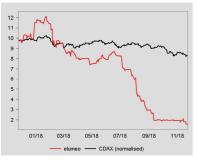


		Value Indicators:	EUR	Share data:		Description:	
				Bloomberg:	ELB GR	elumeo is a vertically-integ	
				Reuters:	ELBG.DE	multi-channel, precious jev	wellery
				ISIN:	DE000A11Q059	retailer	
		Market Snapshot:	EUR m	Shareholders:		Risk Profile (WRe):	2018e
Duice	EUD 4 50	Market cap:	8.6	Freefloat	26.5 %	Beta:	1.8
Price	EUR 1.56	No. of shares (m):	5.5	Blackflint ltd. (Boyé)	26.6 %	Price / Book:	0.5 x
		EV:	13.8	Ottoman Strategy Holdin	ngs 26.2 %	Equity Ratio:	49 %
		Freefloat MC:	2.3	Heliad Equity Partners	7.5 %		
		Ø Trad. Vol. (30d):	14.06 th	Sycomore Asset Manageme	nt 5.1 %		

# Restructuring in progress

- Unique business model: elumeo is no ordinary precious jewellery retailer. Not only is its vertically integrated business concept a rarity in non-branded jewellery, its distribution channel is also unique as about 58% of sales are currently generated on proprietary television channels. Nearly 35% of sales are generated online.
- Jewellery is a fragmented market: Most jewellers do not venture outside their domestic markets. The largest European player holds a market share of less than 2%. In Germany, the overall jewellery market is growing only marginally at around 0.3% CAGR 2010-2017 but the online channel has shown double-digit growth for the last three years and even the TV sales channel has defended its market share. Given an online share of just 10% in the sector we expect e-commerce to continue to show double-digit growth in the next years.
- elumeo has several strengths: Firstly, it is price leader in the industry with a price advantage of around 45% for its customers. With its multi-sourcing approach (India & Thailand) and its fully automated logistic operations, elumeo should also have one of the best cost structures in the sector. Secondly, elumeo has a very loyal customer base with more than 75% repeat customers. With the company's unique auction-based sales format and the video content, the emotional engagement of its customers is very high. Finally, as nearly 35% of sales are generated online, elumeo has very high exposure to the sector's main growth channel.
- Unfortunately several issues have prevented elumeo from capitalising on its strengths. Immediately after the IPO in 2015, logistic problems in its UK subsidiary and adverse currency movements in the Thai Bhat, and later the pound sterling (GBP), led to substantially negative EBITDA in 2015 & 2016. Meanwhile in Chantaburi, Thailand, the company's substantially enlarged production facility was not operating profitably in the long run, requiring an overhaul of the supply chain. Thus 2018 EBITDA is expected to be substantially negative again.
- In response to these difficulties, elumeo overhauled its merchandise structure and programme format in summer 2018. Furthermore, elumeo exited the UK market and in November 2018 decided to close the unprofitable production in Thailand. Finally elumeo identified EUR 6m in cost savings and the board appointed an experienced chief restructuring officer to oversee the implementation of the measures.
- Based on the initiated measures we expect elumeo to approach EBITDA breakeven in 2019 and generate an EBITDA of EUR 3m in 2020.
- As elumeo is currently in a restructuring phase, the share is not attractive based on 2018 and 2019 multiples. Assuming a successful turnaround, our DCF model indicates substantial upside. However there are substantial uncertainties arising from a tight liquidity situation with a looming loan maturity at year-end, a dispute with a major shareholder and director, and the task of liquidating the manufacturing company in Thailand. While elumeo should ultimately master these challenges we initiate our coverage without a rating, until these issues have been successfully resolved.

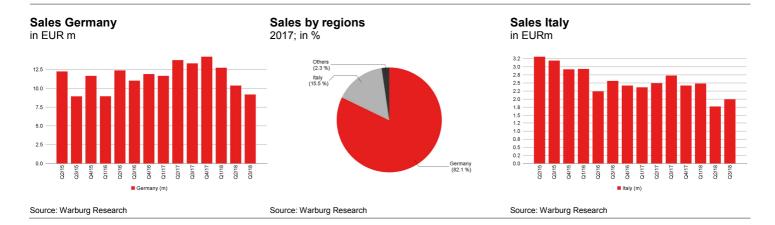


Rel. Performance vs CDAX:	
1 month:	-19.8 %
6 months:	-67.6 %
Year to date:	-71.8 %
Trailing 12 months:	-69.1 %

Company events:	

FY End: 31.12. in EUR m	CAGR (17-20e)	2014	2015	2016	2017	2018e	2019e	2020e
Sales	-1.9 %	70.8	72.6	58.5	67.6	55.0	58.8	63.7
Change Sales yoy		33.0 %	2.6 %	-19.5 %	15.5 %	-18.5 %	6.9 %	8.4 %
Gross profit margin		52.9 %	46.1 %	45.6 %	44.1 %	36.5 %	45.0 %	48.0 %
EBITDA adj.	-	4.1	-4.9	-4.2	-0.6	-11.2	-1.0	3.0
Margin		4.8 %	-8.2 %	-10.0 %	-3.2 %	-23.1 %	-4.2 %	2.4 %
EBIT	-	2.5	-8.7	-9.0	-1.6	-14.2	-2.5	1.5
Margin		3.6 %	-12.0 %	-15.5 %	-2.4 %	-25.8 %	-4.2 %	2.4 %
Net income	-	2.8	-8.9	-15.5	-6.0	-15.5	-3.1	1.2
EPS	-	0.69	-1.88	-2.82	-1.10	-2.82	-0.56	0.23
EPS adj.	-	0.92	-1.30	-1.29	-0.49	-2.53	-0.56	0.23
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		-0.76	-6.67	-2.34	0.90	0.94	-0.17	0.24
EV / Sales		n.a.	1.5 x	1.4 x	0.9 x	0.3 x	0.3 x	0.2 x
EV / EBITDA		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.5 x
EV / EBIT		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8.9 x
P/E		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.9 x
P / E adj.		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.9 x
FCF Potential Yield		n.a.	1.5 %	3.6 %	-14.2 %	-42.6 %	2.1 %	25.5 %
Net Debt		-2.4	-0.2	12.0	10.4	5.2	6.1	4.8
ROE		14.8 %	-23.6 %	-34.5 %	-17.0 %	-63.2 %	-19.5 %	8.4 %
ROCE (NOPAT)		16.7 %	n.a.	n.a.	n.a.	n.a.	n.a.	7.1 %
Guidance: n	.a.							



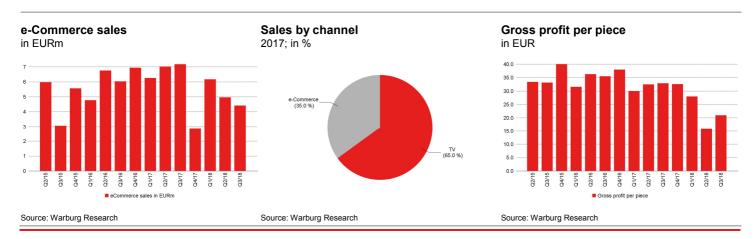


# **Company Background**

- Elumeo is a precious jewellery retailer offering a broad range of gemstones mostly in the price range of EUR 25 to EUR 1,000. Products priced at more than EUR 1,000 generate about 15% of sales.
- Elumeo is a multi-channel retailer. Revenues generated on the company's television channel amount to about 60% of sales while e-commerce generates 35%.
- On its TV channels, Elumeo sells its products exclusively in a Dutch auction-like process. The auction starts with a high price, which is gradually lowered until customers bid at a price level they deem attractive.
- Elumeo has a range of collections targeting a variety of target customers with specific design elements.
- Due to the vertically integrated structure, elumeo is the price leader in (online-) jewellery.

# **Competitive Quality**

- Elumeo's vertically integrated business model cuts out several steps in the supply chain. It uses its cost leadership for a price differentiation to peers and prices are significantly lower than the competition.
- The integration of design and production processes in combination with distribution via a proprietary TV channel represent high barriers to entry. This model ensures very short lead times and a wide product assortment.
- The auction process leads to a higher customer engagement while the limited product availability coupled with the continuous supply of "fresh" merchandise prompts frequent purchases.
- The internet is already responsible for attracting about 60% of new customers. Structural growth of the internet sales channel should also be a major driver of growth for the company.





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# **Summary of Investment Case**

#### Investment triggers

- A substantial improvement in the gross margin from current levels of less than 40% to the 2013/2014 level of more than 50% would trigger a re-assessment of the margin potential. Once the benefits of the new multi-sourcing approach become fully visible in the P&L the market should discount such a scenario.
- Elumeo has identified cost savings of up to EUR 6m which are, for the most part, to be realised in 2019. The restructuring programme is led by an experienced Chief Restructuring Officer.
- On the back of the implementation of the new multi-sourcing strategy, elumeo should return to top-line growth in 2019.
- The reduction in working capital should solve the tight liquidity situation. Particularly the redemption of the EUR 5m loan, which is due December 31 2018, should substantially reduce the investment risk.

#### **Valuation**

- Due to the current breakeven situation, elumeo's valuation on earnings multiples is rather high
- Elumeo trades on EV/sales 2018 of 0.3 and is thus one of the cheapest stocks in our peer group. However compared with online retailers with similar growth/margin development, that is not particularly low.
- Our DCF model yields a value of EUR 3 per share and therefore substantial upside, however our model assumes a successful turn-around and an EBITDA margin of 9% in the mid term.

#### Growth

- In 2018, elumeo's sales and earnings will decline substantially. However, with its exposure to structurally growing sales channels and the change in the sourcing strategy, we expect high single-digit sales growth in 2019 and 2020.
- The combination of the cost savings programme and the changes in the supply chain should lead to substantial profitability improvement in 2019 and a mid single-digit EBIT margin in 2020.

#### Competitive quality

- In contrast to traditional retailers, elumeo is vertically integrated, which means it enjoys superior sourcing conditions and lead times. elumeo largely reinvests this cost advantage in prices.
- elumeo offers a much wider range of gemstones than other jewellers, making the product assortment unique.
- elumeo is operating multiple electronic distribution channels, i.e. not only mobile app and internet but also classic TV personal shopping.
- With interactive television formats and online bidding agents, elumeo offers a "live" experience and attractive content, which enhances the consumer's shopping experience.



# **Company Overview**

#### **Products**

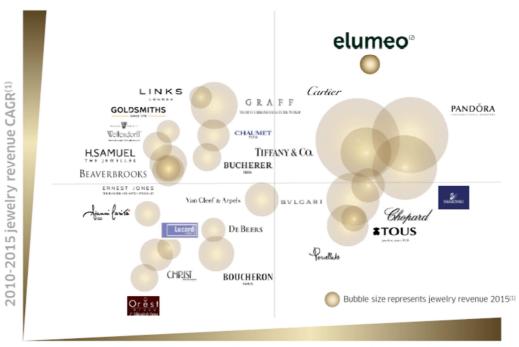
Elumeo is a vertically integrated precious jewellery retailer. Since 2018 elumeo sources its merchandise from two manufacturing sites in India and Thailand, which are operated in close cooperation with local partners.



#### Sales Split (based on 2017 sales of EUR 67.5m)



## **Key Competitors**



European presence (in % of European market size)(3)

Source: Warburg Research



# **Company & Products**

- Elumeo solely sells precious jewellery and offers a far wider range of gemstones than its peers
- Multi-channel distribution with more than one-third of business in pure e-commerce
- Interactive features and video content make for a very engaging shopping experience
- Vertical integration ensures excellent sourcing conditions

Benefitting from increasing ecommerce penetration

# Vertically integrated, multi-channel, precious jewellery retailer

elumeo's mission statement is to "make fine jewellery an affordable luxury for everyone".

# History

The company was founded in 2008 with an initial investment of EUR 4m. Until Jan 2015 the expansion was solely financed by the company's cash flow. Considering that international expansion started in 2010, the cash-efficient growth is an outstanding achievement. Finally in July 2015, elumeo went public. In the aftermath of the Brexit referendum and operational difficulties, management decided in late 2017 to exit the UK market. In early November 2018 management decided to close the group's own production facilities in Thailand.

# Management

The company is run by an experienced, entrepreneurial management team that consists mainly of elumeo co-founders. Chairman of the Board is Wolfgang Boyé a co-founder of elumeo with more than 15 years of entrepreneurial experience. In November 2018 Ingo Stober, who has many years of extensive experience in the turnaround of retail companies, was appointed Chief Restructuring Officer.

Currently there is a dispute between Don Kogen, member of the executive board, and the company, as Mr. Kogen is legally challenging a decision of the board to appoint a managing director of Silverline Distribution Ltd., one of elumeo's subsidiaries. In our view this has to be seen against the background of a request by one large shareholder to replace Mr. Boyé as Chairman of the board (as well as the dismissal of three managing directors).

## Juwelo is the company's key banner

Juwelo is the key retail banner in all markets. In addition to Juwelo, elumeo also owns the New York Gemstone and schmuck.de sites, however the sales generated with these brands are very small (low single-digit share of revenues). Juwelo has established a number of brands, covering a broad range of design patterns, which are tailored to specific target groups.

## Distribution: multi-channel approach

Juwelo follows a truly multi-channel approach. TV distribution is still the most important channel and is considered to be the best way to reach the typical consumers of precious jewellery, who are generally in the late-50s age-bracket. Bearing in mind that elumeo already produces live TV content, this content can also be migrated to formats for smart TV and web-based TV applications as the penetration of these formats increases. The highest rates of growth, however, are currently being seen in elumeo's web shops and its mobile app.



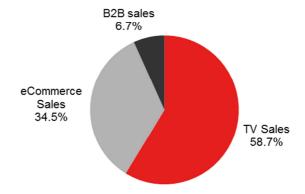
## Multiple avenues to reach the customer



Source: elumeo, Warburg Research

In 2017, e-commerce already accounted for 34.5% of sales and grew 26% yoy. While TV sales were still growing in 2017 (+5%), its relative share of sales has decreased. This channel now only accounts for 58.7% of elumeo's overall sales, down from 75% in 2015.

#### TV and e-commerce share of sales in 2017

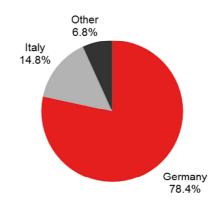


Source: elumeo, Warburg Research

Elumeo is operating two TV channels: one in Germany and one in Italy. Its web-shop operations also extend to France, the UK, Spain, Benelux and the US. The B2B business relates mainly to the sale of elumeo's jewellery to TV stations in the US. However as this was a low-margin business, which helped to increase the capacity utilisation of the group's production facility in Thailand, we don't expect any meaningful sales from this business line in 2019.



## Regional split (2017)



Source: elumeo; Warburg Research

# Marketing: proprietary TV channel meets online marketing

For its TV commerce format, elumeo operates proprietary TV channels. Rather than advertising, elumeo focuses on attracting viewers to its TV channels. A key way to attract viewers is to secure an attractive position in the electronic programme guides of TVs or set-top boxes. elumeo has managed to do this in Germany mainly due to its experience in the market. This attractive positioning serves as a solid barrier to prevent competitors from copying the business model.

In addition to its CRM activities, elumeo uses online marketing in all relevant markets. elumeo's key brand Juwelo emerges as one of the top results for specific search queries (e.g. "ruby ring") rather than in general searches for jewellery retailers.

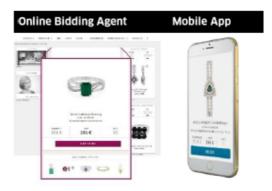
#### Interactive price discovery

On its TV channels, elumeo sells its products exclusively in a Dutch auction-like process. A "Dutch auction" describes a bidding process in which the auction kicks off at a high price and this is gradually lowered until customers bid at a level that they deem to be attractive. For regular pieces, elumeo announces the size of the lot and all bidders pay the price required to sell the last piece (higher-priced products, so-called highlights are only available once and, in this case, the process stops once the first bid is made. Should a product fail to attract bids, elumeo has the option of withdrawing the offer). Bids can be placed over the telephone, on the internet or a mobile app. This makes for a unique shopping experience, combining information and active engagement of the consumer.



# Video content conveys emotion and facts





Source: elumeo

# Fully integrated design and production

## Vertically integrated production process



Source: elumeo

The fully integrated value chain represents a significant cost advantage over peers and faster lead times. Products are manufactured in Bangkok and Jaipiur – in a lean supply chain approach. Elumeo does not own the production plants but has a centralized, vertically integrated platform to manage the production processes not just to ensure the high quality requirements of elumeo but also to ensure compliance with high social and sustainability standards.

The sourcing of gemstones is determined by elumeo specialists and a network of suppliers across the globe. This extensive global coverage provides for quick access to new discoveries. The company also seeks to support sustainable local mining practices. Its access to a broad selection of gemstones enables elumeo to offer more than 500 different gemstone varieties.



After their arrival, the gemstones are reviewed for quality and are sorted according to clarity, carat, cut etc. As some designs are made solely for specific gemstones, they need to be matched accordingly. Jewellery designs are drawn on a scale of 1:1, as frequently requested by sales entities, while the designs may also be adapted to customer preference. Currently more than 50,000 models are saved in an electronic database.

The first step of the production process is the creation of a master mould based on the design. The materials are then smelted and cast accordingly with the aid of a rubber mould and wax. After being placed in a furnace, followed by a water bath, the cast is extracted and the unfinished goods are clipped from the wax. The material is then weighed for overall material loss (<5%). The final steps involve the careful collection of metal shavings and dust before setting the gemstones in the prefinished products. The product is then polished, reviewed and undergoes a quality inspection before being shipped, stored and sold.

# Wide range of products a key factor of differentiation

Compared to its close peers, the broad range of products offered by elumeo represents another key factor of differentiation. elumeo offers more than 500 different gemstones. In both elumeo's TV formats and the webshop, the product offering is accompanied by information to educate the customer on gemstones. These efforts enable elumeo to sell such a diverse product range.

# Range of gemstone varieties offered

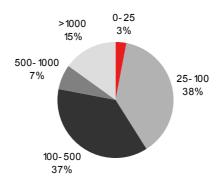


Source: elumeo

Although more than 75% of elumeo's sales are with products priced below EUR 500, it has successfully started to tap the market for jewellery with price tags of more than EUR 1,000.



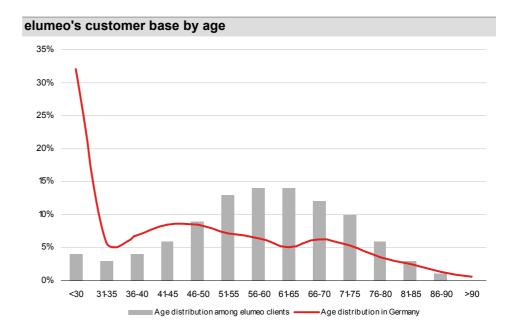
# Sales breakdown by price range



Source: elumeo

# Typical customers are not digital natives

elumeo's customers are mostly female (76%) and within the 46 to 75 age group. People aged 30 and younger, so-called digital natives, are underrepresented compared to the age distribution among the German population. We consider this age structure a key reason for the difficulties experienced by pure jewellery online retailers. elumeo on the other hand can capitalise on this age structure and should thus be able to participate in both the internet growth and the attractive pool of customers not as versed in internet technology.



Source: elumeo, destatis, Warburg Research



# **Competitive Quality**

- Elumeo offers the widest assortment of coloured gemstones at far more attractive prices than peers
- Fully automated warehouse and vertically integrated production ensure cost leadership
- Transition to mostly web-based business model is progressing rapidly
- High share of repeat buyers
- Auction process leads to higher emotional engagement of customers

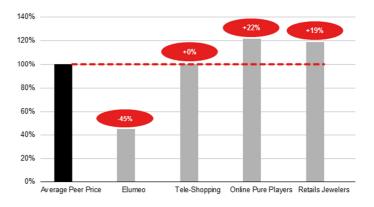
Vertically integrated production should secure price leadership

# Price and cost leadership

With its vertically-integrated business model, elumeo cuts out several steps in the supply chain. The traditional jewellery retail business model is based on wholesale sourcing rather than integrated production which is generally limited to the niche of artisan goldsmiths or the large luxury brands. While other online jewellers are contributing to the change in the distribution landscape, few have attempted to change this key inefficiency of the industry.

elumeo uses its cost-efficiency for clear price differentiation to peers and, broadly speaking, elumeo's prices are around 45% lower than competitors':

#### Around 45% price advantage compared to peers (1)



Source: elumeo, Warburg Research; (1) Based on elumeo's market observations between Nov-14 and May-15. Based on the average variance of each item of a selection of 12 comparable jewellery items to the average price of this selection; (2) HSE24, QVC and GEMS TV; (3) Amazon.de, Rakuten.de and Valmano.de; (4) Include Berlin branches of Christ, Wempe, Juwelier Fidan, Goldschmiede Hahs, Juwelier und Goldschmied

As the extensive price survey conducted by elumeo dates back to 2015, just before the IPO, we checked if this claim still holds true. We focused on the German market leader Christ, as the most relevant peer. In our view, elumeo has retained clear price leadership. Furthermore, the breadth of Christ's range of coloured gemstones is significantly smaller than elumeo's (In May we did not find a single emerald on Christ's webshop compared with 167 items at Juwelo, elumeo's retail brand).

In the table below we have listed a couple of pieces that we deem comparable in terms of the quality of the gemstones and precious metals used. This rough overview confirms that elumeo's prices continue to compare very favourably to Christ and management's claim of a price advantage of around 45% is still broadly realistic (prices as of April 2018).



Selective p	rice comparison	Juwelo/ Christ		
	Jı	uwelo		Christ
Diamond	Art.Nr 8447EW 375er Gold Diamond	99 €	Art.Nr 60027021 333er Geldbgold Diamond	249 €
Ruby	Art.Nr. 1269OJ 375er Gold Ruby	199 €	Art.Nr 60073112 333er Gelbgold Ruby	399 €
Earstuds	Art.Nr 2302CL 925er silver Tahiti Pearl, Eme	rald • 149 €	Art.Nr 86775557 925er silver Tahiti Pearl	299 €

Source: Warburg Research

Finally elumeo has fully automated its warehouse, adapting a solution from the pharmacy business (Apostore) for its needs.

# Fully automated warehouse





Source: elumeo



# Auction process a key advantage

#### Interactive live commerce increases customer engagement

#### Live commerce

- Actively engaging and educating customers through elumeo's liveselling-system
- · Live content used across all channels
- Live show with strong educational content to increase brand recognition, trust and compensate for missing touch & feel element of pure eCommerce players

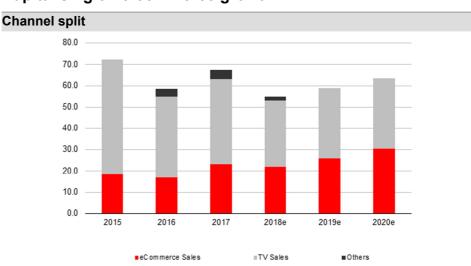


Source: elumeo

On its TV channels, elumeo sells its products exclusively in a process resembling a Dutch auction. A Dutch auction describes a bidding process in which the auction kicks off at a high price and the price is gradually lowered until customers bid at a level that they deem to be attractive. In our view this has several advantages. Firstly limiting the available products increases the desirability and increases the pressure on the customer to act as the same product will not be available later. Secondly, it introduces a gaming element to the process which increases customer interest in the format. Thirdly, the process leads to efficient inventory management.

Ultimately, the auction format allows elumeo to effectively apply the lessons of successful (vertical) fashion companies - frequent changes in the product offering leads to higher purchasing frequency.

# Capitalising on e-commerce growth

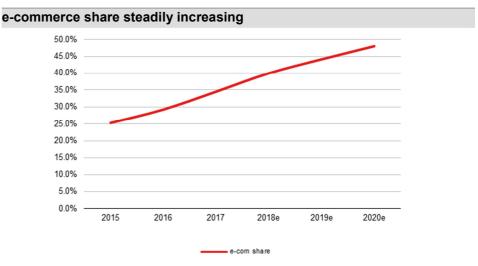


Source: elumeo, Warburg Research:

Since 2016, elumeo has been consistently generating more than 50% of its new customers over the internet (in 9M 2018 the figure stood at 54%). Thus the combination of new customer acquisition and the transition of existing customers leads to a steady increase in the e-commerce share of the business. Indeed, although we expect a small



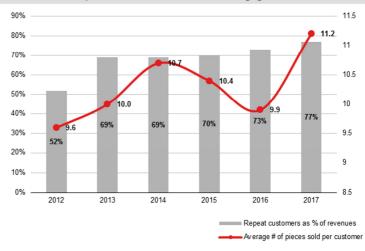
decline in online sales in 2018, the share of online sales has increased further. In light of an expected online share of 40% for the full year 2018 (9M 2018 38%), elumeo is thus on track to become an internet-driven business.



Source: elumeo, Warburg Research

# Loyal customers

# Repeat customers expected to continue driving growth



Source: elumeo, Warburg Research

Despite some challenges in the last years, elumeo's customer loyalty has been consistently high. Not only has the average number of pieces-per-customer remained consistent at around 10, more importantly 77% of revenues are generated by repeat customers. We see this as proof of the appeal of elumeo's wide product range. It should also be seen as indication that customers value the combination of information/education and shopping on elumeo's TV formats.

While in 2018 customer based KPIs also should have slipped, the historical customer loyalty should be a good base to return to sales growth based on a more attractive product assortment.



# **Growth / Financials**

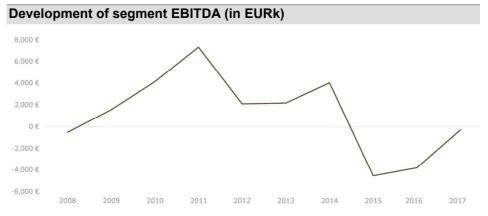
- The first years after the IPO have been challenging
- Positive momentum of new product and marketing strategy has led to a return to double-digit growth in 2017 (+30%)
- Supply chain change has choked top-line momentum in 2018
- Substantial cost savings programme initiated
- Gross margin remains a key challenge, however early results of new supply chain look promising

#### Thai Bhat, Brexit and poor execution

# What went wrong?

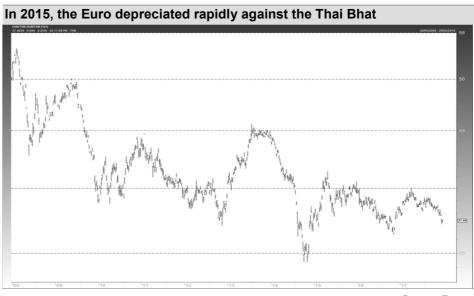
#### **Currencies and other issues**

Since the IPO in July 2015, elumeo's earnings have provided little joy. In 2015 and 2016, elumeo reported substantial EBITDA losses (EUR 15m in total).



Source: (1) 2008-2013 not audited and not according to IFRS, elumeo

The Thai Bhat (THB) is elumeo's main sourcing currency. In 2015, the EUR/THB exchange rate was very volatile but elumeo was not able to pass on the cost increases (particularly as it had increased its raw material inventory at the wrong moment). In addition, the relocation of elumeo's UK subsidiary to Birmingham (from Leamington Spa) led to substantial operating difficulties, resulting in lost sales and inventories.



Source: Factset



Finally the outcome of the Brexit referendum and the resulting depreciation of the GBP exacerbated these problems and the high level of management capacity absorbed by the UK operations began to affect elumeo's other markets. Additionally, the company's production facility in Chantaburi, Thailand, which had been substantially enlarged, was not operating profitably in the long run, requiring an overhaul of the supply chain. Unfortunately in this process the strong sales momentum was choked (four quarters of double-digit growth in Germany in 2017. Q1 2018 was still showing high single-digit growth).

# What has changed?

#### New formats and brands

On foot of the disappointing top-line performance management took several measures to revive growth. Firstly, the programme structure was overhauled. Equally important in our view, the broadcasting time & content of the television shows were previewed and promoted in its customer magazine. The website also has a "preview" section.

#### New programme structure and TV guide

# IHR JUWELO-SHOWGUIDE

Was Sie im November nicht verpassen sollten.



The Cavill Collection, 8 - 2 Uhr

The Cavill Collection, 8 -17 Uhr Arion's Selection, 17 - 2 Uhr

MO 05.11 Arlon's Selection, 17 - 2 Uhr

Juwelo for You - Ihr Festtag, 8 - 2 Uhr

Kaleldo, 19 - 0 Uhr NEU!

Der Juwelo-Wahlsonntag, 8 - 17 Uhr
So.
Annette with Love, 17 - 19 Uhr
Shiny Future, 19 - 21.30 Uhr

Origami, 14.30 - 17 Uhr NEU!

Juwelo for You - Ihr Festtag, 8 - 2 Uhr

Annette with Love, 21.30 - 2 Uhr

FR. Juwelo for You - Ihr Festtag, 8 - 17 Uhr AMAYANI, 17 - 2 Uhr

5A. 17.11. AMAYANI, 8 - 2 Uhr

Der Juwelo-Wahlsonntag, 8 - 12 Uhr MONOSONO COLLECTION, 12 - 17 Uhr Annette with Love, 17 - 2 Uhr MO: Für Ihn, 19 - 21.30 Uhr

Juwelo for You - Ihr Festtag, 8 - 2 Uhr

Black Friday (versandkostenfrei), 8 - 2 Uhr

SA. Black Friday (versandkostenfrei), 8 - 17 Uhr De Melo, 17 - 2 Uhr

SO. Black Friday (versandkostenfrei), 8 - 17 Uhr Lance Fischer, 17 -2 Uhr

Lance Fischer, 8 -2 Uhr

Lance Fischer, 8 -17 Uhr M De Luca, 17 - 2 Uhr

28.11. M De Luca, 8 - 2 Uhr

Juwelo for You - Ihr Festtag, 8 - 17 Uhr MONOSONO COLLECTION, 17 - 2 Uhr

FR. The Cavill Collection, 17 - 2 Uhr

Änderungen vorbehalten

Mit unserer Programmvorschau im Internet unter www.juwelo.de/programmvorschau/ bleiben Sie immer auf dem neusten Stand.

Source: elumeo

Secondly, new formats were developed, e.g. the "creation" format. In this show customers can choose the gold colour (or opt for gilding in the case of silver jewellery) and ring size. The design and gemstone however are fixed.

17

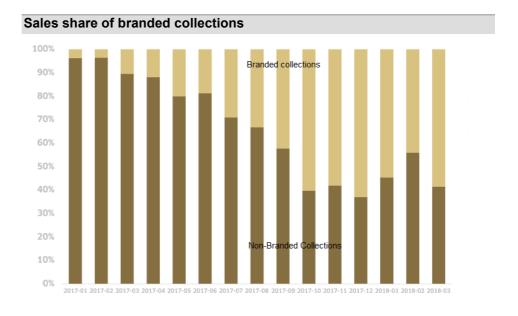


# Silber Gold Ringgröße Sie wählen: Sie wählen: Sie wählen: GG SI RG RG GG WG 16-22

Source: elumeo

Finally elumeo started to brand its collection and consequently the sales share of branded collections increased to more than 50% of sales.



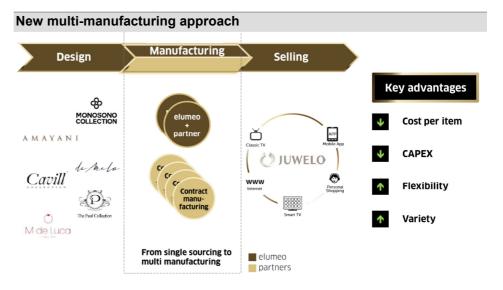


Source: elumeo

The main benefit of the increased sales share of branded collections is a higher gross profit per broadcasting minute (management gives a figure that is 2.5 times higher than for traditional jewellery). While the branded products do not necessarily generate a higher gross margin, they have been instrumental to the return to double-digit sales growth in 2017.

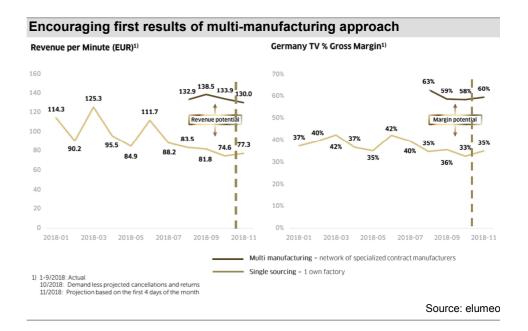


Finally, at the end of 2017, management pulled the plug on the loss-making UK business. In our view this was the right decision, as the subsidiary was tying up far too much management capacity. elumeo has, in the meantime, shut down its entire UK activities.



Source: elumeo

Additionally, management decided to adjust its sourcing strategy to a more efficient model. It shut down its own capacities in Chantaburi, Thailand in favour of Bangkok (Thailand) and Jaipur (India) where elumeo now produces in close co-operation with local partners resulting in significant cost savings. At the same time, elumeo maintains its high quality requirements by incorporating its partners into the company's multi-manufacturing approach. This "capex-light" approach should be the key to success, and to returning to historical levels of gross profit. Indeed, as depicted in chart below, the first results of the multi-manufacturing approach yield margins close to 60%. While in Q3 the volume share of these products was still small (below 10%) management expects this to ramp up to well over 30% as early as in Q4 2018.



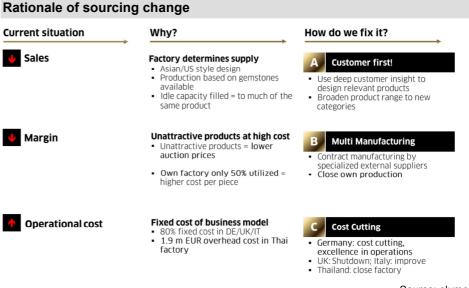


# Major setbacks in Q2 and Q3 results

9M 2018 results						
in EURm	Q3 2018	Q3 2017	% change	9M 2018	9M 2017	%change
Sales	11.22	18.12	-38.1%	40.55	50.22	-19.2%
Gross profit	3.76	8.20	-54.1%	15.03	22.10	-32.0%
Gross profit margin	33.5%	45.2%		37.1%	44.0%	
EBITDA	-5.30	1.26		-9.99	0.39	
EBITDA-margin	-47.3%	6.9%		-24.6%	0.8%	
						Source: elum

The increasing share of branded products and growth in the e-commerce business led to

double-digit sales growth in continued operations throughout 2017 and growth was still high single-digit in Q1 2018. However, the necessary change in the supply chain led to substantial EBITDA losses particularly in Q2 and Q3.



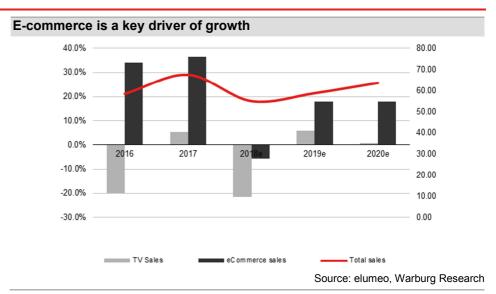
Source: elumeo

# Growth to be driven by e-commerce

#### Return to sales growth expected

The switch to the new sourcing approach should lead to a more attractive product offering. Thus elumeo should be able to realise higher prices and gross margins. Thus the company should again be able to capitalise on its strong e-commerce exposure, which should lead drive growth. Given that the overall online jewellery market is expected to grow by at least ~10% p.a. and given elumeo's historical growth rate of more than 30% in both 2016 and 2017, we are anticipating a growth rate in the high teens in 2019 & 2020. On the other hand, after a rebound in 2019, which should mostly reflect the low base, we expect only flattish sales in the pure TV business. Nevertheless, we are anticipating 7% sales growth on group level in 2019 and 8% in 2020. This top-line growth should form the basis for decent operating leverage on the margin side.





## Scalable business

# Significant reduction in the fixed cost base

Profit & Loss (EURm)	2014	2015	2016	2017	2018e	2019e	2020e
Total sales	70.77	72.61	58.48	67.56	55.04	58.83	63.75
+/- %	33.0%	2.6%	-19.5%	15.5%	-18.5%	6.9%	8.4%
Cost of materials	33.32	39.17	31.82	37.73	34.94	32.35	33.14
Gross operating income	37.45	33.44	26.66	29.83	20.10	26.47	30.61
in % of sales	52.92%	46.05%	45.59%	44.15%	36.52%	45.00%	48.01%
Selling expenses	26.7	27.8	23.4	23.7	23.9	21.9	22.0
in % of sales	37.77%	38.32%	40.07%	35.03%	43.42%	37.14%	34.51%
of which broadcasting expenses	12.6	13.9	9.3	8.4	8.2	7.3	7.3
n % of sales	17.74%	19.17%	15.89%	12.39%	14.90%	12.41%	11.45%
of which personal expenses (incl personal service)	7.5	7.9	7.8	7.5	8.0	6.8	7.0
n % of sales	10.58%	10.88%	13.30%	11.08%	14.53%	11.56%	11.00%
of which marketing expenses	1.1	1.3	1.9	2.4	2.5	2.5	3.0
n % of sales	1.56%	1.83%	3.17%	3.56%	4.54%	4.25%	4.71%
depreciation in selling expenses	0.2	0.3	0.4	0.4	0.4	0.4	0.4
n % of sales	0.31%	0.38%	0.68%	0.60%	0.73%	0.68%	0.63%
other selling expenses	5.362	4.388	4.112	4.999	4.800	4.850	4.288
n % of sales	7.58%	6.04%	7.03%	7.40%	8.72%	8.24%	6.73%
administrative expenses	9.7	12.9	12.8	8.9	9.0	7.1	7.1
n % of sales	13.76%	17.73%	21.81%	13.17%	16.32%	12.04%	11.14%
of which personal expenses (incl personal service)	4.0	5.3	4.5	3.7	4.1	3.8	4.0
n % of sales	5.59%	7.33%	7.68%	5.50%	7.52%	6.46%	6.27%
depreciation in administrative expenses	0.4	0.6	0.7	0.7	0.7	0.7	0.7
n % of sales	0.59%	0.79%	1.26%	1.09%	1.33%	1.25%	1.15%
stock based compensation	0.0	0.4	0.5	0.3	0.2	0.3	0.3
n % of sales	0.00%	0.49%	0.80%	0.47%	0.36%	0.54%	0.50%
net loss from foreign exchange	1.0	1.2	2.8	0.0	0.0	0.0	0.0
n % of sales	1.42%	1.71%	4.84%	0.00%	0.00%	0.00%	0.00%
other administrative expenses	4.353	5.379	4.231	4.130	3.906	2.229	2.049
in % of sales	6.15%	7.41%	7.24%	6.11%	7.10%	3.79%	3.21%
other operating income	2.7	0.1	0.5	1.1	0.1	0.0	0.0
n % of sales	3.83%	0.11%	0.90%	1.69%	0.50%	0.50%	0.50%
net gain from foreign exchange	0.0	0.0	0.0	0.6	0.0	0.0	0.0
n % of sales	0.00%	0.00%	0.00%	0.85%	0.00%	0.00%	0.00%
service fee distribution partners	0.0	0.0	0.4	0.5	0.1	0.0	0.0
n % of sales	0.00%	0.00%	0.76%	0.73%	0.15%	0.00%	0.00%
other	2.711	0.079	0.084	0.075	0.000	0.000	0.000
n % of sales	3.83%	0.11%	0.14%	0.11%	0.00%	0.00%	0.00%
other operating expenses	1.2	1.5	0.0	0.0	1.5	0.0	0.0
n % of sales	0.65%	0.40%	0.08%	0.50%	0.50%	0.00%	0.00%
of which depreciation	0.697	0.985	1.588	1.606	1.5	1.5	1.5
EBITDA	3.21	-7.72	-7.46	0.01	-12.70	-0.97	3.00
in % of sales	4.54%	-10.63%	-12.75%	0.02%	-23.07%	-1.65%	4.70%

Source: 2016 & 2017 figures restated due to discontinuation of UK business, elumeo

In light of the revenue decline, management reviewed its cost structure and identified savings of EUR 6m. Our model assumes that elumeo will realise EUR 4m savings in 2019, especially in the absence of overheads from the Thai factory, as of the start of the year. Although we have modelled another EUR 1m savings for 2020, we expect total operating expenses to be only roughly stable, as we expect somewhat higher variable selling expenses.



#### Substantial cost savings envisaged

#### Germany (3.0 EUR m)

TV guests and payment cost (1.0

- Skip external guest moderators
- · Renegotiate payment services

Distribution (0.6 EUR m) Renegotiate TV contracts

#### Logistics (1.0 EUR m)

- Stop external storage Consolidate shipments
- Use other parcel services

#### Staff (0.4 EUR m)

- Reduce IT contractors
- Reorganize Berlin

#### Italia, UK, International (1.1 EUR m)

#### Italy (0.6 EUR m)

- Renegotiate TV contractsReduce foreign guest moderators

#### UK (0.2 EUR m) Close down completely

#### Other international (0.3 EUR m)

# Reduce advertising in NL, FR, USA

#### Thailand (1.9 EUR m)

Σ6 EUR m

Restructure own factory

(1.9 EUR m)

Overhead cost made redundant

Source: elumeo

The key positive factor, proven by elumeo in 2017, is its cost control and its potential for operating leverage (bear in mind that the 2016 figures are not comparable to 2015 because of the discontinuation of the UK business). In 2017 these fixed costs (particularly broadcasting expenses) and personnel expenses in sales and administration did not increase despite double-digit top-line growth. Fixed-cost leverage is the core element of the margin improvement that we expect in the long run (beyond 2020).

#### Gross margin set to improve in 2019

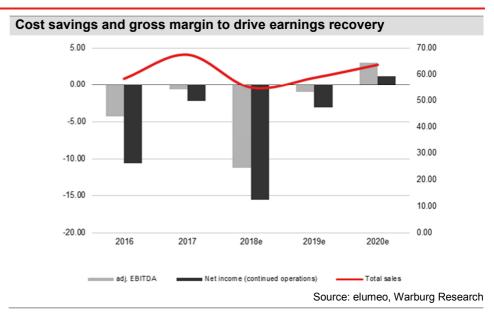
In the last couple of years, elumeo's gross margin has trended downwards from the peak level of 53% generated by the group in 2014. This decrease is explained by several factors including, 1. the currency headwind which started in 2015 and which was not immediately fully passed on to customers; 2. a larger share of high-end products which tend to generate lower margins; 3. the build-up of a B2B business (elumeo sells its jewellery to a US TV channel - this business generates a margin of only around 25% and it diluted the 2017 gross margin by around 140bp); 4. exit from the UK market led to lower capacity utilisation in elumeo's production facility in Thailand.

The change in manufacturing should improve the gross margin in 2019 and 2020. This new strategy means that elumeo should benefit not only from the lower labour costs in India but, with the external production, the accounting-induced foreign-exchange volatility (due to inter-company liabilities) that distorted elumeo's results in the past will now no longer occur. As elumeo still carries some EUR 26m inventories from its former production, the full impact of the sourcing shift will only be seen in 2020 and beyond.

#### Approaching EBITDA breakeven in 2019

We assume EUR 4m cost savings will be realised in 2019. Together with a return to sales growth and a return to a gross margin in the mid-40s (i.e. an increase of more than 800bp), elumeo's EBITDA should come close to breakeven.





# **Tight liquidity situation**

As of Q3 2018, elumeo had EUR 9.6m net debt and considering the negative EBITDA, traditional solvency measures like net debt/EBITDA or interest coverage look appalling. In light of a credit facility of EUR 5m which must be repaid by December 31, 2018, elumeo thus explicitly mentions the liquidity risk in its quarterly report, as the gross cash position of EUR 3.4m as of 30 September 2018 does not cover the outstanding liability. Nevertheless, at the end of Q3, elumeo still had more than EUR 22m tangible equity value. The main asset is inventory of EUR 26m and, as this is equivalent to 47% of expected 2018 sales, the reduction in working capital should provide the cash to pay down the maturing loan.

In light of net assets of around EUR 0.5m, management currently expects to liquidate the Thailand-based production company without tapping additional group funds. However should the assets ultimately prove insufficient to cover the outstanding debts, this would represent an additional risk for elumeo's liquidity situation.

Assuming tight working capital management and sustainable EBITDA profitability, elumeo's business model should be cash generative as, structurally, it requires little capital expenditure.

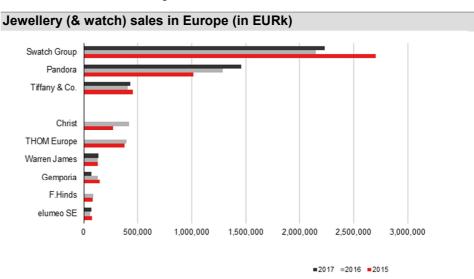


# elumeo is among the larger players in Europe

# **Market & Competitors**

# Fragmented market

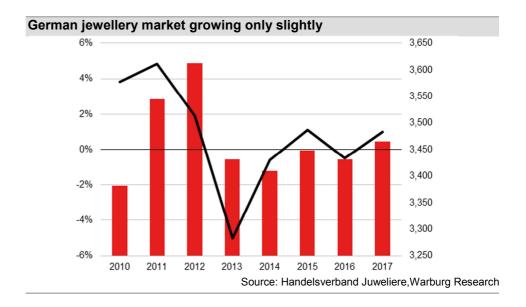
The European jewellery market has a total volume of more than EUR 32bn according to Euromonitor, based on 2016 figures.



Source: company data, Warburg Research

With sales of around EUR 415m, the largest European jeweller Christ has a European market share of just 1.3%. On a European basis, the market is highly fragmented as most jewellers are operating in their domestic markets only. German market leader Christ holds a market share of nearly 9% in its domestic market (based on EUR 4.7bn combined market volume of watches and jewellery in Germany).

Currently elumeo generates more than 75% of sales in Germany and commands a market share of 1.5%. While the German market has grown slightly (2.4%) since 2010, it has been pretty flat since 2013.

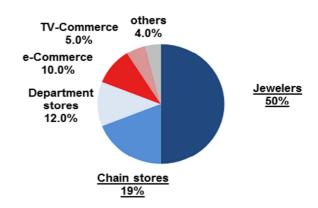


Small jewellers and chain stores still command the vast majority of the overall market volume. However the online channel already accounts for 10% of the market and has roughly doubled its share since 2014. While TV commerce accounts for only 5% of the



market, it is important to note that the market share of this sales channel has been constant since 2014. Bearing in mind that elumeo is only addressing the online and TV segment of the market, it has a share of 10% in the distribution channels in which it is active.

#### Channel split in the German jewellery market



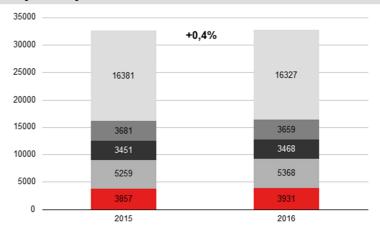
Source: Handelsverband Juweliere, Warburg Research

While we do not expect a substantial acceleration of growth in the German jewellery market, growth of the e-commerce channel should continue. We consider a share of more than 15% of the market, which is equivalent to around 10% CAGR, a realistic level to be achieved over the next five years (for comparison in fashion retail, the online share is currently at around 17%).

In 2017, elumeo generated 15% of its sales in Italy, its only major foreign exposure after the exit from the UK market. While elumeo's business in Italy shrunk in the last two years this market continues to offer a major opportunity for growth.

Even in the absence of major growth in the German market, the combination of elumeo's exposure to the structurally growing e-commerce channel and its negligible market share outside Germany offers substantial growth potential in the years to come.

#### European jewellery market volume of more than EUR 32bn

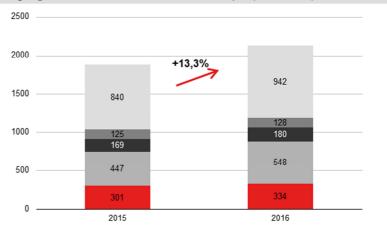


■Germany ■UK ■France ■Italy ■Rest Europe

Source: elumeo, Euromonitor International Passport 2017



# Double-digit growth for online sales in Europe (in EURm)



Source: elumeo, Euromonitor International Passport 2017

■Germany ■UK ■France ■Italy ■Rest Europe



# **Valuation**

- No listed peer with a similar set-up
- Based on 2018 & 2019 multiples, the valuation is not attractive compared with other listed peers
- Higher visibility on margin progress and positive surprise on the top line would be main triggers for additional upside in our DCF

# Business model is unique among listed jewellers

# Peer group analysis

The table below gives an overview of the valuation of companies we consider to be even remotely comparable. Unfortunately there is no other vertically-integrated, listed jewellery retailer with a multichannel approach and strong internet and TV commerce exposure.

Since the takeover of the Home Shopping Network by QVC (Liberty Media), there isn't even a listed peer in the general TV commerce segment. Our peer group consists of major jewellery retailers and a broad selection of e-commerce peers operating in a variety of product categories. The peer group analysis mostly serves to give a general impression of the wide range of multiples that the market is applying in this sector rather than a firm valuation yardstick for elumeo.

The only general conclusion that can be drawn from the peer group comparison is that the market is handsomely rewarding companies with strong top-line growth (CAGR of more than 20%) irrespective of the current EBIT margin, as all these companies trade on high earnings multiples (EV/ EBIT 2019 multiples between 30 and 115).

While elumeo's EV/sales multiple of 0.3 is the third-lowest multiple in our peer group, it is hardly possible to argue that this makes elumeo a particular bargain, as in terms of growth and current EBIT margin, elumeo does not rank particularly favourably.

French Shopping Club SRP Group (Showroom privé) and German online tyre dealer Delticom show the harsh punishment meted out by the market for online formats that fail to deliver the uninterrupted top- and bottom-line growth expected of these companies. Both stocks trade on EV/sales multiples which are lower than elumeo's current multiple.

Overall, we currently don't see a compelling relative value case compared to its peers. That said, once elumeo manages to deliver consistent double-digit sales growth while continuing to improve its margins, there is considerable revaluation potential.

Peer group											
	Price	Ev/Sales '18	B EBIT margin 2018e	Ev/EBITDA '18	Ev/EBITDA'1	9 Ev/EBIT '18	Ev/EBIT '19	P/E '18	P/E '19	EPS growth '18	Sales CAGR 17-19
Pandora	341.9	1.89	27.5%	6.0	5.9	6.9	6.9	7.3	7.1	-9.9%	1.5%
Tiffany	100.1	2.77	18.3%	11.9	10.9	15.1	13.8	21.0	18.5	16.5%	7.5%
Signet Jew elers	51.0	0.66	5.6%	7.6	7.6	11.7	11.9	11.5	11.8	-32.7%	-0.5%
Zalando	26.7	1.08	2.5%	24.1	18.9	44.1	31.4	88.0	58.0	-24.0%	20.5%
Asos	46.5	1.48	4.2%	22.3	17.4	35.5	29.4	44.4	36.6	24.9%	23.4%
Amazon	1495.5	3.30	6.2%	23.3	18.6	53.5	37.8	75.4	55.7	334.9%	25.5%
Rakuten	918.0	1.43	13.5%	7.3	8.8	10.6	15.2	12.7	20.7	-9.8%	13.8%
Boohoo	1.9	2.60	8.3%	27.0	20.9	31.2	24.2	48.4	39.1	26.8%	39.7%
Zooplus	138.4	0.71	-0.1%	221.7	68.5	-940.4	115.4	-925.6	188.3	-155.0%	21.5%
SRP Group	3.5	0.19	-0.4%	19.3	10.0	-53.5	31.0	n.m	158.6	44.0%	6.7%
Delticom	8.4	0.23	1.5%	12.8	9.5	15.7	11.3	28.9	14.2	176.2%	5.8%
Median Total		1.43	5.6%	19.3	10.9	15.1	24.2	24.9	36.6	16.5%	13.8%
Elumeo	1.6	0.33	-23.1%	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	-6.7%
										Source: Wa	rburg Research



#### DCF model

#### Selected peers

#### **Pandora**

Pandora is a Danish jewellery brand for women, generating DKK 22.7bn sales (~USD 3.5bn) in 2017. The products are charms (small jewellery pieces that can be combined with a bracelet), silver and gold bracelets and rings. The charms account for more than half of sales. The brand is mainly active in the Americas, Europe and Australia and has a strong online recognition among younger people.

#### **Tiffany**

Tiffany was founded in 1837 and is a jewellery manufacturer with a clear luxury brand image. Almost 46% of the USD 4.2bn group sales are generated in the Americas (of which 90% in the US), where the company has its roots. The main product categories are Jewellery Collection (53%), Engagement Jewellery (26%) and Designer Jewellery (14%).

#### **Signet Jewelers**

Signet Jewelers is a multi-brand company with total sales of USD 6.2bn. The company has 75% of its 2,900 stores in malls. In the US, the company operates with the brands Kay, Jared and Ultra. Ultra was acquired in 2012. The UK market is addressed with the brands H. Samuel, Ernest Jones and Leslie Davis. The product line includes diamond jewellery (60% of sales), gold and silver jewellery (33%) and watches (7%).

#### DCF model

The core assumptions of our DCF model are a risk-free interest rate of 1.5% and a market risk premium of 5.5%. We derive a fundamental beta of 1.8. A beta above 1.0 mainly reflects a liquidity discount for smaller companies, a higher than average execution risk to realise the expected gross margin improvement and the risk of refinancing the maturing credit line (EUR 5m due at the end of 2018). As of year-end 2017, elumeo had some EUR 10m net debt, however we expect elumeo will seek to improve its equity ratio further and have therefore assumed a target capital structure of 96% equity. Thus we derive a WACC of 11.1%.

Until 2020, our model is driven by our detailed sales, earnings and cash-flow forecast Thereafter, we assume a gradual decline in growth rates from 8% in 2021 to 5% in 2030. In our terminal value, we use a growth rate of 2%.

We are assuming the EBITDA margin will reach 9.0% as of 2023 (i.e. 7.0% EBIT margin) i.e. we assume that group profitability will reach the level of German market leader Christ (which reported an EBITDA margin of 8.9% in fiscal year 2015/16, which is its most recent earnings release). While our margin assumption might look aggressive compared with elumeo's realised margins in the years after the IPO, bear in mind that before the IPO, elumeo generated a peak EBITDA margin of 15% in Germany.

As the automated warehouse is less than four years old, elumeo's infrastructure is pretty new and we therefore expect rather low capex.

Until 2026, we use a tax rate of 5% due to the tax loss carry-forwards of EUR 35m in Germany (there are another EUR 17m tax loss carry-forwards abroad). Thereafter we use a blended rate of 25%.

These assumptions form the base case of our DCF model. Please see our DCF model on the following page for detailed assumptions and a sensitivity overview. If elumeo manages to return to historic peak margins generated before the IPO, there is considerable upside for the share.



DCF model														
	Detaile	d forecas	t period				T	ransition	al period					Term. Value
Figures in EUR m	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	
Sales	55.0	58.8	63.7	68.8	74.4	79.6	84.3	88.6	93.0	97.6	102.5	107.6	110.9	
Sales change	-18.5 %	6.9 %	8.4 %	8.0 %	8.0 %	7.0 %	6.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	3.0 %	2.0 %
EBIT	-12.7	-2.5	1.5	3.1	4.5	5.6	5.9	6.2	6.5	6.8	7.2	7.5	7.8	
EBIT-margin	-23.1 %	-4.2 %	2.4 %	4.5 %	6.0 %	7.0 %	7.0 %	7.0 %	7.0 %	7.0 %	7.0 %	7.0 %	7.0 %	
Tax rate (EBT)	-5.7 %	-12.2 %	4.3 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	25.0 %	25.0 %	25.0 %	25.0 %	
NOPAT	-13.4	-2.8	1.4	2.9	4.2	5.3	5.6	5.9	6.2	5.1	5.4	5.7	5.8	
Depreciation	1.6	1.6	1.5	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.2	
in % of Sales	2.9 %	2.7 %	2.4 %	2.1 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	
Changes in provisions	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	0.0	0.0	0.0	1.8	1.0	0.9	0.9	8.0	8.0	8.0	0.9	0.9	0.6	
- Capex	0.9	0.6	0.9	1.0	1.1	1.2	1.3	1.3	1.7	2.1	2.2	2.3	2.2	
Capex in % of Sales	1.5 %	0.9 %	1.4 %	1.4 %	1.5 %	1.5 %	1.5 %	1.5 %	1.8 %	2.1 %	2.1 %	2.1 %	2.0 %	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-12.0	-1.7	2.1	1.6	3.6	4.8	5.2	5.6	5.6	4.2	4.4	4.6	5.2	6
PV of FCF	-12.0	-1.5	1.7	1.2	2.4	2.8	2.8	2.7	2.4	1.6	1.6	1.5	1.5	18
share of PVs		-45.15 %						77.92	2 %					67.23 %

Model parameter				Valuation (m)							
Derivation of WACC:		Derivation of Beta:		Present values 2030e	9						
				Terminal Value	18						
Debt ratio	3.90 %	Financial Strength	2.50	Financial liabilities	11						
Cost of debt (after tax)	3.8 %	Liquidity (share)	3.00	Pension liabilities	0						
Market return	7.00 %	Cyclicality	1.00	Hybrid capital	0						
Risk free rate	1.50 %	Transparency	1.40	Minority interest	0						
		Others	1.00	Market val. of investments	0						
				Liquidity	2	No. of shares (m)	5.5				
WACC	11.00 %	Beta	1.78	Equity Value	17	Value per share (EUR)	3.00				

Sens	Sensitivity Value per Share (EUR)													
		Terminal (	Growth							Delta EBI	Γ-margin			
Beta	WACC	1.00 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	3.00 %	Beta WACC	-5.5 pp	-2.5 pp	-1.0 pp	+0	
2.06	12 5 %	1 50	1 68	1 74	1 79	1.85	1 91	2 04	206 125%	-5 10	-1 38	0.52		

												•					
Beta	WACC	1.00 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	3.00 %	Beta	WACC	-5.5 pp	-2.5 pp	-1.0 pp	+0.0 pp	+1.0 pp	+2.5 pp	+5.5 pp
2.06	12.5 %	1.59	1.68	1.74	1.79	1.85	1.91	2.04	2.06	12.5 %	-5.19	-1.38	0.52	1.79	3.06	4.96	8.77
1.97	12.0 %	1.92	2.03	2.09	2.15	2.22	2.29	2.44	1.97	12.0 %	-5.15	-1.17	0.82	2.15	3.48	5.47	9.45
1.87	11.5 %	2.28	2.41	2.48	2.55	2.63	2.71	2.89	1.87	11.5 %	-5.10	-0.93	1.16	2.55	3.94	6.03	10.21
1.78	11.0 %	2.68	2.83	2.91	3.00	3.09	3.19	3.40	1.78	11.0 %	-5.05	-0.66	1.54	3.00	4.46	6.66	11.05
1.69	10.5 %	3.12	3.30	3.40	3.50	3.61	3.73	3.98	1.69	10.5 %	-4.99	-0.36	1.96	3.50	5.05	7.36	11.99
1.59	10.0 %	3.62	3.83	3.95	4.07	4.20	4.34	4.64	1.59	10.0 %	-4.92	-0.02	2.43	4.07	5.70	8.15	13.05
1.50	9.5 %	4.18	4.43	4.57	4.71	4.87	5.04	5.41	1.50	9.5 %	-4.83	0.37	2.98	4.71	6.45	9.05	14.26

- We expect a return to mid single-digit sales growth and assume 2% growth in the terminal value
- The group EBITDA margin should approach the 9%-level
- We assume a beta of 1.8 to account for the low liquidity and the execution risk for the gross margin increase
- The tax loss carry-forwards lead to very low tax rate until 2026



Valuation							
	2014	2015	2016	2017	2018e	2019e	2020e
Price / Book	n.a.	2.1 x	1.8 x	1.5 x	0.5 x	0.6 x	0.6 x
Book value per share ex intangibles	5.95	9.10	6.92	5.67	2.99	2.48	2.69
EV / Sales	n.a.	1.5 x	1.4 x	0.9 x	0.3 x	0.3 x	0.2 x
EV / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.5 x
EV / EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8.9 x
EV / EBIT adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8.9 x
P/FCF	n.a.	n.a.	n.a.	9.7 x	1.7 x	n.a.	6.6 x
P/E	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.9 x
P / E adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.9 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	n.a.	1.5 %	3.6 %	-14.2 %	-42.6 %	2.1 %	25.5 %
*Adjustments made for: For 2018, we have only adjusted	for the non-cash currency	losses					

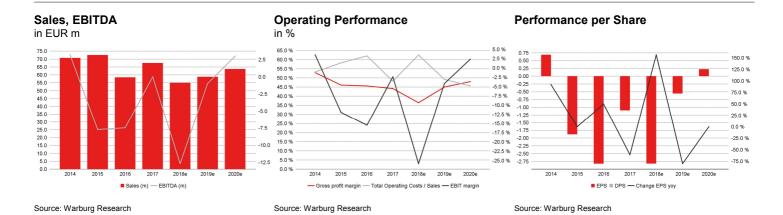
Company Specific Items							
	2014	2015	2016	2017	2018e	2019e	2020e
Active Customers	75,923	79,943	84,587	82,062	78,525	84,733	91,471
Revenue per Customer	932.13	908.22	691.31	823.28	700.92	694.25	696.94
Average Selling Price	74.73	71.26	69.72	73.16	60.20	63.71	65.75
eCommerce sales in % of group sales	0.0 %	25.3 %	41.9 %	34.5 %	40.0 %	44.1 %	48.1 %
eCommerce sales in EURm	n.a.	18	25	23	22	26	31
Volume (in pieces)	n.a.	918,932	894,407	923,476	914,241	923,384	969,553
Gross profit per piece	n.a.	36.39	35.00	32.00	21.99	28.67	31.57



Consolidated profit and loss							
In EUR m	2014	2015	2016	2017	2018e	2019e	2020
Sales	70.8	72.6	58.5	67.6	55.0	58.8	63.7
Change Sales yoy	33.0 %	2.6 %	-19.5 %	15.5 %	-18.5 %	6.9 %	8.4 %
COGS	33.3	39.2	31.8	37.7	34.9	32.4	33.1
Gross profit	37.4	33.4	26.7	29.8	20.1	26.5	30.6
Gross margin	52.9 %	46.1 %	45.6 %	44.1 %	36.5 %	45.0 %	48.0 %
Research and development	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales and marketing	26.7	27.8	23.4	23.7	23.9	21.9	22.0
Administration expenses	9.7	12.9	12.8	8.9	9.0	7.1	7.1
Other operating expenses	1.2	1.5	0.0	0.0	1.5	0.0	0.0
Other operating income	2.7	0.1	0.5	1.1	0.1	0.0	0.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	3.2	-7.7	-7.5	0.0	-12.7	-1.0	3.0
Margin	4.5 %	-10.6 %	-12.8 %	0.0 %	-23.1 %	-1.6 %	4.7 %
Depreciation of fixed assets	0.7	1.0	1.6	1.6	1.5	1.5	1.5
EBITDA adj.	4.1	-4.9	-4.2	-0.6	-11.2	-1.0	3.0
Margin	5.7 %	-6.8 %	-7.2 %	-0.8 %	-20.3 %	-1.6 %	4.7 %
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	2.5	-8.7	-9.0	-1.6	-14.2	-2.5	1.5
Margin	3.6 %	-12.0 %	-15.5 %	-2.4 %	-25.8 %	-4.2 %	2.4 %
EBIT adj.	3.4	-5.9	-5.8	-2.2	-12.7	-2.5	1.5
Interest income	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.0	0.6	0.6	0.6	0.6	0.3	0.2
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	2.5	-9.0	-9.6	-2.2	-14.8	-2.8	1.3
Margin	3.6 %	-12.4 %	-16.5 %	-3.3 %	-26.9 %	-4.7 %	2.0 %
Total taxes	-0.2	-0.1	1.0	-0.1	0.7	0.3	0.1
Net income from continuing operations	2.8	-8.9	-10.6	-2.1	-15.5	-3.1	1.2
Income from discontinued operations (net of tax)	0.0	0.0	-4.9	-3.9	0.0	0.0	0.0
Net income before minorities	2.8	-8.9	-15.5	-6.0	-15.5	-3.1	1.2
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	2.8	-8.9	-15.5	-6.0	-15.5	-3.1	1.2
Margin	3.9 %	-12.3 %	-26.5 %	-8.9 %	-28.2 %	-5.2 %	1.9 %
Number of shares, average	4.0	4.7	5.5	5.5	5.5	5.5	5.5
EPS	0.69	-1.88	-2.82	-1.10	-2.82	-0.56	0.23
EPS adj.	0.92	-1.30	-1.29	-0.49	-2.53	-0.56	0.23
*Adjustments made for: For 2018, we have only adjusted f	or the non-cash o	currency losse	es.				

Guidance: n.a.

Financial Ratios							
	2014	2015	2016	2017	2018e	2019e	2020e
Total Operating Costs / Sales	53.2 %	58.1 %	62.0 %	48.2 %	62.5 %	49.2 %	45.6 %
Operating Leverage	2.4 x	n.a.	-0.2 x	-5.3 x	-42.7 x	-12.0 x	n.a.
EBITDA / Interest expenses	1070.0 x	n.m.	n.m.	0.0 x	n.m.	n.m.	15.0 x
Tax rate (EBT)	-9.3 %	0.8 %	-10.2 %	3.3 %	-4.9 %	-10.9 %	5.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

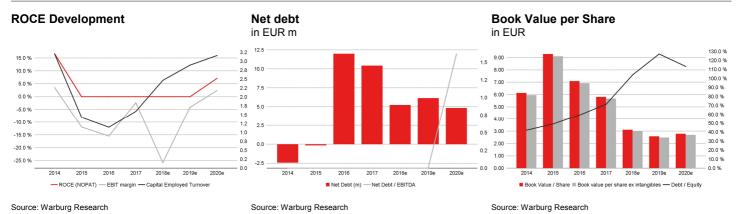






In EUR m	2014	2015	2016	2017	2018e	2019e	2020
Assets	2017	2010	2010	2017	20100	20100	
Goodwill and other intangible assets	0.7	1.0	0.9	0.8	0.7	0.6	0.5
	0.7	1.0	0.9	0.8	0.7	0.6	0.9
thereof other intangible assets thereof Goodwill	0.7	0.0	0.9	0.0	0.7	0.0	0.0
	2.3	11.7	11.2	9.4	8.8	8.0	7.4
Property, plant and equipment							
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	2.5	2.5	2.3	2.3	2.3	2.3
Fixed assets	3.0	15.2	14.7	12.4	11.7	10.8	10.2
Inventories	21.4	40.4	38.9	33.5	16.3	16.9	17.6
Accounts receivable	4.8	2.2	3.5	3.0	0.8	0.8	0.9
Liquid assets	2.4	13.6	1.8	1.5	1.7	0.8	1.
Other short-term assets	1.0	2.1	1.7	2.4	2.4	1.0	1.0
Current assets	29.7	58.3	45.9	40.5	21.2	19.6	20.6
Total Assets	34.8	76.2	62.1	54.7	34.8	32.2	32.7
Liabilities and shareholders' equity							
Total equity	24.5	51.1	39.0	32.0	17.1	14.2	15.3
Provisions	0.0	2.3	1.2	1.0	1.0	1.0	1.0
thereof provisions for pensions and similar obligations	0.0	0.5	0.6	0.7	0.7	0.7	0.7
Financial liabilities (total)	0.0	13.0	13.2	11.3	6.3	6.3	5.3
thereof short-term financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts payable	7.3	7.4	6.2	7.3	7.3	7.6	7.9
Other liabilities	3.0	2.4	2.5	3.1	3.1	3.1	3.
Liabilities	10.3	25.1	23.1	22.8	17.7	18.0	17.3
Total liabilities and shareholders' equity	34.8	76.2	62.1	54.7	34.8	32.2	32.7

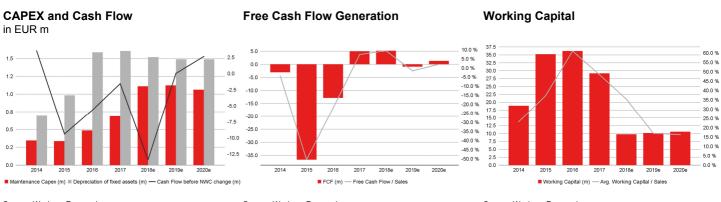
Financial Ratios							
	2014	2015	2016	2017	2018e	2019e	2020e
Efficiency of Capital Employment							
Operating Assets Turnover	3.3 x	1.5 x	1.2 x	1.8 x	3.0 x	3.2 x	3.5 x
Capital Employed Turnover	3.2 x	1.4 x	1.1 x	1.6 x	2.5 x	2.9 x	3.2 x
ROA	91.3 %	-58.7 %	-105.5 %	-48.8 %	-132.1 %	-28.3 %	12.2 %
Return on Capital							
ROCE (NOPAT)	16.7 %	n.a.	n.a.	n.a.	n.a.	n.a.	7.1 %
ROE	14.8 %	-23.6 %	-34.5 %	-17.0 %	-63.2 %	-19.5 %	8.4 %
Adj. ROE	19.9 %	-16.3 %	-15.7 %	-7.6 %	-56.7 %	-19.5 %	8.4 %
Balance sheet quality							
Net Debt	-2.4	-0.2	12.0	10.4	5.2	6.1	4.8
Net Financial Debt	-2.4	-0.6	11.4	9.8	4.6	5.5	4.2
Net Gearing	-9.9 %	-0.3 %	30.8 %	32.6 %	30.6 %	43.3 %	31.6 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	139.1 %
Book Value / Share	6.1	9.3	7.1	5.8	3.1	2.6	2.8
Book value per share ex intangibles	5.9	9.1	6.9	5.7	3.0	2.5	2.7





Consolidated cash flow statement							
In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Net income	2.8	-8.9	-15.5	-6.0	-15.5	-3.1	1.2
Depreciation of fixed assets	0.7	1.0	1.6	1.6	1.5	1.5	1.5
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase/decrease in long-term provisions	0.3	-0.2	0.7	0.0	0.0	0.0	0.0
Other non-cash income and expenses	-0.2	-1.3	7.6	2.8	0.6	1.6	-0.1
Cash Flow before NWC change	3.5	-9.4	-5.7	-1.6	-13.4	0.0	2.6
Increase / decrease in inventory	-10.6	-19.0	-2.5	4.6	17.3	-0.6	-0.7
Increase / decrease in accounts receivable	2.4	0.9	-1.5	-0.4	2.1	0.0	0.0
Increase / decrease in accounts payable	3.3	0.6	-2.2	2.6	0.0	0.3	0.3
Increase / decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	-4.9	-17.5	-6.2	6.8	19.4	-0.4	-0.4
Net cash provided by operating activities [1]	-1.4	-26.9	-11.9	5.2	6.0	-0.4	2.2
Investments in intangible assets	0.8	0.4	0.1	0.0	0.1	0.1	0.1
Investments in property, plant and equipment	0.9	9.4	0.9	0.2	0.8	0.5	0.8
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	-1.7	-9.8	-1.0	-0.2	-0.9	-0.6	-0.9
Change in financial liabilities	3.7	13.0	-0.7	-2.0	-5.0	0.0	-1.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	34.5	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	1.9	-3.2	0.0	0.0	0.0
Net cash provided by financing activities [3]	3.7	47.6	1.2	-5.2	-5.0	0.0	-1.0
Change in liquid funds [1]+[2]+[3]	0.8	11.1	-11.7	-0.3	0.2	-0.9	0.3
Effects of exchange-rate changes on cash	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	2.4	13.6	1.8	1.5	1.7	0.8	1.1

Financial Ratios							
	2014	2015	2016	2017	2018e	2019e	2020e
Cash Flow							
FCF	-3.1	-36.7	-12.8	5.0	5.2	-0.9	1.3
Free Cash Flow / Sales	-4.3 %	-50.5 %	-22.0 %	7.4 %	9.4 %	-1.5 %	2.0 %
Free Cash Flow Potential	0.4	1.6	3.0	-8.3	-5.9	0.3	3.4
Free Cash Flow / Net Profit	-110.9 %	410.9 %	82.8 %	-82.2 %	-33.5 %	29.7 %	105.1 %
Interest Received / Avg. Cash	0.3 %	4.4 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	n.a.	10.0 %	4.6 %	5.0 %	6.5 %	4.8 %	3.5 %
Management of Funds							
Investment ratio	2.4 %	13.5 %	1.7 %	0.3 %	1.5 %	0.9 %	1.4 %
Maint. Capex / Sales	0.5 %	0.5 %	0.8 %	1.0 %	2.0 %	1.9 %	1.7 %
Capex / Dep	241.9 %	995.5 %	61.3 %	14.4 %	55.9 %	36.9 %	60.4 %
Avg. Working Capital / Sales	23.1 %	37.3 %	61.1 %	48.4 %	35.4 %	16.9 %	16.3 %
Trade Debtors / Trade Creditors	66.0 %	29.9 %	56.2 %	40.4 %	11.1 %	11.1 %	11.1 %
Inventory Turnover	1.6 x	1.0 x	0.8 x	1.1 x	2.1 x	1.9 x	1.9 x
Receivables collection period (days)	25	11	22	16	5	5	5
Payables payment period (days)	80	69	71	71	77	86	87
Cash conversion cycle (Days)	179	319	397	270	99	110	112



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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
elumeo	5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A11Q059.htm



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-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
<u>"_"</u>	Rating suspended:	The available information currently does not permit an evaluation of the company.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING
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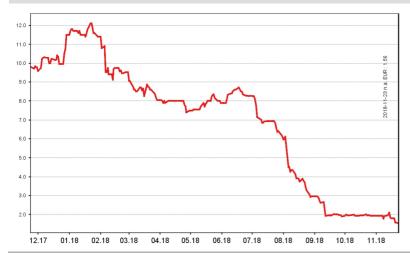
Rating	Number of stocks	% of Universe
Buy	128	62
Hold	67	33
Sell	3	1
Rating suspended	8	4
Total	206	100

#### WARBURG RESEARCH GMBH - ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	34	72
Hold	11	23
Sell	0	0
Rating suspended	2	4
Total	47	100

#### PRICE AND RATING HISTORY ELUMEO AS OF 23.11.2018



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.



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