

Expert System

FY16 results

Turning the AI hype into reality

Expert System spent FY16 investing in its corporate structure post the TEMIS acquisition. While this led to a small loss in FY16, it leaves the company better positioned with a unified technology offering and offices established in the key growth markets. New business in H216 confirmed that these changes are starting to have a positive effect. Converting the increasing interest in Expert's cognitive computing solutions into new business should support strong revenue growth and a return to profitability.

Year end	Revenue (€m)	EBITDA (€m)	EPS* (c)	DPS (c)	P/E (x)	EV/EBITDA (x)
12/15	19.4	1.4	(4.1)	0.0	N/A	43.1
12/16	25.1	(2.2)	(22.0)	0.0	N/A	N/A
12/17e	29.7	3.2	(3.2)	0.0	N/A	19.6
12/18e	35.4	6.6	3.9	0.0	47.3	9.6

Note: *EPS is normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. FY15 results have been restated.

Pace of new business accelerated in H2

After a weak H1, Expert accelerated the pace of new contract wins, generating 73% h-o-h revenue growth in H2. While FY16 sales were in line with our forecast, grant income came in lower and other operating expenses were higher than expected, resulting in EBITDA of -€2.25m (our forecast: €0.07m). Good control over working capital resulted in a better than forecast year-end net debt position.

Increasing interest in commercial application of AI

Artificial intelligence (AI) is a hot topic but, until recently, companies were not allocating budget to it as they were unclear on the commercial applications. Expert is now seeing more interest in its technology, with an increasing level of RFIs and pitches against the larger players, and proof of concept trials converting to full contracts. The availability of vertical applications, for example in banking and insurance, provides a faster route for companies to adopt cognitive computing and helps companies understand use cases for the technology. Expert has outlined its three-year plan for double-digit annual sales growth, expanding EBITDA margins and debt reduction. Our forecasts assume slightly more conservative growth in FY17 and FY18, with EBITDA margins increasing to nearly 19% in FY18.

Valuation: Reflects growth potential

Expert System trades on an EV/EBITDA of 19.6x FY17e and 9.6x FY18e. On FY18 metrics, which assume that revenue growth converts to strong EBITDA margin expansion, it is trading at a discount to enterprise search, information management and big data analytics software companies. Our DCF valuation of Expert System suggests a value of €2.59/share (previous: €2.60). Expert's ability to convert customer interest in the fast-growing data mining and analytics market into commercial contracts will be key to share price upside from this point.

Software & comp services

27 April 2017

Price €1.83

Market cap €51m

 Net debt (€m) at end FY16* 12.4
 *Excludes short-term investments

Shares in issue 27.8m

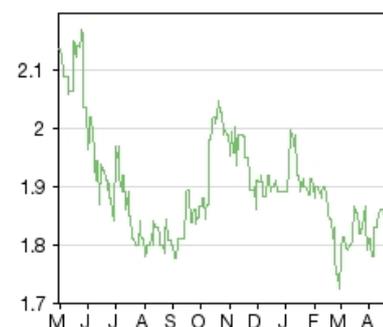
Free float 65.2%

Code EXSY

Primary exchange AIM Italia

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (0.8) (2.8) (14.0)

Rel (local) (4.0) (10.3) (24.0)

52-week high/low €2.2 €1.7

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

H117 results 29 September

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Review of FY16 results

Exhibit 1: Results highlights					
€m	FY15	FY16	FY16 estimate	Difference	y-o-y
Sales	16.39	23.37	23.57	-0.9%	42.6%
Grants and other income	2.98	1.69	2.16	-21.8%	-43.3%
Total revenue	19.37	25.06	25.73	-2.6%	29.4%
Capitalised development costs	3.62	5.67	4.80	18.1%	56.5%
Changes in WIP	0.17	(1.17)	0.40	-392.4%	-769.4%
Total production value	23.16	29.55	30.93	-4.4%	27.6%
Staff costs	11.30	18.49	18.44	0.3%	63.6%
Other costs	10.40	13.31	12.42	7.2%	28.0%
EBITDA	1.46	(2.25)	0.07	N/A	-253.5%
Depreciation & amortisation - in-house	2.69	3.70	2.33	58.4%	38.2%
Normalised EBIT	(1.23)	(5.94)	(2.27)	-162.1%	384.6%
Depreciation & amortisation - acquired	2.55	2.61	3.00	-13.1%	2.3%
Reported EBIT	(3.77)	(8.55)	(5.27)	-62.3%	126.5%
Reported net income	(3.28)	(8.13)	(3.97)	-104.7%	147.4%
Net debt	12.43	12.41	14.14	-12.2%	-0.1%

Source: Expert System accounts

Expert System reported FY16 sales essentially in line with our forecast. H2 sales accelerated to €14.8m compared to the €8.6m reported in H1. In addition to benefiting from typical H2 seasonality, the company had seen a slowdown in sales in H1 as the integration process distracted the sales team from closing deals – this reversed in H2 with a 73% sequential increase in sales. Total revenue came in lower than our forecast due to lower than expected income from grants. Capitalised development costs were 18% higher than forecast, and changes in work in progress contributed a negative €1.2m to production value, which overall was 4% below our forecast.

Staff costs were in line with our forecast whereas other costs were 7% higher than forecast. We understand that this was due to the use of external consultants for implementation work. The combination of higher operating costs and lower production value resulted in EBITDA €2.2m below our forecast. The company incurred net financing costs of €0.2m (our forecast €1.2m), including net interest expense of €0.6m and currency gains of €0.3m. A tax credit of €0.6m was recorded versus our forecast of €2.5m.

Good working capital control resulted in net debt essentially flat compared to FY15, despite lower than forecast EBITDA.

Geographic performance

Exhibit 2: Performance by geography						
€m	Sales			EBITDA		
	FY15	FY16	y-o-y	FY15	FY16	y-o-y
Italy	9.3	12.9	39%	0.7	1.3	86%
UK and rest of EU	2.9	5.4	86%	0.6	(2.5)	N/A
US	4.2	5.1	21%	0.1	(1.0)	N/A

Source: Expert System

Revenues generated in Italy showed strong growth year-on-year, and even stronger growth in EBITDA. In the UK and the rest of the EU, the majority of growth came from the TEMIS acquisition. The head of sales in France was changed, which slowed sales for some time. The company also decided to stop selling some of TEMIS's older products (while still continuing to support them), and this had a negative impact on sales. The US business saw some growth, although investment during FY16 to establish two separate businesses (public sector and enterprise) reduced EBITDA. At a group level, orders were 20% higher at the end of FY16 versus FY15.

Business update

New wins show vertical focus paying off

Expert has developed vertical specific solutions for various industries, including banking & insurance, life science & pharma, oil & gas and media & publishing. The company recently announced it had signed a strategic partnership with **Zurich Insurance Group** to provide its cognitive computing solutions to the group globally. In February, it was selected by **Intesa SanPaolo** to provide its Cogito software for use in cognitive banking services.

New partnerships announced

In April, the company announced that it is partnering with **Blue Prism**, a provider of robotic process automation (RPA) software. Expert's software can be used to extract data from a variety of unstructured data sources, which in turn can be used as the input data for process automation robots such as Blue Prism's. For example, an administrator could use Expert's software to gather crucial pieces of information from documents containing unstructured data (such as customer forms and reports from specialists) to provide data that is then fed into the process automation robot. This in turn would automatically populate all relevant fields in the company's systems. This can improve process efficiency and save employee input for areas that require judgment or for dealing with customers.

Expert has expanded its partnership with **Esri** from Italy to working together globally. Esri software manages spatial and geo-reference data. The partnership integrates Esri's ArcGIS platform with Expert's Cogito platform.

Launching latest version of the Cogito platform

In February the company launched Cogito 14, which integrates TEMIS solutions and rebrands them as Cogito. The same solutions are now available in every country. Improvements to the platform include:

- Cogito Knowledge Graph¹ enriched with **domain knowledge** for finance and biopharma;
- **Machine learning algorithms** added to enable users to enrich knowledge automatically from text, with or without supervision from subject matter experts;
- **Cogito Studio Express** added to make it simpler for end-users to design and maintain their taxonomy/ontology and govern the text analytics process; and
- Extended version of the **Cogito API** to simplify the development and integration of Cogito-based applications with other existing platforms or architectures, speeding up implementation.

Industry recognition

Over the last year, Expert has been recognised by several industry analysts for its technology. This includes a position in Knowledge World's "100 companies that matter in Knowledge Management in 2017", inclusion in the Forrester Wave as a top 10 provider of big data text analytics software and inclusion in the Gartner Magic Quadrant for Insight Engines.

This recognition is crucial for Expert as the endorsement of its technology provides a useful marketing tool for the company in its international ambitions, particularly when selling in the US.

¹ Knowledge Graph embeds millions of concepts, their lexical forms, properties and relationships, helping to precisely disambiguate the meaning of words and expressions contained in text.

Gartner Magic Quadrant for Insight Engines

Gartner recently published its inaugural Magic Quadrant for Insight Engines. This is an evolution from the previous enterprise search market analysis. Insight engines provide the user with the means to access information and insights in a more proactive manner via interfaces beyond the traditional query box. Expert is one of 13 companies included, and is positioned as a niche player. We note that enterprise search is a sub-sector of Expert's business, whereas for many of the peers it is their main business. Expert rates well on its ability to implement complex projects and provide tools for customisation to "fine tune" the software.

Outlook and changes to forecasts

The company has outlined its three-year plan (Exhibit 3), expecting strong growth in sales over the next three years. Total production value assumes capitalised development costs of €4.7m and income from grants of €1.6-1.7m per annum. In terms of the cost base, the company expects to show a small increase in staff costs in 2017, but expects to cut the level of external costs from the 2016 level. From 2018, it expects growth in both cost lines at a lower rate than revenue growth. The acceleration of EBITDA should enable the company to move to a cash flow positive position from FY17.

Exhibit 3: Company three-year business plan						
€m	FY17	FY18	FY19	Growth		
				FY17	FY18	FY19
Sales	28.2	34.9	47.4	21%	24%	36%
Production value	34.5	41.4	54.0	17%	20%	30%
EBITDA	3.6	7.3	11.6	N/A	103%	59%
Net income	(3.4)	0.1	2.7			
Net debt*	9.8	9.7	5.5			

Source: Expert System. Note:*Includes short-term investments worth c €1.3m that we exclude from our net debt forecasts.

We have revised our forecasts to take account of management's outlook and FY16 results.

Exhibit 4: Changes to forecasts						
€m	FY17e old	FY17e new	Change	y-o-y	FY18e new	y-o-y
Sales	28.3	28.0	-0.9%	20.0%	33.6	20.0%
Other income & grants	2.1	1.6	-22.7%	-3.8%	1.7	6.2%
Total revenues	30.4	29.7	-2.4%	18.4%	35.4	19.2%
Capitalised development costs & changes in WIP	5.5	4.7	-13.9%	4.5%	4.7	0.0%
Production value	35.8	34.4	-4.1%	16.3%	40.1	16.6%
EBITDA	3.4	3.2	-4.5%	-243.1%	6.6	104.4%
EBITDA margin	11.1%	10.8%	-0.2%	19.8%	18.6%	7.7%
D&A	(2.6)	(4.0)	55.2%		(4.4)	
Normalised operating profit	0.8	(0.8)	-207.2%	-86%	2.2	-364%
Normalised operating margin	2.5%	-2.8%	-5.3%	20.9%	6.1%	8.9%
Amortisation of acquired intangibles	(3.0)	(2.6)			(2.6)	
Reported operating profit	(2.2)	(3.4)	53.5%	59.9%	(0.4)	87.1%
Normalised EPS (c)	(0.5)	(3.2)	486.2%		3.9	
Net debt	18.4	11.6	-36.8%	-6.4%	10.7	-8.0%

Source: Edison Investment Research

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, e-commerce search, big data analytics, enterprise search and information management markets. With a forecast return to positive EBITDA in FY17, Expert is trading on an EV/EBITDA multiple of 19.6x FY17, falling to 9.6x in FY18. For FY18 this is at a discount to enterprise search, information management and big data analytics companies.

Our 10-year DCF analysis values the company at €2.59/share, substantially unchanged from our previous €2.60 valuation. Rolling forward our valuation by one year, we forecast a revenue CAGR of 11% from FY16 to FY26, with EBITDA margins rising to 25%. We assume capex/sales decline from 14% in FY18 to 7% by FY26 and use a WACC of 9% and long-term growth of 3%. A 1% increase in the WACC results in a valuation of €2.09/share, while a 1% decrease results in a valuation of €3.31.

Exhibit 5: Peer multiples

	Market cap (€m)	CY EV/S	NY EV/S	CY EV/ EBITDA	NY EV/ EBITDA	CY P/E	NY P/E	CY sales (€m)	CY EBIT margin	CY EBITDA margin	NY sales growth	NY EPS growth
Natural language understanding												
Expert System	50.6	2.1x	1.8x	19.6x	9.6x	N/A	47.3x	29.7	-2.8%	10.8%	19%	N/A
Nuance Communications	5,123	3.4x	3.3x	8.5x	8.0x	11.1x	10.5x	2,036	28.9%	40.0%	4%	6.1%
E-commerce search												
SLI Systems	13	0.4x	0.4x	N/A	N/A	N/A	N/A	32	N/A	N/A	7%	N/A
Big data analytics												
Splunk	8,051	6.5x	5.1x	56.1x	38.7x	107.4x	72.1x	1,191	7.9%	11.5%	26%	48.9%
Tableau	3,861	3.8x	3.5x	60.9x	40.9x	N/A	805.7x	874	0.1%	6.2%	8%	N/A
Teradata	3,772	1.7x	1.8x	9.7x	9.4x	21.9x	21.9x	2,123	13.4%	18.0%	-1%	0.1%
Average		4.0x	3.5x	42.2x	29.7x	21.9x	N/A		7.1%	11.9%	11%	N/A
Enterprise search and information management												
OpenText	8,312	4.2x	3.7x	12.3x	10.1x	16.6x	13.8x	2,310	26.8%	29.7%	15%	20.3%
IHS Markit	16,353	6.1x	5.8x	15.5x	14.2x	21.3x	18.4x	3,532	23.6%	25.7%	5%	15.8%
CommVault	2,095	2.9x	2.7x	21.8x	18.9x	50.6x	45.3x	644	11.5%	12.5%	7%	11.8%
Average		4.4x	4.0x	16.5x	14.4x	29.5x	25.8x		20.6%	22.6%	9%	16.0%

Source: Bloomberg (as at 25 April 2017), Edison Investment Research

Exhibit 6: Financial summary

	€'000s	2012	2013	2014*	2015**	2016	2017e	2018e
31-December		IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP	IT GAAP
PROFIT & LOSS								
Revenue		11,593	11,109	13,045	19,368	25,057	29,666	35,374
EBITDA		2,624	2,014	2,339	1,463	(2,245)	3,214	6,568
Operating Profit (before amort. and except.)		1,765	916	609	(1,226)	(5,941)	(821)	2,166
Intangible Amortisation		0	0	0	(2,549)	(2,608)	(2,608)	(2,608)
Exceptionals		(319)	45	59	0	0	0	0
Other		0	0	0	0	0	0	0
Operating Profit		1,446	961	669	(3,775)	(8,549)	(3,429)	(442)
Net Interest		(298)	(376)	29	213	(156)	(520)	(517)
Profit Before Tax (norm)		1,467	539	638	(1,013)	(6,097)	(1,342)	1,649
Profit Before Tax (reported)		1,148	584	697	(3,562)	(8,705)	(3,949)	(959)
Tax		(452)	(359)	(609)	277	579	1,382	336
Profit After Tax (norm)		1,015	180	29	(934)	(5,692)	(872)	1,072
Profit After Tax (reported)		697	225	89	(3,284)	(8,126)	(2,567)	(623)
Average Number of Shares Outstanding (m)		22.0	22.0	22.0	22.8	25.8	27.7	27.7
EPS - normalised (c)		4.6	0.8	0.1	(4.1)	(22.0)	(3.2)	3.9
EPS - normalised and fully diluted (c)		4.6	0.8	0.1	(4.1)	(22.0)	(3.2)	3.9
EPS - (IFRS) (c)		3.2	1.0	0.4	(14.4)	(31.5)	(9.3)	(2.3)
Dividend per share (p)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)		100.0	100.0	100.0	100.0	100.0	100.0	100.0
EBITDA Margin (%)		22.6	18.1	17.9	7.6	-9.0	10.8	18.6
Adj Operating Margin (%)		15.2	8.2	4.7	-6.3	-23.7	-2.8	6.1
BALANCE SHEET								
Fixed Assets		6,691	9,905	5,719	20,301	20,379	18,636	16,626
Intangible Assets		1,111	2,462	4,640	18,539	18,372	16,689	14,652
Tangible Assets		635	606	692	916	915	856	882
Investments		4,945	6,836	387	846	1,092	1,092	1,092
Current Assets		12,767	15,491	32,681	42,588	37,012	36,727	38,761
Stocks		722	476	1,563	1,797	627	627	627
Debtors		5,488	5,820	7,866	10,228	10,233	11,768	13,533
Cash		2,065	2,967	4,900	11,249	9,063	9,861	10,795
Other		4,492	6,228	18,352	19,314	17,088	14,471	13,806
Current Liabilities		(8,871)	(10,333)	(13,639)	(20,517)	(22,679)	(23,218)	(23,866)
Creditors		(6,538)	(7,350)	(10,698)	(15,082)	(16,459)	(16,999)	(17,647)
Short term borrowings		(2,332)	(2,984)	(2,940)	(5,435)	(6,219)	(6,219)	(6,219)
Long Term Liabilities		(4,642)	(5,172)	(7,803)	(22,227)	(18,275)	(18,275)	(18,275)
Long term borrowings		(4,642)	(5,172)	(4,799)	(18,240)	(15,252)	(15,252)	(15,252)
Other long term liabilities		0	0	(3,005)	(3,987)	(3,023)	(3,023)	(3,023)
Net Assets		5,945	9,890	16,958	20,145	16,437	13,870	13,247
CASH FLOW								
Operating Cash Flow		8,077	2,891	737	2,738	2,088	6,218	6,451
Net Interest		(298)	(376)	29	(324)	(155)	(520)	(517)
Tax		(452)	(359)	(609)	(1,576)	0	0	0
Capex		(3,095)	(2,384)	(3,905)	(20,045)	(6,378)	(4,900)	(5,000)
Acquisitions/disposals		0	0	(6,436)	3,045	46	0	0
Financing		0	0	12,341	6,573	4,418	0	0
Dividends		0	(180)	0	0	0	0	0
Net Cash Flow		4,232	(408)	2,156	(9,588)	18	798	934
Opening net debt/(cash)		6,352	4,909	4,822	2,839	12,426	12,408	11,610
HP finance leases initiated		0	0	0	0	0	0	0
Other		(2,788)	128	(173)	0	0	0	0
Closing net debt/(cash)		4,909	5,189	2,839	12,426	12,408	11,610	10,676

Source: Expert System accounts, Edison Investment Research *FY14 was first year of consolidation for some subsidiaries. **FY15 results restated.

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