in the case of a start-up project and the availability of the right business skills within the applicant’s organisation.

Regulators take different approaches which results in discrepancies in rigour and this depends more often than not on historical references. The US regulators have come on a long hard journey to clean up what once a totally discredited industry and their approach differs from the European style due to the very different journey that has been made. This is often not well understood

Step 2; the protection of minors

The first thing you have to do is establish who is a minor. If I was to ask an average room of people then the general answer would be 18 years old is the legal age when a person can bet but you would be surprised by the variances you will encounter. Belgium has a minimum age of 21 years, other ages range from 14 to 23 years old. Ages of consent in the US range between 16 to 21 but differ according to activity. This is a good example of why we are seeing the huge take up of national licencing schemes and why my best guess for the US is a State level solution

rather than Federal one. A Federal solution cannot reflect local conditions and respond to local pressures let alone moral sensitivities or indeed the desire to offer protection for existing businesses that may have supported the local economy for decades providing vast amounts of local taxes and employment and investment.

So what measures are required by Regulators? In the online space there are a number of ways that can be utilised and the regulatory body specifies the depth to which an operator must intervene to ensure that minors do not have access to gambling websites but there is great variety and some jurisdictions are more thorough than others. The most common tool is rendered completely online where a number of databases are cross checked to verify the age of the player; bank accounts obviously, electoral roll and many others. If something doesn't stack up then the operator is informed and then has to manually intervene to verify the player. Some countries are well served by the information held and available online others less so and this has an impact on the cost of doing business in those countries. Others such as France and Italy take an active role in authorising their citizens access to licensed operators and others stipulate the monetary limits that can be played for which might increase as the player demonstrates responsible behaviour. Each country, as can be seen, tends to develop their own methodology and the operator must know and abide with those requirements.

Step 3: Fairness of the games

This area is one of the most complex and the costliest to comply with. It covers not only the technical standards which tend to be developed by each jurisdiction but also the operational requirements, set out in the regulations of each jurisdiction. This area is receiving a lot of attention in order to introduce common standards as the incremental cost to operators working across many jurisdictions can be substantial but unfortunately with little to show for the effort as of yet. Essentially in order to gain a licence to operate the applicant company or their technical supplier must submit each and every game to testing to prove compatibility to the required standards, not only at the time of the application but all changes and revisions must also be submitted for approval before deployment in many cases. Typically the standards will set out the security standards, the pay-out tables and performance and any number of features such as self-exclusion tools, help desk functionality etc. which must be available in the prescribed manner. For instance the Spanish regulations require a reminder must be sent to all players to change their passwords at regular intervals, a feature we have not seen before anywhere but all though a small extra requires changes to an operator's software and one which must be tested to prove it works. The second facet of this section is the need to submit for audit and locked into the change management process between the regulator and the licensee is the Internal Control Documentation wherein every detail of the operational function of the operator is laid out and subject to scrutiny. This is a daunting piece of work for the inexperienced but as in many cases less is often more and the document should be a useable working record of how a company operates. For instance it would set out the terms and conditions applicable for the player and the regulator would check that it complies with their regulations and the law of the land.

Conclusion.

Operating across borders requires a number of assets, not least deep pockets to afford the marketing warfare encountered whilst trying to attract the players and establish your brand credentials but also an administrative capability which can cope with the numerous requirements both legal and technical. Taking good advice is an absolute must due to the complexity of the new regulated markets and understanding their differences. Never has it been more important to know the market in which you operate and appreciate the sometimes subtle vagaries. My presentation at I-Gaming Super Show will give a brief overview of the European landscape which will demonstrate the problems and challenges.

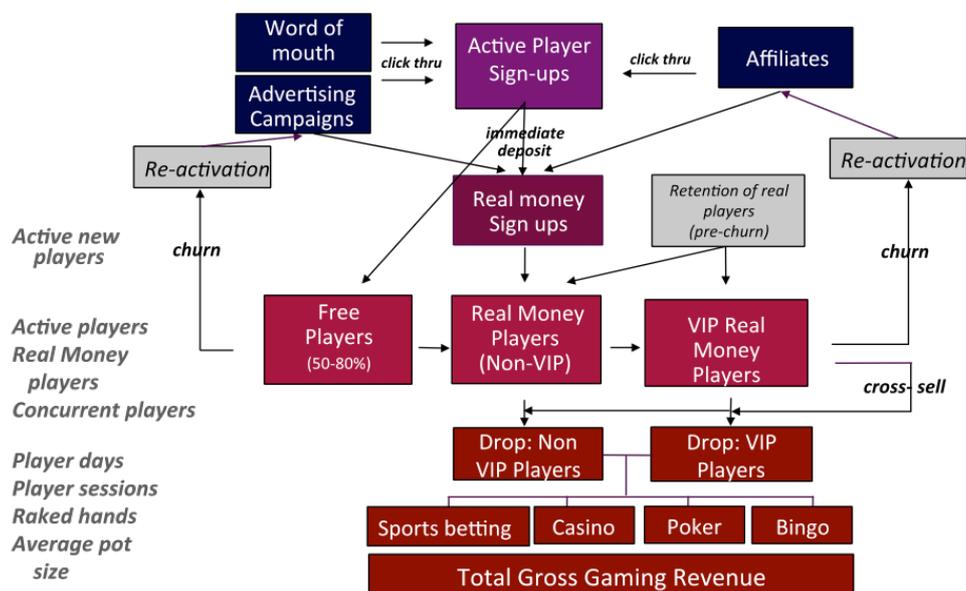
Developing an Operational Budget for the Online Gaming Sector

Developing a financial model of any company can be one of the most difficult tasks when starting a company. The one thing that can be assured is that the model will never be accurate. So the question for a good manager is how to minimize the degree of getting it wrong. While investors who examine financial models for a living fully understand that a budget or model is bound to be wrong to some degree, it is the ability of the manager (CEO/CFO) to easily explain the variance and justify their assumptions that gives an investor comfort.

When I first started out working, my first job was in Investment Banking where I was placed into covering the Gaming Sector. As a core part of the job, we were trained for months specifically in formal financial modeling, creating complex models that were easy to follow and simple for stress testing various assumptions. It is this tool set that has followed me throughout my career and has enabled me the ability to understand new industries by starting a budget from scratch.

REVENUE: What are the Key Performance Indicators (KPIs) Driving the Business?

When developing a budget for the online gaming sector, I like to start from the top, the revenue. There are some individuals who think it is acceptable to derive a revenue line from a 'top down' approach using high level market projections, e.g. the size of the UK market and assume they can capture a small market share to derive their revenue number. I find this fundamentally flawed, dangerous and as a former venture capitalist a glaring red flag. It demonstrates a lack of initiative or understanding of a person's own business and doesn't give me comfort that the operator is truly thinking about the details of their business and how certain decisions could impact their business. Rather I prefer 'bottom up' approach one that takes into account the key KPIs from which to build a revenue projection. This approach allows me to define a series of assumptions for which I am forced to sufficiently research in order to justify my assumptions. The KPIs that I have used to generate a financial model is the following:



Marketing Budget: I always begin my top line revenue assumption, from somewhere towards the bottom of the Profit & Loss statement, the marketing budget. By starting with the marketing budget, I am able to perform scenario analyses to see how an increase or decrease over time will impact my bottom line.

Media Breakdown: At the marketing budget level, I break the budget down into a number of components: SEO/SEM, Online Campaigns, Offline Campaigns, Social Marketing and sometimes in-venue (depending on the situation). Note: Affiliate marketing excluded from this part of the

budgeting exercise.

Cost per Acquisition (CPA: Each marketing component is then ascribed its own value to determine the cost to acquire a depositing player. For example, a company could have 50% of the budget coming from SEO/SEM, 25% for Facebook and 25% for online campaigns (no offline marketing). Each of these has its own CPA (CPA is defined here as a depositing player not a registered player), which could be as little as \$25 for an in-venue player to as high as \$300 depending on the product (casino, bingo, poker, sports) as well as the territory (UK, W. Europe, E. Europe etc..)

Taking these altogether we now are able to derive the number of new depositing players from campaigns. In determining the revenue from affiliates, it can be quite tricky when first starting out. The success depends so much on the strategy and the talent of the affiliate manager. Typically I believe 30% of traffic from affiliates is a safe assumption and one that is easy to justify.

Player Waterfall: Now that we have estimated the number of new depositing players, its time to move on to determine the actual number of depositing players. The difference between new depositing players and total number of players is two fold: Churn and reactivation. It is these two figures that many operators don't realize can actually make or break a model or more poignantly can make or break a business. How fast your players churn after month 1 through 6 can vastly differ creating a potentially profitable or unprofitable operation. How many players are you left with after the first month? Is it 70% or 40%? What does the 6-month tail look like? Is it 5% remaining with you or as much as 25%? The answer can determine if this is a scalable venture or not. How effective are you in retaining customers who churn off your site by encouraging players to deposit on a sister site. How aggressive are your re-activation bonuses? And how quickly do you contact a player once they have churned off. All of these questions formulate the basis of your active monthly player figure.

Revenue Per Player: The revenue or drop per player per month is the next line item in KPI budgeting. When modeling the revenue assumptions, I much prefer focusing on the revenue that the operator holds (i.e. player turnover/wager less player winnings). With regard to poker, this also includes tournament fees. This has become both industry standard as well as more accurate than trying to project player wager less the player payout. In practice casino, sports, poker all differ greatly. Separating out VIPs is a subjective call. I've seen it both ways. There is no wrong or right answer when starting up but once six months into operations, it is a good idea to keep these separate.

Seasonality: Seasonality is the final component in determining the revenue figure. Seasonality includes a number of components namely (1) the number of days in a month, (2) the impact of seasonal weather and (3) external events that drive the business such as sporting seasons and World Series of Poker events that greatly impact player activity.

Once you have accounted for all of these factors effectively you can now generate your revenue line. This ore accurately is called Gross Gaming Revenue. What is important to note is that when doing budgeting and financial modeling, it is the Gross Gaming Revenue that is the target line.

EXPENSES

Once you have derived your revenue line its critical to then set out to figure out how you're going to pay for it. Expenses are divided into two components: Variable and Fixed. Variables costs do just as it sounds it varies directly in proportion to the revenue. Together they form what accountants refer to as a cost of good sold to get to gross profit. Variable Expenses include: Promotions: Promotions include the all of the bonuses that are given to the player that is directly related to game play. Examples include deposit bonus, re-deposit bonus, rake back, tournament

sponsorship and any other money that go back towards the player. Accounting for bonuses is tricky. Some companies are advised by their auditors deduct this from the top line revenue. Thus the revenue line that is reported is net of these bonuses. The theory is that the operator was never really entitled to count this as revenue in the first place as you can easily manipulated the bonus figure and gross the revenue line up artificially. Fees to pay Affiliates could also fall under the promotions figure but may companies such as bwin.party actually separate this figure out.

Payments: Payment processing is pretty straightforward. It includes the fees associated with a player deposit and withdrawal. The fees will largely depend on jurisdiction of the player a (regulated versus unregulated) as well as payment method. Payment processing can be as little as 2% or as high as 8%.

Chargebacks: Chargebacks refers to the return of funds to the player or customer bad debt. When a player denies they had made the transaction or doesn't have player funds to cover the loss, the money gets 'charged back' to the operator automatically. Similar to the accounting of promotions chargebacks could also be included as a deduction from top line revenue. Similar to payments, Chargebacks vary depending on the jurisdiction as well as the quality of a fraud department. Some payment providers who are so versed in player fraud and identification will guarantee chargebacks as part of the service. A good operator will be able to mitigate their chargebacks to under 1%.

Gaming Tax: The gaming duty is fee associated with obtaining/maintaining the appropriate licenses to operator an online site. This fee is the main contention point in regulated markets as some jurisdictions (France) charges a fee based on wager or turnover fee, which artificially keeps the effective tax rate too high. Others are trying to charge too high of a fee even using net gaming revenue as the metric. This is in contrast to the numerous worldwide licenses (Malta, Gibraltar, Alderney) that charge a gaming tax of 1-3% effectively.

Third Party Software: Software fees include all 3rd party content and service software required to run the games. The vast majority of online gaming sites typically outsource almost all the game development to a 3rd party. Only a few of the larger operators have proprietary game software. Even the vast majority of sports books who manage their own pricing and risk use 3rd party platforms. The prices of the 3rd party software varies greatly. Branded slots can go for as much as 17-20% while smaller cheaper games can be as little as 4%.

Combined these fees account for all of the variable expenses on a P&L. When budgeting these fees it is important to figure out what your breakpoints are when negotiating revenue share deals. Understanding how these fees hit the P&L on a combined basis will help a company more effectively manage their business.

Fixed Fes are the final component of an online gaming P&L. It includes the more controllable costs that an operator will incur. Fixed expenses do vary depending on the size of the organization but the changes in the amounts incurred are lumpier as they increase in a more controlled fashion. Well at least in theory.

Marketing Budget: This is the budget that is used to drive the revenue line. It is different than the bonus & promotions in that the marketing budget is specifically funds used to acquire customers but not exactly directly tied to the revenue. It is possible a marketing campaign may not prove effective this not yielding the desired revenue level or just the opposite could hold true. The marketing budget typically includes SEO/SEM, online campaigns, offline campaigns and sponsorship.

Employee & Employee Related: After the marketing budget, employees tend to be the second largest expense. As the organization grows in revenue, it obviously the number of employees will grow to support it but this is not directly tied to the revenue. Benefits & Bonus is an important component of employee expenses not to be overlooked.

Other Operational Fees: There are a number of other expenses that must be included in an operational budget. These include hosting & bandwidth, office related expenses, telecommunication (e.g. telephone, mobile), travel & entertainment, professional fees (legal, accounting) and research & development. While each of these are critical to the operations, they are fairly self-explanatory.

Capital Expenditures or Depreciation: While I personally prefer to see a Profit & Loss statement in a more traditional manner with expenses properly capitalized (upfront costs that are amortized over time to even out the cash flow) some managers prefer to see just the net cash number and deduct all expenses at the time they are incurred. Either way a figure needs to be included to reflect the expenses that are included in capital expenditures. This includes hardware expenditure, a portion of the development fees, upfront fees associated with gaming license etc..

After deducting all of the fixed fees from the Gross Profit, we finally get to our net profit (pre-tax). We are assuming in this case there is no debt, which if there were would incur interest, which would also be deducted as it's paid. The key to building a good budget is structuring it in a way that easily allows for stressed testing (one trick is to keep all inputs or assumptions in a separate color text). Managing a budget on an on-going basis is a critical exercise for managers. Continually benchmarking actual performance against budgets can be tedious but a very worthwhile exercise. Where were you too low? Too high? Where can you improve? Where did you outperform? All these questions need to be managed on a monthly basis in order to be able to quickly adapt to the changing environment while better understanding your own business.

Technology & Software Selection

Choosing partners and suppliers correctly from the beginning is paramount to the success of your iGaming business. In this session we will take a practical look at the software and hosting requirements for your business. This session will benefit senior management in their purchasing and partnering decisions, helping to avoid pitfalls and find best-of-breed suppliers.

Introduction

Unless you are a technology house with big ambitions in the gambling space, it is highly likely you will need to make some very important decisions on who to partner with to deliver your strategy successfully. Even those with in-house capabilities need to ask themselves, do they build in house or partner with a best-of-breed outsourced solution and devote their internal expertise to other ends that might help differentiate themselves from the competition.

In this session we will look at the key factors to consider when partnering with third parties and how to ensure they are kept on their toes once selected. This will avoid discussing Compliance and Hosting options as that will be covered in detail by my co-panelist.

Key Factors to consider

Most of the following factors are relevant for Partner selection in all sectors. If you are looking for someone to provide a Sportsbook platform, Live Dealer Casino, Poker network, Affiliate service, Fraud tool or Mobile platform, you will be asking yourself:

1. What is my business model – how am I looking to make money?

Am I a pure sportsbook business that needs to focus on huge choice of events and markets, or is my strategy to use sports as a vehicle to acquire new customers and then spend all my marketing resource on converting them to being active casino players?

2. What is my target market / regional territory?

Over the years Operators have made many mistakes by translating their domestic website into the language of their newly targeted territory and expected it to work. It doesn't. Localisation is about giving people what they want and from an Operator point of view that means partnering with people whose product can offer truly localised services. Key things to look for here are languages, currencies, product differentials (eg asian handicap & live betting in Asia), payment solutions & front end design and hosting.

3. What is their track record?

An obvious one but, who have they worked with already, where, and how do the testimonials read?

4. What are the commercials?

Despite the commoditised nature of many of the revenue channels in betting & gaming, wide variations in commercial offerings do exist in the supplier market. Do your research, understand what the differences are, negotiate and make sure any minimum guarantee commitments are not going to cripple your business in the first 12-24 months.

5. Is the Partner in question forward thinking or a follower?

With the emergence of mobile & tablet devices, and no doubt many other channels for distribution in the future, you don't want to be stuck with a Partner that is always playing catch up. Getting first – or equal first – to market on new platforms is a huge marketing hook and does not need to be a costly one if wrapped up under the same original partner contract. Revenue share models often help here as the Partner is incentivised to ensure you have maximum

distribution in the most effective way.

6. Can you see yourself working with these people as a true business Partner?

It's important to engage the company in question in the objectives for your business. Having them on an incentivised model will help them think wider than pure contract obligations on how they can help you give them more revenue in revenue share. This may be through other activities they are involved in or simply by introducing a valuable contact.

7. Try avoid exclusivities

Choice is good – not only for the customer but also for the Operator in helping keep suppliers of similar products on their toes. Of course, commercial benefits may be realised by offering exclusivity. Some markets almost require no exclusivity. For example, the superstitious nature of Asian gamblers means if you have two branded casinos on your website and they have a bad run in one, there is a fair chance they will simply go to the other on your site to try their luck rather than go elsewhere.

The 7-pillar checklist for Partner selection in the Online gambling world:

- Understand clearly what you are trying to achieve
- Where are you looking to achieve it & how good is their localisation programme?
- What are the options in that market & what have they done there so far?
- What are their commercial offerings? Understand the differences when applied to your projections
- Will the partner break new ground for you in new technology?
- Are they a true Partner, or a filed contract?
- Choice is good.

Summary

In terms of Partner choice, the Online gambling world is in an extremely healthy position right now. Many mistakes have been made over the years by Operators trying to do things in house as they attack new products and regions. This was, in part, down to lack of suitable third party options. Today lots of choice exists in a competitive supplier market in every aspect of the business. The key decision is how each option is lined up with your own business objectives. Some of the option include:

European Sportsbook: Openbet, GtechG2, LVS & some white label solutions

Asian Sportsbook: Oneworks, Inplaymatrix & white label offerings

Live Dealer Casino: Entwine, HoGaming, Opus

European Casino: Playtech, Microgaming, Chartwell

Bingo / Softgames: Playtech, Winawage, Scratchino

Poker: Microgaming, Playtech & white label offerings

Racebook: Pari-mutuel tote integrations, virtual

Mobile / tablet: Branded App developments and/or third party web based

Data feeds & auto event management: Betgenius, Betradar, Botsphere

Payments: Cards, e-wallets, direct bank transfer

Customer Service: Team in house, or outsourced function

KYC Services: GB Group, 192.com

There are many more choices available with no right or wrong answer. The best answer will be identifying the Partners best able to deliver on your business objectives.

Building out a secure and robust infrastructure – where to place your hardware and how to connect it to your players.

When operating a bricks and mortar casino your players visit your premises and you control their experience whilst they are your guests - operating online is no different, you've just got to make sure your outfit is actually still there when they come to visit. Anything less than 100% uptime and your clients will be leaving in droves - just the same as they would if they arrived at your casino and found the doors locked.

How do you go about ensuring that your site is always available?

Once you have found, or developed, your software these are the questions that need to be asked of the custodians of your infrastructure and the suppliers of connectivity between you and your hard earned players.

Let's start from the ground up:

Physical location:

How high above sea level is the facility? The jury is out on how much change we expect in sea level over the next few decades but this is nonetheless an important question to ask your supplier. Depending on your location it would be wise to look at several metres above sea level – certainly in the double digits, as even though predictions for the next two decades range wildly from a few centimetres to well over a metre there are other factors than global warming to consider: tidal surge, storms, tsunami and in some locations tectonic movement.

Flood plains? Similarly to sea level this information is available when you purchase your house – you should ask this question of your provider too. Depending on jurisdiction your supplier should be able to articulate to you where they are on the Flood Risk Index or similar local tool.

Seismic disturbances? Your supplier should be able to give you documented evidence of past disturbances and the likelihood of these happening again along with mitigating steps they have taken against such activity taking out the facility.

Flight path? Ask if the building is on a flight path, or near an airport, this is risk that should be considered, although a plane crashing into the data centre is an unlikely event, the recovery time would be extended.

Physical access? The compound that you host your equipment in should have a minimum of two public access roads leading to the site. One of the most common causes of your maintenance guys being separated from your kit is a road traffic accident on the route to the compound.

Neighbours? The hosting facility could well be located in a zone dedicated to light industry, it's worth asking what the neighbours in this zone do for a living – their activities could pose a risk to your facility.

Perimeter? The perimeter of the compound should have a minimum of 8' high anti-climb fencing topped with three strands of barbed wire. There should be CCTV coverage, preferably with at least three months storage for the footage and there should be security floodlighting in the darker areas of the site.

Jurisdictional infrastructure? It is always worth asking the wider question of the power and

logistics capabilities of the nation or state that you are locating in – there are still some jurisdictions, mainly offshore, that do not have N+1 power generation facilities. Look at logistics too, how quickly can you get that blade backplane that's gone faulty to your hardware?

The fabric of the hosting facility and its surroundings:

Once you have found a site that is not going to be flooded, burnt to the ground or physically unavailable, your next consideration is the fabric of the building and the availability of the mechanical and engineering facilities available.

Physical security – location? Computer hardware still gets stolen to order, check for protection against ram raiders through pillars or access road layout. The flipside of this is can you still get a truck load of servers in to the place?

Physical security – access? A minimum of two factor authentication is what you should look for – named holders of key cards to be used in conjunction with an PIN code. Visitor cards should be stored in a key safe and allocated to individuals who are either defined on a per client access list or are escorted during their visit. Airlock double doors are preferable – you cannot open more than one door at a time. Some facilities will have a mantrap.

Fabric of the build? Ask questions about the fabric of the build; is it double block construction? Prefab? You need assurance that your provider has considered the time to force entry with various tools and power equipment. It is worth asking about lightening protection at this point too.

The plant – power? Check the total power to the site, primary and secondary transformers and the switch gear. Also check that there are two PDUs supplying diverse power to your racks.

The plant – environmental? Expect a minimum of N+1 cooling with a tight SLA on the temperature parameters on the room 20C-22C is common as a baseline for most data centres +/- 10% deviation from that base is normal for the SLA. Humidity should also be controlled by your hosting provider. 45%-60% relative humidity should be maintained to avoid both static discharge and corrosion of components, check this against your specific equipment and your SLA from your provider.

The plant – electrical generation? As a minimum you should expect the facility to be backed up by a standby generator. Ask the supplier how much fuel this carries and how often they are tested – both on and off load. Also ask questions about how long the generator takes to spin up, check in particular what is happening to the aircon during this time and once the generator is running – your kit will fry in under 5mins with no aircon.

Fire protection? FM200 gas is still standard, check that there is adequate coverage for the room, including the plenum spaces. If this goes off it will not damage your equipment – or your staff! – but the room will be sealed off from you whilst the gas is vented.

Very Early Smoke Detection Apparatus - VESDA? As well as standard smoke detectors you should expect the room to have adequate VESDA coverage, this will depend on the volume of the room but will be documented in the design spec of the facility.

Power delivery to your equipment? Ask if the racks are supplied with PDUs and check the handover of power – it could be commando sockets or PDUs. You need a minimum of two

separately fused supplies to each rack - these supplies must be on the same phase. Ask about the maximum power delivered to each rack - anything less than 20A will leave you with quite a bit of space in each rack that cannot be used due to lack of power.

The flooring? Should be raised to a minimum of 600mm to ensure adequate airflow, the floor should be antistatic with the pillars earth bonded and it has to be strong enough to hold the load of your kit. When you go round the facility ask to take a look under the floor, this should be clean and tidy with no dust, stripped wire ends or stray bits of stuff.

Moisture? Does your supplier check for moisture under the floor irrespective of air-conditioning type used?

Ability to hold positive pressure? When it is necessary to extinguish a fire in a facility the room needs to hold the gas in, a leaky room will lose the gas and the fire may start up again. Your supplier should demonstrate that this has been specified in the design and tested regularly.

Are you green? Ask about the Power Usage Effectiveness (PUE) of the facility - the closer to 1 this number is the more efficient the use of power is in the facility. The global average in 2011 was just under 1.9 some of the best in the world come in between 1.11 and 1.20 you should go below 1.9 but expect to pay a premium for a PUE less than 1.4.

What you choose to put in this facility:

So you've found a secure, noisy, cold box to host your operation let's look at the kit you are going to put in it.

Blades or pizza boxes? Both are common but there is a preference in the industry for multiple servers over blades, probably due to cost and flexibility. If going down the blade route consider the maximum power draw once the chassis is fully populated – can your supplier handle this much draw on power and cooling?

III Phase? Most providers will be able to supply III phase power but it is unlikely that this will extend to the whole of the room. Check how much III phase can be provisioned if you need it for large storage arrays or blades.

Voltage – 110V/240V AC/DC? Always worth checking that the power supplies of your hardware are compatible with the domestic power of your chosen jurisdiction – there are differences in III phase supplies by country too. It is also possible to buy DC power supplies for some servers and comms equipment – don't go down the DC route - it is not that commonly supported in data centres.

Weight? Some kit may need flooring to cope with up to 12kN, ask about this and also how to get the kit to its final resting position.

Comms access and distribution? There are standards here too with most going for Cisco switches at the access layer. As the operation scales load balancers may be required. Cabling is a labour of love - check your suppliers in house cabling for neatness and labelling, if it's any good you may consider them to cable your comms up. You need to be clear on the rules around the volumes of cables either under the floor in trays or above your racks with your supplier.

Can it be supported? When choosing your kit there is no point in going for the latest DC powered quantum supercomputer if there is no one in your location capable of supporting it or financially capable of holding spares. Follow the crowd but do remember people do sometimes

actually get sacked for buying IBM!

Connectivity to your players

When operating in the “real” world do you control the highways and civil infrastructure leading to your building, district or State? Probably not.

You can when operating online but most choose to leave this function to the telecommunications experts – these are the questions that you should be asking them:

Physical links out of the facility and jurisdiction? Check the routing and capacity of the fibre links out of the facility and indeed out of the jurisdiction. Rings are standard for resilience but a mesh is better. A lot of suppliers will tell you that they have as much capacity available as you want. This is often true but as you scale to become among the biggest you will find that there are some very real challenges when you need the same amount of bandwidth as a small country! The global telcos will have experience in this, the domestic suppliers may not, probe their knowledge ask what is the biggest that they have carried. Seek out a true physical map of infrastructure, not the logical map that the sales guys use, you may find pinch points in capacity or common paths upstream in the network even in other countries or continents.

Peering? Virtually all bandwidth suppliers will have multiple peers upstream into the internet - it is worth running through these with them for two reasons: i) You can check their wider reach to your intended customer base - you may find that your Uzbekistan site does not get the visitors that you expected because there is not adequate peering with providers there. ii) Under closer inspection you may find that there are common routes between the upstream providers, it is well worth checking this as there are pinch points in capacity both in Europe and the US - several upstream peering partners may be using the same subsea cable for instance. At a more local level all suppliers should be able to help you with your BGP peering but it's worth asking the question.

Flexibility in capacity? You shouldn't need to be permanently scaled to accommodate Cheltenham or a 100k player tournament. When your marketing department goes nuts your supplier should be able to scale temporarily to the capacity that you need. Bursting is common but do check the limits on this and also the cost.

Vendor or supplier dependencies? Look for a network that is not perched above another network. Many operators build out a pyramid of services with layer 2 physical circuits underpinning a MPLS network which in turn supplies capacity to an IP network. This makes sense from a cost point of view but your supplier really should have built out discrete networks for each layer using different hardware suppliers - this way if one layer fails the rest don't come tumbling down too. You then have the ability to rely on your comms provider for say IP bandwidth but have another discrete and protected physical path to another location for ultimate resilience.

SLA's? Naturally you are looking for at least 5 nines or 99.999% uptime and should be working with your supplier for 100% uptime. 5 nines gives you just over 5 mins downtime in a year, not much, but not great if it happens during the tournament that you have just spent \$2m advertising.

Restoration times? Be careful! The underlying infrastructure should restore in under 15ms if a cable is taken out but this could take weeks to repair. There should be adequate capacity elsewhere on the network mesh to carry this traffic but you should check this. Also speak to your suppliers about their experiences in a situation where they have seen a BGP route flap – this can take up to 3mins to restore. Some suppliers will have technology in place to mitigate this with restore times typically being <5ms.

Latency? Get SLAs on global latency too, you've seen The Sting with Robert Redford and Paul

Newman. You don't want the modern day equivalent arbitrage opportunity to happen to you due to network latency between you, your player and the live game.

DDoS Mitigation? Imagine the scenario that 100,000 motorists park up outside your bricks and mortar casino. Not that likely in the physical world but commonplace online. You will be attacked when your operation is online, you will be threatened and held to ransom, your site and infrastructure will be bombarded by hundreds of thousands of spurious requests from zombie computers. Even the largest operator is unlikely to be able to deal with the size of attacks that are offered up by the botnet networks, some of these attacks have taken down nations. Your supplier should be well versed in dealing with these attacks, ask them what they have in place to mitigate attacks, what is the largest attack they can clean and also how sophisticated their platform is at dealing with more complex and targeted low level attacks.

Insights:

Compliance? You may require ISO certification for your operation and will certainly be required to be PCI compliant if you are processing transactions. Use your supplier for support in these applications – they own the infrastructure supporting your hardware and should handle this part of your application for you.

SPoFs? Ask your supplier directly about single points of failure, both in their infrastructure and upstream from them in their suppliers. They should be able to share these with you if there are any and you can then plan together how to mitigate any risks.

Virtualisation? It is not uncommon for hosting providers to offer a managed virtualised platform, consider how appropriate for your business it would be to use this as a temporary resource for testing and development – some jurisdictions will allow you to use shared virtualised infrastructure for your live operation, potentially consider this as a low cost alternative for the start-up phase of your operation.

Installed base? Ask them what type of equipment is typically installed in the hosting centre, don't expect too much detail but you may find out that say 60% of the installed servers are HP for instance. If there is a sufficient installed base you may find that your supplier carries spares onsite that could be used in an emergency to compliment your hardware warranty.

Monitoring and 'hands and eyes' support? Expect your supplier to at least be monitoring their infrastructure and to give you portal access to this. Many will also be able to monitor your servers and hardware for you too, ask them about this. Hands and eyes support for those little jobs that don't require a full engineering visit; swapping hard-disks, adding memory, patching cables etc will save you a fortune in engineering time, qualify what your supplier offers in this area.

NOC/SOC? Check that your supplier has a 24x7x365 onsite Network or Service Operations Centre this is the hub of the supplier's outfit that will be available to you if things go wrong with their equipment or yours. If there is not an onsite 24hr technical presence and you need to reboot a machine that has hung you can always bounce your machines if you have installed remote power management PDUs in your racks but onsite technical staff should be standard for any serious player in the market.

Summary:

There are many more questions that will arise once you truly lift the lid on an organisation you should feel comfortable that your chosen supplier has been open with you and is willing to share the design documentation for both the hosting facilities and the connectivity with you. In summary most data centre operators and telcos will have been through this many times, you should expect to be able to use the benefit of their expertise. Some regulators will also give you a check list as part of your licence application use this list to set your minimum expectations of your supplier.

TAKING YOUR GAMING ORGANISATION ONLINE – KEY RECRUITMENT QUESTIONS TO ADDRESS

PRESUMPTIONS

1. **Consultation Stage** – The gaming organisation will have already sought consultative advice and will have decided to take their business online
2. **Products** – The gaming organisation has elected to offer a full suite of online gaming products rather than just one/a small selection
3. **Approach** – There are various approaches a gaming organisation can take when developing its online operation. They range in the level of ownership the organisation takes on and with it, the level of risk:



For the purposes of this presentation, it is assumed that the gaming organisation will have take the proprietary approach

RECRUITMENT DECISIONS

Stage 1 – Key 1st Appointments

1st Appointment

General Manager/Head of Online	Role – Take strategic responsibility for building the online business for the gaming operation
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Subsequent Appointments

Head of Marketing/ Commercial Management	Develop the route to market for the business and build its marketing function
Head of Technical Management	Develop the technical infrastructure of the business and its suite of products
Head of Operations	Ensure the business is compliant with all licensing requirements and build its support functions

Question – Should these appointments be sourced internally or from the online gaming space?

	Internally	Online Gaming
+	<ul style="list-style-type: none"> Appointees are familiar with organisation’s structure & culture as well as its markets & customers 	<ul style="list-style-type: none"> Appointees will be experienced within the online gaming environment Appointees will have demonstrated success in building online gaming businesses Appointees would introduce an ‘online gaming culture’
-	<ul style="list-style-type: none"> Appointees have little experience of online environment Appointees would require training & consultative advice – could cause conflict with permanent workforce Consultant’s knowledge would no longer be available at end of their contracts 	<ul style="list-style-type: none"> The arrival of new appointees could cause conflict with existing workforce

Our Experience

The majority of gaming organisations that have successfully launched on online gaming business have done so by appointing individuals from the online gaming space rather than internally.

The characteristics and nuances of the online gaming environment differ to the extent where it is easier for an individual experienced in online gaming to adapt to a new company’s culture than it is for an existing employee to make the transition to the online gaming space

Stage 2 – Key Departments in an online gaming business

Once the key hires have been appointed they begin the process of creating the departments within each function.

Operations	Marketing	Technical
<ul style="list-style-type: none"> Finance Payments & Banking Fraud & Collusion Customer Services Human Resources Legal & Compliance Project Management 	<ul style="list-style-type: none"> Customer Acquisition Affiliate Management Customer Retention VIP Management <ul style="list-style-type: none"> Product Management & Development Communications & PR Commercial & Business Development Customer Insight 	<ul style="list-style-type: none"> Software Development Infrastructure Hosting Network Management IT Security Business Analysis

Product Specific Departments

Certain products require specific skills and experiences that are not required by others

Product	Skills
<ul style="list-style-type: none"> • Sportsbook • Poker • Live Play Casino • Bingo 	<ul style="list-style-type: none"> • Trading & Risk • Room/Tournament Management • Studio production • Chat Management

Question – Localisation vs. Centralisation

Should the organisation develop a centralised approach by basing the majority of employees in one location or establish separate bases in a variety of locations?

	Localisation	Centralisation
+	<ul style="list-style-type: none"> • Can take advantage of favourable local conditions e.g. talent clusters/lower tax/pay rates etc • Relocation less of an issue • Marketing – Easier to source individuals with local market knowledge and experience 	<ul style="list-style-type: none"> • Greater economies of scale can be exploited • Clearer management/communication channels • Face to face communication increased • One SLEPT* environment for organisation to conform to e.g. employment law
-	<ul style="list-style-type: none"> • Need to adapt to several local SLEPT* environments • Convoluted management/communication channels • Higher intra company travel costs 	<ul style="list-style-type: none"> • Selecting from smaller talent pool • Requires some relocation leading to higher hiring costs • Greater distance from key markets and customers

*SLEPT = Social, Legal, Economic, Political, Technological

Please Note:

Most jurisdictions put certain conditions on the granting of licenses. These include whether the location of key officials, departments and/infrastructure within the jurisdiction's borders and would have to be taken into account when deciding where to locate departments.

Our Experience

When viewed from a purely management perspective most larger clients would prefer to localise certain parts of their business. However, other factors may prevent them from doing so e.g. basing the business in one location for tax purposes etc.

The extent to which localisation also differs from department to department according to how scarce skill sets are. E.g. an organisation may establish a remote marketing department where skilled, experienced professionals are based but centralise its international customer services department as foreign language skills may be freely available in the vicinity of its current base.

Question – Internal Development vs. Outsourcing?

While the approach used in the document follows the proprietary model, there is no reason why the gaming organisation cannot outsource certain elements of its business .e.g. specific product development/regional marketing etc.

Should the organisation build all departments in house (either through organic growth or acquisition) or outsource certain elements to suppliers?

	Internal	Outsourcing
+	<ul style="list-style-type: none"> • Organisation 'owns' the output • Can exert complete control over all parts of the organisation • More stable in the long-term. • Knowledge developed internally • Provides greater returns in long-term 	<ul style="list-style-type: none"> • Can engage with experienced suppliers who can already demonstrate success • Quicker from concept to launch • Carries lower initial cost/risk
-	<ul style="list-style-type: none"> • Longer lead time from concept to launch • More costly to develop initially • Carries greater risk initially 	<ul style="list-style-type: none"> • Dependent on performance of suppliers • Less stable in long-term • Knowledge stays with suppliers • Returns are shared with suppliers

Our Experience

The examples here are quite mixed. However, the primary approach taken in the current market is to outsource the provision of non-core products and marketing services initially before bringing them in house either through procurement or developing a separate internal solution.

When an organisation outsources it still needs to appoint someone within its own structure to liaise with the supplier. This individual should be experienced in online gaming to ensure the relationship with the supplier is productive as possible and that the organisation's interests are promoted properly.

As a recruiter we normally experience two distinct bursts of mass recruitment activity with clients entering the online gaming space; firstly at the initial team building phase and the secondly as the outsourced departments are brought in house.

Question – Product vs. Functional Structure

Should the gaming organisation structure its departments around its products (e.g. poker, sportsbook) or along purely functional lines (e.g. marketing, operations, development)?

	Product	Function
+	<ul style="list-style-type: none">• Allows greater specialisation of skills within each product team• Enhances co-ordination between functions within product team	<ul style="list-style-type: none">• Greater co-ordination within each function• Greater efficiencies gained
-	<ul style="list-style-type: none">• Less co-ordination between those working in each function• Danger of duplicating roles & resources	<ul style="list-style-type: none">• Less teamwork between those working on specific product• Danger of individual's focus on function's performance not product

Our Experience

While there are advantages and disadvantages to both approaches, most companies have followed a hybrid model where product specific teams take direct responsibility for the performance of their offering and can call upon larger functional departments whenever their skills and input is required.

The role of player acquisition in launching a new iGaming brand.

What to look for when setting up your market entry plan

The numbers clinic:

Identify the market place:

There are two common ways to estimate market maturity:

- Number of online players as a % of broadband users in the country. On average across various gaming verticals; >3% high growth markets, 3% to 5% developing, <5% mature stagnated markets.
- Year on Year revenue growth and active players growth

Player profiling:

Player profiling varies between geographies, different gaming verticals and even more so between brick and mortar and online gaming destinations. Whereas the typical customer in a brick and mortar casino is a female of over 40 years old the picture in the online space is not surprisingly different:

Online poker is heavily young male skewed with 85% of the players' base with over 60% of players under 35 years old. Online casino player base tend to be less male skewed particularly with slot machines but card games still attract a larger proportion of men. Age groups are older than poker and tend to range 30-45 years old.

Online Bingo is female skewed with 70% of the player base, this is with the exception of Latin markets being more gender natural. Ages range 20-50 years old with higher propensity towards the top end of this range.

Budgets and channel mix:

Most marketing budgets are measured against net revenue. The proportion of your marketing budget to net revenue can differ significantly based on how aggressively you're perusing market share, the ability to use mass media (TV) as an advertising medium, the level of competition in the market and its maturity.

Assuming TV is available and you are pursuing an aggressive market share strategy during the entry market phase your marketing budget might be around 25% of net revenue (20% after gaming tax) – dropping to 15% and 10% in following years

Your budget split in an entry year might look as follows:

- Online (display, social, affiliates and PPC): 40%
- TV advertising: 35%
- Offline display: 10%
- Sponsorships and partnerships: 10%
- PR: 5%

In the following years TV, offline and sponsorships will decline with an increase in proportionate online spend.

Key Performance Indicators:

- New signups; Play for Free and Play for Money
- Cost per acquisition of Real Money player
- Life time Value of Real Money player
- Return on Investment (ROI) for marketing spend

iGaming companies will aim at a minimum ROI of 2 to 2.5 on marketing spend measured by net revenue. Cost per Acquisition (CPA) and Player Life Time Value (LTV) are two of the core financial

KPIs iGaming companies use to measure the success of their marketing campaigns. Both will vary based on various factors. Starting from games type, marketing channels, level of competition and market maturity to the quality of your games software and the effectiveness of your CRM program .

In very general terms casino games offer the highest life time value with poker second and bingo third. This reflects on the type of CPA gaming companies will target for each one of these gaming verticals. Large scale TV rand campaigns will normally result in higher CPAs due to media prices but if your PPC channels are managed properly in support of your above the line TV campaigns they can achieve very lucrative CPA level of less than half of your TV and offline campaigns. Time to market is an important factor in determining CPA levels; early entry to an emerging market will result in low CPAs which will increase in time as competitors enter the market and markets become more mature with less remaining hanging fruits.

The following table describes in general terms the level of CPA and LTV you can expect in online Casino, Poker and Bingo.

Games type	LTV (\$ net revenue)	CPA (\$)
Casino	500-600	250-300
Poker	400-450	150-200
Bingo	100-125	50

* Figures are estimated global industry averages and can vary significantly in different geographies.

Points of consideration:

The Pareto principal in internet gambling is extreme. It is 2-3% of casino players that will make more than 90% of the casino gross revenues. These are the customers that are most difficult and expensive to recruit, averages can therefore be misleading.

Cross sell online poker to casino can be at 10% of the poker players’ base but it is those players who will increase LTV of a joint online casino and poker product by over 25%.

Drop off points:

There are 3 main stages in the customer journey where your new prospect customer can drop off. You must minimize these risks as much as possible pre launch and revisit post launch.

- Visits to downloads; use reassuring messages, some players might still be concerned about installing new software. Use progress bar and informational messages during the installation process.
- Download to registration- make sure the initial sign up form is short and simple. Only ask for the most crucially needed information. Make your new player’s life easy with features like password suggestions, automatic address display etc. Completing the initial sign up form should take under a minute.
- Registration to deposits: This is the most crucial stage in monetising your customers. Optimising conversions to deposits requires offering vast selection of payment options with special focus on popular local methods. Real time deposit assistance via live chats and phone support is key to rescuing first time and repeat depositors as players are dealt with at the time they are most engaged.

Industry averages suggest 20-25% registration to first time deposit rate. With emerging markets registering single figure conversion rates, developed markets with 20-30% conversion rates and mature regulated markets with over 30% conversion rate.

CRM the crucial stages in customer’s life cycle:

Conversion: It is not all about headline bonus!

Attractive headline bonus is good for grabbing attention but don't under estimate your customer.

Play through multipliers and number of qualifying deposits are important decision factors particularly with more knowledgeable players. In the UK over 1/3 of players quoted they were influenced by friends recommendation in choosing their first online gaming site. Less than 1/4 quoted promotions and bonus offers as the main reason for choosing their first online gaming site with similar number of players seeking trusted brands as their destination sites.

Leveraging your offline assets and physical presence can prove to be important motivator in converting players to the online gaming world. Physical Gaming terminals that offer instant registration, deposits and cash out with online gaming sites are useful and improve customer experience. Running special online qualifiers to live poker events are highly popular with poker players and will provide motivation for online play as well as tie between your live and online brands.