Mirriad Advertising

Initiation of forecasts

Ad industry game changer

Media

Mirriad Advertising is shifting up a gear, with its AI-driven, in-content advertising gaining credibility with brands, agencies and platforms, helped by December's £26m fund raise. A Tier 1 global content platform signed up in Q420 (subject to an NDA) and in June, Tencent upgraded to a full commercial contract. A major global food and beverage company has been working with Mirriad to insert assets into content and has extended the co-operation. The offering is being positioned as an integral element of marketing budgets, with the additional prospect of ad insertion into live TV. We initiate forecasts showing scaling revenues and reducing EBITDA loss.

Year end	Revenue (£m)	EBITDA* (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)
12/19	1.1	(11.5)	(12.2)	(8.1)	0.0	N/A
12/20	2.2	(8.6)	(9.1)	(4.2)	0.0	N/A
12/21e	3.3	(10.9)	(11.2)	(4.0)	0.0	N/A
12/22e	9.0	(7.9)	(8.1)	(2.9)	0.0	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Activating the buyers

With the ever-growing challenges of reaching ad-avoiding audiences and with third-party cookies being withdrawn from FY23, brand owners are looking for more innovative solutions to engage with their target audiences. To take full advantage, Mirriad needs to integrate with a programmatic advertising ecosystem. Good progress is being made but there remain some elements to be added internally, via M&A or partnerships. Identification and monetisation of ad inventory (the 'space' where a product or ad can be appropriately inserted) must be seamless, scalable, and readily compatible with agencies' working practices, especially for live (or near-live) content. Mirriad's initial commercial breakthrough with Tencent provided proof of concept and copious efficacy data on core industry KPIs of brand recognition and purchase consideration. Broaching the US market is key and signing a global Tier 1 entertainment company looks to have been the bridgehead. The recent framework agreement with a major global food and beverage company after successful proof-of-concept trials steps up commercial credibility. Adding music video and, in time, live TV and sports gives brands the ability to target by audience and mood.

Modelling of campaigns and revenue share

We are now initiating forecasts, modelling revenues on assumptions on numbers of campaigns, campaign value and the proportion allocated to Mirriad under revenue-share arrangements, but caution that this stacking of assumptions means a wide range of possible outcomes. December's £26.2m gross fund raise has given the resource to meet management's ambition on scaling up both technology and sales.

Valuation: Discounting good revenue growth

Traditional multiples are helpful given the limited visibility. A reverse DCF suggests the current share price is factoring in FY23–30 revenue CAGR of 31%, assuming EBITDA margins reach 25% for that period (WACC: 10%, 2% terminal growth).

12 August 2021

Price	**34.5p**
Market cap	**£96m**

Net cash (£m) at end-June 2021 (excluding lease liabilities of £0.6m)	29.8
Shares in issue	279.2m
Free float	97.0%
Code	MIRI
Primary exchange	AIM
Secondary exchange	OTC QX

Share price performance

%	1m	3m	12m
Abs	(26.0)	(37.7)	81.0
Rel (local)	(26.8)	(38.5)	48.8
52-week high/low		63p	19p

Business description

Mirriad generates new revenue for content producers and distributors by creating new advertising inventory in content. Its patented, AI and computer vision technology dynamically inserts products and innovative signage formats after content is produced. Its market-first solution seamlessly integrates with existing subscription and advertising models, and dramatically improves the viewer experience by limiting commercial interruptions. Mirriad operates in the US, Europe and China.

Next events

Interim results	September 2021 (date tbc)

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Edison profile page

Mirriad Advertising is a research client of Edison Investment Research Limited

Investment summary

Company description: Contextually relevant ad insertion

Mirriad has developed and, crucially, protected the technologies and methodologies to digitally insert advertisements and products into linear and digital content, post-production (as opposed to traditional product placement, which is done at the time of filming) protected by a series of patents. This enables brands to reach audiences at scale, through a medium that consumers have been shown to like and which studies have shown increases impact. The group's new scene-selector capability allows for automated identification of inventory, informed by context both physical and emotional, which will allow agencies and advertisers to select the most advantageous opportunities for their insertions. While the focus to date has been mostly in film and TV, music video is a clear extension with great potential. The next stage is built around the opportunity in live events. Accelerating towards the programmatic opportunity, Mirriad has developed a platform to give its customers live, on-screen visibility of the content's audience, demographic and geographic reach potential.

Stephan Beringer, CEO, updates here on trading and progress in the first half.

Exhibit 1: Executive interview with Stephan Beringer on H121 trading

Source: Edison Investment Research

Valuation: Factoring in good medium-term growth

Traditional sales and earnings multiples are not appropriate valuation tools, given the early phase of the company's development. We also feel a standard DCF, with varying WACC and terminal growth, is not going to deliver any insight on valuation. Rather, we have fixed the WACC at 10% and the terminal growth at 2% in 2030 and looked to see how the derived price varies with revenue growth and EBITDA margin over the medium term, being 2023–2030. Using our FY21 and FY22 forecasts as a base, the current price suggests that if EBITDA margins were to settle at 25%, revenue growth would be 31% over that period. This is obviously a simplistic approach, and – if the corporate development plays out as planned – revenue growth would be faster in the earlier years. The key catalysts/milestones we are monitoring include the number of tie ups with content owners, brands and agencies. In April, the shares were uplisted from the junior OTC QB to the top-tier QX exchange.

Financials: Stacked assumptions

There is little inherent revenue visibility, but we would expect this situation to improve as more campaigns are run. We have therefore modelled revenues by combining assumptions on the number of campaigns run, the value of those campaigns and the share of revenue accruing to Mirriad from the content owners. Costs are mostly people, both at cost of sales and at operating cost level. Tech development (again, mostly people costs) is expensed within operating costs rather than capitalised. The £26.2m gross fund raise in December 2020 boosted the net cash at the year-end to £35.4m (there is no external debt, with lease liabilities of £0.6m) and the recent trading update indicated end-June net cash of £29.8m. Our modelling indicates an EBITDA loss in 2021 of around £10.9m, from £8.6m in FY20, on anticipated revenues up from £2.2m to £3.3m, reflecting additional costs taken on to power the sales effort and the continuing technology development. We would then, from 2022, expect the loss to start narrowing as the revenues build.

Sensitivities: Dependent on uptake

The speed of adoption and the build of scale will determine the pace of revenue growth and the range of possible outcomes at the moment is very wide. Revenues historically have been modest, representing what have effectively been repeat trials or one-off campaigns, plus the retainer contract with Tencent in China, which has now ended and was replaced with a new commercial arrangement. With the sign-up of the Tier 1 entertainment company in Q420, and now the framework agreement with the global US-based food and beverage brand, revenues could start to build more rapidly. Other sensitivities include the ability to achieve full automation with the agency tech stacks; the success of the push into music video and live; plus key individual risk; the ability to defend any patent infringements; ability to determine and protect pricing; and currency (US dollar, Indian rupee and Chinese yuan movements against sterling).

Increasing the ambition

Mirriad's core proposition centres on being able to insert content into existing material post-production. This has numerous advantages over traditional product placement, especially around flexibility. Studies commissioned by Mirriad have demonstrated increased brand awareness, purchase intent and actual brand consumption (see below).

Physical product placement will typically be done weeks or months before the content is seen. It is therefore challenging to tie into broader media campaigns, particularly in recent months when timings have been disrupted by the effects of the pandemic. Mirriad's alternative proposition allows virtual product or adverts to be inserted after production, but before broadcast. It can be tailored to local audiences or by time of day, for example.

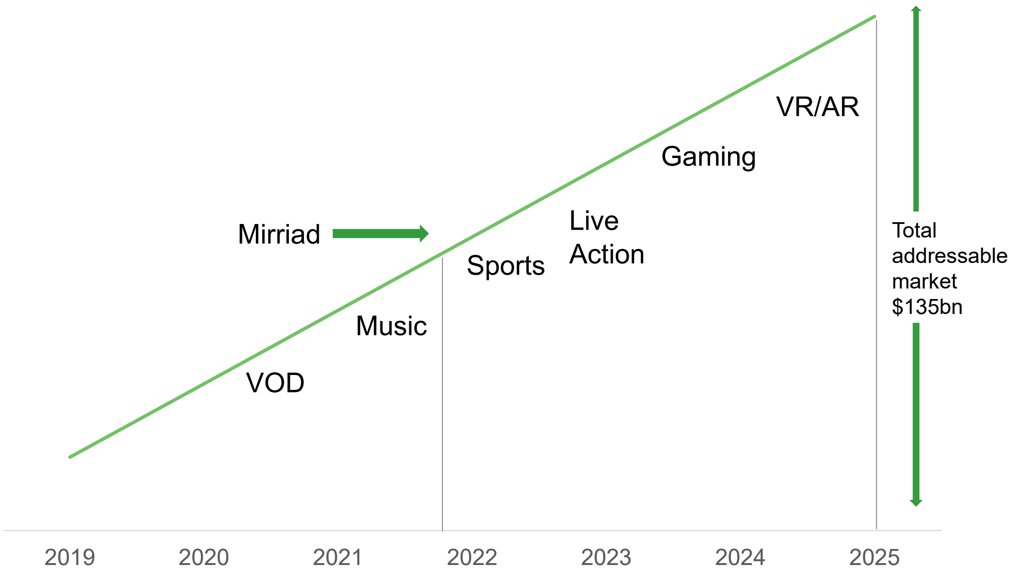
Mirriad derives its revenues (in the most part) from content owners that share the revenues they generate from brands and agencies running campaigns within its content. Typically, Mirriad would take a 20–35% share. So it is important Mirriad:

- builds partnerships with content owners that want to monetise their libraries;
- generates enthusiasm from brands that want to be able to target audiences (more important now third-party cookies are being withdrawn), creating a demand-pull; and
- encourages agencies to offer the new format to their brand customers as part of their campaign planning strategy.

Progress on these fronts is discussed below.

The group's sophisticated AI-driven software ingests the content, as supplied by the platform for example, and identifies the opportunities, which can then be sold as inventory to advertisers and/or agencies. To date, TV and film have been the main focus, but the group's ambitions are far more extensive, as shown below. Management sizes the total addressable market in this context at $135bn, covering all the elements in Exhibit 2.

Exhibit 2: Timeline of ambition for development of addressable content



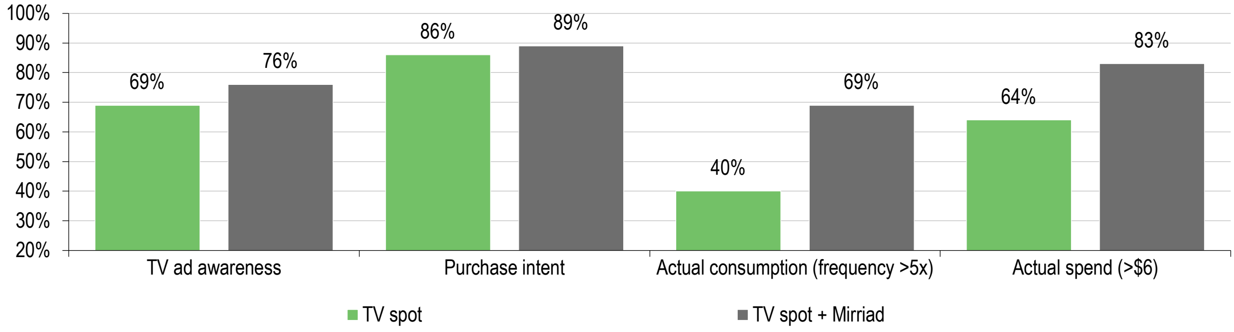
Source: Mirriad, Edison Investment Research. Note: TAM Zenith 2020, approx. value for TV and video for US, UK, France, Germany, China

The use of this technique has numerous advantages over alternative advertising approaches, which have been investigated and benchmarked in numerous studies commissioned by the group.

- **It is verifiable**. Together with the main industry bodies, such as the RSMB in the UK, Mirriad has established standards for measuring and reporting audience reach and the number of image impressions. RSMB (itself jointly owned by Kantar and Havas) has been the contractor to the Broadcaster's Audience Research Board in the UK since 1989, the body defining standards for UK TV audience measurement. By being able to verify the number of impressions, studies can ascertain the impact on viewers and provide part of a framework for charging clients. ComScore has also verified the viewability of insertions, with the methodology also scoring highly versus alternatives in a study by Nielsen. The group has now also secured agreements on methodology from the IAB, the international body for internet advertising.
- **High levels of acceptability**. The popularity of ad-blockers and the 'skip-ad' button on playback services is testament to audience preferences to tune out the interruptions to their entertainment. Mirriad's format, on the other hand, is platform-agnostic and cannot be blocked or skipped. In studies carried out by Kantar and Toluna across multiple campaigns run by Mirriad on programmes shown in the United States, China and France, 89% of the sample thought that the advertising type was a natural fit, with 81% regarding it as enhancing the brand. In a similar study in the US across five campaigns, 59% of viewers preferred the branded integrations to a traditional ad, with 32% having an equal preference (the balance preferred the traditional ad).
- **It is effective**. As part of the group's programme to build its reputation amongst agencies and brands, it has carried out numerous studies showing how the use of Mirriad's insertions can and do amplify the impact of other marketing techniques in terms of awareness and purchase consideration. The results of one study are shown below following the use of the technique in telenovelas aired by Univision for a major global soft drinks brand. The boost is notable simply for the awareness, but the increased consumption by regular customers is particularly striking. This seems to be holding true not just in film and TV, but also in music videos. In a campaign

for Heineken's Mexican beer brand Tecate in a music video by Colombian artist, Giovanny Ayala, released on New Year's Eve and with 2.5m views on YouTube (at 11 May 2021), ad awareness leapt from 13% to 56%, affinity rose from 32% to 40% and purchase intent was up from 57% to 63%, as measured by Kantar.

Exhibit 3: Efficacy of campaign for major global soft drink brand



Source: Mirriad

- **The technology has patent protection**. Mirriad has 28 patents globally, with another 13 pending, covering key components of the technology such as continuity, dynamic segment insertion and content valuation.

Strengthened and broadened management team

The management team is headed by Stephan Beringer, CEO. He joined the board in October 2018 after a long career in the advertising industry. He was president of data, technology and innovation at Publicis and CEO of VivaKi, during which time he drove the transformation of Publicis's programmatic buying and servicing model. He has previously chief growth and strategy officer for the Digital Technologies Division of Publicis Groupe, international CEO for Digitas and Razorfish, and global chief strategic officer and president of Tribal DDB EMEA. CFO David Dorans joined in 2015 following a career in the broadcasting and technology sector where his roles included financial leadership and operational roles.

In February 2021, the team was joined by Philip Mattimoe as chief technology officer. His background is in music, broadcast, telecoms, and media, having previously held positions as chief information officer at Music Sales Group, head of TV technology programme at TalkTalk, and programme manager at Sky Go and Skype. His expertise spans product, project, development, data, quality assurance, infrastructure and operations, as well as the development and implementation of cutting-edge technology platforms. More recently, the group has established a new role of chief revenue officer, which underlines this new commercialisation stage of its development. It has recruited Miles Lewis, who will be responsible for aligning revenue-generating teams and building strategic partnerships. He brings over 30 years of expertise in media, advertising, music and technology to the role. He was previously head of agency sales at AOL UK then senior VP of sales at Last.fm and in both roles oversaw significant revenue growth. Next he was senior VP of International at Shazam Entertainment. Post its sale to Apple Inc, he joined Melody VR (now Napster) as chief commercial officer, where he was responsible for creating, launching and scaling its commercial plans.

Recent directors' share market purchases

In recent weeks, the non-executive chairman, John Pearson, and Alastair Kilgour, non-executive director and founder of Parkwalk Advisors, have bought shares in the market at 35p, adding 70k and 200k shares and taking their holdings to 262k and 792k shares respectively. In the related RNS, the chairman indicated that his purchase should be taken as a sign of his 'confidence in the business, its leadership, and its pathway to long-term growth despite challenging recent market conditions.'

Driving new revenue streams for content owners

Exhibit 4: Business fundamentals

	Model 1		Model 2	
	Responsibility	**Notes**	**Responsibility**	**Notes**
Core business model	**SaaS/Revenue share**	Partner with broadcaster/ streamer, VOD platform etc.	**Media sell**	Partner with content owner (eg film, music, social, gaming, VR/AR etc)
End buyer?	Advertisers and agencies		Advertisers and agencies	
Content source	Content distributor	Eg Tencent, Ch4, Tier 1 US	Content owner	Eg, film producer, music rights owner
Who is responsible for sales?	Content distributor	Mirriad may also act as joint demand generator	Mirriad	Possibility of franchise option
Content clearance	Content distributor clears with rights owner		Mirriad clears with content or rights owner	
Delivery	Content distributor fulfils delivery, or	Mirriad provides insertions to fulfil delivery	Content owner fulfils delivery on behalf of Mirriad, or	Mirriad provides insertions to fulfil delivery
Reporting and billing	Content distributor		Mirriad	

Source: Mirriad Advertising

The exhibit above shows the two underlying business models, of which the left-hand version is likely to be the main contributor to revenue. Here Mirriad works with the content distributor, which might be a broadcaster or streaming platform, to identify suitable inventory within the selected library content. This is then sold to advertisers or their agencies and Mirriad takes a share of the campaign revenues, typically 20–35%.

In the second model, on the right-hand side, Mirriad makes the sale on behalf of the content owner with which they are partnered.

Show reel

Examples of the process and outcome of the scene analysis and insertion is demonstrated in this reel.

Exhibit 5: Mirriad show reel (click to play)

Source: Mirriad

Progress

With its interim results in September 2020, management articulated its growth strategy with some more granularity. There are three core elements and here we set out progress made to date:

1. **Expand partner footprint** including Tier 1, drive adoption with advertisers and exploit new sources of content for scale.

- **Progress to date**
  - Mirriad has strengthened its US and international sales function to support its efforts, with success in the US market key due to its dominance in the content space.
  - Management has outlined it is working, to a varying extent, with all the major advertising holding company groups at an agency level. There will be no exclusivity here as it wishes to be a part of the ecosystem. Agencies are now starting to invite Mirriad to client meetings where relevant.
  - A global food and beverages company tested the Mirriad solution on eight Univision telenovelas, initially focusing on the main drink brand before broadening use cases to other in-house brands. The company is now reportedly discussing using Mirriad's tech in its Latin American and European markets.
  - Mirriad now has nine core content partnerships signed in the US (including music), with around seven more in the pipeline. It now has four partnerships with major international film producers. In total, it has 22 broadcasters and digital distributors under contract globally. It is also pursuing opportunities with Sports leagues.
  - Specifically, the Tier 1 deal is with one of the largest US-based content producers and distributors and runs for two years from October 2020. It allows them to use Mirriad’s technology on any of its US platforms, from networks to streaming. It gives Mirriad access to extensive inventory, as identified by Mirriad’s platform, which it can then offer to brands and agencies.
  - In June, Mirriad announced a further partnership, this one with A+E Networks, following a successful collaboration in Q420. The new arrangement has widened the content opportunity to include more films, original series and short-form content across A&E, Lifetime and the History Channel through H221 and FY22.
  - Mirriad has agreed new terms with Tencent, with the new agreement backdated to start on 1 April. This is effectively now a ‘proper’ commercial arrangement, on a revenue-share basis, similar to those negotiated and in place in the UK/Europe and in the United States (as with the Tier 1 entertainment major). The restrictions of the previous arrangements have been removed and it can now be widened across a much broader range of content then previously, allowing greater reach. The experience to date with Tencent has shown how successful this method of in-content advertising can be for brands for brand recognition, purchase consideration and actual purchase.
  - Contextual advertising is leaping up the agenda globally in response to privacy concerns and Mirriad’s solution is building market traction.

2. **Extend business model** to include a direct-to-advertiser/agency marketplace approach.

   To become a true part of the advertising ecosystem, Mirriad needs to offer a programmatic advertising solution, totally integrated. For this to be widely adopted, there needs to be a standardised approach that can be ‘plugged in’. The group has been developing an architecture that will be accessible by the key agency groups, with the aim of becoming a line-item within marketing budgets. For this to work smoothly, it must cover the four stages of the process:

   i. planning, demand generation, sales facilitation

   ii. the actual bid and transaction

   iii. campaign activation and delivery
   iv. campaign reporting

   In order to fulfil all of these elements, it may be necessary to undertake some M&A to infill, with the advantage of speed and, potentially, cost over internally developed solutions.

   The spring is traditionally the time when the TV and film industry liaises with the agencies and advertisers ahead of the autumn release schedules in meetings known as upfront presentations. With substantial volumes of available and monetisable inventory, Mirriad is increasingly being invited to join and incorporated in the upfront planning process.

   For campaign activation and delivery, the ingestion of content should be fully automated and, as per the contextual algorithm referred to above, each brand could have its own inventory. This approach is needed to be able to scale the operation to deliver a seamless service, particularly as the group moves towards delivering campaigns into live content. The platform also has to be accessible to the agencies on a self-service basis for the agencies readily to recommend and adopt the Mirriad model as a regular part of their commercial offering. Scene selector, described below, takes this a step further.

   In terms of reporting and reconciliation, Mirriad has carried out numerous studies to ascertain the efficacy of its advertising with the industry's leading data agencies such as Kantar and Nielsen. It also has now agreed metrics with the IAB, the main international body for online advertising, as described above.

3. **Establish Mirriad as the leader** in next generation brand and advertising experiences, powered by ground-breaking technology and innovation.

   The group's patent-protected software (it has 28 patents and 13 patents pending globally) detects the ambience of the content context to maximise the impact of the inventory. With each trial and with each campaign run, the group obtains more data with which to hone the proposition.

The second and third elements may be accelerated through acquisition, if that provides a more efficient route than internal development in terms of cost of development or speed to market.

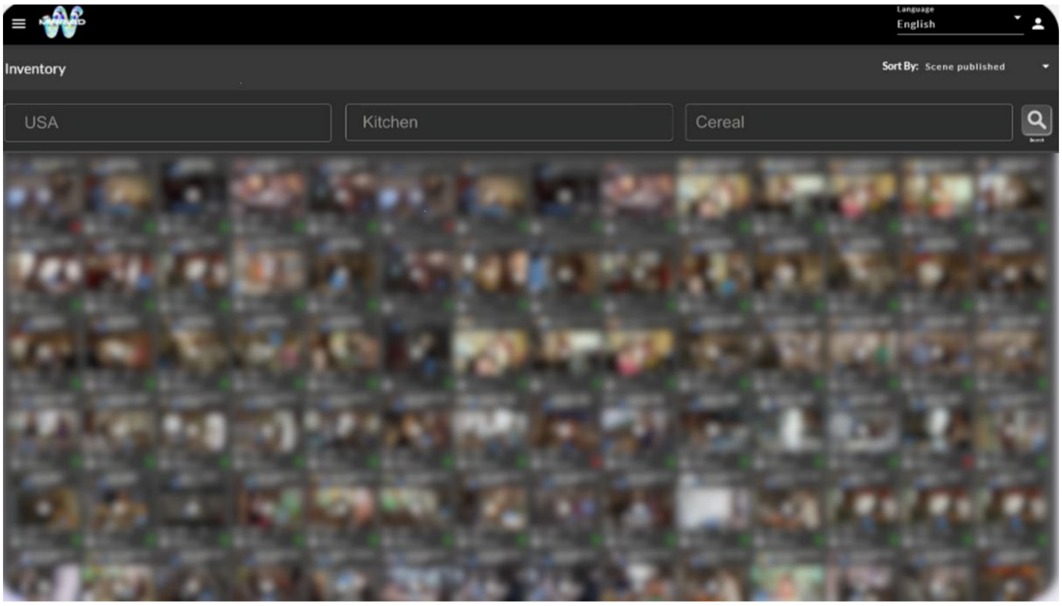
Scene searcher AI changes the game

Mirriad has developed algorithms that identify scenes providing the best context for product categories. For example, a scene that involved beaches, families, sunshine and a happy ambience with no cars would be suitable for promoting ice cream, or the algorithm might identify breakfast scenes as appropriate for cereals.

With a growing number of content owners under partnership arrangements, Mirriad has the raw material from which to grow its library of opportunities. Library content can be ingested onto the platform, with inventory for potential product or placement identified with its contextual data as derived by the Scene Searcher algorithms.

With this degree of automation and with the links built with the agencies' buying stacks, the true potential for Mirriad's approach starts to come into focus.

Exhibit 6: Scene selector platform



Source: Mirriad

Music and Live expand addressable revenue verticals

Much of Mirriad's work carried out to date has focused on the pre-recorded film and TV opportunity. However, there is also a significant opportunity in the music industry to bring brands and artists together. The particular effects of the pandemic on the music industry have highlighted just how reliant artists had become on income derived from live events and the associated merchandising as the growth of streaming had undermined their revenue streams from their recorded works.

Traditional product placement in music videos has been done before, but Mirriad's technique means that library videos can also be monetised. The artist remains in control of the integrity of their output. From a brand's perspective, official music video and associated social media can offer wide geographic reach and the potential for numbers of views into the billions, within a brand-safe environment.

YouTube's global head of music stated in a blog post in November 2020 that YouTube's internal statistics revealed that over two billion people per month were watching music videos on the channel, with recorded live music consumption doubling between July 2019 and July 2020. In total, 85% of music video consumption was in the foreground, rather than accompanying other activities as might be the case with the straight audio.

Mirriad has partnered with major and independent record labels and music management companies with its 'Music Alliance'. Revenues generated here would fall under the second business model as illustrated in Exhibit 4, above.

Live events, particularly sport, is also a significant opportunity for Mirriad to build its revenues, although the technological barriers here are notably higher. For 'almost live' highlights and clips, insertions can already be done without noticeable interruption between upload and broadcast.

Sensitivities

Mirriad's technology potentially delivers a significant industry shift, adding a new line item into marketing budgets. However, there can be no certainty that management will achieve its ambitions. Some elements are clearly already established, particularly the acceptability to audiences, as demonstrated through the research commissioned from Kantar. As and when the technique becomes used more commonly, reactions to it may change.

Patent protection. Mirriad has sought to protect its IP at all stages and now has 41 patents and patents pending across the US, Europe and Asia. These include protection on dynamic emotional targeting (see below). The 28 patents in place globally cover techniques such as:

- Continuity in identifying and embedding brands across scenes – this ensures that ad insertions do not disappear or have any continuity issues.
- Online catalogues for scene selections, which gives exposure to advertisers and agencies to scenes for ad insertions.
- Generate embedding instructions, which allows automation of the ad-insertion process.
- Dynamic segment insertion, which allows for dynamic selection of branded segments per viewer, key for addressable solutions.
- Content valuation, which allows the platform to forecast the value of unseen content, a prerequisite for inventory planning, selling and buying.

There are competitors in the market, but also at an early (or earlier) stage, which is where the patent protection should assist. Ryff is a venture capital-backed private US company, while Triplelift primarily works in native advertising, placing in stream advertising, which may be in the form of video.
Branded Entertainment Network is an important player in the traditional product placement and influencer markets, increasingly using technology to identify suitable opportunities. Bidstack is focused on providing native in-game advertising to the global video games industry.

Key to financial success is achieving adoption and, as explained above, the sales and PR push around gaining acceptance and commercial contracts is now a key focus of effort. This is across platforms, agencies and advertisers, all of whom need to buy in to the concept for this to succeed. With a global Tier 1 entertainment company now on board, attention will be drawn to when they start using Mirriad and in what output. The hope is clearly that if this key name endorses this type of advertising, others will follow. In terms of advertisers, the leading food and beverages company is clearly a strong ambassador for the technology, while in China luxury brands have done notably well in content run on Tencent. In time, we hope Mirriad will attract a wide range of brands that can be placed across a wide variety of content inventory.

To achieve the vision which management outlines, the technology needs to be truly scalable. This needs a genuinely integrated tech stack that meshes seamlessly with those of the agencies, ultimately allowing programmatic trading. This may well involve M&A as a more time-efficient and less costly method of ensuring that the offering covers all of the optimal capabilities.

Building in the US. The priority is to make a meaningful incursion into the US market, as it generally leads the way across the industry, as well as being the largest market in the world (we estimate at around 40% of the global total in FY20). Working with global agencies and global brands should spread the reach further. Increasing the penetration in the US market will mean a greater proportion of US dollar denominated revenue, while costs are predominantly in sterling and the Indian rupee. Currency management may therefore become more of an issue (no hedging is carried out at the moment).

Payment mechanisms. We describe the outline of the type of revenue share arrangements in the financials section, below. Campaign size, frequency and the percentage of revenue share are all variable. The assumptions made here are key to the financial modelling. We work on the basis that the levels we have used as inputs are fairly cautious, but the ultimate downside revenue assumption is zero.

Ad pricing could evolve, as the systems and the AI learn what works best, where, with the most efficacious combinations generating the highest pricing per impression.

The management team, led by CEO Stephan Beringer, has worked hard to promote Mirriad's offering and nurture relationships across all the interest groups. We would highlight there is an element of key-person risk here.

Once established, there may well be an element of cyclicality, as with the rest of the industry.

We would also note that IP Group owns 25.3% of the Mirriad's equity, 12.4% through IP2IPO and 12.9% through Parkwalk Advisors.

Valuation

At this stage of the company's corporate development, with limited visibility on either the top line or on profit and with a very wide range of possible earnings outcomes, valuation is obviously not going to be an exact science.

A valuation based on earnings multiples is self-evidently not applicable and even those based on a multiple of sales are not of use when there is so little certainty. Below are the current global EV/sales multiples for the advertising sector. Mirriad's EV/sales are considerably in excess of these. However, it should be noted these advertising stocks are growing over the three years at a CAGR of 30.6%. If that were all Mirriad achieved, it would barely scratch the surface of what is possible given the novel nature of Mirriad's offering and the early stages of the company's development.

Exhibit 7: Global advertising sales multiples

	EV/sales	EV/sales FY1	EV/sales FY2	EV/sales FY3
Market	6.6	5.1	3.5	2.9
Mirriad	28.5	18.8	6.9	-

Source: Refinitiv. Note: Priced at 9 August 2021.

Reverse DCF approach to give valuation context

Rather than a traditional DCF, varying the terminal growth rate and WACC assumptions, we have looked at the appropriate level of valuation for the shares under different assumptions on medium term (beyond the explicit two-year forecast period, so FY23 to FY30) growth. This is done keeping the WACC at 10%, with a terminal growth rate of 2% in 2030 (although these assumptions are also open to question, given the uncertainties involved).

The exercise shows that, if the group achieved medium-term EBITDA margins of 25%, the current share price is factoring in a medium-term revenue CAGR of 31%. For context, the average EBITDA margin forecast for FY3 for the stocks used in the exhibit above is 20.5%, but the range is large, from 6.5% to 43.8%, reflecting the wide range of business models. If Mirriad succeeds in building the level of automation it anticipates to its ingestion, processing and integration with agencies' tech stacks, then it should be delivering EBITDA margins in the upper half of this range.

Exhibit 8: DCF with varying EBITDA margin, medium-term growth assumptions, £/ share

		Growth rate FY23–30e						
		10%	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**
EBITDA margin	45%	0.28	0.43	0.64	0.93	1.31	1.79	2.41
	40%	0.24	0.38	0.57	0.82	1.15	1.58	2.13
	35%	0.20	0.32	0.49	0.71	1.00	1.38	1.85
	30%	0.16	0.27	0.41	0.60	0.85	1.17	1.58
	25%	0.12	0.21	0.33	**0.49**	0.69	0.96	1.30
	20%	0.09	0.16	0.25	0.37	0.54	0.75	1.02
	15%	0.05	0.10	0.17	0.26	0.39	0.54	0.75
	10%	0.01	0.05	0.09	0.15	0.23	0.34	0.47
	5%			0.01	0.04	0.08	0.13	0.19

Source: Edison Investment Research

With each financial report and piece of news flow on new content and brand partnerships, we should get a better understanding of the financial dynamics and be able to hone the valuation techniques.

Financials

Mirriad Advertising remains at an early stage of commercialisation of its technology and its published financial results shed little light on its potential revenues and earnings.

Investment and adoption stage

Exhibit 9: Summary historical income statement

£m	FY17	FY18	FY19	FY20
Revenue	**0.874**	**0.416**	**1.140**	**2.180**
Cost of sales	(0.181)	(0.144)	(0.178)	(0.244)
Gross Profit	**0.694**	**0.272**	**0.961**	**1.936**
Gross margin	79.3%	65.5%	84.4%	88.8%
Employee costs	(6.879)	(6.905)	(8.123)	(7.559)
G&A costs	(4.264)	(5.680)	(4.378)	(3.407)
Forex	(0.167)	0.041	(0.168)	(0.028)
Other	0.257	0.341	0.203	0.433
EBITDA	**(10.359)**	**(11.931)**	**(11.505)**	**(8.626)**
Depreciation	(0.090)	(0.149)	(0.498)	(0.466)
Amortisation	(0.823)	(2.349)	(0.170)	0.000
EBIT	**(11.272)**	**(14.429)**	**(12.174)**	**(9.092)**

Source: Mirriad

With the group effectively still in the development stages, revenues are limited, with many campaigns run to date effectively trials to generate proof of concept. From March 2019, Mirriad entered into a contract with Tencent in China that enabled it to trial Mirriad's technology and provided Mirriad with a minimum guarantee, which was paid throughout FY20 and provided most of the recorded revenue. Although the terms of this contract were not disclosed, China provided 81% of the group's FY20 revenue (FY19: 68%). The group reports its revenues by geography, but, as we explain below, we have not used this approach in our modelling.

Cost of sales roughly translates to people costs, particularly the cost of the production centre in India, which employs around 25 people. This is effectively a quasi-fixed cost, as the facility has to be staffed to cater for peak demand, which builds in an element of inevitable inefficiency. As the business scales, we would expect some the tasks to be automated, trained by AI, allowing the gross margin to build above 90%.

Employee costs are also the major element of operating costs. The group employed an average of 106 people in FY20, of whom 30 were in management roles. The total includes operational, finance, research, marketing and client-facing staff. Research costs (which again are effectively personnel costs) are expensed rather than capitalised as there is no absolute certainty the expense will be recoverable against revenues. The General and Administrative bucket includes an element of property costs, as well as the cost of consultants and market research commissioned to validate the effectiveness of the technology and the advertising proposition.

Approach to modelling

For the two years to March 2021, Mirriad had the benefit of the regular contractual income from Tencent in China as the customer evaluated the potential benefit of the technique for its clients and how acceptable it was for consumers. As discussed earlier, a new follow-on agreement with Tencent has been agreed, removing the cap and opening up substantial opportunities for Mirriad within the leading Chinese media conglomerate.

It does, however, mean modelling group revenue becomes more problematic. The approach that we have adopted is to attempt to model the number of campaigns being run on a quarterly basis, together with an indication of the value of an average campaign. We have then used an estimate of the share of the campaign revenue that will accrue to Mirriad. With so many variables, we would emphasise this is perhaps more of an illustrative scenario than an analytic prediction. However, it is based on some indicated intervals for the metrics that have been used by management in various presentations over recent months. In particular:

- Number of campaigns. Management has mentioned running around 20 campaigns in Q121, lower than the level that might have been hoped, with some planned campaigns delayed while clients' full-year campaign planning is tailored to the pandemic conditions on reopening. After a slower-than-hoped-for Q221, we have assumed this position improves through Q3 (reflecting the pick-up in pitch activity through Q221) and that there will be the normal industry uplift in Q4. Similarly, for FY22, we would assume activity is weighted towards H2.
- Revenue per campaign. This may vary considerably by geography. Budgets and campaigns in the key US market will tend to be larger, typically in a range of $500–700k. We would expect campaigns run in Europe to be notably smaller, running territory by territory and perhaps more likely to be in the region of $100–200k. At this stage, it is difficult to judge the likely level of funds behind Chinese campaigns. Obviously, the potential audiences are huge, but pricing per view is likely to be much lower than the US, as is the case with overall ad spend per capita. We have therefore set a broad range of $200–700k per campaign. Our assumptions (shown below) are for an average campaign value of $350k in H221 as the offering becomes more established in the market, moving up through FY22 as the ROI on campaign spend becomes more acknowledged in the market and as the proportion of revenue generated in the US market increases.
- Revenue share. Here again management has indicated that revenue share will likely be in a range of 20–35%. To be conservative, we have modelled at the bottom of this range.

Exhibit 10: Outline modelling

	Indicated level	Q121	Q221	Q321	Q421	FY21	Q122	Q222	Q322	Q422	FY22
Number of campaigns		17	11	20	30	78	21	28	35	55	139
Rev per campaign	$0.2–0.7m	0.2	0.2	0.35	0.35		0.35	0.35	0.45	0.55	
Campaign revenue	$m	3.4	2.3	7	10.5	23.2	7.2	9.7	15.6	30.3	62.7
Revenue share %	20–35%	0.2	0.2	0.2	0.2		0.2	0.2	0.2	0.2	
Revenue	$m	0.68	0.46	1.4	2.1	4.6	1.45	1.93	3.12	6.05	12.5
Exchange rate	$1.40					£3.3m					£9.0m

Source: Edison Investment Research

The outturn therefore depends on the mix of business posted. The business model for music will be different, as will that for live broadcast, as and when that comes fully on stream. However, for the sake of simplicity, we will not adopt that degree of granularity for the time being.

While the number of campaigns we expect to have been completed in H121 is relatively low, we note that the latest trading update indicated that 17 new sales were in negotiation with major US advertisers at the end of June and a further 17 were at proposal or request for proposal (RFP) stage. This leads us to be more optimistic for the H221 outcome.

As explained above, the cost of sales is a reasonably fixed number, meaning gross margin should build as revenues grow. We expect the other cost lines to grow as the business scales. In Q221, the group recruited a London-based chief revenue officer, Miles Lewis, to build strategic partnerships across platforms, brands and agencies. Sales teams have also been reinforced in Asia Pacific (Melbourne), China, London and New York. Within the G&A line, various consultants are working on projects such as data strategy and building interfaces for the music business offering. There is also outsourced sales enablement also employed to take advantage of the shorter-term opportunity without adding permanent overheads.

These additional costs mean although we anticipate a step up in revenue for FY21, from £2.2m to £3.3m, we expect a larger EBITDA loss for the year of £10.9m, from £8.6m in FY20. For FY22, as the business scales further, we would (all other things being equal) envisage losses to start to reduce, with our modelling indicating a figure of (£7.9m).

While we have not prepared full forecasts further out, the momentum would indicate the group moving into profit in FY24. However, there are a lot of assumptions made to reach that conclusion that may prove inaccurate.

Fund raisings have boosted cash flow

Mirriad is currently loss making and operating cash flow is consequently negative, with cash burn in H121 of around £0.9m per month.

In August 2019, the group raised £16.2m gross (£15.3m net) at 15p per share, to back the plan put in place by Stephan Beringer after his appointment in late 2018. This gave the group the resource to build out more of the platform and the evidence of shareholder support to give some confidence to parties potentially interested in the technology.

With continued cash burn through the rest of FY19 and into FY20, there was inevitably shareholder interest in when the group would next need to raise funding. The call came in December 2020, with the issue of 65.2m shares at 40p, raising £26.2m gross (£24.8m net).

These two raises have enabled the group to scale up its commercial staffing and technical resource – both essential if it is to fulfil the potential to build a totally new stratum of advertising. As explained above, the investment in research and development, platforms, interfaces etc is all expensed rather than capitalised. With operating losses likely to persist for at least two, possibly three, more years, operating cash flow will continue to be negative over that period.

Cash supports balance sheet

At the end of FY20, the cash and cash equivalents of £35.4m represented 94% of the group's total assets. Obviously, the balance sheet date was very soon after the fund raise, without which it would have been obvious that some such exercise would be required within a few months. The recent H1 trading update indicated that at end-June, the group had cash and cash equivalents totalling £29.8m.

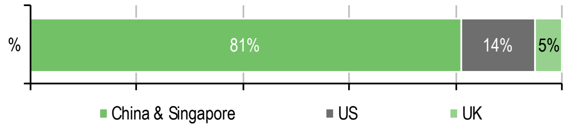
There is a further asset that is not reflected in the balance sheet but has some intrinsic value. This is the inventory that has been identified within the library resource (particularly that within the library of the Tier 1 streamer) but has not yet been sold. Putting an actual value on it would not be straightforward, as its value will depend on the precise nature of the inventory and its value to an advertiser.

Now the group's financial position is more secured, management is able to accelerate the plans to address the market opportunity, notably the effort being put behind sales. It is also in a position to infill and augment its technical capabilities through acquisitions.

Exhibit 11: Financial summary

£m	2018	2019	2020	2021e	2022e
Year end 31 December	IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT					
Revenue	0.416	1.140	2.180	3.300	9.000
Cost of Sales	(0.144)	(0.178)	(0.244)	(0.247)	(0.288)
Gross Profit	0.272	0.961	1.936	3.052	8.712
EBITDA	(11.931)	(11.505)	(8.626)	(10.927)	(7.854)
Normalised operating profit	(14.429)	(12.174)	(9.092)	(11.177)	(8.054)
Amortisation of acquired intangibles	0.000	0.000	0.000	0.000	0.000
Exceptionals	0.000	0.000	0.000	0.000	0.000
Share-based payments	(0.176)	(0.360)	(0.350)	(0.350)	(0.350)
Reported operating profit	(14.605)	(12.534)	(9.442)	(11.527)	(8.404)
Net Interest	0.058	0.023	0.004	0.004	0.004
Joint ventures & associates (post tax)	0.000	0.000	0.000	0.000	0.000
Exceptionals	0.000	0.000	0.000	0.000	0.000
Profit Before Tax (norm)	(14.371)	(12.151)	(9.089)	(11.173)	(8.051)
Reported tax	0.042	0.056	0.032	0.000	0.000
Profit After Tax (norm)	(14.329)	(12.095)	(9.056)	(11.173)	(8.051)
Minority interests	0.000	0.000	0.000	0.000	0.000
Discontinued operations	0.000	0.000	0.000	0.000	0.000
Net income (normalised)	(14.329)	(12.095)	(9.056)	(11.173)	(8.051)
Basic average number of shares outstanding (m)	104.1	150.2	215.7	281.6	281.6
EPS - basic normalised (p)	(13.8)	(8.1)	(4.2)	(4.0)	(2.9)
EPS - diluted normalised (p)	(13.8)	(8.1)	(4.2)	(4.0)	(2.9)
EPS - basic reported (p)	(13.9)	(8.3)	(4.4)	(4.1)	(3.0)
Dividend (p)	0.0	0.0	0.0	0.0	0.0
Revenue growth (%)	(52.4)	174.0	91.3	51.4	172.7
Gross Margin (%)	65.5	84.4	88.8	92.5	96.8
EBITDA Margin (%)	N/A	N/A	N/A	N/A	N/A
Normalised Operating Margin	N/A	N/A	N/A	N/A	N/A
BALANCE SHEET					
Fixed Assets	0.770	1.125	0.823	1.021	1.905
Intangible Assets	0.170	0.000	0.000	0.000	0.000
Tangible Assets	0.414	0.913	0.637	0.437	0.312
Trade & other receivables	0.186	0.212	0.186	0.584	1.594
Current Assets	16.466	20.193	36.970	26.716	23.396
Stocks	0.000	0.000	0.000	0.000	0.000
Debtors	0.974	1.025	1.476	2.532	6.904
Cash & cash equivalents	15.204	19.092	35.421	24.112	16.419
Other	0.288	0.077	0.073	0.073	0.073
Current Liabilities	(1.659)	(1.696)	(2.317)	(3.116)	(7.801)
Creditors	(1.622)	(1.298)	(1.914)	(2.712)	(7.397)
Tax and social security	(0.037)	(0.025)	(0.013)	(0.013)	(0.013)
Short term borrowings	0.000	0.000	0.000	0.000	0.000
Lease liabilities	0.000	(0.373)	(0.390)	(0.390)	(0.390)
Long Term Liabilities	0.000	(0.423)	(0.204)	(0.204)	(0.204)
Long term borrowings	0.000	0.000	0.000	0.000	0.000
Long term lease liabilities	0.000	(0.423)	(0.204)	(0.204)	(0.204)
Net Assets	15.577	19.200	35.271	24.417	17.296
Minority interests	0.000	0.000	0.000	0.000	0.000
Shareholders' equity	15.577	19.200	35.271	24.417	17.296
CASH FLOW					
Op Cash Flow before WC and tax	(11.931)	(11.505)	(8.626)	(10.927)	(7.854)
Working capital	(0.332)	(0.237)	0.165	(0.257)	0.312
Exceptional & other	0.000	0.000	0.000	0.000	0.000
Tax	(0.007)	0.248	0.082	0.000	0.000
Net operating cash flow	(12.269)	(11.494)	(8.379)	(11.184)	(7.542)
Capex	(1.016)	(0.062)	(0.025)	(0.050)	(0.075)
Acquisitions/disposals	0.000	0.000	0.000	0.000	0.000
Net interest	0.058	0.023	0.004	0.004	0.004
Equity financing	1.926	15.290	24.779	0.000	0.000
Dividends	0.000	0.000	0.000	0.000	0.000
Other	(0.169)	(0.389)	(0.363)	(0.079)	(0.079)
Net Cash Flow	(11.470)	3.367	16.015	(11.309)	(7.693)
Opening net debt/(cash)	(26.384)	(15.204)	(19.092)	(35.421)	(24.237)
FX	0.000	0.000	0.000	0.000	0.000
Other non-cash movements	0.290	0.520	0.315	0.125	0.000
Closing net debt/(cash)	(15.204)	(19.092)	(35.421)	(24.237)	(16.544)

Source: Company accounts, Edison Investment Research

Contact details	Revenue by geography
96 Great Suffolk Street London SE1 0BE UK +44 (0)20 7884 2530 www.mirriadplc.com	

Management team

Chairman: John Pearson	CEO: Stephan Beringer
John joined the board in October 2017 and was appointed chairman in April 2019. His career has encompassed advertising and media, technology and digital. He is the former CEO of Virgin Radio and Virgin Radio Intl. director of Ginger Media, chairman of Shazam and co-founder of World Architecture News and food.com.	Joined the board in October 2018 to take on the role of chief executive officer following a long career in the advertising industry where he covered a wide range of roles from creative to strategy to technology to data. Prior to joining Mirriad, he was president of data, technology and innovation at Publicis and CEO of VivaKi, driving the transformation of Publicis's programmatic buying and servicing model. He was previously chief growth and strategy officer for the digital technologies division of Publicis, international CEO for Digitas and Razorfish, and global chief strategic officer and president of Tribal DDB EMEA.
CFO: David Dorans	
David joined the board in December 2015 following a career in the broadcasting and technology sector where his roles included financial leadership and operational roles. He was previously chief financial officer at Mindshare UK, chief financial officer of YouView, head of distribution and broadcast technology at Channel 4 and general manager of UKTV.	

Principal shareholders	(%)
IP Group / IP2IPO	12.35
IP Group / Parkwalk Advisors	12.91
M&G	10.63
MI Chelverton UK Equity Growth	5.02
Investec Wealth & Investment	3.91
Ninety One UK Ltd	3.75
Columbia Threadneedle	3.06

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