

Expert System

FY17 results

Strong finish to the year

Expert System saw an uptick in demand towards the end of FY17, resulting in revenues and EBITDA ahead of our forecasts. The company has revised its outlook for FY18/19, expecting double-digit sales growth and EBITDA margin expansion; we have revised up our FY18 forecasts to reflect this. The company expects to burn cash in FY18 before turning cash-flow positive in FY19. Evidence of sustained customer demand combined with good cost and cash control will be key to share price upside.

Year end	Revenue (€m)	EBITDA* (€m)	EPS* (€)	DPS (€)	P/E (x)	EV/EBITDA (x)
12/16	25.1	(2.2)	(0.22)	0.0	N/A	N/A
12/17	27.8	1.7	(0.18)	0.0	N/A	31.2
12/18e	30.5	4.0	(0.05)	0.0	N/A	13.6
12/19e	34.8	7.0	0.02	0.0	53.4	7.8

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

Strong pick-up in revenues in H217

Expert reported FY17 sales growth of 11.8% y-o-y, versus our expectations for flat sales. This implies that H217 sales grew 110% sequentially, highlighting in part the typical seasonality that Expert experiences, but also a pick-up in demand for its solutions towards year end. Combined with slightly lower than expected operating costs, this generated a positive EBITDA of €1.7m before exceptional restructuring costs of €0.7m. The proportion of annual licences sold increased to 41% of licence revenues from 28% in FY16, and grew in absolute terms by 145% y-o-y. Year-end net debt of €8.8m was higher than we forecast, mainly due to higher receivables resulting from the heavy weighting of licence sales close to year end.

Revised growth targets

The company sees the market for its solutions starting to mature, with companies now actively looking for ways to use artificial intelligence (AI) to improve their business processes. Vertical solutions, which reduce the amount of customisation work required and shorten the sales cycle, combined with the availability of annual licensing are helping the company win new business. Expert has published its new growth and profitability targets for FY18/19, essentially pushing out the growth by one year from the targets set a year ago. This was flagged at H117 results, when we reduced our forecasts. Based on higher than expected FY17 revenues, we raise our FY18 revenue forecast by 6.7% (9.9% growth) and EBITDA forecast by 33%.

Valuation: Sustained customer demand key

Expert System trades on an EV/EBITDA of 13.6x FY18e. This is at a premium to its Italian software and services peers and at a discount to enterprise search and information management companies, and high-growth big data analytics software companies. Our DCF valuation of Expert System suggests a value of €1.91/share (previously €1.83). Expert's ability to convert customer interest in the fast-growing data mining and analytics market into commercial contracts, combined with achieving the targeted profitability, will be key to share price upside from this point.

Software & comp services

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Price	€1.28
Market cap	€46m
Net debt (€m) at end December 2017	8.8

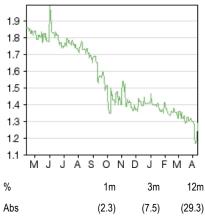
Shares in issue 35.7m

Free float 73.1%

Code EXSY

Primary exchange AIM Italia
Secondary exchange N/A

Share price performance



Abs (2.3) (7.5) (29.3)

Rel (local) (3.8) (7.0) (37.9)

52-week high/low €2.0 €1.2

Business description

Expert System has developed and patented technology that extracts useful information from unstructured text using semantic-based techniques. It applies this technology to a number of verticals including enterprise search, customer experience management and big data analytics.

Next events

AGM 23 April 2018

Analyst

Katherine Thompson +44 (0)20 3077 5730

tech@edisongroup.com

Edison profile page

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Review of FY17 results

€m	FY16	FY17e	FY17	Diff	у-о-у
Sales	23.4	23.4	26.1	11.8%	11.8%
Other income and grants	1.7	1.8	1.6	(5.9%)	(2.5%)
Total revenues	25.1	25.1	27.8	10.6%	10.9%
Capitalised development costs & changes in WIP	4.5	5.0	5.0	0.5%	11.8%
Production value	29.6	30.1	32.8	8.9%	11.0%
EBITDA	(2.2)	(1.5)	1.7	N/A	N/A
EBITDA margin	-9.0%	-6.1%	6.3%	12.4%	15.2%
D&A	(3.7)	(4.0)	(4.9)	21.9%	32.4%
Normalised operating profit	(5.9)	(5.6)	(3.2)	(42.8%)	(46.3%)
Normalised operating margin	-23.7%	-22.2%	-11.5%	10.7%	12.2%
Amortisation of acquired intangibles	(2.6)	(2.6)	(2.6)		
Exceptional items	0.0	0.0	(0.7)		
Reported operating profit	(8.5)	(8.2)	(6.5)	20.6%	24.0%
Normalised EPS (c)	(22.0)	(14.0)	(18.3)	(31.5%)	(16.8%)
Net debt	12.4	4.3	8.8	107.3%	(28.9%)

For FY17, Expert System reported sales 11.8% ahead of our forecast, with H217 revenues showing sequential growth of 110%. Half-yearly revenues saw acceleration in growth: H117 sales declined 1.5% y-o-y, whereas H217 sales saw 19.6% growth y-o-y. The higher level of revenues (particularly high-margin licences) combined with slightly lower than expected operating expenses, resulting in positive EBITDA of \leq 1.7m, well ahead of our \leq 1.5m loss forecast. Depreciation and amortisation was \leq 0.9m higher than forecast, resulting in a normalised operating loss that was \leq 2.4m smaller than forecast. The company incurred exceptional costs of \leq 0.7m relating to reorganisation of the business. Net finance costs of \leq 2.2m were higher than our \leq 0.5m forecast, due to unrealised foreign exchange losses of \leq 1.6m. Net debt at year end was higher than forecast primarily due to working capital and capex that were ahead of our forecasts. The large number of licences signed close to the end of the year inflated trade receivables at year end.

Revenue breakdown highlights growth in annual licences

For the first time, the company has disclosed a breakdown of revenues by type; see Exhibit 2. Subscription licence sales more than doubled in the year, whereas one-off licences grew by 33%. Maintenance revenues increased by 8%; these are only generated from one-off licences. Revenues from providing services decreased 15% y-o-y, reflecting the reorganisation of the professional services team to better balance utilisation and profitability. Recurring revenues made up more than a third of the total, up from 28% in FY16.

The company encourages customers to sign up for annual licenses; of those taking annual licenses, roughly half sign up for one year and half sign up for three-year contracts. This improves visibility for Expert and reduces the upfront cash outlay for the customer.

On a geographical basis, 63% of revenues came from international markets (vs 61% in FY16), with 25% growth in the US and 400% growth in the UK. The company expects the major driver of growth in FY18 and FY19 to come from outside of Italy.



Revenues (€m)	FY16	FY17
Subscription licences	2.0	4.9
One-off licences	5.2	7.0
Maintenance	4.3	4.7
Services	10.4	8.9
Other	0.2	0.2
Total*	22.2	25.6
Proportion of total revenues		
Subscription licences	9%	19%
One-off licences	24%	27%
Maintenance	19%	18%
Services	47%	35%
Other	1%	1%
Total	100%	100%
Growth y-o-y		
Subscription licences		145%
One-off licences		33%
Maintenance		8%
Services		(15%)
Other		0%
Total		15%
Recurring revenues (subscription licences plus maintenance)	6.3	9.6
% of total	28.4%	37.3%

Outlook and changes to forecasts

Expert's view is that the market for artificial intelligence software is starting to mature, and companies are looking for ways to incorporate AI to improve the efficiency of their business processes. Expert is seeing the strongest demand from the financial and insurance sectors as well as intelligence agencies, helped by its focus on providing specialist vertical solutions for those markets. Partnering with system integrators and consultants should help the company to access more opportunities, as well provide more implementation resource for customers so that Expert can focus on developing and selling software.

The company has revised its outlook for FY18 and FY19 and is aiming to achieve the growth and profitability as below. This pushes out the company's forecasts by roughly a year compared to the outlook this time last year, although this was highlighted when the company reported H117 results in September. The positive momentum seen in H217 gives some confidence that growth can be achieved in future years.

Exhibit 3: Revised outlook								
€m	FY17	FY18e	FY19e					
Sales*	25.6	28.5-30.0	33.0-34.5					
Production value	32.8	35.5-37.0	39.8-41.3					
EBITDA	1.0	4.0-5.0	7.0-8.0					
Net income	(8.3)	(4.6-3.9)	(1.1-0.1)					
Net debt	8.8	13.6-12.9	13.0-12.0					
EBITDA margin	3.9%	14.0-16.7%	21.2-23.2%					
Source: Expert System. Note:*N	et of changes in work-in-	progress						

We have revised our forecasts to reflect better growth prospects in FY18. This results in higher EBITDA in FY18. We forecast the company to generate a net cash outflow in FY18, as operating cash flow is not yet high enough to cover capitalised development costs, before turning marginally cash flow positive in FY19.



€m	FY18e old	FY18e new	Change	у-о-у	FY19e new	у-о-у
Sales	26.9	29.0	8.0%	11.1%	33.3	14.7%
Other income & grants	1.8	1.5	(14.3%)	(8.9%)	1.5	0.0%
Total revenues	28.6	30.5	6.7%	9.9%	34.8	14.0%
Capitalised development costs & changes in WIP	5.5	5.5	0.0%	9.5%	5.5	0.0%
Production value	34.1	36.0	5.6%	9.8%	40.3	11.8%
EBITDA	3.0	4.0	33.2%	130.4%	7.0	74.3%
EBITDA margin	10.6%	13.2%	2.6%	6.9%	20.2%	7.0%
D&A	(4.4)	(5.2)	17.7%		(5.5)	
Normalised operating profit	(1.4)	(1.2)	(15.4%)	(62.4%)	1.6	(229.5%)
Normalised operating margin	-5.0%	-3.9%	1.0%	7.6%	4.5%	8.4%
Amortisation of acquired intangibles	(2.6)	(2.6)	0.0%		(2.6)	
Exceptional items						
Reported operating profit	(4.0)	(3.8)	5.4%	41.4%	(1.1)	72.3%
Normalised EPS (c)	(3.4)	(4.5)	(35.0%)	75.3%	2.4	152.9%
Net debt	7.4	12.6	72.0%	43.3%	12.6	(0.0%)

Valuation

The majority of Expert's direct competitors are private companies or subsidiaries of large companies such as IBM or HP Enterprise. We have compared Expert's valuation and operating metrics to peers operating in the natural language processing, big data analytics, enterprise search and information management markets, as well as to Italian software and IT services peers.

On our revised forecasts, based on EV/sales Expert is trading at a discount to all peer groups. This reflects that fact that the company is still in a growth phase and moving towards operating profitability. On an EV/EBITDA basis it is trading more in line with Italian software and IT services peers, and at a discount to all other groups. If the company can maintain the current sales momentum and meet the growth and profit targets it has set for FY18 and FY19, the valuation discount should start to close. Progress towards net cash generation will also help reduce the discount.

We note that Coveo, a privately owned intelligent search and predictive analytics company, recently attracted a \$100m investment from Evergreen Coast Capital for a 27% stake in the company. This values the business at \$370m. We understand from press articles that the company has an annualised revenue run rate of \$50m, which values it on a price/sales multiple of 7.4x, more akin to high growth companies such as Splunk or Tableau.

We have also revised our DCF valuation, rolling the valuation forward by one year. Our 10-year DCF analysis values the company at €1.91/share, marginally up from our previous €1.83 valuation. We now forecast a revenue CAGR of 9.1% from FY17 to FY27, with EBITDA margins rising to 28% by FY27. Assuming the company continues to capitalised development spend, we forecast capex/sales reducing to 9.5% by FY27. We use a WACC of 9% and long-term growth of 3%. A 1% increase in the WACC results in a valuation of €1.50/share, while a 1% decrease results in a valuation of €2.49.



	Market cap	CY EV/ Sales	NY EV/ Sales	CY EV/ EBITDA	NY EV/ EBITDA	CY P/E	NY P/E	CY sales (m)	CY EBIT Margin	CY EBITDA Margin	Sales Growth	EPS Growth
	(m)										NY	NY
Natural Language Understanding												
Expert System	€46	1.8x	1.6x	13.6x	7.8x	N/A	53.4x	30.5	-3.9%	13.2%	14.0%	N/A
Nuance Communications	\$4,505	3.0x	2.9x	N/A	9.7x	13.1x	12.4x	2,073	25.9%	N/A	3.9%	5.9%
Big Data Analytics												
Splunk	\$12,43 9	8.2x	6.5x	55.7x	38.2x	99.9x	69.3x	1,629	11.7%	14.7%	24.6%	44.2%
Tableau	\$5,643	5.9x	5.2x	120.3x	62.5x	689.8x	174.7x	971	0.6%	4.9%	13.2%	294.9%
Teradata	\$4,145	2.1x	2.0x	11.9x	11.2x	26.0x	23.2x	2,181	11.2%	17.3%	2.7%	12.3%
Average		5.4x	4.6x	62.6x	37.3x	271.9x	89.0x		7.8%	12.3%	13.5%	117.1%
Enterprise search a	nd information	on manage	ement									
OpenText	\$7,894	4.1x	3.9x	11.0x	10.3x	13.1x	12.0x	2,806	33.7%	34.4%	4.2%	9.0%
IHS Markit	\$16,69 1	6.1x	5.8x	15.5x	14.2x	21.4x	18.8x	3,872	21.1%	23.3%	5.8%	13.9%
CommVault	\$2,599	3.6x	3.3x	29.3x	22.3x	64.0x	43.2x	706	11.7%	14.9%	10.2%	48.0%
Average		4.6x	4.3x	18.6x	15.6x	32.8x	24.7x		22.2%	24.2%	6.7%	23.6%
Italian software & se	ervices											
TXT e-solutions	€140	1.4x	1.3x	14.6x	11.6x	63.1x	46.6x	39	6.6%	8.5%	7.4%	35.3%
Exprivia	€72	0.7x	0.7x	6.2x	5.9x	11.5x	10.6x	165	7.7%	8.0%	3.6%	8.3%
Piteco	€90	4.9x	4.5x	12.4x	11.0x	16.0x	14.6x	20	31.8%	32.8%	9.7%	9.7%
Reply	€1,669	1.6x	1.5x	11.5x	10.5x	18.9x	17.1x	982	12.9%	13.0%	9.0%	10.6%
Average		2.2x	2.0x	11.2x	9.8x	27.4x	22.2x		14.7%	15.6%	7.5%	16.0%



	€'000s 2012	2013	2014	2015	2016	2017	2018e	2019
31-December	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAF
PROFIT & LOSS								
Revenue	11,593	11,109	13,045	19,368	25,057	27,783	30,531	34,79
EBITDA	2,624	2,014	2,339	1,463	(2,245)	1,746	4,024	7,01
Operating Profit (before amort. and except.)	1,765	916	609	(1,226)	(5,941)	(3,189)	(1,198)	1,552
Intangible Amortisation	0	0	0	(2,549)	(2,608)	(2,608)	(2,608)	(2,608
Exceptionals	(319)	45	59	0	0	(700)	0	(
Other	0	0	0	0	0	0	0	(
Operating Profit	1,446	961	669	(3,775)	(8,549)	(6,496)	(3,806)	(1,055
Net Interest	(298)	(376)	29	213	(156)	(2,191)	(601)	(601
Profit Before Tax (norm)	1,467	539	638	(1,013)	(6,097)	(5,380)	(1,800)	95
Profit Before Tax (reported)	1,148	584	697	(3,562)	(8,705)	(8,687)	(4,407)	(1,656
Tax	(452)	(359)	(609)	277	579	348	441	166
Profit After Tax (norm)	1,015	180	29	(934)	(5,692)	(5,164)	(1,620)	856
Profit After Tax (reported)	697	225	89	(3,284)	(8,126)	(8,339)	(3,966)	(1,491
Average Number of Shares Outstanding	22.0	22.0	22.0	22.8	25.8	28.1	35.7	35.7
(m)	22.0	22.0	22.0	22.0	20.0	20.1	55.1	55.1
EPS - normalised (c)	4.6	0.8	0.1	(4.1)	(22.0)	(18.3)	(4.5)	2.4
EPS - normalised and fully diluted (c)	4.6	0.8	0.1	(4.1)	(22.0)	(18.3)	(4.5)	2.4
EPS - (IFRS) (c)	3.2	1.0	0.4	(14.4)	(31.5)	(29.6)	(11.1)	(4.2
Dividend per share (p)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA Margin (%)	22.6	18.1	17.9	7.6	-9.0	6.3	13.2	20.2
Adj Operating Margin (%)	15.2	8.2	4.7	-6.3	-23.7	-11.5	-3.9	4.5
BALANCE SHEET								
Fixed Assets	6,691	9,905	5,719	20,301	20,379	18,828	17,198	15,127
Intangible Assets	1,111	2,462	4,640	18,539	18,372	16,944	15,349	13,329
Tangible Assets	635	606	692	916	915	792	757	707
Investments	4,945	6,836	387	846	1,092	1,092	1,092	1,092
Current Assets	12,767	15,491	32,681	42,588	37,012	37,671	35,279	36,393
Stocks	722	476	1,563	1,797	627	99	99	99
Debtors	5,488	5,820	7,866	10,228	10,233	12,384	13,870	15,812
Cash	2,065	2,967	4,900	11,249	9,063	11,235	7,416	7,422
Other	4,492	6,228	18,352	19,314	17,088	13,953	13,893	13,059
Current Liabilities	(8,871)	(10,333)	(13,639)	(20,517)	(22,679)	(19,521)	(19,965)	(20,499
Creditors	(6,538)	(7,350)	(10,698)	(15,082)	(16,459)	(14,145)	(14,590)	(15,123
Short term borrowings	(2,332)	(2,984)	(2,940)	(5,435)	(6,219)	(5,376)	(5,376)	(5,376
Long Term Liabilities	(4,642)	(5,172)	(7,803)	(22,227)	(18,275)	(17,702)	(17,202)	(17,202
Long term borrowings	(4,642)	(5,172)	(4,799)	(18,240)	(15,252)	(14,683)	(14,683)	(14,683
Other long term liabilities	0	0	(3,005)	(3,987)	(3,023)	(3,019)	(2,519)	(2,519
Net Assets	5,945	9,890	16,958	20,145	16,437	19,276	15,309	13,819
CASH FLOW								
Operating Cash Flow	8,077	2,891	737	2,738	2,088	(1,921)	2,993	6,623
Net Interest	(298)	(376)	29	(324)	(155)	(626)	(612)	(617
Tax	(452)	(359)	(609)	(1,576)	0	0	0	(017
Capex	(3,095)	(2,384)	(3,905)	(20,045)	(6,378)	(6,321)	(6,200)	(6,000
Acquisitions/disposals	(0,000)	0	(6,436)	3,045	46	1,275	0,200)	(0,000
Financing	0	0	12,341	6,573	4,418	11,178	0	(
Dividends	0	(180)	12,341	0,373	0	0	0	(
Net Cash Flow	4,232	(408)	2,156	(9,588)	18	3,585	(3,819)	6
Opening net debt/(cash)	6,352	4,909	4,822*	2,839	12,426	12,408	8,824	12,642
HP finance leases initiated	0,332	4,909	0	2,039	12,420	12,400	0,024	12,04
Other	(2,788)	128	(173)	0	0	0	0	(
Closing net debt/(cash)	4,909	5,189*	2,839	12,426	12,408	8,824	12,642	12,636



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