

Business Intelligence

We live in the Information Age but for information to be useful it has to be converted into **intelligence**. Take, for example, daily stock quotes, they are information but, in its raw form, of not much use to anyone. Convert the stock quotes into a chart and now you have investing intelligence. Add moving averages and the information becomes more meaningful, more useful for making buy, sell or hold decisions. The business of Business Intelligence is to convert raw data into intelligence that can be used to make sound management decisions.

Investment in software tools for BI will continue to climb. BI was a US\$3.6 billion market in 2000 according to International Data Corp., which predicts that even with an economic slow down, revenue from BI software will grow at a rate of 27% per year to US\$12 billion by 2005.
[InfoSystems Executive, November 2001, Vol. 6 No. 11](#)

This looks like an exciting growth industry to invested in. The question is, which companies will be the winners?

According to Software Magazine, there are 19 companies in the Business Intelligence business but NetGenesis has been merged into SPSS leaving only 18. Of these 18, 7 are privately held leaving 11 that are of interest for the individual investor. The top 5 companies had between them 72% market share which means that the trailing 6 are of no special interest for us unless you know something that no one else knows.

Ticker	Company	Revenue 2001	% Market Share
HYSL	Hyperion Solutions Corp.	498,507	20.9
COGN**	Cognos Inc.	492,613	20.7
BOBJ**	Business Objects S.A.	415,794	17.4
MSTR	MicroStrategy Inc.	188,026	7.9
BRIO	Brio Technology, Inc.	129,655	5.4
	Others	660,737	27.7
	Total*	2,385,332	100.0

* The revenues for the top 5 companies are taken from their SEC filings. COGN's latest quarter ended 11/30/2001. Total Revenue is taken from Software Magazine and I don't know if it refers to the calendar year 2001. If not, there could be some distortions in the market share figures but they are close enough for our purposes.

** COGN and BOBJ have been gaining market share while the others have been losing it. BOBJ has been outpacing COGN. In PR releases, Cognos calls itself **THE leading provider** of business intelligence and, indeed, it has outsold Hyperion over the last two quarters.

COGN and BOBJ are the only two of the top 5 companies that have been consistently profitable. BOBJ has been profitable for at least the last 16 quarter while COGN has been profitable for 14 of the last 15 quarters -- they had a loss during the quarter ended 5/31/01.

From the above I deduce that this is really a two horse race between COGN and BOBJ unless the other ones shape up.

Revenue growth

Cognos			Business Objects		
Quarter	Revenue	% Growth Y/Y	Quarter	Revenue	% Growth Y/Y
			3/31/98	34,566	
5/31/98	67,309		6/30/98	39,552	
8/31/98	70,583		9/30/98	41,257	
11/30/98	76,308		12/31/98	51,520	
2/28/99	86,925		3/31/99	49,508	43.2
5/31/99	81,645	21.3	6/30/99	57,543	45.5
8/31/99	88,128	24.9	9/30/99	59,766	44.9
11/30/99	97,753	28.1	12/31/99	74,826	45.2
2/28/00	118,114	35.9	3/31/00	72,582	46.6
5/31/00	108,698	33.1	6/30/00	84,553	46.9
8/31/00	118,213	34.1	9/30/00	86,005	43.9
11/30/00	124,638	27.5	12/31/00	105,794	41.4
2/28/01	144,103	22.0	3/31/01	98,278	35.4
5/31/01	108,016	-0.6	6/30/01	101,505	20.0
8/31/01	116,313	-1.6	9/30/01	99,200	15.3
11/30/01	124,181	-0.4	12/31/01	116,811	10.4

Not quite tornado growth but certainly impressive in a deflationary recession.

Valuation

Ticker	COGN	COGN	BOBJ	BOBJ	HYSL	MSTR	BRIO
Revenue latest quarter (000)	124,181	124,181	116,811	116,811	116,637	43,235	28,210
Estimated net profit margin	12.5%	12.5%	10.0%	10.0%	4.0%	4.0%	4.0%
Estimated first year growth rate (*)	25%	20%	35%	25%	0%	0%	0%
Shares outstanding (millions)	87.3	87.3	61.7	61.7	32.8	92.6	29.8
Recent price	29.45	29.45	39.59	39.59	21.99	3.23	2.69
P/S	5.2	5.2	5.2	5.2	1.5	1.7	0.7
Calculated fair value	41.25	33.5	65.84	43.92	17.48	2.29	4.65
P/S	7.2	5.9	8.7	5.8	1.2	1.2	1.2
Market Cap (000)	3,601.1	2,924.4	4,062.6	2,709.9	573.3	212.5	138.7
Delta (red = overvalued)	1.4	1.1	1.7	1.1	0.8	0.7	1.7
Growth 1st 10 years		The growth rate shown is for the first year only. During the following years the growth rate is gradually reduced so that by the 11th year it is the number show below. I believe that I am using conservative growth figures. IDC predicts that revenue from BI software will grow at a rate of 27% per year for the next 4 years					
Growth next 10 years	10%	This growth rate is maintained for years 11 to 20. After that the model has no further cash flows.					
30 yr Treasury	5.5%	Discount rate used to bring future cash flows to present value.					

Cognos Inc.

The [Cognos Inc.](#) web site does such a good job of explaining what they do that it is not worth while for me to repeat it here. Please visit their web site for complete information. This company has 19 thousand customers in 120 countries and their

products are distributed by 3,000 worldwide partners and resellers. They leverage off their customer's success to sell to new customers, what I used to call **marketing by name dropping**, it works extremely well.

Business Objects S.A.

The [Business Objects S.A.](#) web site home page locks you into a few choices and it does not let you explore the site. To go where you want to go you have to click on the [Site Map](#) first. A truly strange web design.

Once you get past this initial difficulty you discover that Business Objects probably has fewer customers than Cognos but many of them are Fortune 100 companies. This could be the reason why Business Objects is growing revenues faster than Cognos.

Conclusions:

I cannot find a reason to recommend one company over the other. Cognos is slightly ahead in revenues but Business Objects is growing faster.

The one point of difference seems to be the way they extract data from the application software databases. From Yahoo's Expanded Business Description for Cognos:

Unlike solutions provided by other business intelligence vendors, the Company's EBI Platform has the ability to create and manage a data mart from an existing database. This data mart creation capability is packaged as Cognos DecisionStream. The Company's solution is optimized for modeling, transforming, and creating high-speed, scalable business intelligence data marts that have embedded knowledge of the business intelligence applications they will serve, thereby enabling faster deployment and user acceptance of these applications.

Cognos adds the following:

Cognos DecisionStream is comprised of a Windows-based dimensional design environment, and a multi-platform, server-based ETL (Extraction, Transformation, and Load) engine with native support for all major relational databases. The design environment's intuitive

graphical interface makes defining and implementing transformation processes easy, while the high-performance transformation engine processes large volumes of data quickly.

On the other hand, Business Objects solves the problem in a different manner, with what they call a *Semantic layer*. Unfortunately, their web site is so badly organized that I can't find a reference to it. The job of the semantic layer is to hide the complexity of the underlying database structure from the user.

Following the rules of The Gorilla Game, we should buy a basket of players which in this case translates, IMO, into buying Cognos and Business Objects. The other players are losing money and that is something that I don't find attractive!

Denny

"Demand creates queues. Supply gets rid of them."

[Software Times](#)