

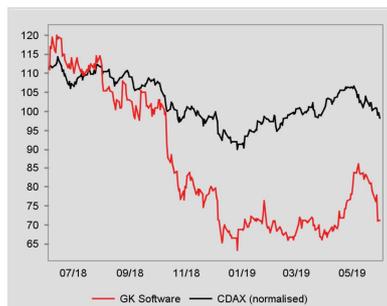
<p>Buy</p> <p>EUR 93.00 (EUR 100.00)</p> <p>Price EUR 71.20</p> <p>Upside 30.6 %</p>	<p>Value Indicators: EUR</p> <p>DCF: 92.69</p>	<p>Share data:</p> <p>Bloomberg: GKS GR</p> <p>Reuters: GKSG</p> <p>ISIN: DE0007571424</p>	<p>Description:</p> <p>Leading software company for stationary retailers</p>
	<p>Market Snapshot: EUR m</p> <p>Market cap: 134.6</p> <p>No. of shares (m): 1.9</p> <p>EV: 168.1</p> <p>Freefloat MC: 53.1</p> <p>Ø Trad. Vol. (30d): 194.25 th</p>	<p>Shareholders:</p> <p>Freefloat 39.5 %</p> <p>GK Software Holding 49.6 %</p> <p>SAP 5.3 %</p> <p>Rainer Gläß 3.3 %</p> <p>Stephan Kronmüller 2.3 %</p>	<p>Risk Profile (WRe): 2019e</p> <p>Beta: 1.8</p> <p>Price / Book: 3.2 x</p> <p>Equity Ratio: 38 %</p> <p>Net Fin. Debt / EBITDA: 2.7 x</p> <p>Net Debt / EBITDA: 2.8 x</p>

Significant expansion of international structures; Licence business still weak

<p>Stated Figures Q1/2019:</p> <table border="1"> <thead> <tr> <th>in EUR m</th> <th>Q1/19</th> <th>Q1/19e</th> <th>Q1/18</th> <th>yoy</th> <th>2019e</th> <th>2018</th> <th>yoy</th> </tr> </thead> <tbody> <tr> <td>Sales</td> <td>24.6</td> <td>26.0</td> <td>23.7</td> <td>3.7%</td> <td>118.0</td> <td>106.2</td> <td>11.2%</td> </tr> <tr> <td>EBITDA margin</td> <td>-0.6</td> <td>0.4</td> <td>1.3</td> <td>-</td> <td>11.8</td> <td>6.8</td> <td>72.7%</td> </tr> <tr> <td></td> <td>-2.6%</td> <td>1.5%</td> <td>5.7%</td> <td></td> <td>10.0%</td> <td>6.4%</td> <td></td> </tr> <tr> <td>EBIT margin</td> <td>-2.8</td> <td>-1.8</td> <td>0.2</td> <td>-</td> <td>5.7</td> <td>1.6</td> <td>254.9%</td> </tr> <tr> <td></td> <td>-11.5%</td> <td>-6.9%</td> <td>0.9%</td> <td></td> <td>4.8%</td> <td>1.5%</td> <td></td> </tr> </tbody> </table>	in EUR m	Q1/19	Q1/19e	Q1/18	yoy	2019e	2018	yoy	Sales	24.6	26.0	23.7	3.7%	118.0	106.2	11.2%	EBITDA margin	-0.6	0.4	1.3	-	11.8	6.8	72.7%		-2.6%	1.5%	5.7%		10.0%	6.4%		EBIT margin	-2.8	-1.8	0.2	-	5.7	1.6	254.9%		-11.5%	-6.9%	0.9%		4.8%	1.5%		<p>Comment on Figures:</p> <ul style="list-style-type: none"> GK Software AG released results for the first quarter of 2019 on 29.05.19. These results (especially the earnings figures), were below expectations (WRe). The reason was, once again, an (ongoing) absence of realised licence revenues. The absence of settled licences by the cut-off date combined with the strong rise in costs, especially for international structures, which had been expected (employees +19%), led to a considerably negative result. As the business with services was strong owing to several country roll-outs, there was nevertheless slight revenue growth in comparison to the strong Q1/18.
in EUR m	Q1/19	Q1/19e	Q1/18	yoy	2019e	2018	yoy																																										
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For GK Software, the acquisition of further customers in strategically important markets, especially in the U.S., is paramount. Following a convincing business year in 2018, solely in relation to revenue and the acquisition of new customers, this situation is continuing in FY 2019. Typically, the first quarter is weak in relation to the cut-off date for the realisation of licence revenues. This had a particularly negative impact on the reported Q1 as the rapid expansion of company structures continues apace (employees +19%). Strategically, however, the company was once again convincing: in the first quarter, two further customers were gained in the U.S. (OmniPOS for 1,500 Filialen). Additionally, a subscription-based contract was finalised in Columbia. Furthermore, for the first time, a U.S. customer was gained for GK's filling station solution. These will go live in the third quarter of FY 2019. Equally worthy of mention is that a first artificial intelligence-based solution was placed ("SAP Dynamic Pricing by GK", a solution for the automation of pricing, based on the new platform AIR, Artificial Intelligence for Retail). This too will now be marketed internationally by SAP in its own portfolio. **The GK Software share continues to be rated Buy with a slightly reduced price target of EUR 93 (100).**

<p>Changes in Estimates:</p> <table border="1"> <thead> <tr> <th>FY End: 31.12. in EUR m</th> <th>2019e (old)</th> <th>+ / -</th> <th>2020e (old)</th> <th>+ / -</th> <th>2021e (old)</th> <th>+ / -</th> </tr> </thead> <tbody> <tr> <td>Sales</td> <td>119.6</td> <td>-1.3 %</td> <td>137.5</td> <td>-1.3 %</td> <td>n.a.</td> <td>n.m.</td> </tr> <tr> <td>EBITDA</td> <td>12.1</td> <td>-2.3 %</td> <td>26.3</td> <td>-1.9 %</td> <td>n.a.</td> <td>n.m.</td> </tr> <tr> <td>EBIT</td> <td>6.5</td> <td>-12.3 %</td> <td>19.8</td> <td>-5.4 %</td> <td>n.a.</td> <td>n.m.</td> </tr> <tr> <td>EPS</td> <td>0.0</td> <td>-13.0 %</td> <td>0.0</td> <td>-5.6 %</td> <td>n.a.</td> <td>n.m.</td> </tr> </tbody> </table>	FY End: 31.12. in EUR m	2019e (old)	+ / -	2020e (old)	+ / -	2021e (old)	+ / -	Sales	119.6	-1.3 %	137.5	-1.3 %	n.a.	n.m.	EBITDA	12.1	-2.3 %	26.3	-1.9 %	n.a.	n.m.	EBIT	6.5	-12.3 %	19.8	-5.4 %	n.a.	n.m.	EPS	0.0	-13.0 %	0.0	-5.6 %	n.a.	n.m.	<p>Comment on Changes:</p> <ul style="list-style-type: none"> The short-term estimates for revenue and earnings (WRe, 2019, 2020) are slightly reduced again, owing to the still weak Q1. Entry to the important U.S. market for retail software has been successful and this will be more decisive for the valuation of the share over the long term, than strong results in the short term. In the model (DCF), the risk adjustment is adapted slightly based on short-term earnings uncertainty (Beta 1.6 to 1.8)
FY End: 31.12. in EUR m	2019e (old)	+ / -	2020e (old)	+ / -	2021e (old)	+ / -																														
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Rel. Performance vs CDAX:

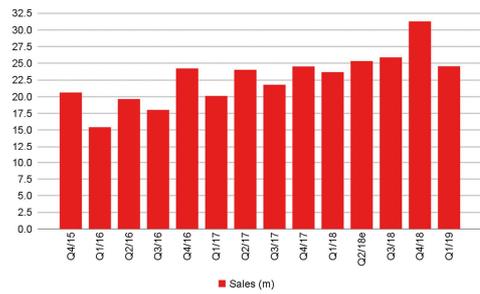
1 month:	-7.2 %
6 months:	-9.0 %
Year to date:	-4.1 %
Trailing 12 months:	-23.5 %

Company events:

20.06.19	AGM
29.08.19	Q2
26.11.19	Q3

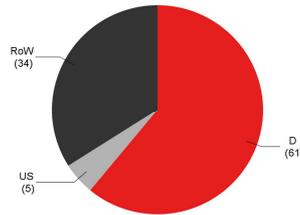
FY End: 31.12. in EUR m	CAGR (18-21e)	2015	2016	2017	2018	2019e	2020e	2021e
Sales	13.7 %	62.6	77.3	90.5	106.2	118.0	135.7	156.1
Change Sales yoy		40.3 %	23.5 %	17.0 %	17.4 %	11.2 %	15.0 %	15.0 %
Gross profit margin		87.6 %	90.6 %	90.6 %	92.7 %	92.5 %	95.0 %	95.0 %
EBITDA	63.1 %	2.2	7.8	8.8	6.8	11.8	25.8	29.7
Margin		3.5 %	10.1 %	9.7 %	6.4 %	10.0 %	19.0 %	19.0 %
EBIT	138.1 %	-1.3	3.9	5.0	1.6	5.7	18.7	21.5
Margin		-2.0 %	5.1 %	5.5 %	1.5 %	4.8 %	13.8 %	13.8 %
Net income	153.5 %	-1.5	2.8	3.9	0.9	3.8	13.1	15.1
EPS	152.8 %	-0.79	1.50	2.05	0.49	2.00	6.87	7.92
EPS adj.	152.8 %	-0.79	1.50	2.05	0.49	2.00	6.87	7.92
DPS	0.0 %	0.00	0.00	0.00	0.50	0.50	0.50	0.50
Dividend Yield		n.a.	n.a.	n.a.	0.5 %	0.7 %	0.7 %	0.7 %
FCFPS		0.20	0.63	3.70	-9.27	-4.21	0.35	1.69
FCF / Market cap		-0.3 %	1.4 %	3.9 %	-9.0 %	-5.9 %	0.5 %	2.4 %
EV / Sales		1.2 x	1.3 x	2.0 x	2.1 x	1.4 x	1.2 x	1.1 x
EV / EBITDA		33.7 x	12.5 x	20.9 x	32.3 x	14.3 x	6.6 x	5.6 x
EV / EBIT		n.a.	24.8 x	36.7 x	138.3 x	29.8 x	9.0 x	7.8 x
P / E		n.a.	30.8 x	46.0 x	210.4 x	35.6 x	10.4 x	9.0 x
P / E adj.		n.a.	30.8 x	46.0 x	210.4 x	35.6 x	10.4 x	9.0 x
FCF Potential Yield		2.8 %	7.3 %	4.5 %	3.4 %	6.1 %	12.1 %	14.1 %
Net Debt		8.8	10.5	3.7	24.6	33.5	33.8	31.6
ROCE (NOPAT)		n.a.	8.1 %	10.6 %	16.1 %	5.7 %	16.0 %	16.1 %
Guidance:	n.a.							

Sales development
in EUR m



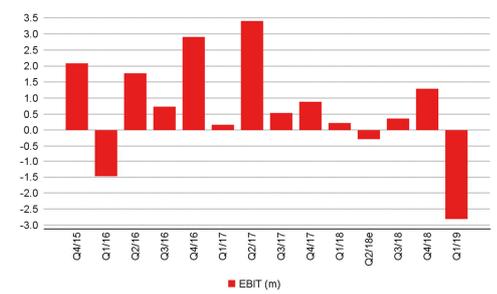
Source: Warburg Research

Employees per location
2018; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

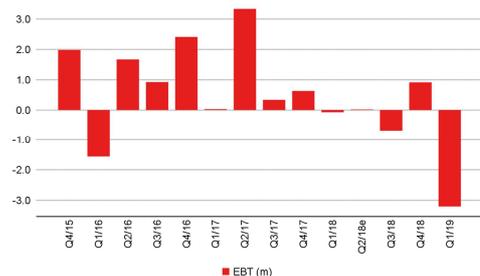
Company Background

- GK Software is the leading software supplier for retailers.
- As well as standard processes, GK Software solutions facilitate special requirements such as bonus programmes, the recording of fiscal details and the seamless integration in back-end solutions.
- The business activities of GK Software divides into two segments - the sale of product licences and the corresponding services.

Competitive Quality

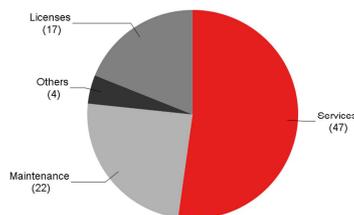
- The structural advantages of GK Software are compelling:
- GK Software's leading solution is completely Java-based, which makes it lean, platform independent and means it can be operated on the existing customer infrastructure.
- For many retail projects, GK competitors tend to undercalculate their bids and as a consequence are unable to complete the project on time and within budget.
- GK has outstanding reference clients (Hornbach, Kaufhof, Douglas, Netto, Tchibo, T-Punkt, Thalia, JYSK Nordic...)
- At the same time, GK Software's personnel costs are, depending on the location, often about 20% below those of a similar project team of a large system integrator.

EBT development
in EUR m



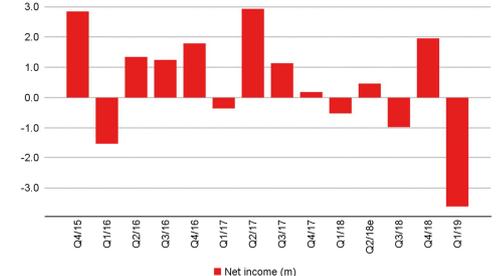
Source: Warburg Research

Sales by segments
2019e; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	
Sales	118.0	135.7	156.1	176.3	195.7	211.4	224.1	237.5	251.8	266.9	282.9	297.0	311.9	
Sales change	11.2 %	15.0 %	15.0 %	13.0 %	11.0 %	8.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	5.0 %	5.0 %	2.5 %
EBIT	5.7	18.7	21.5	24.7	29.4	33.8	38.1	40.4	42.8	45.4	48.1	50.5	53.0	
EBIT-margin	4.8 %	13.8 %	13.8 %	14.0 %	15.0 %	16.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	
Tax rate (EBT)	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	
NOPAT	4.0	13.3	15.3	17.5	20.8	24.0	27.0	28.7	30.4	32.2	34.1	35.9	37.6	
Depreciation	6.1	7.1	8.1	8.8	9.8	10.6	9.0	7.1	7.6	2.7	2.8	3.0	3.1	
in % of Sales	5.2 %	5.2 %	5.2 %	5.0 %	5.0 %	5.0 %	4.0 %	3.0 %	3.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Changes in provisions	0.0	0.0	0.0	-0.9	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	
Change in Liquidity from														
- Working Capital	3.9	4.3	4.8	4.8	4.6	3.7	3.0	3.2	3.4	3.6	3.8	3.4	3.5	
- Capex	14.0	15.2	15.2	10.6	9.8	10.6	6.7	7.1	5.0	2.7	2.8	3.0	3.1	
Capex in % of Sales	11.9 %	11.2 %	9.7 %	6.0 %	5.0 %	5.0 %	3.0 %	3.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
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)	-7.8	0.9	3.4	10.0	16.3	20.3	26.3	25.5	29.6	28.7	30.4	32.5	34.2	36
PV of FCF	-7.3	0.7	2.6	6.8	9.9	11.1	12.9	11.3	11.7	10.2	9.7	9.3	8.8	103
share of PVs	-1.99 %			50.69 %										51.30 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	0.00 %	Financial Strength	1.80
Cost of debt (after tax)	4.2 %	Liquidity (share)	1.80
Market return	7.00 %	Cyclicality	1.80
Risk free rate	1.50 %	Transparency	1.80
		Others	1.80
WACC	11.40 %	Beta	1.80

Valuation (m)

Present values 2031e	98		
Terminal Value	103		
Financial liabilities	35		
Pension liabilities	2		
Hybrid capital	0		
Minority interest	1		
Market val. of investments	0		
Liquidity	12	No. of shares (m)	1.9
Equity Value	175	Value per share (EUR)	92.69

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.98	12.4 %	75.16	76.13	77.16	78.24	79.37	80.56	81.82	1.98	12.4 %	66.78	70.60	74.42	78.24	82.05	85.87	89.69
1.89	11.9 %	81.45	82.59	83.79	85.06	86.39	87.79	89.28	1.89	11.9 %	72.93	76.97	81.01	85.06	89.10	93.14	97.18
1.85	11.7 %	84.86	86.10	87.39	88.76	90.21	91.74	93.36	1.85	11.7 %	76.27	80.43	84.60	88.76	92.93	97.09	101.26
1.80	11.4 %	88.46	89.80	91.21	92.69	94.27	95.94	97.71	1.80	11.4 %	79.81	84.10	88.40	92.69	96.99	101.28	105.58
1.75	11.2 %	92.27	93.72	95.25	96.86	98.58	100.40	102.34	1.75	11.2 %	83.57	88.00	92.43	96.86	101.30	105.73	110.16
1.71	10.9 %	96.29	97.87	99.53	101.30	103.17	105.16	107.29	1.71	10.9 %	87.57	92.15	96.72	101.30	105.88	110.45	115.03
1.62	10.4 %	105.10	106.97	108.95	111.06	113.30	115.70	118.27	1.62	10.4 %	96.37	101.27	106.16	111.06	115.96	120.85	125.75

- GK has been able to grow strongly in recent years and, last but not least, convince in terms of profitability
- The technological leadership position and the cooperation with SAP form a good basis for further growth
- This leading position in the world provides considerable scope for sales and earnings

Valuation	2015	2016	2017	2018	2019e	2020e	2021e
Price / Book	2.2 x	2.8 x	4.6 x	5.0 x	3.2 x	2.5 x	2.0 x
Book value per share ex intangibles	2.03	4.18	7.02	4.82	7.06	13.88	22.09
EV / Sales	1.2 x	1.3 x	2.0 x	2.1 x	1.4 x	1.2 x	1.1 x
EV / EBITDA	33.7 x	12.5 x	20.9 x	32.3 x	14.3 x	6.6 x	5.6 x
EV / EBIT	n.a.	24.8 x	36.7 x	138.3 x	29.8 x	9.0 x	7.8 x
EV / EBIT adj.*	n.a.	24.8 x	36.7 x	138.3 x	29.8 x	9.0 x	7.8 x
P / FCF	n.a.	73.7 x	25.5 x	n.a.	n.a.	206.0 x	42.2 x
P / E	n.a.	30.8 x	46.0 x	210.4 x	35.6 x	10.4 x	9.0 x
P / E adj.*	n.a.	30.8 x	46.0 x	210.4 x	35.6 x	10.4 x	9.0 x
Dividend Yield	n.a.	n.a.	n.a.	0.5 %	0.7 %	0.7 %	0.7 %
FCF Potential Yield (on market EV)	2.8 %	7.3 %	4.5 %	3.4 %	6.1 %	12.1 %	14.1 %

*Adjustments made for: -

Consolidated profit & loss

In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Sales	62.6	77.3	90.5	106.2	118.0	135.7	156.1
Change Sales yoy	40.3 %	23.5 %	17.0 %	17.4 %	11.2 %	15.0 %	15.0 %
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	0.5	0.4	0.0	0.0	0.0	0.0	0.0
Total Sales	63.1	77.7	90.5	106.2	118.0	135.7	156.1
Material expenses	8.3	7.7	8.5	7.7	8.9	6.8	7.8
Gross profit	54.9	70.0	81.9	98.4	109.2	128.9	148.3
<i>Gross profit margin</i>	<i>87.6 %</i>	<i>90.6 %</i>	<i>90.6 %</i>	<i>92.7 %</i>	<i>92.5 %</i>	<i>95.0 %</i>	<i>95.0 %</i>
Personnel expenses	39.7	47.7	57.8	68.8	80.2	86.8	99.9
Other operating income	1.7	1.8	5.2	3.6	6.5	8.1	9.4
Other operating expenses	14.7	16.3	20.5	26.4	23.6	24.4	28.1
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	2.2	7.8	8.8	6.8	11.8	25.8	29.7
<i>Margin</i>	<i>3.5 %</i>	<i>10.1 %</i>	<i>9.7 %</i>	<i>6.4 %</i>	<i>10.0 %</i>	<i>19.0 %</i>	<i>19.0 %</i>
Depreciation of fixed assets	1.0	1.1	1.4	2.7	2.4	2.7	3.1
EBITA	1.2	6.7	7.4	4.1	9.4	23.1	26.5
Amortisation of intangible assets	1.5	1.8	2.2	2.5	3.5	4.1	4.7
Goodwill amortisation	1.0	1.0	0.2	0.0	0.2	0.3	0.3
EBIT	-1.3	3.9	5.0	1.6	5.7	18.7	21.5
<i>Margin</i>	<i>-2.0 %</i>	<i>5.1 %</i>	<i>5.5 %</i>	<i>1.5 %</i>	<i>4.8 %</i>	<i>13.8 %</i>	<i>13.8 %</i>
EBIT adj.	-1.3	3.9	5.0	1.6	5.7	18.7	21.5
Interest income	0.2	0.1	0.1	0.1	0.0	0.0	0.0
Interest expenses	0.3	0.6	0.8	1.6	0.3	0.3	0.3
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	-1.4	3.5	4.3	0.2	5.4	18.4	21.2
<i>Margin</i>	<i>-2.2 %</i>	<i>4.5 %</i>	<i>4.8 %</i>	<i>0.2 %</i>	<i>4.5 %</i>	<i>13.6 %</i>	<i>13.6 %</i>
Total taxes	0.1	0.6	0.5	-0.8	1.6	5.3	6.2
Net income from continuing operations	-1.5	2.8	3.9	0.9	3.8	13.1	15.1
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	-1.5	2.8	3.9	0.9	3.8	13.1	15.1
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	-1.5	2.8	3.9	0.9	3.8	13.1	15.1
<i>Margin</i>	<i>-2.4 %</i>	<i>3.7 %</i>	<i>4.3 %</i>	<i>0.9 %</i>	<i>3.2 %</i>	<i>9.6 %</i>	<i>9.7 %</i>
Number of shares, average	1.9	1.9	1.9	1.9	1.9	1.9	1.9
EPS	-0.79	1.50	2.05	0.49	2.00	6.87	7.92
EPS adj.	-0.79	1.50	2.05	0.49	2.00	6.87	7.92

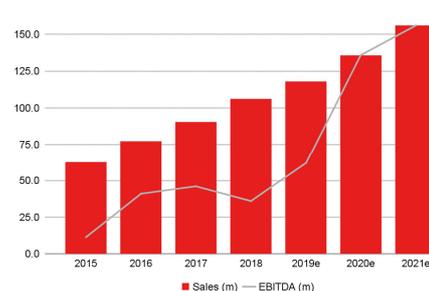
*Adjustments made for:

Guidance: n.a.

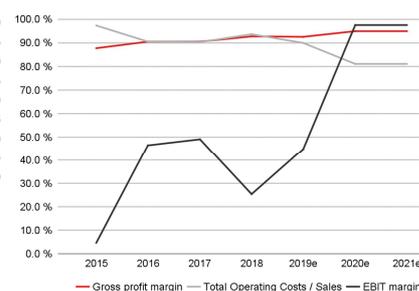
Financial Ratios

	2015	2016	2017	2018	2019e	2020e	2021e
Total Operating Costs / Sales	97.4 %	90.4 %	90.3 %	93.6 %	90.0 %	81.0 %	81.0 %
Operating Leverage	-1.4 x	n.a.	1.6 x	-3.9 x	22.8 x	15.4 x	1.0 x
EBITDA / Interest expenses	6.7 x	12.2 x	11.2 x	4.4 x	39.3 x	85.9 x	98.8 x
Tax rate (EBT)	-8.5 %	18.1 %	10.5 %	-439.8 %	29.0 %	29.0 %	29.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	103.1 %	25.0 %	7.3 %	6.3 %
Sales per Employee	145,313	175,985	201,806	232,188	253,045	285,296	321,657

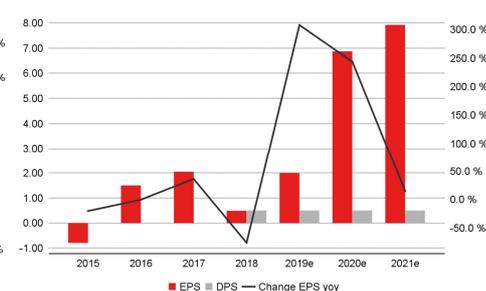
Sales, EBITDA in EUR m



Operating Performance in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

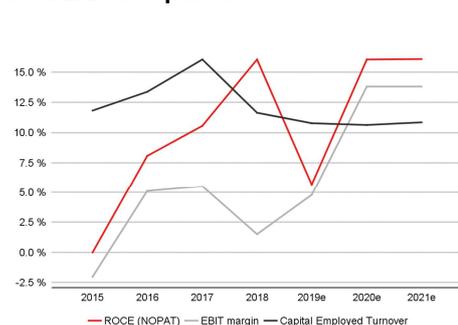
Consolidated balance sheet

In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Assets							
Goodwill and other intangible assets	25.2	23.8	25.4	30.0	28.6	27.8	26.3
thereof other intangible assets	20.2	18.8	21.4	12.2	11.0	10.4	9.2
thereof Goodwill	5.0	5.0	4.0	17.9	17.6	17.3	17.0
Property, plant and equipment	5.8	8.9	14.2	22.7	32.1	41.0	49.6
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	30.9	32.7	39.6	52.8	60.7	68.8	75.9
Inventories	1.7	1.2	1.0	0.5	1.8	2.1	2.4
Accounts receivable	12.6	18.0	17.7	26.0	28.9	33.3	38.3
Liquid assets	7.4	6.0	30.5	11.8	2.8	2.5	4.8
Other short-term assets	15.2	13.7	17.8	20.0	20.0	20.0	20.0
Current assets	36.8	38.9	67.0	58.4	53.6	58.0	65.5
Total Assets	67.7	71.6	106.6	111.2	114.3	126.8	141.4
Liabilities and shareholders' equity							
Subscribed capital	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Capital reserve	18.2	18.5	20.5	21.4	21.4	21.4	21.4
Retained earnings	0.0	0.0	0.0	0.0	2.9	15.0	29.1
Other equity components	8.9	11.3	16.3	15.8	15.8	15.8	15.8
Shareholders' equity	29.0	31.7	38.7	39.2	42.0	54.2	68.3
Minority interest	0.0	0.0	0.0	1.1	1.1	1.1	1.1
Total equity	29.0	31.7	38.7	40.3	43.1	55.2	69.4
Provisions	6.0	3.6	3.7	3.1	3.1	3.1	3.1
thereof provisions for pensions and similar obligations	1.5	1.7	1.9	1.6	1.6	1.6	1.6
Financial liabilities (total)	14.7	14.8	32.3	34.8	34.8	34.8	34.8
thereof short-term financial liabilities	3.2	5.8	10.3	12.3	12.3	12.3	12.3
Accounts payable	2.1	2.2	1.8	2.4	2.6	3.0	3.5
Other liabilities	15.9	19.3	30.0	30.7	30.7	30.7	30.7
Liabilities	38.7	39.9	67.9	70.9	71.2	71.6	72.1
Total liabilities and shareholders' equity	67.7	71.6	106.6	111.2	114.3	126.8	141.4

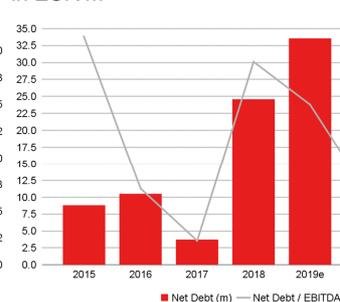
Financial Ratios

	2015	2016	2017	2018	2019e	2020e	2021e
Efficiency of Capital Employment							
Operating Assets Turnover	4.5 x	3.0 x	3.0 x	2.3 x	2.0 x	1.8 x	1.8 x
Capital Employed Turnover	1.7 x	1.8 x	2.1 x	1.6 x	1.5 x	1.5 x	1.5 x
ROA	-4.9 %	8.6 %	9.8 %	1.8 %	6.3 %	19.0 %	19.9 %
Return on Capital							
ROCE (NOPAT)	n.a.	8.1 %	10.6 %	16.1 %	5.7 %	16.0 %	16.1 %
ROE	-5.0 %	9.3 %	11.1 %	2.4 %	9.4 %	27.2 %	24.6 %
Adj. ROE	-5.0 %	9.3 %	11.1 %	2.4 %	9.4 %	27.2 %	24.6 %
Balance sheet quality							
Net Debt	8.8	10.5	3.7	24.6	33.5	33.8	31.6
Net Financial Debt	7.3	8.8	1.8	23.0	32.0	32.3	30.0
Net Gearing	30.3 %	33.1 %	9.6 %	61.1 %	77.8 %	61.3 %	45.5 %
Net Fin. Debt / EBITDA	337.6 %	112.8 %	21.0 %	337.0 %	271.1 %	125.2 %	101.2 %
Book Value / Share	15.4	16.8	20.3	20.6	22.1	28.5	35.9
Book value per share ex intangibles	2.0	4.2	7.0	4.8	7.1	13.9	22.1

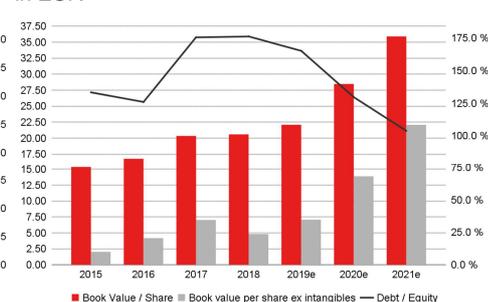
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

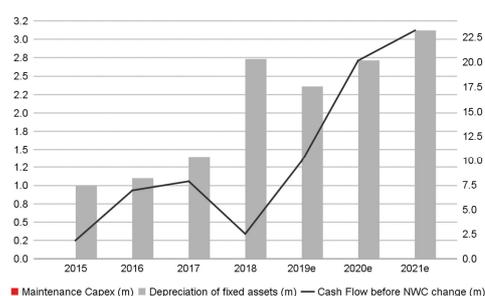
In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Net income	-1.5	2.8	3.9	0.9	3.8	13.1	15.1
Depreciation of fixed assets	1.0	1.1	1.4	2.7	2.4	2.7	3.1
Amortisation of goodwill	1.0	1.0	0.2	0.0	0.2	0.3	0.3
Amortisation of intangible assets	1.5	1.8	2.2	2.5	3.5	4.1	4.7
Increase/decrease in long-term provisions	0.7	0.2	0.2	-0.3	0.0	0.0	0.0
Other non-cash income and expenses	-0.8	0.0	0.0	-3.3	0.0	0.0	0.0
Cash Flow before NWC change	1.9	6.9	7.9	2.5	9.9	20.1	23.2
Increase / decrease in inventory	-0.1	0.5	0.2	0.5	-1.3	-0.3	-0.3
Increase / decrease in accounts receivable	-0.4	-5.4	0.3	-8.3	-2.9	-4.4	-5.0
Increase / decrease in accounts payable	-0.2	-3.6	0.2	-0.3	0.2	0.4	0.5
Increase / decrease in other working capital positions	1.0	5.2	6.6	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	0.3	-3.4	7.3	-8.2	-3.9	-4.3	-4.8
Net cash provided by operating activities [1]	2.2	3.6	15.2	-5.7	6.0	15.8	18.4
Investments in intangible assets	-1.2	-1.2	-0.3	-0.3	-2.4	-3.5	-3.5
Investments in property, plant and equipment	-1.1	-1.1	-7.9	-11.7	-11.7	-11.7	-11.7
Payments for acquisitions	-16.8	0.0	0.0	-3.9	0.0	0.0	0.0
Financial investments	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	-2.6	-1.1	0.2	0.0	0.0	0.0
Net cash provided by investing activities [2]	-18.6	-5.0	-9.3	-15.7	-14.0	-15.2	-15.2
Change in financial liabilities	13.6	0.1	17.5	-0.9	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Other	-1.0	-2.2	1.6	0.0	0.0	0.0	0.0
Net cash provided by financing activities [3]	12.6	-2.1	19.1	-0.3	-1.0	-1.0	-1.0
Change in liquid funds [1]+[2]+[3]	-3.9	-3.5	25.1	-21.7	-9.0	-0.3	2.3
Effects of exchange-rate changes on cash	0.1	0.0	0.0	-0.1	0.0	0.0	0.0
Cash and cash equivalent at end of period	6.4	2.8	27.9	8.7	2.8	2.5	4.8

Financial Ratios

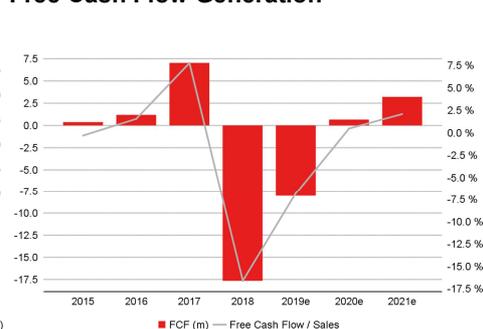
	2015	2016	2017	2018	2019e	2020e	2021e
Cash Flow							
FCF	0.4	1.2	7.0	-17.6	-8.0	0.7	3.2
Free Cash Flow / Sales	-0.3 %	1.5 %	7.8 %	-16.6 %	-6.8 %	0.5 %	2.1 %
Free Cash Flow Potential	2.1	7.2	8.3	7.6	10.2	20.4	23.5
Free Cash Flow / Net Profit	13.3 %	42.0 %	180.8 %	-1907.9 %	-210.2 %	5.0 %	21.3 %
Interest Received / Avg. Cash	2.5 %	2.2 %	0.7 %	0.7 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	4.1 %	4.3 %	3.3 %	4.7 %	0.9 %	0.9 %	0.9 %
Management of Funds							
Investment ratio	3.8 %	3.1 %	9.0 %	11.3 %	11.9 %	11.2 %	9.7 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	68.6 %	61.4 %	215.8 %	228.7 %	228.7 %	215.1 %	187.1 %
Avg. Working Capital / Sales	13.1 %	16.1 %	18.1 %	18.9 %	22.2 %	22.3 %	22.3 %
Trade Debtors / Trade Creditors	600.2 %	819.6 %	964.6 %	1100.6 %	1111.5 %	1110.0 %	1094.3 %
Inventory Turnover	5.0 x	6.4 x	8.6 x	14.8 x	4.9 x	3.2 x	3.3 x
Receivables collection period (days)	73	85	71	90	89	90	90
Payables payment period (days)	93	105	79	112	107	161	164
Cash conversion cycle (Days)	-123	23	-1	2	56	41	38

CAPEX and Cash Flow

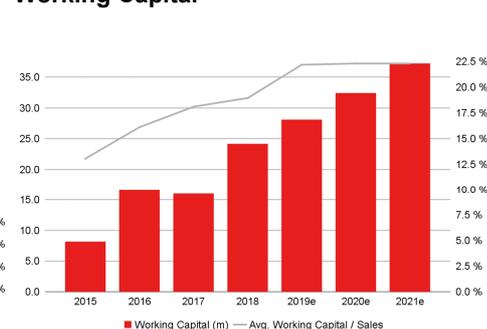
in EUR m



Free Cash Flow Generation



Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

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GK Software	5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0007571424.htm

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Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-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.
“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	123	62
Hold	65	33
Sell	3	2
Rating suspended	6	3
Total	197	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	31	82
Hold	5	13
Sell	0	0
Rating suspended	2	5
Total	38	100

PRICE AND RATING HISTORY GK SOFTWARE AS OF 03.06.2019


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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