MEASURING VALUE

Putting a Price on a Head

Work stoppages, discrimination complaints, imposition of protective import tariffs and international trade battles are often triggered by allegations of unfair compensation. Behind these conflicts is an underlying question: What is the value of an employee?

Baseline columnist Paul A. Strassmann, who served as a technology executive and consultant to *Fortune* 500 companies, devised a formula to measure the worth of an employee at a public corporation (see "Real Numbers," p. 30, and "Tool," right).

His goal: Give information management executives a better understanding of how to allocate scarce I.T. resources. "There are a growing number of firms where the overwhelming assets are not financial assets, but knowledge assets," he says. "In such cases any concentration of I.T. investment on financial efficiency—such as reduction in inventories or overhead productivity gains—could be misplaced by overlooking improvements in effectiveness that translate into gains in knowledge assets."

Strassmann starts with a company's year-end stock market valuation, or Market Value. He then subtracts the shareholder equity, or Financial Value, to get a company's Knowledge Value. He also comes up with a Knowledge Capital multiplier—the ratio of knowledge assets to financial assets. This ratio reflects how much more shareholders expect from intangible knowledge compared to tangible financial assets. This number is then multiplied by the Knowledge Value and the expected shareholder rate of return to come up with a company's annual worth of Knowledge Capital.

With Johnson & Johnson as an example, the expected shareholder rate of return is 4.04%. And the Knowledge Capital multiplier comes to 4.92—which means that multiplier for Johnson & Johnson is 4.92 times greater than its relatively low cost of financial capital of 4.04%, giving a price of knowledge capital equal to 19.9%. At that price, an investment in knowledge projects would require high returns before getting approval.

To derive the average worth of an employee, he subtracts average compensation per employee from the annual worth of Knowledge Capital. For J&J, that number comes to $181,959—or more than $80,000 more than the average annual employee compensation.

Understanding an employee's net worth can help a CIO set budget priorities. If a number is too low, Strassmann says CIOs should look for dramatic gains in profitable revenue instead of cutting costs: "Cutting the I.T. budget would be the remedy with just about the lowest priority."

TOOL: What Are Your Employees Worth?

How do you measure the average value of an employee? It certainly isn't the compensation you pay. It represents the value of employees as an experienced team—one that is well organized, responds effectively to competition, has the capability to innovate and the intelligence to seek opportunities to gain a position sustainable over time.

The tool below offers one approach to measuring that work. It hinges on a company's market capitalization being consistent with its financial results for at least five years. In situations where market capitalizations are highly erratic, such as in the case of a start-up business or under speculative conditions, a "fair" market valuation can be calculated by using several methods such as the Capital Asset Pricing Model. That model, which takes into account how markets incorporate risk in pricing securities, is available from organizations such Standard & Poor's or the Value Line Investment Survey.

INSTRUCTIONS: Obtain your company's financial data from published financial statements or financial analysts to fill out rows A, B, D, F and H. Consider using at least three years of data to identify major year-to-year differences. Then, perform the calculations. For further insights, compare your firm with the closest three competitors. An interactive version of this worksheet is available at GO.BASELINEMAG.COM/JAN06.

	BASICS	EXAMPLE	YOUR COMPANY
A	Market Value (company's market capitalization at year-end; example is in millions of dollars)	$188,213	
B	Financial Value (company's shareholder equity; example is in millions of dollars)	$31,813	
C	Knowledge Value (**A** - **B**)	$156,400	
D	Number of employees (in 000s)	109.9	
E	Knowledge Value per employee (**C** x **1,000** ÷ **D**)	$1,423,114	
F	Total employee compensation, in millions	$11,074	
G	Average compensation per employee (**F** x **1,000** ÷ **D**)	$100,764	
H	Expected shareholder rate of return (available from Standard & Poor's, Value Line Investment Survey or other sources)	4.04%	
I	Knowledge/financial ratio (represents ratio of Knowledge Value to Financial Value (**C** ÷ **B**)	4.92	
J	Annual worth of Knowledge Capital (**E** x **H** x **I**)	$282,723	
K	**Average worth of an employee (J - G)**	**$181,959**	

SOURCE: STRASSMANN INC. NOTE: SOME FIGURES ARE ROUNDED