

FINANCIAL INTELLIGENCE

A Manager's Guide to Knowing What the Numbers Really Mean

KAREN BERMAN and JOE KNIGHT

KAREN BERMAN is founder and president of the Business Literacy Institute, a training and consulting firm which develops financial literacy programs. She has worked with a wide range of companies creating financial literacy programs which aim to transform employees and managers into business partners. Dr. Berman is a graduate of the University of California at Davis and the California School of Professional Psychology.

JOE KNIGHT is a co-owner of the Business Literacy Institute and CFO and a co-owner of Setpoint Systems, an automation and roller coaster company. An acclaimed public speaker, Mr. Knight facilitates financial literacy training courses. He is a graduate of Brigham Young University and the University of California, Berkeley.

The Web site for this book is at www.financialintelligencebook.com.

SUMMARIES.COM is a concentrated business information service. Every week, subscribers are e-mailed a concise summary of a different business book. Each summary is about 8 pages long and contains the stripped-down essential ideas from the entire book in a time-saving format. By investing less than one hour per week in these summaries, subscribers gain a working knowledge of the top business titles. Subscriptions are available on a monthly or yearly basis. Further information is available at www.summaries.com.

MAIN IDEA

Financial intelligence is a set of skills and attitudes about finance which can and should be acquired by everyone in business. In its most basic form, to be financially intelligent you need to be competent in four different skill sets:

The four key skill sets of financial intelligence

- ▶ 1 Have a good understanding of the basics of financial reporting.
- ▶ 2 Have an appreciation for the fact accounting is part science, part art.
- ▶ 3 Know and understand your ratios and you'll make better financial decisions.
- ▶ 4 Understand the bigger picture and don't think numbers tell the whole story.

While the people who work exclusively in finance tend to learn these skills early on in their careers, anyone who plans on being in a position to rise to the top of any organization need to be at least financially literate. It pays to master the four skill sets of financial intelligence. To not do this, you run the risk of being permanently relegated to the sidelines.

"We have worked with thousands of employees, managers, and leaders in American companies, teaching them about the financial side of business. Our philosophy is that everyone in a company does better when they understand how financial success is measured and how they have an impact on the company's performance. Our term for that understanding is 'financial intelligence'. Greater financial intelligence, we've learned, helps people feel more involved and committed. They understand better what they are a part of, what the organization is trying to achieve, and how they affect results. Trust increases, turnover decreases, and financial results improve."

— Karen Berman and Joe Knight

▶ 1 Have a good understanding of the basics of financial reporting. Pages 2 - 4

- ▶ Learn how to read an income statement
- ▶ Get better at understanding balance sheets
- ▶ Become skilled at deciphering cash flows

▶ 2 Have an appreciation for the fact accounting is part science, part art. Pages 5 - 6

- ▶ Know the accounting profession's basic rules, estimates and acceptable assumptions
- ▶ See links between assumptions and conclusions
- ▶ Know when to question and challenge the numbers

▶ 3 Know and understand your ratios and you'll make better financial decisions. Pages 6 - 7

- ▶ Know your financial ratios to be good at analysis
- ▶ Be very good at calculating return-on-investment
- ▶ Start managing your balance sheet

▶ 4 Understand the bigger picture and don't think numbers tell the whole story. Page 8

- ▶ Understand and appreciate your firm's financial results taking into account:
 - The state of the economy as a whole
 - The competitive environment you operate within
 - Evolving customer needs and expectations
 - The arrival of new technologies

Four key skills

1

Have a good understanding of the basics of financial reporting.

Learn how to read an income statement

The income statement – also sometimes called the “profit and loss statement”, the “P&L statement”, the “operating statement” or the “earnings statement” – shows revenues, expenses and profit for the stated period of time. The bottom line for an income statement is net profit which can sometimes be called net income or net earnings.

What most non-financial people don’t realize is many numbers on the income statement reflect estimates and assumptions on the part of the company’s management and its accountants. Judgement calls have been made on what to include where and even when to time the various transactions. This is why you have to also read the footnotes which accompany an income statement to gain some idea of how the accountants have made these various judgement calls.

The three key categories in an income statement are:

1. **Revenue** – or as some companies call it “income”. The key issue here is when to recognize a sales transaction. This is simple if the company delivers a product or service in full on a specific day, but in many complex sales transactions the delivery or installation process takes a considerable period. Should that revenue be brought in as income when the contract is signed, when delivery is made or when the money has actually been received from the client? All of these areas are judgement calls in one regard, and a fertile area for manipulation of the income statement from another perspective. Some companies have even been known to ship unordered products to customers at the end of a quarter to meet their forecasts with the expectation the product will be shipped back in the following quarter (a practice known as “channel stuffing”).
2. **Costs and expenses** – which fall into two main categories:
 - **The costs of the goods sold** – all the direct costs involved in producing the company’s product or service. Again, decisions have to be made what to include here. For example, you would include the costs of materials and the wages of your people on the manufacturing line, but does the costs include the wages of the plant managers and sales commissions? The key criteria used in making these types of decisions is you need to be reasonable and consistent and explain your decisions clearly in the footnotes so as to avoid confusion.
 - **Operating expenses** – which may be considered the company’s overheads or fixed costs. In practice, this incorporates everything the accountants have decided does not belong in the costs of the goods sold category. If one single item (like sales and marketing for example) makes up a significant proportion of the company’s total expenses, it may be shown on a separate line in the income statement. Depreciation and the amortization of costs over a number of years tend to be a large part of the costs and expenses for many companies. When extraordinary items arise, it isn’t unusual for a one-time charge to appear in the income statement for the period involved. This should be a red flag to the savvy reader of some kind of financial engineering going on.

3. **Profit** – which can be labeled as the “gross margin”, “operating income”, “net profit”, “earnings”, “net income” or “net profit” at the discretion of the firm’s accountants or auditors. The key figures to track here are:

- **Gross profit** – sales revenue minus the cost of goods sold or the cost of services incurred. Analysts compare the gross profit figures with the industry standards to gauge whether a firm is doing well or not. Gross profit can be affected greatly by decisions about when to recognize revenue and by decisions on what to include in the costs.
- **Operating profit** – is the gross profit minus operating expenses including depreciation and amortization. This is the profit the firm earns from its overall business activities. It is sometimes described as EBIT – earnings before interest and taxes. Everyone from bankers to investors look at operating profit to gauge how well a company is being managed and whether it will be able to continue to pay its debts.
- **Net profit** – is the bottom line. It’s what is left over after everything has been subtracted. Net profit is then used to calculate earnings per share and price/earnings ratios. To increase net profits, most companies are constantly trying to increase sales, lower the costs of the goods sold and reduce operating expenses.

“GAAP – the generally accepted accounting principles that govern how U.S. accountants keep their books – runs for some 4,000 pages and spells out a lot of detailed rules. GAAP only provides guidelines. Companies take those guidelines and apply a logic that makes sense for their particular situations. The key, as accountants like to say, is reasonableness and consistency. So long as a company’s logic is reasonable, and so long as that logic is applied consistently, whatever it wants to do is OK.”

– Karen Berman and Joe Knight

“In principle, the income statement tries to measure whether the products or services that a company provides are profitable when everything is added up. It is the accountants’ best effort to show the sales the company generated during a given time period, the costs incurred in making those sales (including the costs of operating the business for that span of time), and the profit, if any, that is left over. Over time, the income statement and the cash flow statement will track one another. Profit will be turned into cash. Profit is always an estimate – and you can’t spend estimates.”

– Karen Berman and Joe Knight

INCOME STATEMENT (millions)

Year Ended Dec 31, XX

Sales	\$8,689
Cost of goods sold	<u>6,756</u>
Gross Profit	\$1,933
Selling, general and admin	\$1,061
Depreciation	239
Other income	<u>19</u>
EBIT	\$652
Interest expenses	191
Taxes	<u>213</u>
Net Profit	\$248

► Get better at understanding balance sheets

The balance sheet is a statement of what the business owns and what it owes at specific points in time. The difference between what a company owns and what it owes is the equity of the company. The long-term aim of any company is to carry out business activities which will increase equity for the benefit of the shareholders.

Just as for other financial statements, balance sheets incorporate some estimates and assumptions on the part of the management and the accounting team. These estimates should be spelled out in the notes which accompany the financial statements. The majority of those notes usually relate to the balance sheet and how the various figures were arrived at.

The balance sheet draws its name from the fact that at any specific point in time, for every company:

$$\text{Assets} = \text{Liabilities} + \text{Shareholder's Equity}$$

Taking each of these sections of the balance sheet in turn:

1. **Assets** – what the company owns. If these assets can be turned into cash in one year or less, they are called current assets while everything else is classified as a long-term asset. The most common assets are:
 - Cash or money in the bank.
 - Accounts receivable – money owed by customers.
 - The value of finished products sitting in inventory.
 - The cost of property, plant or equipment, less depreciation.
 - Goodwill paid for any acquisitions.
 - The value of any intellectual property or intangibles.
 - Any prepaid assets or other accruals.
2. **Liabilities** – what the company owes. These are the financial obligations the company has in place. Again, current liabilities will need to be paid in one year or less whereas long-term liabilities are due over a longer time frame. Liabilities are usually listed from shortest-term to longest-term on the balance sheet. Liabilities will include:
 - Short-term loans, lines of credit and personal notes.
 - Accounts payable to the firm's vendors and suppliers.
 - Accrued liabilities like payroll and other expenses.
 - Loans.
 - Deferred bonuses, deferred taxes, pension obligations, etc.
3. **Shareholder's equity** – the value of the company which will consist of the capital provided by the shareholder plus any retained earnings. Sometimes this is designated as "owner's equity" or "stockholder's equity". This will usually include:
 - Preference shares which typically pay a set dividend.
 - Common shares which may or may not pay a dividend.
 - Additional paid-in capital provided by shareholders.
 - The company's retained or accumulated earnings.

The balance sheet in effect shows how the company has obtained what it currently owns. Astute analysts generally look at a company's balance sheet first rather than its income statement because the balance sheet reveals the most about what the company is doing. Managing the balance sheet or in other words progressively increasing the firm's net worth shows how effective a business manager is. Effective managers understand how changes in the balance sheet will impact on the firm's other financial statements and vice versa. Changes in the balance sheet over an extended time period are one of the most reliable ways to gauge the effectiveness of the firm's management. They show decisively whether value is being created or lost by what the managers are doing.

Note also every time you make a change in one financial statement, there will always be corresponding flow-on effects in the firm's other financial statements. If you're attempting to manage using your income statement, for example, you're also having an effect on your company's balance sheet. Greater profits increase equity but how those profits are achieved also matters. Managers always have to step back a little and view the bigger picture perspective. Care is required that an action in one financial statement area doesn't have undesirable consequences elsewhere.

A firm's balance sheet answers the basic questions everyone will always ask:

- Is the company solvent?
- Can the company pay its bills as they fall due?
- Has the owner's equity been steadily growing over time?

The fact intangible assets do not show up on the balance sheet is also an important point to note. For example, a firm's employees and their know-how are key assets of any company and yet they don't appear on the balance sheet. The reason for this is nobody has any idea how to value employees and their knowledge. Similarly, no established guidelines exist for valuing a brand name or the value of other intellectual property. Different companies take different approaches in all of these areas which is well within the scope of the artistic side of the accountancy profession. Again there are no hard and fast guidelines but each company is left to decide for itself what is realistic and consistent for its particular circumstances.

BALANCE SHEET (millions)

Assets	Dec 31, XX	Dec 31, YY
Cash & equivalents	\$ 83	\$72
Accounts receivable	1,312	1,204
Inventory	1,270	1,514
Other current assets	<u>85</u>	<u>67</u>
Total Current Assets	2,750	2,857
Property, plant, equipment	2,230	2,264
Other long-term assets	<u>213</u>	<u>233</u>
Total Assets	<u>\$5,193</u>	<u>\$5,354</u>
Liabilities		
Accounts payable	\$1,022	\$1,129
Credit line	100	150
Long-term debt payment	<u>52</u>	<u>51</u>
Total current liabilities	1,174	1,330
Long-term debt	1,037	1,158
Other long-term liabilities	<u>525</u>	<u>491</u>
Total Liabilities	<u>\$2,736</u>	<u>\$2,979</u>
Shareholder's Equity		
Common stock	\$ 74	\$74
Additional paid-in capital	1,110	1,110
Retained earnings	<u>1,273</u>	<u>1,191</u>
Total Shareholder's Equity	<u>\$2,457</u>	<u>\$2,375</u>
Total Liabilities and Equity	<u>\$5,193</u>	<u>\$5,354</u>

Become skilled at deciphering cash flows

Cash is a reality check for any company. In simple terms, if you run out of cash, you cannot stay in business. A company with strong, ongoing cash flow will be in a good position to excel in the future. Cash keeps the doors open for any business and cash flow is a key measure of financial performance. Savvy investors also understand cash flow is very hard to fudge and this is a key metric worth evaluating in more detail.

Profit is not necessarily the same as cash coming in. It's possible for a company to be making good sales numbers but still to be in a cash crunch because of the fact suppliers have to be paid before the sales revenue has been banked. In fact, if sales are growing rapidly, the company will need additional cash to be injected in order for it to grow. The difference between profit and cash may appear subtle to a non-specialist in finance but this is a key principle nonetheless. Healthy businesses require both profits and cash to succeed.

Cash flow statements typically break down cash inflows and outflows into three main categories:

1. *Cash from operating activities* – the cash flow generated by the actual operations of the business. This includes the amounts customers pay, the cash used to pay salaries, suppliers and for fixed operating expenses like rent and so forth. A company with a cash flow which is consistent and healthy means the firm is in a good position and the management are doing a good job. It also means the firm will likely be able to fund its own growth internally rather than by borrowing or issuing more stock.
2. *Cash from investing activities* – the cash used or generated by the company's investment activities. This will be capital investments and the receipt of the proceeds of selling some or all of the company's assets. This category of cash flow shows how much cash the company is spending in buying assets to secure its future.
3. *Cash from financing activities* – the cash used or generated by financial transactions between the company and its shareholders. This may be in the form of an equity investment, the company paying off a loan, a stock buyback or the payment of a dividend. This cash flow category highlights the extent the company depends on outside financing for its ongoing growth.

Cash connects all of the company's activities. Everything the firm does will either increase or decrease the company's cash position. In simple terms, if the company is doing a good job of generating cash, it has a strong future. If it is losing cash, something needs to change before the cash runs out or new financing arrangements are put in place. There are also other benefits to understanding cash flow in more depth:

- Knowing and understanding your company's cash situation will help you know what senior management's priorities are and where they are placing the greatest emphasis. If you know where they are taking the company, you can position yourself advantageously.
- Instead of focusing solely on profitability, you increase your value to your company if you also focus on generating cash. You may do this by:
 - Arranging better payment terms with your customers.
 - Reducing the amount of inventory your company holds.
 - Deferring your expenses wherever possible.
 - Developing more stringent credit policies.

- When you understand cash flow in more detail, you're ready to be given greater responsibilities. You can work more closely with the firm's senior management who are always concerned about the big picture rather than narrowly focusing on the income statement like most line managers do.

"Cash flow is a key indicator of a company's financial health, along with profitability and shareholders' equity. It's the final link in the triad, and you need all three to assess a company's financial health."

– Karen Berman and Joe Knight

"EBITDA is no longer Wall Street's favorite 'measure to watch'. Now the hot metric is free cash flow. How to calculate free cash flow? First, get the company's cash flow statement. Next, take net cash from operations and subtract the amount invested in capital equipment. That's all there is to it – free cash flow is simply the cash generated by operating the business minus the money invested to keep it running. Some companies have looked at free cash flow for years. Warren Buffett's Berkshire Hathaway is the best-known example, though Buffett calls it 'owner earnings'."

– Karen Berman and Joe Knight

"If your company's free cash flow is healthy and increasing, you know at least the following: • Your company has options. It can use free cash flow to pay down debt, buy a competitor, or pay dividends to owners. • You and your colleagues can focus on the business, not on making payroll or on raising additional funds. • Wall Street is likely to look favorably on your company's stock."

– Karen Berman and Joe Knight

CASH FLOW STATEMENT (millions)	
Year Ended Dec 31, XX	
Cash from operating activities	
Net profit	\$ 248
Depreciation	239
Accounts receivable	(108)
Inventory	244
Other current assets	(18)
Accounts payable	(107)
Cash from operations	\$498
Cash from investing activities	
Property, plant & equipment	\$(205)
Other long-term assets	20
Cash from investing	\$(185)
Cash from financing activities	
Credit line	\$ (50)
Current portion of long-term debt	1
Long-term debt	(121)
Other long-term liabilities	34
Dividends paid	(166)
Cash from financing	\$(302)
Change in cash	11
Cash at beginning	72
Cash at end	\$ 83

Four key skills



2

Have an appreciation for the fact accounting is part science, part art.



Know the accounting profession's basic rules, estimates and acceptable assumptions

Non-specialists in accounting naturally assume keeping the books is a purely objective activity but the fact is a large number of judgement calls are required in producing a firm's financial statements. Accountants are attempting to use limited data to produce as accurate as possible a description of how well the company is performing. They have to quantify what can't easily be quantified and that always generates loads of judgement calls and educated guesses.

As a result of making those assumptions and estimates, some kind of bias always creeps into the financial statements. This doesn't mean any attempt is being made to deceive the reader. Instead, bias means different sets of accountants may skew the numbers in one direction or another. If you understand the assumptions and estimates accountants and other financial people typically use, you're in a better position to decipher what the numbers actually mean.

"Financial intelligence means understanding where the numbers are 'hard' – well supported and relatively uncontroversial – and where they are 'soft' – that is, highly dependent on judgement calls. What's more, outside investors, bankers, vendors, customers, and others will be using your company's numbers as a basis for their own decisions. If you don't have a good working understanding of the financial statements and don't know what those folks are looking at or why, you are at their mercy."

– Karen Berman and Joe Knight

"Everything else in business – marketing, research and development, human resource management, strategy formulation, and so on – is obviously subjective, a matter dependant on judgement and experience as well as data. But finance? Accounting? Surely, the numbers produced by those departments are objective, black and white, indisputable. Surely, a company sold what it sold, spent what it spent, earned what it earned. The fact is, accounting and finance, like all those other business disciplines, really are as much art as they are science. You might call this the CFO's or the controller's hidden secret, except it really isn't a secret, it's a widely acknowledged truth that everyone in finance knows. Trouble is, the rest of us tend to forget it. We think that if a number shows up on the financial statements or the finance department's reports to management, it must accurately represent reality."

– Karen Berman and Joe Knight

"Accounting and finance are not reality, they are a reflection of reality, and the accuracy of that reflection depends on the ability of accountants and finance professionals to make reasonable assumptions and to calculate reasonable estimates."

– Karen Berman and Joe Knight

"Do the finance folks dominate decisions? They shouldn't. The strength of their department should be balanced by the strength of operations, of marketing, of human resources, of customer service and so on. If managers in those other departments are not financially savvy, then accounting and finance necessarily have the upper hand. The bias they inject into the numbers affects and can even determine decision making."

– Karen Berman and Joe Knight



See links between assumptions and conclusions

Whenever you see a number included in a financial statement, it's always a good idea to pause and ask some simple but crucial questions first:

- What are the key accounting assumptions which have been used in arriving at this number?
- Are there any estimates included in these numbers?
- What is the natural bias those assumptions and estimates are leaning towards?
- What are the implications if those assumptions or estimates are in fact incorrect?

To take one example, consider the many methods by which a company's valuation can be calculated. There are a number of ways to do this, each with advantages and disadvantages. Some of the options are:

- Take the company's earnings and look at comparable publicly listed companies and see what their market values are. This is known as the price-to-earnings ratio method.
- Look at how much cash the company generates every year and figure out what that stream of future cash is worth today. This is called the discounted cash flow method.
- Look at the value of all the company's assets – plant, equipment, inventory, reputation, customer base, etc. – and make estimates of value based on what it would cost to replicate those assets. This is the asset valuation method.

Each of these valuation methods have integral assumptions and biases. For example, if you value a company by the price-to-earnings ratio, you're assuming the stock market is rational and the price it ultimately sets is accurate and correct. You're ignoring the fact the market sometimes get out of sync with reality. You're also ignoring the fact the company's "earnings" number itself is actually only an estimate and able to be varied quite a bit, depending on the decisions of management. Similarly, if the discounted cash flow method of valuation is used, there is always going to be debate over what discount rate should be used. A small variation in this rate can have a substantial impact on the valuation arrived at.

Each of these valuation methods looks reasonable on the surface but each has various biases which will lead to different results. Companies are constantly being brought, sold or financed on the basis of these valuations. It helps, therefore, if you keep in mind the numbers being used and the actual figures being arrived at are based on best-guess estimates and assumptions. If these assumptions turn out to be incorrect, the conclusions are on shaky ground. An integral element of financial intelligence is always to think about the assumptions being used for any figures arrived at.

"Managers routinely incorporate what they know about the marketplace, the competition, the customers, and so on into their decisions. When they also incorporate financial analysis, their decisions are better. We are not big believers in making decisions based solely on the numbers. But we do think ignoring what the numbers tell you is pretty silly. Good financial analysis gives managers a window into the future and helps them make smarter, more informed choices. Imagine the power in your organization if everyone understood the financial side of the business."

– Karen Berman and Joe Knight

► Know when to question and challenge the numbers

With a little bit more financial intelligence than the average person in business has, you have the tools to be able to watch emerging trends at your company and understand more of the story behind the numbers. Once you have some knowledge, you'll then have the confidence to challenge the conclusions reached by your finance and accounting department. You'll be able to differentiate between hard data, assumptions and accounting estimates. In practical terms that means you'll be able to say when decisions are on solid ground and when they are not.

The point is others will have no hesitation in critically evaluating your company and its operational decisions, so it makes sense for you to beat them to the punch. Another point is if you don't challenge what the people from accounting and finance are saying, you are in effect letting them control all the decisions. You're allowing decisions to be made based on the numbers they have provided, and these numbers in turn are based on the assumptions and estimates the accountants feel comfortable with. If you elect not to challenge these numbers, you are ceding control over decision making to them.

The higher the amount of financial intelligence there is in your organization, the better because:

- *Everyone will learn how to make better decisions* – based on the success of the overall business rather than the narrow demands and preferences of one department or unit.
- *Managers will understand why things happen* – and what they can be doing to help the company succeed. Instead of feeling like hostages to senior management decisions, people will have the opportunity to use their own initiative.
- *You'll have a healthier business* – with decisions being made based on sound financial reasoning rather than on the strength of internal politics and power struggles.
- *When everyone understands the firm's financial objectives, they become empowered to act independently* – which means more initiative can be used rather than constantly waiting for directions to come from the senior management.
- *Financial transparency always incorporates open lines of communication* – which generally leads to greater efficiencies the length and breadth of the organization. Greater trust and a shared sense of purpose usually result when business is conducted openly and on the basis of merit.
- *Financially savvy managers can react more rapidly to changes in the marketplace* – because they will have everything required to make sound decisions on their own.
- *Rank-and-file employees can come up with smarter and more practical ideas on how to improve their part of the business* – meaning everyone in the organization focuses on optimizing what they're doing.

"We think understanding the financial side of the business will make your life more meaningful. You would never play baseball or backgammon without first learning how the game is played: why should business be any different? Knowing the rules – how profits are figured, why return on assets matters to shareholders, and all the rest – lets you see your work in the big-picture context of business enterprise, which is simply people working together to achieve certain objectives. You'll want to contribute, and you'll know how to do so."

– Karen Berman and Joe Knight

Four key skills

► 3

Know and understand your ratios to make better financial decisions.

► Know your financial ratios to be good at analysis

Financial ratios are good because they tell you more than raw numbers alone. They offer a yardstick by which the organization's progress over time can be measured. The four categories of financial ratios most people tend to follow are:

1. *Profitability ratios* – which help you evaluate a company's ability to generate profits in the future. Generally speaking, for these ratios, the higher the better. The most common profitability ratios are:
 - *Gross margin* – the company's gross profit divided by revenue, expressed as a percentage. The higher, the gross margin is, the better.
 - *Operating profit margin* – gross profit minus operating expenses divided by revenue expressed as a percentage. This measures ability to generate profit.
 - *Net margin* – net profit divided by revenue expressed as a percentage. This tells how much out of every sales dollar a company keeps after meeting its costs.
 - *Return on assets* – net profit divided by total assets. This shows what percentage of every dollar invested will be returned as profit.
 - *Return on equity* – net profit divided by shareholders' equity. This ratio measures what percentage of profit the company generates for every dollar of equity invested in it.
2. *Leverage ratios* – which help you analyze how extensively a company uses debt. Leverage can be good or bad, depending on the circumstances. The key leverage ratios:
 - *Debt-to-equity* – which is total liabilities divided by shareholder's equity. This measures how much debt the company has for every dollar of shareholder's equity.
 - *Interest coverage* – operating profit divided by the company's annual interest charges. This shows how much interest a company has to pay relative to its turnover.
3. *Liquidity ratios* – which tell about a company's ability to meet all its obligations in the future. The two key liquidity ratios are:
 - *Current ratio* – current assets divided by current liabilities. This shows whether a company can pay its bills or whether it hoards its cash.
 - *Quick ratio* – current assets minus inventory divided by current liabilities. This measures how easy it would be for a company to pay its short-term debt without waiting to sell off the inventory.
4. *Efficiency ratios* – which are used to evaluate how efficiently a company manages its balance sheet assets and liabilities. The most commonly used ratios here include:
 - *Inventory days* – average inventory divided by the cost of goods sold each day. This shows how long inventory stays in your system before being sold.
 - *Inventory turns* – 360 divided by inventory days. This measures how many times inventory turns over in a year.
 - *Days sales outstanding* – total accounts receivable divided by the amount of revenue brought in each day. This measures the average time customers take to pay.

► Be very good at calculating return-on-investment

To increase your financial intelligence, become skilled at calculating return-on-investment for your firm's projects and proposals. Before anyone commits to an item of capital expenditure, those looking at the proposal will want to know what the return-on-investment will be.

To calculate return-on-investment:

1. *Start by determining what the initial cash outlay will be* – once everything has been taken into account. Develop your best estimates of all the costs incurred in the first year and then the ongoing costs which will be incurred in subsequent years. Have a clear picture of the cash cost right up front.
2. *Project the future cash flows which will come from this investment* – as conservatively as possible. Usually this will require making estimates and assumptions about what the demand will be for whatever is produced, so be explicit and specific about those assumptions in your overall analysis.
3. *Evaluate the future cash flows* – to come up with your return-on-investment figure and to make a decision on whether the investment is worth making. In practice, there are three ways companies usually look at future cash flows:
 - *Look at the payback term* – how many years it will take for the cash flow generated to return the original cash outlay. This is a quick reality check and rule-of-thumb.
 - *Look at the present value of the anticipated future cash flow* – which can usually be done by a spreadsheet or template developed by your finance department. What you do here is show the proposed returns are greater than the opportunity cost of the money involved if it were to be invested elsewhere.
 - *Look at the "internal rate of return"* – which is a variation of the net present value approach. In essence you calculate what the actual return provided by the projected cash flows will be and then compare that rate with what your company could achieve by investing elsewhere. You see whether your proposed investment offers a superior rate of return or whether other alternatives look more attractive as the basis for making a decision.

"Managers sometimes go overboard in writing up capital expenditure proposals. It's probably human nature: we all like new things, and it's usually pretty easy to make the numbers turn out so that the investment looks good. But we advise conservatism and caution. Explain exactly where you think the estimates are good and where you think they may be shaky. Do sensitivity analysis, and show (if you can) that the estimate makes sense even if the cash flows don't materialize at quite the level you hope. A conservative proposal is one that is likely to be funded – and one that is likely to add the most to the company's value in the long run."

– Karen Berman and Joe Knight

"Financial professionals can and do analyze proposed projects and make recommendations using a host of assumptions and estimates, and the results turn out well. They even enjoy the challenge of taking these unknowns and quantifying them in a way that makes their company more successful. With a little financial intelligence, you can contribute your own specialized knowledge to this process."

– Karen Berman and Joe Knight

► Start managing your balance sheet

Another area where financial intelligence will also be very useful is if you apply what you learn to better managing your organization's balance sheet. In essence, this means making your business more efficient at converting your inputs into products and services customers will pay cash for. Obviously the more you speed this cycle up, the better.

The key areas you should look at in order to better manage your balance sheet are:

1. *Look for practical ways to reduce your working capital requirements* – because capital is always expensive. Working capital is the amount of capital needed for your company to make products, deliver services, build your infrastructure and meet expenses until you're paid. If you can manage your working capital more efficiently, that will have a powerful impact on your firm's profitability.
2. *Trim your accounts receivables* – by making certain customers receive products they are happy to pay for rather than waiting for quality issues to be resolved. You also lower your accounts receivables by increasing your customer credit checks and making certain you will be able to collect from customers. Credit terms extended to your customers may also be fine-tuned and enhanced to reduce your accounts receivable.
3. *Reduce your inventory levels wherever possible* – because this takes up a lot of working capital. You want to reduce your inventory to a level where you're able to meet customer requirements promptly when needed. Astute inventory management means to hit the right balance where you have enough finished product available to sell with confidence but not so much inventory it just sits around a represents a huge block of frozen assets.
4. *Improve your cash conversion cycle* – the amount of time from when you purchase raw materials until when you actually get paid by your customers. Lowering your accounts receivable and reducing your inventory levels will help improve your cash conversion, but there will also be other actions worth considering. The most obvious would be to pay your own suppliers more slowly, but that may impact negatively on your relationship with your vendors. Therefore, you want to look elsewhere in your operating cycle for areas where greater efficiencies can be achieved. It may be that something as simple as having more people aware of the need to improve cash conversion and making financially intelligent decisions will help. Or you may consider introducing planning meetings where managers can work on sharing information better so the company can improve its cash conversion cycle. You may also find there are several similar products in your company's product list which can be amalgamated or consolidated so you don't need to allocate resources to making each will help.

The overall principle is that with greater financial intelligence embedded throughout the organization, more people can get involved in helping manage the balance sheet rather than leaving this solely in the domain of the finance or accounting departments. If you can get everyone working on this, all kinds of interesting ideas and approaches may come to the surface. Working capital is essential in business, but it's also very expensive so anything you can do to reduce the need for more capital will pay dividends.

Four key skills

4

Understand the bigger picture and don't think numbers tell the whole story.

- Understand and appreciate your firm's financial results taking into account:
 - The state of the economy as a whole
 - The competitive environment you operate within
 - Evolving customer needs and expectations
 - The arrival of new technologies

While it's good for as many people as possible within the organization to boost their financial intelligence, the numbers alone don't always tell the whole story. Any firm's financial results always need to be evaluated in context – within the framework of the big picture. How well your business is doing at present and in the immediate future will always be affected by factors like:

- The state of the general economy.
- New developments in the competitive environment.
- Changes in customer needs or expectations.
- The imminent arrival of new technologies.
- The emergence of new business models.
- Changes in customer preferences.

To understand the big picture and respond accordingly, you want to embed financial literacy within the culture of your organization. This will take time and effort, but there are a few things you can do to speed the process up:

1. *Run regular financial intelligence training sessions* – where you take the time to teach people about key financial concepts. These usually work best if they are short (between 30- and 60-minutes maximum) and focused on just one new financial concept each session. Allow enough time between sessions for people to do their own thinking and reading so probably about one session a month is about right. You might even run the same session each week for a month so people can attend two or three times if they're having trouble picking up what's being taught. Topics for these sessions might include:
 - The income statement
 - The balance sheet
 - Cash flow and project finance
 - How gross margin is calculated
 - The whys and wherefores of inventory management
2. *Have a weekly "numbers" meeting* – open to everyone in the organization who wants to attend. At this meeting, the key two or three metrics which drive your company's business model are tracked and discussed. Explain where these numbers come from, how they are calculated and how everybody's actions impact on them. Track the trends over time. If you do a good job of running this meeting, before too long people will start talking among themselves about what they can do to move the metrics in the right direction. Once that starts happening, you can then move to the next level where you start forecasting what the numbers will be in the coming month or quarter. People can then take action to make those forecasts come into reality. You'll be pleasantly surprised by how much ownership of the numbers the rank-and-file employees will take when they know what's happening and how everything fits together.

3. *Set up some scoreboards and other visual aids* – as reinforcements for the effort to boost financial intelligence the length and breadth of the organization. Some executives have "dashboards" which show where the business's performance indicators stand in real time. Get something similar out in the open where everyone can see it. It might also help if you develop a map which reminds people how the company makes money. This will help everyone stay focused on the fact they come to work to generate profits, not simply to do what they're told and then go home at night.

Ultimately, you're attempting to create a culture strongly colored and influenced by shared financial transparency and intelligence.

"We believe passionately in the power of knowledge – and when it comes to business, we believe most of all in the power of financial knowledge, and the financial intelligence necessary to put it to work. Financial information is the nervous system of any business. It contains the data that show how the business is faring – where its strengths are, where its weaknesses are, where its opportunities and threats are as well. For too long, a relative handful of people in each company were the only ones who understood what the financial data was telling them. We think more people should understand it – starting with managers but ultimately expanding out into the entire workforce. People will be better off for gaining that understanding, and so will companies."

– Karen Berman and Joe Knight

"For most business people, financial intelligence is no more than a set of skills that must be, and can be, learned. People who work in finance learn these skills early on, and for the rest of their careers are able to talk with one another in a specialized language that can sound like Greek to the uninitiated. Most senior executives (not all) either come out of finance or pick up the skills during their rise to the top, just because it's tough to run a business unless you know what the financial folks are saying. Managers who don't work in finance, however, too often have been out of luck. They never picked up the skills, and so in some respects they've been relegated to the sidelines. Financial intelligence isn't some innate ability that you either have or don't have. Like most disciplines and skill sets, it must not only be learned, it must also be practiced and applied."

– Karen Berman and Joe Knight

"Finance is the language of business. Whether you like it or not, the one thing every organization has in common is numbers and how these numbers are tabulated, analyzed and reported. You need to use the language to be taken seriously and to communicate effectively. As with any new language, you can't expect to speak it fluently at first. We want you to look at financial reports and analysis with a questioning eye. It's not that we think anything is necessarily wrong with the numbers you see. We merely believe it is tremendously important to understand the what, why and how of the numbers you are using to make decisions. Since every company is different, sometimes the only way to figure out all those parameters is to ask questions. We hope you'll be a bit more motivated, a bit more interested and a bit more excited to understand a whole new aspect of business."

– Karen Berman and Joe Knight