

“How to Manage Cash Flow Better”

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Introduction

CASH FLOW, what is it? Is it important? If it is important, how do I get my hands around it? (If we were you, we'd be asking, “why is a whole chapter devoted to this subject in a book I just bought to learn about valuing the business I want to sell.”).

For starters, cash flow is what we like to call an “undefined accounting term of art.” We know it must be an accounting term of art, because the accountants laid claim to it in 1987. Back then, the accountants issued a 76-page financial accounting standard on it entitled Statement on Financial Accounting Standards No. 95, *Statement of Cash Flows* (“FASB No. 95”). Cash flow is undefined, because there's no specific definition of it in the 76-page document and because financial writers like Jay Abrams and Shannon Pratt tell us so.

Although FASB No. 95 doesn't tell us what cash flow is, it tells us how to calculate it. It also goes to great lengths to impress on us how really important it is, especially how to arrange numbers neatly on a piece of paper. Perhaps this type of thinking is why so many people really hate accounting. Or perhaps it's because so many trees were used for so little substance. (Just a little post-Enron sarcasm.) FASB No. 95 is like telling someone how to bake a cake and not telling them what flavor it is. Relax, in its simplest form, cash flow means did the balance of your checkbook go up or down. Pretty simple, right? Of course, if you understand cash flow, you know where your money came from and where it went.

If you do plan to spend time reading FASB No. 95, it's best to think of it as nothing more than an object lesson in the fine art of accounting geography. It's kind of like a financial road map designed to tell you how you got from Point A (your beginning bank balance) to Point B (your ending bank balance). Want to know the secret of financial success? You need to understand cash flow. The accountants are right. This really is important.

So you don't think cash flow is important? Try this. The next time you need gas, forget your wallet and go to the pump with either your mortgage or last 401(k) statement. Was the clerk impressed? Did he really want to know how much your house is worth or the balance in your retirement account? Or did he just say, “my boss only takes cash or credit cards.” Lets add another twist—you don't have a credit card, and the balance in your bank account is zero. Now what do you do? Beginning to get the picture? No one but your ex-wife and the IRS really cares how much you make or how rich you are on paper; all they want to know is WHERE'S MY MONEY?

So where are we? You just tried to buy gas, but you don't have any money or negotiable credit. The accountants have told you something called cash flow is really important but they don't tell

you what it is. Intuitively, you know that being turned down at the pump relates to the void in you wallet. Now you're really stuck and want to do something about it. We guess that's why you'll continue to read this chapter.

Table 1: A Quick Primer on the Statement of Cash Flows

As we said before, most people don't like accounting. In fact, they avoid it with a passion. But, you're stuck in Podunk, USA, with no cash and you really need to get out. The faster, the better. Well, if FASB No. 95 is the authoritative text on accounting for cash flow, perhaps it can provide some useful information. Let's find out.

Look at Table 1, which is a fairly generic statement of cash flow that was prepared in accordance with FASB No. 95. (Accountants like that phrase "prepared in accordance with.")

Table 1
BOB'S NEIGHBORHOOD STORE
STATEMENT OF CASH FLOWS
INCEPTION AND FIRST FIVE YEARS OF OPERATIONS

	A	B	C	D	E	F	
	Start of	Year of Operations					
	Day 1	1	2	3	4	5	
CASH FLOWS FROM OPERATING ACTIVITIES:							
1	Net income	\$ -	\$ 30,000	\$ 75,000	\$ 115,000	\$ 140,000	\$ 200,000
2	Adjustments to net income (loss):						
3	Depreciation expense	-	9,500	9,500	9,500	11,000	12,500
4	Gain on sale of delivery truck	-	-	-	-	(3,000)	-
5	Changes in operating assets and liabilities:						
6	Accounts receivable	-	-	(30,000)	(75,000)	(25,000)	(20,000)
7	Inventory	(25,000)	(75,000)	(50,000)	-	(75,000)	(75,000)
8	Accounts Payable	15,000	28,500	25,000	(20,000)	50,000	25,000
9	Net cash flow from operating activities	(10,000)	(7,000)	29,500	29,500	98,000	142,500
CASH FLOWS FROM INVESTING ACTIVITIES:							
10	Investment in store improvements	(35,000)	-	-	-	-	-
11	Acquisition of delivery trucks	(30,000)	-	-	-	(45,000)	-
12	Proceeds from sale of delivery truck	-	-	-	-	12,000	-
13	Net cash flow from investing activities	(65,000)	-	-	-	(33,000)	-
CASH FLOWS FROM FINANCING ACTIVITIES:							
14	Invested capital	15,000	5,000	-	-	-	-
15	Proceeds from bank borrowings	75,000	-	-	-	40,000	-
16	Payments on bank borrowings	-	(13,000)	(13,000)	(13,000)	(22,000)	(16,000)
17	Distributions to owner	-	-	-	-	-	(150,000)
18	Net cash flow from financing activities	90,000	(8,000)	(13,000)	(13,000)	18,000	(166,000)
19	Net increase (decreases) in cash	15,000	(15,000)	16,500	16,500	83,000	(23,500)
20	CASH, beginning of period	-	15,000	-	16,500	33,000	116,000
21	CASH, end of period	\$ 15,000	\$ -	\$ 16,500	\$ 33,000	\$ 116,000	\$ 92,500

The subject matter of Table 1 is the story of Bob, who coincidentally opens a neighborhood store in Podunk. Table 1 follows Bob's merry adventures from the time he opens his doors through his first five years of operations. The question of the day is "By reading Table 1, do we really gain an understanding of what actually happened to Bob?"

First, focus your attention on the descriptions of the various activities covered by Table 1 and don't worry about the numbers. What do you see?

A statement of cash flow does not start with the beginning balance in your bank account. It starts with the most important number, *net income*. Next, the statement is divided into three distinct sections: operations, investing and financing. These, sections are ranked in the order of their assumed importance (i.e., accounting geography) to the reader, which is not necessarily in the order businesses operate. For the reader's convenience, each section is separately totaled, and there is a sum of the three sections right after the last section. The sum is used to memorialize how much the cash balance went up or down. (Could this be the illusive cash flow?). Why, these three sections you ask? It's because that's the way business does business. First, a business finances, next it invests, then it operates. After operating, businesses reload and start the whole process over again.

Having trouble relating to Table 1 and accounting geography? You might try reading it like the narrative that opens the movie *Star Wars*, from the bottom up. A few accounting types tell us it actually works, and for what it's worth, they're serious. Here's what happened to Bob.

Bob started a neighborhood store with \$15,000 (A14) of his own money and \$75,000 borrowed from a bank (A15). He invested \$35,000 (A10) in brick and mortar and renovated a rented store in the middle of town. Then he bought a delivery truck for \$30,000 (A11) and purchased \$25,000 (A7) of merchandise using \$15,000 (A8) of vendor credit. Just before he opened, Bob had \$15,000 (A21 and B20) in the bank.

During its first year of operations, Bob's Neighborhood Store made \$30,000 (B1) but reinvested the proceeds, primarily in inventory (see B7 and B8). It took \$7,000 (B9) to keep the doors open and another \$13,000 (B16) to make the bank happy and not foreclose. At the end of the day, the store was tapped for cash and Bob had to pony up for another five grand (see B21 and B14).

Although Bob started the year without any money in the bank, Year 2 was pretty good and the store made \$75,000 (C2). To increase sales, Bob started giving customers credit and ended the year with \$30,000 (C6) of accounts receivable. To maintain sales, Bob increased the store's inventory level to \$150,000 (A7 plus B7 plus C7) by using \$68,500 (A8 plus B8 plus C8) of suppliers' money. After paying off the bank (see C16), Bob had \$16,500 (C21) in his checking account.

In many ways, Year 3 was identical to Year 2. The store started out with \$16,500 (D20) in the bank and it generated another \$16,500 (D19) of net cash flow. Bob ended the year with a cash balance of \$33,000 (D21). What really mattered was how Bob got the \$40,000 (D1 minus C1) of additional net income. He had to give his customers \$75,000 (D6) of additional credit. Bob's

vendors got worried about this new and “creative” strategy and decided to reduce their exposure by \$20,000 (D9). Unfortunately for Bob, the bank still wanted to be paid (see D17).

During Year 4, things started to blossom as Bob began to add more and more new customers. The store made \$140,000 (E1), but that included \$3,000 (E4) of *non-store activity*. Bob’s customers started wanting three things: quicker delivery, a wider selection of merchandise and more terms. To accommodate them, Bob sold his old delivery truck for \$12,000 (E12) and replaced it with a new truck costing \$45,000 (E11). The store’s tax return reported a \$3,000 (E4) gain on the sale. Because of renewed confidence in Bob, the bank agreed to finance the new truck for \$40,000 (E15). To grow the business, inventories were expanded by \$75,000 (E7), using a new foreign supplier who was willing to extend \$50,000 (E8) of credit. Why you ask? Because the new supplier wanted Bob’s business. The downside was that Bob had to give his customers \$25,000 (E6) of new credit and the bank still wanted to be paid (see E16). They even wanted the outstanding balance on the old truck. Some borrowers just call that piggy. On New Year’s Eve, Bob toasted the \$116,000 (E21) he had in the bank.

Now things really started to hum as even more customers flocked to the store. During Year 5, Bob made \$200,000 (F1) and continued to grow the business. After prudent additions to inventory and accounts receivable, helped in part by more vendor financing, the store netted \$142,500 (F9) in cash. Guess what, the banks still wanted to be paid, but less than the year before (see F16). To close Year 5, Bob gave himself a \$150,000 (F17) cash distribution for his hard work. Way to go, Bob!

Look back at Table 1. You should start to see the events of Bob’s first five years summarized there. Even if you hate accounting, you must admit that Bob’s story has been presented in a structured and orderly way. And yes, in a way that best reflects how business does business. It could even provide the basis for a novel idea called *financial analysis*.

There are two technical accounting issues that we did not mention in our discussion of what happened to Bob. If you don’t know or can’t guess, they’re depreciation expense (see row 3) and the gain on the sale of the delivery truck (E4). Accountants call these types of things, *non-cash items*.

Most non-accountants know two things about depreciation. It reduces *net income* (i.e., depreciation is good for taxes), and it arises from expenditures made in the past. Because no current cash is involved and the underlying expenditure, usually operating equipment, was initially classified as an investing activity, FASB No. 95 adds back depreciation expense to *net income* when determining how much cash was actually generated through operations.

Conversely, most companies are not in the business of disposing of their operating equipment. Accordingly, gains and losses resulting from the sale or disposal of these types of assets (see E4) are specifically excluded from the determination of *net cash flow from operations*.

You be the judge, did Table 1 give you a better understanding of what happened to Bob? Your accountants, the Financial Accounting Standards Board and the SEC would like to think so.

But I'm Still Stuck in Podunk

With a little imagination, you can start to see that cash flow is nothing more than a mathematical presentation designed to mirror how business does business. Think of cash flow as a process that involves countless business transactions. In most cases, each individual transaction is unimportant. What is important is the efficiency and productivity of the process. In your case, it is putting enough cash in your wallet so that you can get out of Podunk. And yes, we remember that you want out NOW.

Still awake? Let's expand our little visualization exercise. With more imagination, and perhaps a "controlled substance", you might be able to visualize a whole series of business transactions as they move through the process of how business does business. Yes, you see a businessperson getting a bank loan, renting a local storefront, stocking the shelves, selling to happy customers and calling vendors for more merchandise to sell. What's more, except for borrowing money from the bank and renting new space, this series of events is happening over and over again. You close your eyes a little tighter and see a whole series of these little processes moving clockwise across the big game board called modern business.

In the distance you hear a faint sound, kerching. You know, kerching, the sound a cash register makes. (Duh)

Each time a process is completed, another kerching and then another. Now something very much unexpected is happening. With every kerching your wallet is getting heavier and heavier. Could it be, yes it's true, there's just enough money in your wallet to buy gas. You go back to the pump, fill up, pay that clerk, and start to get out of Podunk as fast as you can. Buckling up, you say to yourself, I just learned the first rule of cash flow management:

"Get as many kerchings as fast as you can."

As you're driving out of Podunk, you look in the rear view mirror and start to wave goodbye. Then you see Bob. He looks happy. As he turns to walk away, you suddenly notice a big bulge on his hip. Then you shout at the top of your lungs, "BOB'S WALLET IS FATTER THAN MINE."

What Bob Knows That You Don't

You're from Big City, USA and went to Whatsamatter U, Class of 78. You are well read and like the finer things of life. On the other hand, Bob is from Podunk, graduated from high school - actually night school - and doesn't get out much. There used to be a movie house in Podunk, but it closed shortly after they stopped making Doris Day movies. (Bob really likes Doris Day and was the president of the state fan club. He never forgave Hollywood.) While you're out wining and dining, what does Bob do? Bob plays Monopoly.

Yes, Monopoly. It's where Bob and many other successful people got their first taste of good old American commerce. Why does Bob give so much credit to Monopoly? It's because it teaches the importance of the *operating cycle* in competitive financial situations. You say under your breath "That's silly Monopoly doesn't have an *operating cycle*." But Bob quickly retorts "Oh yeah? Then what's *pass GO and collect \$200*?"

Bob knows some other important stuff. Stuff like what he sells in his store and the people who shop there. When you talk to Bob, he goes on and on about the merchandise stocked in the store. He knows just where to go to get it and where to go to get the best price. He knows what his merchandise costs today and what it should cost a year from now. Why he even knows about those annoying things like freight-in, duties and demurrage. After a few beers, Bob might start to talk about unpleasant things like product shelf life or the 3-year supply of hula-hoops that his brother-in-law said would sell like hot cakes. They didn't.

What is Bob known for? Just ask anyone from Podunk. They'll gladly tell you how much Bob loves his customers and that he goes an extra mile to make them happy. He knows precisely who his customers are and why they shop at his store. Off the top of his head, he can recite what prices people will pay for the things he sells and what they want in return, mostly value and service. Bob felt pretty smart when he figured out that people buy more when you give them credit. Bob's biggest competitor didn't. Unfortunately for Bob, it took on-the-job training to learn the fine art of collecting. He also had a few object lessons in the workings of small claims court. Bob is now a seasoned veteran and is especially proud of his credit department. But there were times when that competitor looked smart, really smart.

Bob knows a lot more about his store than meets the eye. At a cocktail party, a prosperous Podunk socialite said something about "location, location, location." Bob listened, and before he opened his doors, he studied traffic patterns and found the best location he could afford. He also methodically researched what it would cost (both in time and money) to renovate the store he rented and knew what specific equipment was needed to run the business. He keeps track of customer trends and reacts quickly to market changes. For example, when the store's customers wanted quicker delivery service, he replaced the delivery truck. Because Bob isn't willing to work 24-hours a day, he knows the importance of the people who work for him, and he is ever mindful of the time, effort and expense it took to train them. Bob's store doesn't carry its own brand yet, but he's working on it. People think that it must be pretty easy to open a store like Bob's. Bob just sits back and smiles. Bob knows something about *the cost of entry*.

Bob can even balance his checkbook. He has read his lease, knows precisely what his rent is, including those sticky things like CAM's and percentage add-ons. Bob's accountant told him to watch the store's head count, and he does. Bob is especially aware of what it costs to carry his employees - things like payroll taxes (which he always pays on time), health insurance, and, most importantly, overtime. He also knows what his monthly telephone, electric and insurance bills should be and makes sure they are paid on time, but never sooner than when due.

Although Bob is the only owner, he came to an important realization just before he opened the store. Bob started to think of the people who financed him, his banker and suppliers, as partners

and not adversaries. Like all good partnerships, Bob is honest with the bank and his creditors and demands that they are honest with him. He tries to make all business dealings fair to both sides and strongly believes that commitments should be kept, both his and the other parties'. Bob does two little things his competitors don't. Before he talks with the bank or a supplier, he takes time to analyze exactly what he wants or needs and then tries to anticipate how they will react. (Bob likes to think he's completely up to date on modern business tactics. He actually knows the term *win-win*.) Most importantly, Bob knows what Bob doesn't know. He's not afraid to ask questions or seek advice. Bob talks to his accountant, even after April 15th. After that little episode with the hula-hoops, Bob reads everything before he signs it. He may like and respect his lawyer, but he still reads everything, especially the small print.

Bob always tries to be honest, most of all with himself. He knows that the business has been good to him and that he gets more out of it than just his paycheck. In return, Bob is good to the business. When things got tough a few years back, the business stopped paying Bob's country club dues. Without talking to his accountant, Bob knew that he didn't need a ski boat or jet plane to make local deliveries in Podunk. The store needed a new delivery truck. When things are good, Bob enjoys going to conventions and seminars. Bob's competitors think he just likes the cocktail hour and to network. Bob thinks it's the best place to get up-to-the minute market info. He didn't go to any conventions or seminars the year the business couldn't pay for his country club dues. He just read a lot. Bob's preference is to spend the company's money on things with a payoff - like a well funded retirement plan and life insurance to protect his family.

Believe it or not, Bob took an accounting course at the local junior college where his professor made him read FASB No. 95. That experience taught Bob two lessons that he never ever shares with his competitors. First, the most important thing in his store's financial statement is *net income* (Table 1, Row 1), and a very close second is *net cash flow from operations* (Table 1, Row 9). Bob likes spendable money; he lets other storeowners brag about how much traffic they had at their last clearance sale.

Other than Doris Day, Bob's favorite subject is Monopoly. When Bob really wants to impress people, he discretely lets it slip that he knows the real secret of the game. Remember *pass Go and collect \$200*? Bob claims that he hears little kerchings every time he plays. Bob knows the more kerchings, the better the odds of winning. Do you?

The Fine Art of Kerchinging

When playing Monopoly, talking with us, or just sitting around at the local Kiwanis, Bob calls it kerchinging. When he took that accounting course in junior college, the professor called it something else. Although he seldom uses technical accounting terms anymore, Bob still remembers that vocabulary test on the *operating cycle* and something called *inventory turns*. Bob may talk like a hick, but he mastered the business theory. In Bob's words, "I just seem to make more when I sell more." Kind of a refreshing way to run a business isn't it? OK, we're really not over Enron, at least not yet.

What is a business' *operating cycle*? Bob's professor defined it as "the time it takes from the conception of a business idea through the microsecond when the idea is realized in spendable cash." When asked what does "realized in spendable cash" mean? Bob says, "oh, that's when the bank tells you your deposit cleared."

Some *operating cycles* are very short and some can last for what seems an eternity. Bob used this example in his vocabulary test.

In the 3rd grade I wanted to buy a Monopoly game, but I didn't have the money. It was in the middle of July and my birthday is in October. It was just too long to wait until my next birthday. Being industrious and given that my family owned a lemon tree, a lemonade stand seemed like a really good idea. It took me about an hour to pick the lemons, juice them, paint a sign and start selling. My first day was really hot, and I sold out in about three hours. That was a short *operating cycle*.

That July was the hottest July on record. Soon all the neighbors wanted lemonade, and in about a week all the lemons were picked off my parents' tree. I talked to my Dad about planting another tree just to keep me in business. Dad told me that would be a very long *operating cycle*.

For the record, Bob spent all the money he made going to Doris Day movies and had to borrow from his sister to buy the Monopoly game he wanted. That's when Bob learned about another accounting term call *vigorous*. Bob's sister was in the 9th grade and big for her age. When he couldn't pay the debt on time, Bob started wearing sunglasses and making excuses for walking into doors.

One night at dinner Bob's mom asked him how things were going with his sister. Bob went ballistic. It took about 3 days before Mom lifted the sugar embargo. That's when Bob learned another important lesson - on a hot day, thirsty people don't appreciate real tart lemonade. He also learned that there's no *net cash flow from operations* when there's no *net income*. (Our sincere apologies to the Creative Department over at Enron.)

Next year, Bob just sold Kool Aid. No picking off the tree. Boy was that a short *operating cycle*. Global warming must have started that year, because everyone was thirstier than ever. Bob and his sister were finally on speaking terms and he borrowed just enough to buy his first box of Kool Aid mix. He sold about one-fourth of the box on the first day. With the proceeds from the first week, the sister got paid, albeit a lot more than the balance of last year's loan and this year's loan combined. (That was a painful lesson in the time value of money.) Bob started selling about a fourth to a third of a box every day, except for really hot days when he could sell a whole box or a box and half on a scorcher. On Fridays, Bob went shopping at the local Shop & Save to restock inventory. Bob based purchases on last week's sales and Thursday evening's weather report; he pocketed the balance of the week's take. It proved to be a simple yet effective strategy. Bob learned another important lesson - the quicker he turned over a box of Kool Aid, the quicker he had more money.

Years later, Bob had a real life object lesson with the store's *operating cycle*. It came when he had to chase a customer in small claims court and then collect the judgment. It took about 6-months from the day he filed suit to the day he got his judgment. His customer reluctantly honored the Court's order and Bob got a sizable check. Surprise! The check bounced. Bob finally got paid but through an out-of-state cashier's check that the bank put on hold for 3 days. Bob simply calls this incident *the mother of all operating cycles*.

Although Bob did get paid, he didn't have any readily available cash or credit and the store missed the Cabbage Patch craze. Behind Bob's back, his competitors snickered whenever someone mentioned Cabbage Patch Dolls. As the story goes down at Kiwanis, that's when Bob's biggest competitor became the town's leading authority on *market share*. Out of frustration mixed with envy, Bob paid 500 bucks and took a seminar called "The Wonderful World of Working Capital." He especially liked the section on *inventory turnover*, it reminded him of Kool Aid.

To learn why Bob likes *inventory turns* so much, lets join him at the "Wonderful World of Cash Flow."

8:49 AM, the Pomeranian Room, downtown Holiday Inn, Big City, USA: Fear, envy and greed are three of life's natural motivators. For Bob, it was those constant snickers and a Kiwanis sponsored lecture on *market share*. He arrived early at the "Wonderful World of Working Capital" seminar. The program was a little late. Audiovisual had forgotten to plug-in the instructor's microphone.

The program started at 9:18 AM. After a few "jokes", the instructor opened with a few statements that startled the audience "Today's seminar will focus on improving cash flow through *financial analysis*. Has everyone done the advance prep? Remember the prerequisite? You should have read FASB No. 95. You really can't expect to improve working capital without a clear understanding of how to read a statement of cash flow, can you?" Bob felt in control as about 10 people quietly exited the Pomeranian Room. When the room finally got quiet, the instructor reminded the attendees that the key elements of working capital are cash, inventory, accounts receivable and accounts payable.

Tables 2 and 3: Analysis of Inventory, Pricing, and Accounts Receivable and Payable

After the 10:00 AM break, the instructor launched Power Point. His first template was an example of a statement of cash flow very similar to Table 1. The second template was a detailed analysis of inventory, pricing, turnover and their effects on profits. It was announced that the afternoon's session would concentrate on accounts receivables, purchasing and accounts payable. The seminar would conclude with a section on how to quantify a business' *operating cycle* followed by a cocktail hour. While the instructor explained that cash flow normally increases when a company completes additional profitable *operating cycles*, Bob just heard kerching.

Table 2
BOB'S NEIGHBORHOOD STORE
ANALYSIS OF INVENTORY, PRICING, TURNOVER AND THEIR EFFECT ON PROFITS
INCEPTION AND FIVE YEARS OF OPERATIONS

	A	B	C	D	E	F	
	Start of Day 1	Year of Operations					
		1	2	3	4	5	
SUMMARY OF INVENTORY ACTIVITY:							
1	Balance at the beginning of the period	\$ -	\$ 25,000	\$ 100,000	\$ 150,000	\$ 150,000	\$ 225,000
2	Merchandise purchases	25,000	325,000	550,000	637,500	918,750	1,387,500
3	Cost of sales	-	(250,000)	(500,000)	(637,500)	(843,750)	(1,312,500)
4	Balance at the end of the period	<u>\$ 25,000</u>	<u>\$ 100,000</u>	<u>\$ 150,000</u>	<u>\$ 150,000</u>	<u>\$ 225,000</u>	<u>\$ 300,000</u>
5	NET INCREASE IN INVENTORY [B5 = B4 - B1]	<u>\$ 25,000</u>	<u>\$ 75,000</u>	<u>\$ 50,000</u>	<u>\$ -</u>	<u>\$ 75,000</u>	<u>\$ 75,000</u>
6	AVERAGE BALANCE OF INVENTORY, the sum of the beginning and ending balances divided by 2 [C6 = (C1+C4) / (2)]	<u>N/A</u>	<u>\$ 62,500</u>	<u>\$ 125,000</u>	<u>\$ 150,000</u>	<u>\$ 187,500</u>	<u>\$ 262,500</u>
7	INVENTORY TURNOVER, cost of sales divided by the average balance of inventory [D7 = (D3/D6) x (-1)]	<u>N/A</u>	<u>4.00</u>	<u>4.00</u>	<u>4.25</u>	<u>4.50</u>	<u>5.00</u>
8	NUMBER OF DAYS IN ENDING INVENTORY, ending inventory divided by average daily cost of sales (i.e., cost of sales divided by 360 days) [E8 = (E4 / (E3/360)) x (-1)]	<u>36</u>	<u>144</u>	<u>108</u>	<u>85</u>	<u>96</u>	<u>82</u>
9	MARK-UP, what Bob charges his customers over what he pays his suppliers [F9 = (F10/F3) x (-1)]	<u>N/A</u>	<u>150.00%</u>	<u>151.25%</u>	<u>145.50%</u>	<u>152.00%</u>	<u>153.00%</u>
10	SALES, the cost of what Bob sold times the amount he marked things up	<u>N/A</u>	<u>\$ 375,000</u>	<u>\$ 756,250</u>	<u>\$ 927,563</u>	<u>\$ 1,282,500</u>	<u>\$ 2,008,125</u>
11	SALES GROWTH, the percentage sales grew from the previous year [F11 = (F10-E10) / (E10)]	<u>N/A</u>	<u>N/A</u>	<u>101.67%</u>	<u>22.65%</u>	<u>38.27%</u>	<u>56.58%</u>
12	GROSS PROFIT, the difference between sales and cost of sales [C12 = C10 + C3]	<u>N/A</u>	<u>\$ 125,000</u>	<u>\$ 256,250</u>	<u>\$ 290,063</u>	<u>\$ 438,750</u>	<u>\$ 695,625</u>
13	GROSS PROFIT PERCENTAGE, the percentage of gross profit to sales [E13 = E12 / E12]	<u>N/A</u>	<u>33.33%</u>	<u>33.88%</u>	<u>31.27%</u>	<u>34.21%</u>	<u>34.64%</u>
14	OPERATING EXPENSES, payroll, fringe benefits, rent, utilities, telephone, insurance, etc. (sometimes called the company's annual nut)	<u>N/A</u>	<u>\$ 95,000</u>	<u>\$ 181,250</u>	<u>\$ 175,063</u>	<u>\$ 298,750</u>	<u>\$ 495,625</u>
15	NET INCOME, gross profit less operating expenses (for purposes of this example, income taxes have been ignored) [F15 = F12 - F14]	<u>N/A</u>	<u>\$ 30,000</u>	<u>\$ 75,000</u>	<u>\$ 115,000</u>	<u>\$ 140,000</u>	<u>\$ 200,000</u>

While Table 1 is a historical scorecard designed to evaluate a company's cash management activities, Tables 2 and 3 are tools designed for *financial analysis* of inventory, accounts receivable and accounts payable. Because the emphasis of the seminar was on improving cash flow, it focused on time invested in inventory and accounts receivable offset by time allotted by vendors to their bills. The mechanics involved in this analysis are straightforward and start with a basic *Accounting 1-A* summary of each account. For example, Table 2, Rows 1, 2, 3 and 4

reflects the flow of activity in a company's inventory accounts.¹ Whenever line items of Table 2 or Table 3 involve a calculation, there is a simple formula to guide the reader on how to do the math. After about 2 hours of lecture, Bob started to understand how the templates worked. He took copious notes because he sensed that this information could be used to improve the store's performance, especially its *market share*.

Figure 1 is a copy of Bob's notes.

Figure 1
EXCERPTS FROM BOB'S NOTES
THE WONDERFUL WORLD OF CASH FLOW

HOW TO CALCULATE NET INCOME

Sales	\$ 1,000,000
Cost of Sales	<u>(667,000)</u>
Gross Profit	333,000
Operating Expenses	<u>(185,000)</u>
Operating Profit	148,000
Interest Expense	<u>(28,000)</u>
Income Before Income Taxes	120,000
Provision for Income Taxes	<u>(50,000)</u>
Net Income	<u><u>\$ 70,000</u></u>

HOW TO INCREASE NET INCOME

1. Increase sales volume by selling more units.
2. Increase prices by increasing the mark-up on products you sell.
3. Be careful, price increases sometimes hurt volume (WATCH THE COMPETITION and ALWAYS KNOW YOUR MARKET).
4. Know what your customers want and if you can afford to give it to them.
5. BEWARE OF THE 4 KILLERS:
 - a. Cost of labor, especially head count, overtime and downtime;
 - b. Rent;
 - c. Replacement cost of equipment vs. maintenance expense; and
 - d. Interest expense.
6. Profitable companies pay income taxes, don't make stupid business decisions just to save a few tax dollars.
7. MOST SUCCESSFUL COMPANIES INCREASE NET INCOME WHEN THEY INCREASE INVENTORY TURNOVER. **(KERCHING)**

¹ Please note that for purposes of this chapter, we have focused on the balance sheet and, accordingly, Table 2 presents a format different than the usual one used to calculate cost of goods sold.

Figure 1, Continued
EXCERPTS FROM BOB'S NOTES
THE WONDERFUL WORLD OF CASH FLOW

INVENTORY TURNOVER

Always know your company's average inventory. Each time you sell enough product to equal your average inventory, you have "turned" your inventory. As a rule of thumb, the gross profit percentage (i.e., gross margin) of most companies ranges from 20% to 30%. With that level of gross profit percentage, healthy companies usually need to have inventory turnover rates of 5 to 6 turns per year. Companies with lower gross margins need higher turnovers. When you have higher gross margins you can live on lower turnovers.

Hints & Pitfalls:

1. Not all inventory items turn at the same rate. Just because you have a turnover of 5 times a year, not every product you sell does. Some items could be at 15 and others (HULA-HOOPS) could be a zero.
2. IT PAYS TO KNOW YOUR INVENTORY. Smart operators take the time to calculate individual turnover rates for each product they sell.
3. SMART OPERATORS KNOW A WINNER FROM A LOSER. Don't make a situation worse. Get rid of losers now.
4. Companies have limited funds to invest in inventory. Don't be afraid to ask vendors for terms.
5. Never buy more than you need. Know what you need, know your turnover.
6. Buy smart, buy tight. Use purchase orders that bind vendors to what you expect from them.
7. SMART OPERATORS MANAGE GROSS MARGINS. Know your vendors discounts plans (volume, cash payment, etc.). Take the time to balance the benefits of discounts versus the cost and risks of holding inventory.
8. Take as much time knowing your vendors as you take knowing your customers. Take advantage of what motivates your vendors.

DAYS IN INVENTORY

The number of days in inventory is a helpful way to measure how long it takes you to turn inventory.

ACCOUNTS RECEIVABLE

Accounts receivable are the "hob goblin" of successful selling. It takes money to finance accounts receivable and most companies are not a bank. Banks borrow money to make loans and so will you when you give customers terms. IT COSTS MONEY, REAL MONEY, TO FINANCE ACCOUNTS RECEIVABLES. If you want to stay in business, know how long it takes your customers to pay you. Constantly calculate and monitor the number of days in accounts receivable.

Control billing speed. You can't get paid unless you bill. Un-invoiced sales rarely get paid.

A sale is never complete until it's collected. Remember, a sale is measured by its gross profit and bad debts are measured by the invoiced amounts. It can take a lot of new sales to recover credit loss and new sales are hard to come by. The longer it takes to collect your receivable, more the risk of not being paid.

Figure 1, Continued
EXCERPTS FROM BOB'S NOTES
THE WONDERFUL WORLD OF CASH FLOW

Always consider the cost to finance a sale. After you deduct interest, was the gross profit worth the effort to make the sale?

On the flip side, most companies give customers terms to achieve targeted inventory turns. If you don't make the sale, will you move the inventory?

ACCOUNTS PAYABLE

Just like you, vendors give terms to make sales. They also give discounts to increase sales volume and to collect their accounts quicker. Take time to balance payment terms with cash discounts.

You can't make a meaningful measurement of your financing needs without determining the number of days in your accounts payable.

Usually, interest expense is more sensitive to days outstanding than to the interest rate. Think of days advanced by a supplier as free days. You don't pay interest on free days.

THE OPERATING CYCLE

The operating cycle is sometime call the "cash gap." It refers to the time it takes from the date cash is spent for inventory purchases until the dates that invoices are collected from customers. The goal is to have your customers pay you before you pay your suppliers. Good luck.

You need 3 things to calculate an operating cycle:

1. The payables period (number of days in accounts payable);
2. The receivables period (number of days in accounts payable); and
3. The number of days in inventory.

Following are highpoints of the morning session:

- The quicker you sell your inventory, the quicker you have cash for other things;
- Whenever possible, lower the number of days it takes to move your products;
- Most profitable companies have between five and six inventory turns a year;
- As a rule of thumb, the gross profit of most companies ranges between 20% to 30%;
- The lower the gross profit, the more you need to turn your inventory; and
- Identify inventory losses and take action, now.

Back in the third grade, Bob learned that there's no cash when there's no profits. The discussion on inventory analysis was more commonsense than rocket science - just a practical approach to making money. All in all, he felt that the seminar was wise use of his time and money. Bob didn't feel that way about lunch. It was the specialty of the house - cabbage rolls.

Table 3
BOB'S NEIGHBORHOOD STORE
ANALYSIS OF ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE
INCEPTION AND FIVE YEARS OF OPERATIONS

	A	B	C	D	E	F	
	Start of Day 1	First Year Operations	Second Year Operations	Third Year Operations	Fourth Year Operations	Fifth Year Operations	
SUMMARY OF ACCOUNTS RECEIVABLE ACTIVITY:							
1	Balance at the beginning of the period	\$ -	\$ -	\$ -	\$ 30,000	\$ 105,000	\$ 130,000
2	Sales	-	375,000	756,250	927,563	1,282,500	2,008,125
3	Collections	-	(375,000)	(726,250)	(852,563)	(1,257,500)	(1,988,125)
4	Balance at the end of the period	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 30,000</u>	<u>\$ 105,000</u>	<u>\$ 130,000</u>	<u>\$ 150,000</u>
5	NUMBER OF DAYS IN ENDING IN ACCOUNTS RECEIVABLE, ending accounts receivable divided by average daily sales (i.e., sales divided by 360 days) [E5 = E10 / (E2)/(360)]	<u>-</u>	<u>-</u>	<u>14</u>	<u>41</u>	<u>36</u>	<u>27</u>
SUMMARY OF ACCOUNTS PAYABLE ACTIVITY:							
6	Balance at the beginning of the period	\$ -	\$ 15,000	\$ 43,500	\$ 68,500	\$ 48,500	\$ 98,500
7	Merchandise purchases	15,000	325,000	550,000	637,500	918,750	1,387,500
8	Vendor payments	-	(296,500)	(525,000)	(657,500)	(868,750)	(1,362,500)
9	Balance at the end of the period	<u>\$ 15,000</u>	<u>\$ 43,500</u>	<u>\$ 68,500</u>	<u>\$ 48,500</u>	<u>\$ 98,500</u>	<u>\$ 123,500</u>
10	NUMBER OF DAYS IN ENDING IN ACCOUNTS PAYABLE, ending accounts payable divided by average daily purchases (i.e., purchases divided by 360 days) [F10 = F9 / (F7)/(360)]	<u>-</u>	<u>48</u>	<u>45</u>	<u>27</u>	<u>39</u>	<u>32</u>

Back in the Pomeranian Room, a little after lunch: As previously announced, the afternoon was devoted to managing receivables, purchasing and accounts payable. Back to Power Point and another template. Please turn to Table 3. Bob continued to take copious notes. The instructor concluded the seminar with a secret formula - "How to Calculate Your Operating Cycle."

Following are highlights of the afternoon session:

- To increase sales, companies give customers terms. That results in accounts receivable;
- When you have accounts receivable, you are financing your customers. Learn to think like a bank;
- Vendors give credit for a reason—they want to move product;
- Learn to minimize the time tied up in accounts receivable and maximize the amount of time it takes to pay your vendors (of course without alienating either group);
- Constantly monitor your company's operating cycle. It's almost impossible to operate without a ready supply of cash; and

- When in doubt or before every important decision, use the secret formula, “How to Calculate Your Operating Cycle.”

Bob skipped the no-host cocktail hour because he wanted to hurry home and use his new skills designed to put more money in his wallet.

Bob Puts the Tables to Use in His Business

7:45 PM – Back home, working on the personal computer: When Bob got home he immediately began to replicate the instructor’s templates using the notes he took at the seminar (see Fig. 1). That took about 5 hours. Once his spreadsheets were up and running, Bob entered actual store data from his first five years of operations into Table 1, Table 2 and Table 3.

Because Bob really studies the market, he already knew that his customers were cost conscious and not afraid to shop around. Accordingly, he was not surprised by results on the *mark-up* line of Table 2, Row 9. All in all, the store’s prices were competitive and within a reasonable range of his competitors. Bob also knew exactly what happened in Year 3 (see Table 1, Column D). That’s when he lowered prices to get more volume. Bob knows a little about *market share* too.

What really impressed Bob was the impact *inventory turnover* had on his checking account. (Compare the changes on Table 2, Row 7 with the results on Table 1, Row 9. As the store grew to maturity, it completed more *operating cycles* than the year before because it had higher *inventory turnovers*. By selling more, the store’s operations generated more cash flow). With a big broad smile, Bob said to himself, “It’s like I always say, I just seem to make more when I sell more.”

After a few moments of self-admiration, Bob noticed that he had a lot more invested in merchandise than he remembered. Bob was now studying the store’s *average balances of inventory* (see Table 2, Row 6). The number of days it took to move his merchandise (see Table 2, Row 8) was also a surprise. Was the *number of days in ending inventory* calculation correct? “Boy, do I really need a 3-month supply of inventory sitting on the floor?” Bob thought to himself. “Just think of the time it takes to move that merchandise. When will I finally get paid? Hope I don’t have to hold my breath. And that doesn’t count supplier lead times or front-end payments.” Bob still feels a bit wounded from his first experience with letters of credit. It’s seems that Bob’s first bank officer never told him that LC’s immediately lowered the availability on his credit line. The store’s fifth bank officer was not that shy. He even made Bob grovel a bit for the money. That guy lasted less than a month, but what the hey, Bob’s been a long-time and faithful customer. To make nice-nice, the sixth officer gave Bob a calendar with a real leatherette cover.

Bob also remembered his brother-in-law and those *hula-hoops*. “Gee, the market turned so fast that I never had time to react.” “If it takes 3-months to move my goods, how many *dogs* are sitting on the floor? I can’t take on that much risk especially when over a

quarter of a million is at stake. I guess the seminar was right. It would be best to take an inventory at the end of the month and start to move stuff that won't sell." Bob told the store manager to plan for next month's clearance sale. Bob never brags about clearance sales.

After completing Table 3, Bob concluded that his suppliers were really financing his customers. He based that conclusion on the fact that last year's ending balances were about the same (compare the results of Table 3, Row 5 to Table 3, Row 10). The 5-days difference between the *number of days in accounts payable* and the *number of days in accounts receivable* was about what it takes for customers' checks to clear.

For illustrative purposes, let's assume that the industry average for *number of days in accounts receivable* is just over 35-days. (This type of information is available from trade associations and other published materials usually found in the business section of your local library). The store's new credit and collections policies must be working. He beat the industry norm by 8 days. Most of the store's suppliers sell to Bob on 30-day terms. One or two are up to 60. The math confirmed that Bob was paying his suppliers according to plan, not too slow and not too fast.

Based upon the results of Table 3, Bob did not feel accounts receivable and accounts payable levels were a top priority.

The next day, Bob asked his accountant to analyze how much inventory would be needed to reach 5.5 turns a year. At current prices, that could equate to over \$500,000 in additional sales. If more staff wasn't needed, that could be over \$170,000 in Bob's pocket. Kerching!

Armed with the strength of *financial analysis*, Bob was on a mission. A sound market analysis confirmed that the store could do \$2.5 million, but that assumed 5.5 inventory turns a year. How to finance such growth without going too deep into the store's till was the question most present on Bob's mind.

You see, Bob's wife really wanted that new house, junior's orthodontist said he needed braces, and, lo and behold, his daughter was getting married. Bob knew that he needed more distributions than last year (see Table 1, F17). That was Bob's real dilemma. As Bob fell asleep that night he kept repeating, "*pass Go collect \$200, kerching, pass Go collect \$200, kerching, pass Go collect \$200, kerching....*" About 3:00 AM Bob's wife woke him from a bad dream saying, "Honey wake up! You're having a nightmare. You're talking in your sleep. And yes I will kill you if we don't get the new house, DEAR." Bob was too young to die.

How to Calculate Your Operating Cycle

In the morning, Bob went back to his notes from the previous day. There, written in the turquoise ink of a Holiday Inn pen was the instructor's secret formula, "How to Calculate Your Operating Cycle." Bob read his notes out loud:

“Every operating cycle has three parts, the purchasing component, the inventory component and the customer component. You can quantify the *operating cycle* (OC) by converting each component into days. The *number of days in ending accounts payable* for the purchasing component (PC), the *number of days in ending inventory* for the inventory component (IC) and the *number of days in ending accounts receivable* for the customer component (CC). Here’s the formula:

$$OC = PC - IC - CC”$$

Now do the math (remember try to get the highest score possible because a negative score reflects the number of days you need to finance).

Using Tables 2 and 3, Bob did the math for the store as of the end of Year 5:

<u>Item</u>	<u>Table & Cell Reference</u>	<u>Days in Cycle</u>
Number of Days in Ending Accounts Payable	3, F10	32 Days
Number of Days in Ending Inventory	2, F8	(82) Days
Number of Days in Ending Accounts Receivable	3, F5	<u>(27) Days</u>
Number of Days in Store’s Operating Cycle		<u>(77) Days</u>

By rapid calculation, the store had an operating cycle of 77 days. Instantly Bob knew the store was going to have too much month at the end of the money. He knew he was in trouble and needed help or his wife was going to kill him. What’s more, Bob’s daughter didn’t like the Pomeranian Room. Daddy’s little girl was a princess.

To make a long story short, Bob found out that a key supplier was about to go public and that the investment bankers were complaining about a sudden lack in growth. It didn’t take a rocket scientist to figure out that management was under a lot of pressure. (Can you tell that we invested in Enron stock and are still a little miffed?) Bob didn’t want to do anything shady, he just wanted a little time to grow his business and not get killed. It took about 10 days to arrange a meeting with the supplier’s head of sales. At the meeting, Bob gave the supplier an offer they couldn’t refuse. “Just give me 90-day terms, no price breaks, and I’ll make the rest of your year.” The head of sales had stock options.

Bob Lives and Triumphs

The supplier bit, the store did the business and Bob paid his bill according to terms. In August the family moved into the new house on Lake Podunkading, and everyone cried at the daughter’s wedding. The reception was at Bob’s country club and was the social event of season. Bob is still paying that one off. As for the son, he’s cool. Tom Cruise got braces, too.

Bob's a big financial success - the town's favorite son - and the competitors stopped snickering. With all the *net cash flow from operations* in Bob's checking account, he's starting to think of venturing into new projects like renovating the old movie house or starting a dot.com devoted to playing global Monopoly. The local paper reported that he could be the town's next VC.

On weekends, Bob daydreams about being in the entertainment industry or even buying the Doris Day film library. Bob is still a very consistent fellow. He never forgave Hollywood. And if he likes you, he'll still share how he mastered the fine art of kerchinging. But, only if he likes you.

You might wonder what Bob is known for now. Well to paraphrase Henny Youngman, "Bob's rich, he's got money not just inventory."

Conclusion: Still Want Out?

We started this little jaunt by getting you stuck in Podunk and assuming you want out. Not just out, but out NOW.

Other than the fact that we remember Doris Day and Henny Youngman, you don't know very much about us. Well, if we remember Doris and Henny, we must have some gray hair and the publisher thinks we didn't just fall off a turnip truck. In fact, we've been involved in quite a few buy/sell transactions. Enough to know that when most sellers want out and they want out NOW. You must admit, that's a great segue way back to a textbook on business valuation.

For posterity, this chapter is being written at the end of April 2002. For those of you who read the Wall Street Journal or the financial section of your local newspaper, it should come as no surprise that the U.S. markets are going through an unprecedented period of financial scandals. Without pointing fingers, we believe a root cause of these scandals was that too many investors bought on hype and were not using common sense, sound accounting principles and good business practices.

Take Enron for example. We made those snide remarks for a reason. We wanted to make you think. We wanted you to think about the way smart investors buy businesses. Smart investors, not the crowd that blindly followed the dot.com craze. They are the ones without any money.

Bob is actually a very sophisticated investor. He did a lot of homework that revealed that on-line Monopoly was a well-shopped idea. Bob took a pass. However, he was very much interested in renovating the old movie house and started negotiations with the owner. The owner was pleased to be dealing with Bob. The owner is from the old school and firmly believes that "money talks while bull \$*%#& walks." The owner also thought it was a good idea to employ professionals to ensure that Bob got whatever information Bob needed to close the deal. As to the film library, who needs one when there's a video store on every corner?

Assuming that you still want out, you may need to sell a business in order to leave. Unfortunately, you could have a lot of competition. In today's economy, there are just too many deals chasing too few dollars. Real and committed buyers like Bob are the ones that have money. These buyers are hard bunch to find. They buy informed and they lose interest fast.

About half an hour ago, we gave you Bob's most important attribute. We said Bob was honest with Bob. If you're sincere and truly need to sell that business and want the highest price, we suggest that you figure out what the buyers really want. Remember FASB No. 95; for the Bobs of this world, it's *net cash flow from operations*. Real and committed buyers are just like the guy that owned the gas station. In the final analysis, they just want to know WHERE'S MY MONEY? As the seller, your job is to show them in an orderly, logical, defensible, well-supported and completely understandable way how they're going to get it. In the post Enron era, we suggest that you be honest, too.

With gray hair comes experience, and 2002 marks the third round of financial scandals that we've seen. They come and go about every 10 to 12 years. Some sellers think it's best to just wait for the market to change and for a new crop of eager beavers to come along. Those are the guys who sell the sizzle and not the steak. Well, if history repeats itself, and it usually does, that new crop of wide-eyed neophytes should come along about 2012 or 2015 at the latest. Until then just relax, you'll only be stuck in Podunk. STUCK FOR ANOTHER 10 YEARS.

7:03 PM, June 29, 2014 – the “New” Pomeranian Room of the recently renovated Downtown Holiday Inn, Big City, USA: Well, it seems you never got out of Podunk and had to go to work for Bob stocking shelves. It's too bad that the big bull market didn't start until the summer of 2015. Right after you joined, Bob had lunch with his lawyer and accountant. They introduced him to a couple of business advisors from California with gray hair.

About 10 days later, the local paper reported that the “negotiations intended to reopen the local movie house were stalled.” Within 6 months, Bob had opened a new store in a town half way to Big City, USA. The next year he opened 2 more stores, and in 2012 he sold out to Walmart. You're the assistant manager in Store No. 135. Remember the head of sales that helped Bob out a few years ago? It seems he got a little big for his britches. He took over a highflying dot.com in San Francisco. The year the company failed, the executives didn't get stock options; they got “Wells” letters. If you don't know what a Wells letter is, its what the Fed's use to tell you you've been bad, Enron Bad. You don't want to get one. Concentrate on getting a letter from home, a letter of credit or a letter from Ed McMahon. Bob knows about letters, “The check is in the mail” is the last thing that customer said to Bob before they met in small claims court.

Yes sir, Bob really hit it big, and now its time for him to retire. Bob still hasn't changed and felt more comfortable having his retirement party at the place where “things turned around.” A year ago Big City, USA got a major face-lift. It may be the same old Holiday Inn, but it's now the New Pomeranian Room. All of Bob's closest friends were at the party, and because of Bob's phenomenal success, the local paper sent a reporter to cover the gala event.

About 8:35 PM, they finished dinner and started to toast Bob. Then someone shouted “speech.” Bob stood up and graciously thanked everyone for coming. Then the reporter asked, “Bob can you give us any secrets to your success?” Bob looked fondly at his friends and said “I still play a little Monopoly, but I really try to watch my facility costs and head count. Equipment is another important thing. You just have to know how to maintain it and when to replace it. And, lastly, I like the people at the bank but hate to pay interest.” Bob’s sister smiled when she remembered back to the good old days of *vigorous*. Mom never found out. The reporter then asked “Anything else we should know?” Bob just bowed his head and said “Not really. Thanks again for being here. Goodnight.”

Bob walked out of the New Pomeranian Room with his arm around his grandson’s shoulder. The grandson is a recent graduate of the Business School at Whatsamatter U and wants to go into business for himself, just like Bob. Bob leaned over and softly whispered into the Grandson’s ear so that no one else heard “What I didn’t say was;

“When you watch the cash flow, the profits come naturally.”

Bob never changes. His sister had invited some old competitors to the party.