

YOC

Improving the AdTech experience

YOC develops software for the digital advertising market, with the aim of optimising the advertising experience for advertisers, publishers and users of mobile internet and applications. Central to this is YOC's proprietary ad formats, as well as its VIS.X platform, launched in 2018 to create a scalable and automated exchange. The platform's operating costs are largely fixed, providing scope for margin expansion as revenues build. YOC's H121 results provide early evidence of this, where revenues increased by 22% y-o-y to €7.7m with net income from continuing operations of €228k. Tailwinds within digital advertising support the company's positive outlook and its new partnership with Oracle bolsters its positioning for the upcoming withdrawal of third-party cookies.

VIS.X delivering scalable growth

YOC has developed VIS.X into a full-stack platform, enabling the automation of both publisher inventory trading and transformation of standard advertisements into its proprietary high-impact formats. This is a competitive advantage for YOC as most other AdTech platforms only offer one or the other. Automation increases the number of transactions YOC can complete and reduces the manpower needed to operate the platform, increasing operating leverage and its potential for margin expansion. Publishers and agencies using VIS.X benefit from programmatic advertising, providing scope for more efficient, targeted campaigns with higher monetisation potential. YOC has developed relationships with tier one and tier two European publishers, as well as with prominent global advertisers.

Achieving profitability

In H121 revenue growth was 22% y-o-y and net income was €228k, driven by its VIS.X platform. Momentum is expected to build in H221, underpinned by YOC's FY21 guidance for revenue of €17–18m (+13%) and EBITDA of €1.75–2.25m (+20%). Net debt fell to €1.8m following the conversion of its convertible bond, this equates to a net debt to EBITDA of 0.8x based on FY21 guidance. That said, management needs to deliver on its VIS.X strategy to address its net liabilities position, although we believe this is achievable at the current cash generation rate.

Valuation: Strong share price performance

Following a period of underperformance, YOC's share price grew by 90% in 2020 and by a further 26% in 2021 to date. On guided FY21e sales and EBITDA, YOC trades at EV multiples of 2x and 17x, a discount of 71% and 29% respectively to our peer group. This discount could shrink as its VIS.X strategy develops.

Historic financials and FY21 management estimates

Year end	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (€)	DPS (€)	EV/EBITDA (x)	P/E (x)
12/18	14.9	0.4	(0.1)	(0.1)	0.0	94.3	N/A
12/19	14.9	0.8	0.1	(0.1)	0.0	47.1	N/A
12/20	15.5	1.8	0.9	0.1	0.0	21.0	101.0
12/21e	17.8	2.2	N/A	0.4	N/A	17.1	25.3

Source: YOC. Note: FY21e is based on management guidance.

TMT

27 October 2021

Price €10.1
Market cap €35m

Share price graph



Share details

Code	YOC
Listing	FRA
Shares in issue	3.48m
Net debt* at 30 June 2021 (including lease liabilities and shareholder loans)	€1.8m

Business description

YOC is a Germany based technology company that develops software for the global digital advertising market. By using the platform VIS.X® and YOC's proprietary ad formats, advertisers can increase awareness for their brand or products in combination with high-quality advertising inventory. Its supply-side platform VIS.X, launched in 2018, provides a programmatic marketplace for the automatic trading of digital advertising units, allowing for the real time bidding of advertising budgets. YOC's key markets include Germany, Austria, and Poland.

Bull

- European leader in programmatic advertising and high-impact formats.
- Positive net income.
- VIS.X platform has potential to deliver scalable growth at low fixed costs.

Bear

- Strong competition from several large global companies
- Still in a net liabilities position.
- Short track record of VIS.X platform.

Analysts

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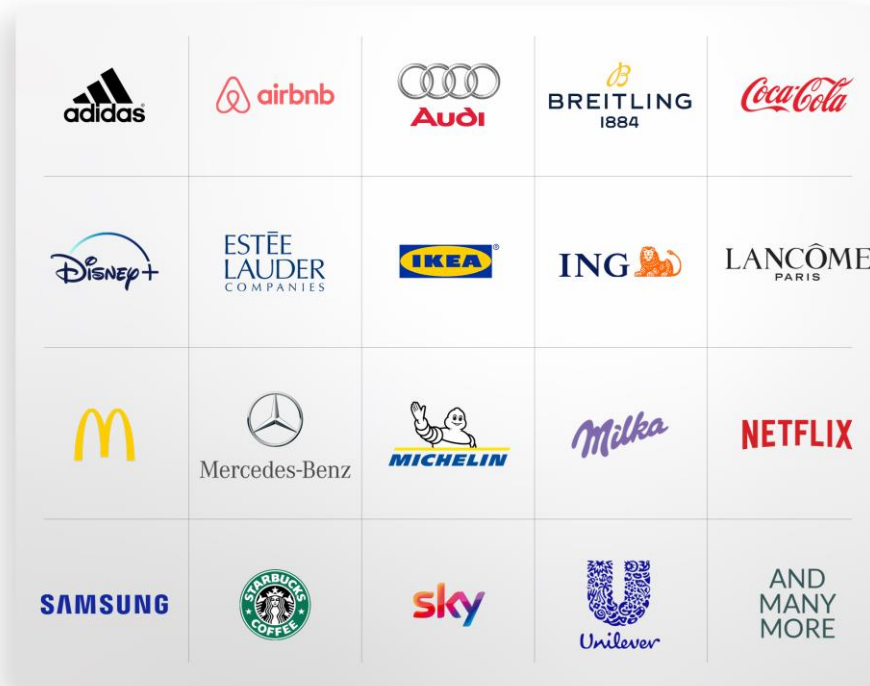
YOC is a research client of Edison Investment Research Limited.

Company description

YOC has established itself as a leading European adtech company delivering software and products for the digital advertising industry, which has been building its expertise as an SSP since its incorporation in 2001. The company operates in Germany (60% of group revenue), Austria (33%) and Poland (7%), where management still sees scope for significant growth in all three markets. Fully capturing the opportunity in these geographies is key to YOC's strategy, as historically it has discontinued operations in France (2015), the UK (2019) and Spain (2020) due to a lack of regional expertise and refocusing of cash resources on VIS.X.

In 2006, YOC listed on the Prime Segment of the Deutsche Börse raising gross proceeds of €10.4m. Since then, it has built its own proprietary technology in programmatic advertising and developed high-impact advertising formats. Over this period, the company has carried out several equity and debt raisings, including loans from CEO Dirk-Hilmar Kraus, to fund development. In 2018, YOC created its programmatic supply-side platform VIS.X, enhancing its ability to deliver efficient media trade at scale by facilitating the automated delivery of YOC's high-impact advertising formats within a single programmatic environment. This is unique to YOC and could provide the company with first mover advantage, supporting VIS.X's growth.

Exhibit 1: Advertisers that use YOC



Source: YOC, Edison Investment Research

SSPs that offer programmatic trading are typically only able to offer standard advertising formats, such as classic banners, and companies that offer high-impact ad formats are unlikely able to offer a programmatic exchange environment. YOC's ability to provide premium products that command higher than average prices in a scalable environment heightens the monetisation potential of publisher inventory. Clearly this is an attractive proposition, enabling YOC to build strong relationships with both tier one and two publishers throughout Europe.

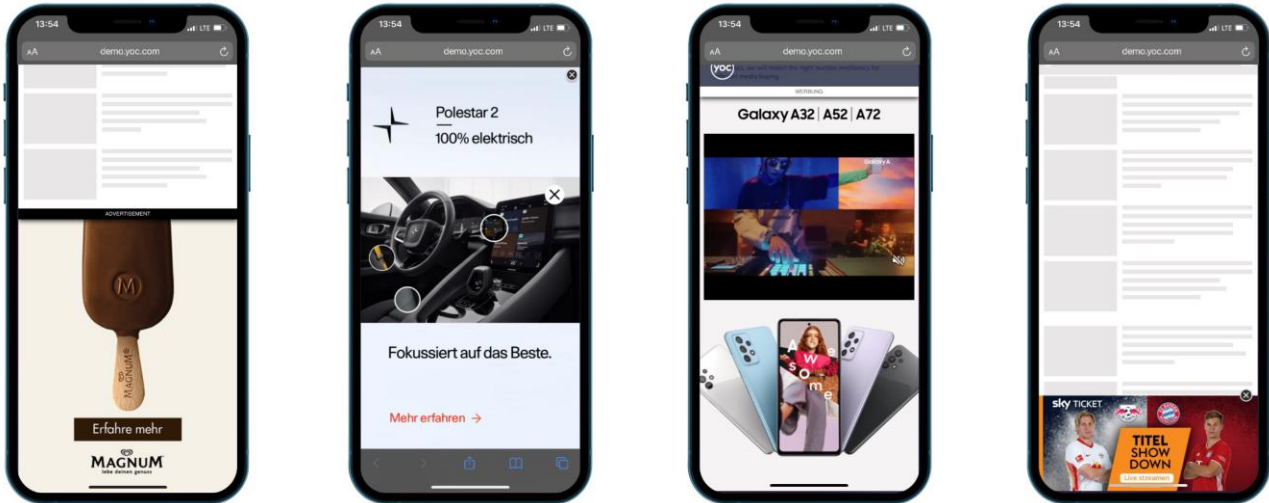
VIS.X is now the company's primary revenue driver, with management aiming for it to comprise 80% of total revenues on a run-rate basis at the end FY21 (50% at H121). Other sources of revenue derive from standard insertion order contracts run on Google's ad server, which should gradually fall following the creation of its VIS.X Ad Server on 3 August 2021. Moreover, the

platform's operating costs are largely fixed, providing scope for margin expansion as revenues build.

Award winning high-impact advertising formats

YOC has developed a portfolio of high-impact ad products, designed to improve the user experience through interactive elements and lower disturbance to the flow of reading. A clear example is its Mystery Ad, shown in Exhibit 2, which has won several industry awards, including an iab webAD and a Golden Cannes Mobile Lion.

Exhibit 2: Sample of YOC's high-impact ad formats



Source: YOC,

As shown by a [Nielsen study](#) in October 2020, the use of YOC's high-impact formats in place of standard designs leads to an increase in the effectiveness of a campaign, shown by several digital advertising metrics including:

- 36% increase in brand recognition;
- 29% rise in purchase intention; and
- 25% increase in recall after consumers are shown the advertisement again.

Advertisers are therefore willing to pay higher prices than they would for standard formats and are encouraged to do so by the high-quality inventory available on the platform. YOC's Ad Engine enables the automated and real-time transformation of standard advertising designs into one of YOC's high-impact formats with no adjustments of existing creatives needed from the advertiser, as illustrated by Exhibit 3. Due to this technological advancement, the platform's trading volume can be scaled without manual interaction.

Exhibit 3: Ad format purchasing process using its VIS.X Ad Engine



Source: YOC

On 3 August 2021, YOC announced the integration of its self-developed ad server to VIS.X for standard insertion orders, increasing the number of sales channels available on the platform and replacing the need to use Google's ad server. Previously only programmatic trading (described below) was available via VIS.X, so this is another step in developing it as a full stack platform, allowing for more automation and therefore greater scalability.

Programmatic advertising versus traditional media buying

Programmatic advertising automates the buying and selling of advertising units, where artificial intelligence (AI) powered software ensures that each impression fits within both agencies' and advertisers' target markets, budgets and goals, all in real-time. The ability to optimise a campaign instantaneously offers a significant advantage over traditional media buying, where campaigns can only be analysed and adjusted once they are finished. Programmatic trading also eliminates the advertiser's risk of overpayment by using real-time bidding (RTB), improving their return-on-investment potential versus traditional methods of pre-paying for a bulk of impressions.

Programmatic advertising could allow for less costly and more efficient campaigns than negotiating direct deals with customers. YOC's experience in this area has enabled management to integrate this technology into VIS.X upon launch, giving its platform a competitive advantage over traditional SSPs.

VIS.X platform: Developing a scalable exchange

VIS.X connects publishers and advertisers through a programmatic exchange environment, enabling advertisers to bid for inventory¹ in realtime. Advertisers place their orders through demand side platforms (DSPs), such as The Trade Desk, MediaMath and Xandr, which plug in to the VIS.X delivery stack.

VIS.X SSP offers three variants of trading, including:

- **Open market:** allows for the fully automated trading of standard advertising formats, where inventory is bought via auction.
- **Private marketplace (PMP):** provides additional benefits to the open market at higher price points and gives access to YOC's high-impact advertising formats. Other perks include guaranteed visibility, custom audiences and first look (prioritised access to inventory).

¹Inventory is advertising space that a publisher has available to sell.

- **Direct trade:** created in 2020 and includes all the features of PMP but permits buyers to purchase a volume guarantee for a specific campaign, allowing for more effective management of its advertising units.

Revenue generated from trading is split between the publisher and YOC, where YOC's share is higher when trading is carried out via VIS.X. Publishers can sell their inventory on the platform via two methods:

- **Header bidding:** inventory is placed in front of a variety of different bidders, allowing for multiple sources of demand to bid for the same inventory at the same time (RTB), increasing yield and providing higher monetisation for the publisher.
- **Direct integration:** VIS.X receives first or exclusive access to publishers' inventories and will then trade specific advertising units in real time using one of the three trading variants described above.

Advertisers are offered a range of pricing models that provide flexibility. In addition to the standard cost per mille² (CPM) and cost per click models, buyers can also choose advanced methods such as viewable CPM (vCPM), where the advertisers are only billed if the advert is seen by the user, and cost per completed video for fully viewed video adverts. Advanced methods prevent past fraudulent activities from reoccurring, such as click fraud where bots artificially inflate the popularity of an ad. Depending on the selected pricing model, VIS.X automatically optimises the ideal quantity and timing based on the buyer's specific targeting options. Additionally, advertisers only pay for inventory when the success of their campaigns have exceeded certain benchmarks, such as number of impressions.

In 2021, YOC introduced its software development kit (SDK) for the VIS.X platform, allowing for the placement of its high-impact advertisements into a mobile app. Previously, VIS.X was tailored to the web, so the introduction of the SDK provides a new revenue source for its publishers and further enhances the scalability potential of the platform.

YOC Hub: Integrating business intelligence

YOC Hub is the company's proprietary business intelligence tool, which is used for internal process management and is also made available to publishers on VIS.X as standard. The tool uses transactional data from all available demand channels, including direct sales, programmatic selling and classical mediation, enabling publishers to manage, analyse and optimise their marketing activities within a single dashboard, as shown by Exhibits 4 and 5. This is enhanced by forecasting capabilities that are powered by machine learning technologies.

Exhibit 4: Example of YOC Hub's user interface



Source: YOC

Exhibit 5: Example of YOC Hub's user interface



Source: YOC

²Term for a thousand impressions.

Market overview

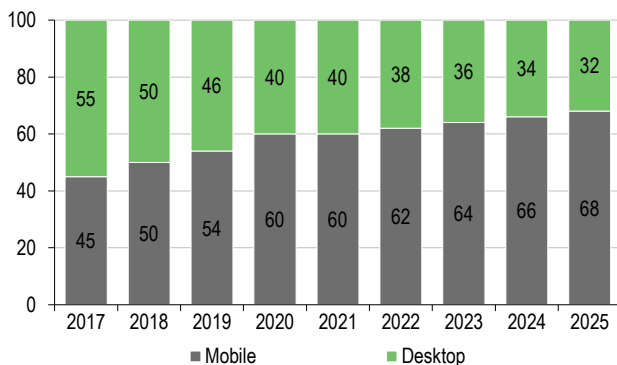
Global digital advertising spend has grown robustly since 2012, with the negative impact of the pandemic on overall advertising spend having lesser influence. YOC's main market of mobile advertising has been the primary driver of this growth, underpinned by increasing mobile web usage and penetration. The significant consolidation seen in the space since 2009 highlights the potential for mobile advertising. Further, YOC is well prepared for the upcoming changes to user data collection, namely the planned withdrawal of cookies set for 2023.

Mobile leads digital advertising

From 2014, mobile devices have been the primary way for people to access the internet and this trend has continued in 2021, with Statista estimating that people will spend 155 minutes on the internet using mobile versus 37 minutes on a desktop. Daily estimated time spent on mobile in 2021 represents a 17% CAGR from 2011. Smartphone penetration is growing at a faster rate than global population growth, increasing from 49% of the population in 2016 to over 78% in 2020, equating to 6.1bn smartphone subscriptions worldwide from a global population of c 7.8bn (Statista).

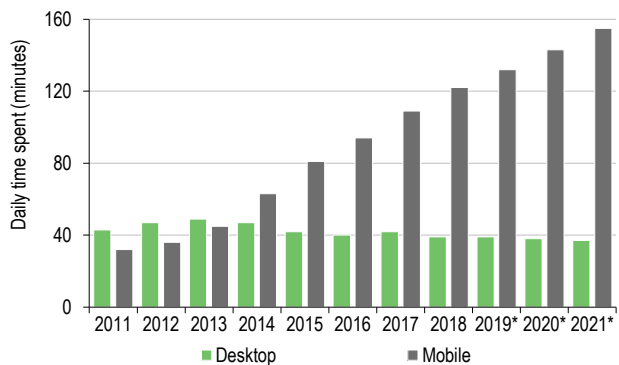
Not only do these factors increase a campaign's viewability potential, but it also expands the amount of data accessible to advertisers. Data enables advertisers to create more targeted campaigns, particularly when using technologies such as AI, which drives programmatic trading and its ability to make real-time adjustments.

Exhibit 6: Forecast global distribution of digital advertising spend, 2017–2025 (%)



Source: Statista, Edison Investment Research

Exhibit 7: Daily time spent on the internet per capita worldwide by device, 2011–2021



Source: Statista, Edison Investment Research. Note: *Estimates.

Changing data landscape

The data landscape for advertisers is evolving, driven by changes in the accessibility of third-party data. Data regulation addressing consumer concerns over privacy has to date been the primary factor, namely the EU's General Data Protection Regulation (GDPR) and California's Consumer Privacy Act. Increasing use of adblockers is also a factor. We have identified two further elements to consider that could impact the targeting effectiveness of an advert:

- Google will be withdrawing its tracking cookies over a three-month period, starting in mid-2023. In response, Google launched its 'Privacy Sandbox' in 2020 as an alternative to cookies, which uses its own first-party data to allow advertisers to carry out measurement and tracking, while making the web more private for users.
- Apple users are increasingly activating limit ad tracking on their devices, reducing the effectiveness of its Identifier for Advertisers (IDFA) function to track data. IDFAs track user activity, distinguishing how they interact with a mobile advertising campaign. A growing number of Android users are also opting out of Google Play Services ID for Android (GPS ADID), which is the Android equivalent of an IDFA.

Several programmatic advertisers, including YOC, have integrated advanced tracking techniques in response to help mitigate any impact these headwinds may have on revenues, which include:

- **Audience advertising:** targets certain interest groups by using a myriad of factors such as age, gender, income, location etc.
- **Contextual advertising:** uses machine-learning technologies to match advertisements to keywords and other metadata found in the content of a webpage.

On 27 October, YOC announced the integration of Oracle Contextual Intelligence into VIS.X, increasing both its contextual targeting capabilities and brand safety.

Competitive landscape

YOC operates in the space that connects marketers to end users, however there is little demarcation between the companies that YOC competes with. Companies that act solely as SSPs are often private and private equity backed, particularly when looking at European players that focus only on mobile advertising. Teads and JustPremium are the two most prominent, both offering their own proprietary advertising formats and programmatic exchange environment. Teads has delayed its planned H221 IPO on Nasdaq, but was expected to reach a valuation of \$5bn, equating to 9.3x FY20 sales (source: Refinitiv). Additionally, US contextual intelligence technology leader GumGum announced its planned acquisition of JustPremium in August 2021 for an undisclosed amount as key part of its growth strategy

Magnite is the world's largest independent SSP, specialising in the programmatic trade of both publisher inventory and connected TV advertising³ across all devices, with the latter highlighting the difference to YOC's high-impact formats for mobile advertising. Other notable examples include Digital Turbine and Criteo as they have both SSP and DSP capabilities on their platforms, operating at a much larger scale to YOC.

M&A and IPO activity highlights potential

Digital advertising revenues and valuations seemingly reached their peak in 2013/14 but following y-o-y declines, M&A and IPO activity accelerated from early 2020. High valuations and the low cost of debt have given companies a time-limited opportunity to broaden their capabilities more easily. The focus has been around vertical integration to create end-to-end platforms or acquiring technology that can provide user insight once access to third-party data becomes more limited (as highlighted above).

Notable examples include:

- **Azerion** acquired Sublime and Inskin Media in September and October 2021 respectively for an undisclosed amount, bolstering its European advertising offering. Both acquired companies produce their own proprietary advertising formats in a programmatic exchange environment, mainly designed for desktops but with some mobile capabilities.
- Merger between **Liftoff** and **Vungle**, which created one of the largest independent mobile app and game growth platforms, targeting user acquisition, monetisation and analytics (October 2021).
- **IronSource**, an Israeli mobile adtech company, which listed on Nasdaq in June 2021 via special-purpose acquisition company at a valuation of \$11bn (28x FY20 sales).
- **Digital Turbine** acquiring **AdColony** (mobile video ad network) for \$400m (February 2021) and **Fyber** (ad monetisation solutions) for \$600m (May 2021).

³Connected TV is a form of private marketplace deal and refers to streaming TV content over the internet on any device.

- **AppLovin's** acquisition of **Adjust** for \$1bn (announced April 2021), expanding AppLovin's software tools for mobile app developers. AppLovin also announced its IPO intentions in March 2021.
- **InMobi**, India's first private company to reach unicorn status, announced its IPO intentions in March 2021 at a potential value of \$12–15bn.

A key issue and area of uncertainty is that many of these companies detailed are still largely loss making, often despite high double-digit revenue growth.

Management, organisation and corporate governance

As a German stock corporation, YOC is subject to the German Stock Corporate Act, so it must have a dual management system by law.

Management board

The management board is appointed by the supervisory board and the term of office served must not exceed five years; however, members can be appointed more than once. Since October 2016, Dirk-Hilmar Kraus has been the sole member of YOC's management board, with his responsibilities including preparing the company's financial reports and consulting with second-level members of management.

Dirk is the CEO and founded YOC in 2001, establishing one of the world's first mobile advertising companies. Before starting YOC, Dirk gained several years of experience in strategy development at Roland Berger Strategy Consultants upon completing his studies at WHU Otto Beisheim School of Management.

Notably, as of 31 December 2020, Dirk has provided YOC with all of its shareholder loans of €480k to finance further growth, with details including:

- 2015: €180k, 5% pa interest, reported under non-current liabilities.
- 2019: €100k, 6% pa interest, due for repayment in 2021.
- 2020: €200k, 7% pa interest, due for repayment in January 2022.

Supervisory board

The supervisory board consists of three people:

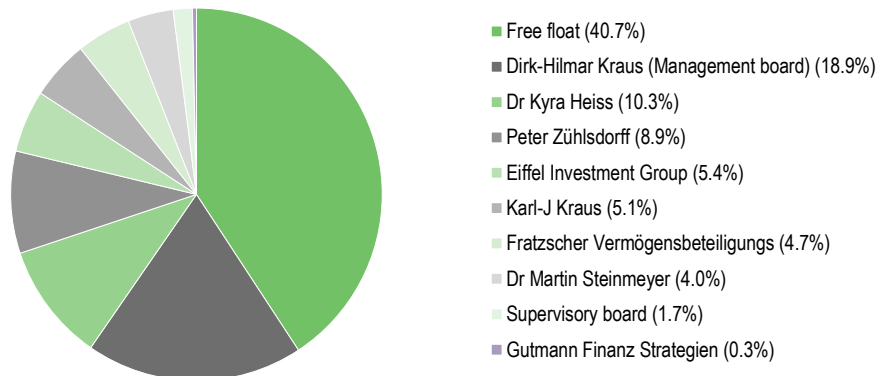
- **Dr Nikolaus Breuel (chairman)**: an experienced CEO, with core areas of expertise including the implementation of strategic corporate alignment and restructuring.
- **Konstantin Graf Lambsdorff (vice chairman)**: a solicitor specialising in tax law, with more than 20 years' experience in investments, financing and transactions. He is one of the founding partners of Lambsdorff Rechtsanwälte, a spin-off of a large international law firm that focuses on high-growth companies.
- **Sacha Berlik (Supervisory Board member)**: until 2020, worked as a managing director of EMEA at The Trade Desk and has also been a general manager of DataXu, a global leader in programmatic trading.

Shareholders and free float

Dirk-Hilmar Kraus has been the main shareholder in YOC since 2008 and holds 18.9% of the company's issued share capital. In 2021, Eiffel Investment Group became the group's fourth largest shareholder at 5.4% following the conversion of its €1.5m bond holding into 187,500 no-par value shares. This has been the most significant change in its shareholder register since 2018, which is

when Dr Kyra Heiss inherited shares from Dr Bernhard Heiss, a previous member of YOC's supervisory board.

Exhibit 8: YOC's shareholder structure



Source: Refinitiv

Financials

Business model

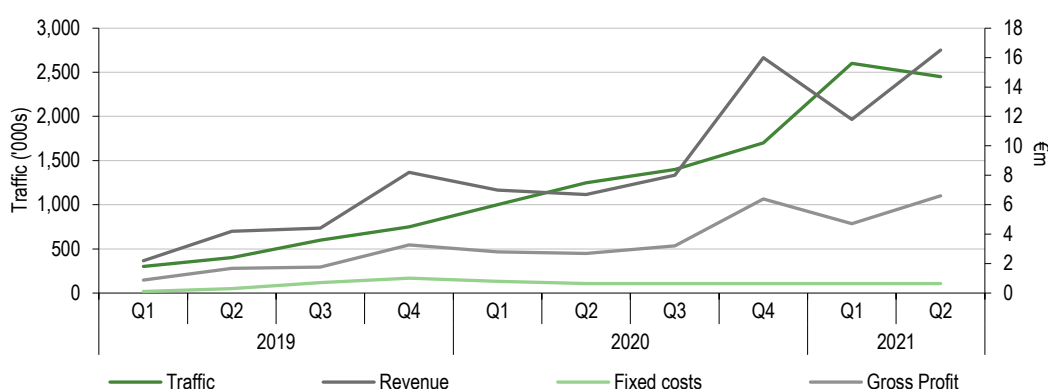
YOC sees VIS.X as its primary revenue driver, given its potential to scale revenues without the need to grow operating costs proportionately. Revenue recognised in the income statement is gross of the publisher's share, which is deducted at the cost of materials line. As at the end of FY20, Germany delivered 60% of group revenue, with Austria at 33% and Poland at 7%. Poland is its newest market, established in 2016, and management believes that its share of total revenue should grow, underpinned by its expectations for the market opportunity and current revenue trends in the region.

YOC relies on its existing relationships with European publishers, coupled with growing demand for its product offering, when selling inventory to advertisers via VIS.X. Continued growth in traffic highlights that this strategy has worked well so far, although uncertainty remains over the robustness of long-term demand, particularly if management decides to enter new markets.

Income statement

Revenue growth from 2018 to 2020 has been robust considering both YOC's change in strategy to its VIS.X platform and the impact of the pandemic on total advertising spend. This strategy change is now gaining traction, with YOC reporting 22% y-o-y revenue growth in H121 to €7.7m (+13% on H119) and 42% y-o-y growth in Q221 to €4.2m. At the half year, management reiterated guidance for FY21 revenue of between €17–18m but expects this to be at the higher end, representing at least double-digit growth and 15% higher than FY20 when using an estimate of €17.8m. We believe this is achievable given advertising revenues are typically H2 weighted, particularly in Q4.

At the end of the half year, 50% of revenue on a run-rate basis was generated via VIS.X, up from 30% at the end of FY20. The remaining 50% relates to standard insertion order contracts using Google's ad server, which should decline gradually as these orders are moved over to VIS.X's newly launched ad server. Management believes that current run rates and the addition of its ad server, should see VIS.X make up 80% of group revenues based on run-rates at the end of FY21.

Exhibit 9: Revenue, fixed costs and traffic generated through VIS.X


Source: YOC, Edison Investment Research

VIS.X offers a chance for margin expansion

As shown in Exhibit 9, the introduction of VIS.X as the main revenue driver offers the opportunity for significant margin expansion, given that the operating leverage of the platform is far higher than traditional selling methods. The graph shows that traffic grew steadily between Q119 and Q221, leading to robust growth in revenue run rates. Lower bid prices due to COVID-19 related uncertainty drove the temporary fall in revenue at the start of 2020, despite traffic continuing to build. Gross margin in FY20 was 40.6%, c 11pp higher than in 2013, which is when the company used more traditional forms of selling rather than programmatic.

Operating costs have reduced as VIS.X requires lower sales and marketing requirements than standard insertion orders and is reflected in the 9.3pp increase in EBITDA margin to 11.9% from 2018 to 2020 and a decline in other operating costs from €1.9m in FY18 to €1.4m in FY20. EBITDA margins have remained robust at 9.5% in H121 (+0.7pp y-o-y) and we believe this should increase given the expected H2 revenue weighting due to seasonal impacts, namely Christmas. This is in line with management's FY21 guidance for EBITDA of €1.75–2.25m, which equates to a margin of c 12.4% on an EBITDA estimate of €2.2m based on the company's belief that results will be at the higher end of guidance.

Exhibit 10: Income statement summary

	€'000s	2016	2017	2018	2019	2020	2021e*
Year end 31 December		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
Revenue		11,960	14,372	14,486	14,854	15,492	17,800
% change		23%	20%	1%	3%	4%	13%
Own work capitalised		184	245	352	314	510	
Other operating income		342	384	598	257	77	
Total output		12,486	15,000	15,436	15,425	16,079	N/A
% change		9%	20%	3%	0%	4%	
Cost of materials		(7,588)	(8,793)	(8,891)	(9,066)	(9,208)	
Personnel expenses		(3,991)	(4,320)	(4,220)	(3,692)	(3,683)	
Other operating expenses		(2,032)	(1,970)	(1,948)	(1,829)	(1,350)	
EBITDA		(1,126)	(83)	377	837	1,838	2,200
% change		2%	-93%	N/A	122%	120%	20%
EBIT		(1,542)	(358)	90	325	1,133	N/A
% change		12%	-77%	N/A	261%	249%	
Profit before tax (as reported)		(1,401)	(1,610)	(1,610)	(445)	(96)	N/A
% change		15%	-72%	-78%	N/A	999%	
Net income from continuing operations			(1,699)	(530)	(158)	(66)	
Net income from discontinued operations		0	0	0	(406)	(334)	
Net income		(1,699)	(530)	(158)	(473)	312	1,200
% change		12%	-69%	-70%	199%	N/A	285%
EPS (as reported) (€)		(0.49)	(0.52)	(0.16)	(0.05)	(0.14)	

Source: YOC. Note: *Management guidance.

Exhibit 11: Income statement key metrics

Year end 31 December	2016	2017	2018	2019	2020	2021*
	IFRS	IFRS	IFRS	IFRS	IFRS	
Income statement key metrics						
Revenue per employee (€'000s)	239	282	268	371	337	
Gross profit margin	36.6%	38.8%	38.6%	39.0%	40.6%	
EBITDA margin	N/A	N/A	2.6%	5.6%	11.9%	12.4%
Personnel expense ratio (personnel expense/revenue)	33.4%	30.1%	29.1%	24.9%	23.8%	
Other operating expenses ratio (OOE/revenue)	17.0%	13.7%	13.4%	12.3%	8.7%	

Source: YOC. Note: *Management guidance.

Net income benefits from low taxes

YOC's net income line benefits from low corporation taxes, which look set to continue in the short to medium term. Most of its tax is generated through its Austrian business, as its German business has high tax carry forwards from 2015 and its Polish operations are currently low profit generating. These low tax levels should allow YOC to build on the positive net income profitability achieved in FY20 and is reflected in management's FY21 guidance of €0.75–1.25m, which would represent 285% y-o-y growth based on our assumption of €1.2m, underpinned by management's belief that results will be at the upper end of its guidance.

Notably, FY19 and FY20 net income were both negatively affected by YOC's discontinued operations in the UK and Spain respectively. However, discontinued operations should not be an ongoing factor, given that management sees and forecasts growth in its three core operating markets of Germany, Austria and Poland due to its strong relationships with publishers and advertisers in these regions.

Balance sheet and cash flow

YOC's balance sheet has changed significantly in 2021, mainly due to the conversion of its 2018–2022 convertible bond, which led to a fall in both its net liabilities and debt position. The bond was issued at a nominal value of €1.56m, convertible into a maximum of 193,825 shares and was used to support investment in its VIS.X platform. Most of the conversion occurred in H121, with Eiffel Investment Group converting €1.5m of its bonds on 30 March; the remaining €53k was converted after the period end, on 31 July.

The group's other debt at the half year includes financial leases of €737k, shareholder loans of €480k and a fully drawn credit line of €500k. Using our FY21 EBITDA estimate of €2.2m, YOC has a comfortable net debt to EBITDA position of 0.8x based on net debt of €1.8m. We note that debt could currently be lower given the expected July 2021 repayment of Dirk-Hilmar Kraus's 2019 €100k loan, however its net position should not have changed.

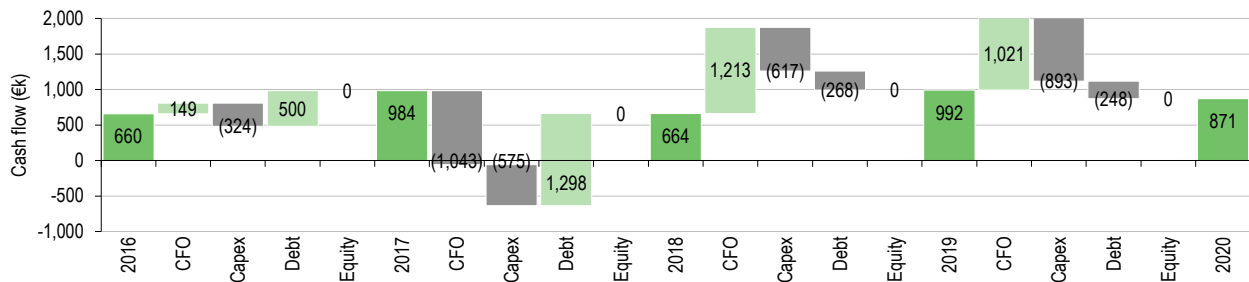
Exhibit 12: Balance sheet and cash flow summary

Year end 31 December	€'000s	2016	2017	2018	2019	2020
		IFRS	IFRS	IFRS	IFRS	IFRS
Balance sheet						
Total non-current assets		537	581	845	2,170	2,321
Total current assets		3,452	4,135	5,379	4,301	4,879
Total assets		3,989	4,715	6,224	6,472	7,200
Total non-current liabilities		1,038	1,246	2,430	3,194	2,950
Total current liabilities		6,557	7,560	7,688	7,630	8,265
Total liabilities		7,595	8,806	10,118	10,824	11,215
Net assets		(3,606)	(4,091)	(3,894)	(4,352)	(4,015)
Cashflow						
Net cash from operating activities		(952)	149	(1,043)	1,213	1,021
Net cash from investing activities		(230)	(324)	(575)	(617)	(893)
Net cash from financing activities		972	500	1,298	(267)	(248)
Net cash flow		(210)	325	(320)	328	(121)
Cash and cash equivalent end of year		659	984	664	992	871

Source: YOC

The group is still in a net liabilities position, despite this figure almost halving to €2.2m at the end of H121 from its FY20 position of €4.0m. This is primarily due to its high levels of current liabilities relative to current assets (H121 current ratio: 0.52, FY20: 0.59), with both periods mainly comprising significant trade payables and liabilities from invoices not yet received. The group's negative H121 equity position was driven by negative retained earnings of €27.8m, which we expect to reduce due to management's change to a more scalable, profitable strategy underpinned by VIS.X.

Exhibit 13: Waterfall showing cash flow movements



Source: YOC

We believe YOC could move to a positive equity position in the near future, underpinned by current levels of free cash flow and expected growth in profitability driven by VIS.X. That said, uncertainty remains if cash burn is greater than management anticipates or if sales from VIS.X do not grow as quickly as expected. Additional funding may also be required for any unplanned M&A or substantive capital projects.

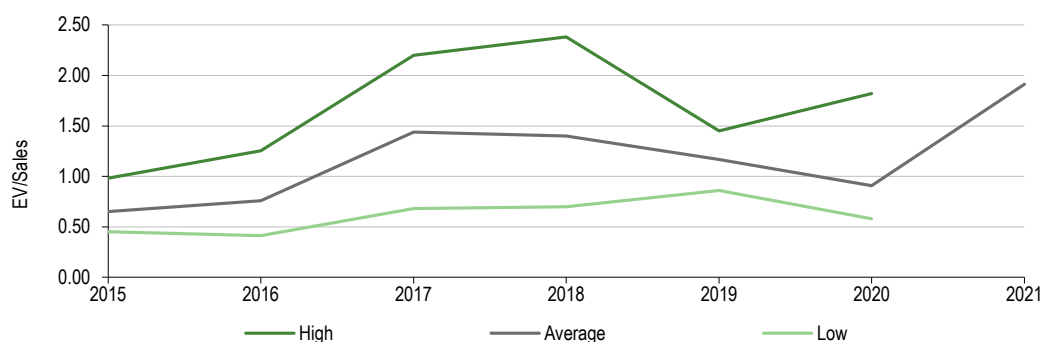
YOC capitalises some of its development costs, where own work capitalised was €510k (3.3% of sales) in FY20, up from €314k (1.7% of sales) in FY19. Since the introduction of VIS.X, greater movements in the company's working capital are explained by its increasing proportion of revenue generated by programmatic trading, which have comparatively longer payment terms.

Dividend policy: Reinvested for capital growth

YOC is currently not in a position to pay dividends and we expect any profits generated to be reinvested back into the business for the foreseeable future.

Valuation

As shown in Exhibit 14, YOC's valuation on an EV/sales basis softened in 2018, in line with revenue growth slowing from 20% in the prior year to 1%, primarily due to the introduction of GDPR. The company's valuation showed signs of recovery in 2020, corresponding with a 205% increase in share price from a low of €2.6 on 31 July to a high of €8.0 on 30 December. This is reflected in the growth of the high-level in FY20 EV/sales as a result of an increased market capitalisation. YOC's share price has continued grow and is up 26% ytd to €10.1.

Exhibit 14: EV/sales FY15–21e


Source: Refinitiv. Note: FY21 based on management guidance.

Peer comparison

As consensus forecasts are not yet available, we compare management's FY21 guidance to the consensus forecasts of a basket of global SSPs, DSPs and other technology companies focusing on programmatic advertising. We note there is no exact peer given the uniqueness of VIS.X with its ability to programmatically trade YOC's high-impact advertising formats and the limited presence of companies that operate solely as SSPs. We have also included various valuation metrics based on financial performance.

Despite YOC expecting an acceleration in sales growth in FY21, it is still 25% lower than the peer group median forecast of 40%. EBITDA margin was 13% lower than peers in FY20 and 17% lower than FY21 forecasts, but we believe YOC's EBITDA margin should expand as programmatic trading's share of revenue continues to build.

Exhibit 15: Peer valuation

Company	Price	Market cap (US\$m)	ytd (%)	Sales growth (%)		EBITDA margin (%)		EV/sales (x)		EV/EBITDA (x)	
				Two-year CAGR	FY21e	FY20	FY21e	FY20	FY21e	FY20	FY21e
TTD	US\$76.8	36,753	(4)	32	40	34	38	43	31	127	81
Digital Turbine	US\$84.1	8,086	49	36	759	14	16	58	7	413	41
Ströer	€72.6	4,776	(10)	(2)	7	31	32	4	4	12	11
Magnite	US\$26.2	3,439	(15)	33	90	19	31	15	8	77	26
Criteo	US\$33.4	2,035	63	(8)	9	30	33	2	2	6	5
Tremor	722p	1,523	84	(13)	47	29	39	7	5	24	12
Pubmatic	US\$28.6	1,442	2	N/A	40	34	33	9	6	27	20
Media & Games Invest	€4.9	842	131	82	64	19	26	5	3	28	12
Acuity Ads	CA\$7.8	382	(45)	26	26	15	18	5	4	30	20
Ad Pepper	€5.4	136	11	16	7	26	25	3	3	13	13
Peer average		5,941	27	23	109	25	29	15	7	76	24
Peer median		1,779	6	26	40	27	31	6	4	27	16
YOC	€10.1	41	26	3	15	12	12	2	2	21	17
Premium/(discount)			0%	-19%	-94%	-13%	-17%	-84%	-71%	-73%	-29%

Source: Refinitiv, Edison Investment Research

On FY20 and FY21e sales, YOC trades at EV multiples of 2x for both years, representing a discount of 84% and 71% respectively to our peer group average. On EBITDA, YOC trades on 21x for FY20 and 17x for FY21e, indicating a smaller discount of 73% and 29% respectively. We believe this can be explained by YOC's comparatively small size, with its market cap at \$41m versus the peer group average of \$5.9bn (median: \$1.8bn). Its geographical location is another factor, with US-listed companies having the highest valuations at an average of 11x FY21e EV/sales and 35x FY21e EV/EBITDA. We believe that management's ability to grow a robust track record for its VIS.X strategy and moving to a positive equity position could be key for closing this discount.

Sensitivities

We believe both YOC's financial performance and share price will be sensitive to the following factors:

- **Competition:** YOC competes with several large global companies, which are in the financial position to replicate YOC's unique selling proposition of trading high-impact advertising formats through a programmatic exchange.
- **Changing technologies:** the introduction of programmatic technologies and rapid growth in mobile advertising highlight how fast the space can change, where radical innovation could see the effectiveness of VIS.X diminish.
- **Funding:** additional funding may be needed if there are any external factors that result in an unexpected reduction in free cash flow, or if there are any unplanned M&A/substantive capital projects.
- **New regulation:** the introduction of GDPR in Europe affected YOC's revenue growth in 2018, so any new regulation has the potential to have the same impact. That said, management is confident that it is well prepared for any upcoming known changes, for example the withdrawal of cookies in 2023.
- **Restricted liquidity:** the free float of YOC shares has consistently remained at between 40% and 60%.

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