

Cash Management Principles in a Small Business

Cash management is often deprioritized by CEOs but is an essential function

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We often observe that greenhorn search fund CEOs land in a cash conundrum, especially in the earliest years of their tenure. This forces these young, first-time, inexperienced entrepreneurs to scramble to patch together a speedy solution while losing investor confidence. It is not a fun process or a pretty picture to witness. Solving cash flow issues on a reactive basis causes CEOs to shift energy from their companies' core operations to shoring up the balance sheet and costs them valuable time that could be better spent focusing on foundational improvements. It amplifies their stress levels and tamps down their confidence. Additionally, it requires newcomer CEOs to engage in embarrassing and painful conversations with board members and investors and often results in emergency equity financing with awkward discussions about valuation, dilution, and why the kerfuffle is happening in the first place. Simply put, a cash jam is best avoided for everyone involved.

Rookie CEOs frequently overlook cash management, and it is admittedly hard for some businesspeople to grasp. But it is essential. We think of this activity as table stakes in running a firm. A CEO just has to do it well, and unfortunately, there is little reward or fanfare for proficiency, but there is swift and stern punishment for ineptitude. Cash management is not thrilling or sexy like a transformational acquisition, but it is extremely important. It is akin to plumbing on cruise ships. When the plumbing works well, water flows in and out on demand without hiccups, and nobody cheers. However, the moment the plumbing is disrupted and water is unavailable or dirty water cannot be eliminated, a real tinderbox is at hand. This is the case with cash flow and cash management in a company – it is expected to work, and there is an uproar if it does not.

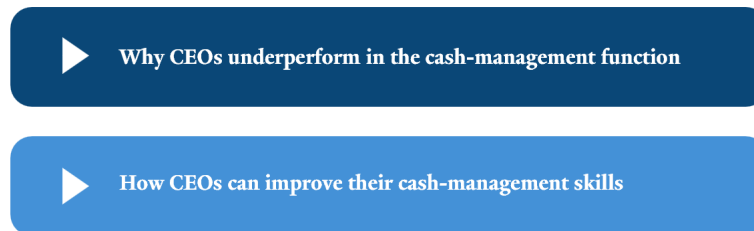
We define cash flow as the movement of money into and out of a business. Businesses rely on cash for operations; like oxygen in a human, cash is constantly entering and exiting a company. Similar to oxygen, suspending inflows and creating a dearth of cash can be lethal. Cash management is the executive process of managing cash flow in a firm. Unlike oxygen, cash flows are not abundantly and readily available; they require attention, cajoling, tweaking, and prodding – cash management is an intentional exercise, and peril awaits those who think it magically occurs.

We are writing this note for two primary reasons. First, when we teach cash-management and working-capital cases, we often see blank stares in our classrooms as students have no context for these mission-critical concepts. Many of our students have backgrounds in large corporations and consulting and investment firms. However, they have no tactical experience in observing or

managing cash flow. For employees of large corporations, cash management is functionalized, and the treasurer, in conjunction with the chief financial officer (CFO), manages the nettlesome process.

Second, neophyte CEOs need assistance here. They are neither attentive enough to nor sufficiently invested in cash flow and cash management. This causes their CEO experience to be unnecessarily challenging and frustrating as they do not have adequate experience in assessing cash issues. In this case note, we will attempt to remedy these two concerns by addressing why CEOs often underperform in cash management and how they can improve their cash-management skills (**Figure 1**).

Figure 1: We will address two issues in this case note



Why many CEOs underperform in the cash-management function

We will now explore why so many search fund CEOs trip on cash-management issues. The frequency of this occurrence surprises us because the CEOs who populate search fund companies are bright, talented, and ambitious. They certainly have the ability to be proficient cash managers, so there must be some reasons why this function ensnares them. We have identified five potential explanations for why CEOs fumble cash management.

Newbie CEOs are pulled in many directions simultaneously

There are a lot of distractions during the first year or two for search CEOs. New leaders are trying to learn and manage the business concurrently during that time. Days are filled with discovering all the ins and outs of the business, building customer relationships, meeting the team, and understanding talent. Additionally, CEOs need to confront the inevitable fire drills when each of these parts of operations flares up. It can be challenging to pay attention to cash-flow management when a key customer is threatening to leave or when the CFO departs suddenly.

Cash management is often glossed over in favor of more exciting topics

Search fund CEOs have many aspirations when they acquire an operating company. Their thoughts and actions often orbit around capital allocation, strategy, culture, and equity value creation. These are unequivocally fun and essential parts of being a small business CEO. We rarely, if ever, however, hear CEOs pine to engage in cash management, the mundane task of ensuring that a business has ample funds to operate successfully. Cash management is often relegated to a second- or third-tier priority, while CEOs focus on more glamorous topics. While essential to a company's sustainability and health, cash management is neither exciting nor sexy. Try bragging to friends about compressing accounts receivable (AR) days and see what type of reaction there is. Additionally, searchers often do not focus adequately enough on cash-management issues before purchasing a business – it is not part of the due diligence process. How invoices are created and submitted to customers and how inventory reordering works impacts

working capital and cash flow but is unlikely to be a core part of diligence. The absence of pre-closing time spent on cash management can portend a post-closing problem.

We want to draw a distinction at this point between capital allocation and cash management, especially regarding how CEOs view these two topics. While capital allocation and cash management are cousins, they are not identical. Search fund entrepreneurs primarily view capital allocation as sourcing debt and equity and using those funds in addition to free cash flow from the business's operations to issue dividends, extinguish debt, buy back equity, or invest in operations. Cash management is the far less cerebral task of managing AR, accounts payable (AP), and inventory and developing systems and processes to ensure the company has adequate funds.

Tenderfoot CEOs tend to be profit-and-loss-statement centric

Many first-time CEOs devote all their energy to managing the profit and loss (P&L) statement and think less about the balance sheet and cash-flow statement, which are the scorecards for cash management. Although this is not the best hygiene, we understand why this happens. CEOs are lasered in on revenue and its growth and primarily measure their success based on EBITDA.* After all, EBITDA tends to drive valuation and the pathway to CEOs earning their performance equity. The mantra in the search fund ecosystem is to deliver revenue and EBITDA growth or face investors' ire. While focusing on the P&L is not wrong, it does not help a CEO understand and manage their firm's cash needs. Those hints lie on the balance sheet in AR, AP, inventory, accrued expenses, and the cash account itself. The changes in cash positions are tabulated in the very useful cash-flow statement. Focusing on the P&L is akin to a ship captain only caring about where they are going and how fast they will get there without considering fuel resources and burn rates – it is dangerous. Any seasoned CEO knows that revenue and EBITDA are not cash and that cash is what a business lives on.

CEOs build models that do not go down to free cash

We love the intricate multivariable models that search fund CEOs so adroitly construct. They provide a dizzying array of information and prognostication. Unfortunately, more information does not imply more accuracy. Additionally, many CEOs build their models only going down to the EBITDA line. They fail to understand that while companies might trade on EBITDA, EBITDA does not mean cash and cannot pay bills or cover payroll. While EBITDA might be the MBA crowd's favored metric, those pesky interest payments, taxes, and capital expenditures (not to mention changes in working capital and mandatory debt principal payments) are very real and demand cash. These models also frequently do not include robust sensitivity analyses contemplating how cash and liquidity react when things go south unexpectedly. Modeling off of historical financials can be problematic as many sellers run their businesses based on simplistic cash accounting methods. At the same time, searchers will have to convert to generally accepted accounting principles (GAAP) standards as quickly as possible.

Furthermore, if CEOs do take cash needs and dynamics into account, they often fail to comprehend that the GAAP revenue booked in January might not convert to an actual check in the mail for months. Therefore, an invoice that goes out at the end of January, which is accurately booked as revenue, might not convert to cash until late May if a customer pays on a disappointing and frustrating 90-day basis. A cash crunch will surely loom if those timing differences are not accounted for in a CEO's fancy model. Finally, CEOs must contemplate deferred revenue in their forecasting. When cash is received in advance but not yet earned, a liability account is created (deferred or unearned revenue). CEOs must remember that if they are

* Earnings before interest, taxes, depreciation, and amortization.

to perform for customers, there will likely be a corresponding future expense using cash. We are empathetic because we sheepishly admit that we have made all of these mistakes, too.

By overemphasizing growth, CEOs can create self-inflicted wounds

Search fund CEOs seem to be genetically predisposed to pursue growth. They have internalized the common notion that businesses must grow to create equity value. We are certainly not anti-growth, but there are circumstances when growth creates or exacerbates cash-flow challenges. This will depend on the business model and cash-flow dynamics. Paradoxically, when CEOs in some businesses grow rapidly, they create harmful, self-inflicted wounds. We are huge fans of Karen Berman and Joe Knight's work in general and their excellent book *Financial Intelligence* in particular. The remainder of this section is based on their work and the concepts covered in that book, specifically Chapter 16, Profit Does Not Equal Cash.

Let's consider CEO Quinn running the ABC business. Quinn acquired ABC and structured the deal to have \$25,000 in cash on the balance sheet at inception. ABC purchases goods and supplies on the first of the month and is required to pay vendors on net 30-day terms. ABC has large businesses as customers, and they demand favorable payment terms of 60 net days. ABC has a cost of goods sold (COGS) equal to 55% of sales, and indirect costs are \$10,000 per month. Our overly simplistic example illustrates the puzzle of growing but not generating enough cash to support the business (**Figure 2**).⁵

In month 1, ABC has \$30,000 in revenue but receives no cash inflows because customer payment terms are net 60. AR goes up to \$30,000. Cash drops from the beginning of period (BOP) balance of \$25,000 to an end of period (EOP) balance of *negative* \$1,500 since Quinn incurred \$26,500 of expenses (\$16,500 of COGS and \$10,000 of indirect costs). The good news for Quinn is that ABC's net profit was \$3,500 for the month.⁶

In month 2, sales spike to \$50,000. Quinn is thrilled; growth is good! Net profit comes in at \$12,500 – more good news. However, no cash has yet come in from sales made in month 1, and now, AR is \$80,000. Additionally, the cash balance has gone deeper into the hole at a *negative* \$39,000.⁷

In month 3, Quinn redoubles efforts to grow even more to solve the cash flow riddle, and sales are \$65,000, with a net profit of \$19,250 – good news again. Quinn makes a mental note to brag to their board. Finally, ABC collects some cash (\$30,000) from customer sales made in month 1, but the cash required for COGS grows as sales increase. The cash balance now stands at *negative* \$54,750.⁸

ABC is in an untenable situation and cannot meet its vendor and indirect cost obligations. Yet it is successfully growing both revenue and net profit – hypergrowth can upend a firm's cash flow. All CEOs eventually learn that profit is not cash. Quinn is creating a self-inflicted cash boiling point by ingenuously pursuing growth at unsustainable levels. Unfortunately, the situation is unsolvable unless Quinn brings in outside capital or slows growth and finds a cash equilibrium. As unappealing as ABC's situation is, it could be worse. If ABC requires periodic capital expenditures (which do not hit the P&L in accordance with GAAP), cash is further impaired even though net profit is preserved.⁹

Many search fund entrepreneurs pursue software companies as acquisition targets. Some of these companies operate similarly to ABC described above. They are often growth centric at the expense of cash flow and possibly profits. These software business can still create attractive returns on an equity-value basis as they typically trade on recurring revenue metrics, but managing a cash-negative business is an especially tricky task for a new CEO without operating experience. These CEOs should think deeply about how to

[†] For pedagogical purposes, please allow us to pretend that companies can have growing negative cash balances.

address the shortage of cash flow. This problem can be solved by continually seeking fresh external capital, but that capital had better be established in advance.

Figure 2: Illustrative P&L demonstrating the potential cash challenges of a growing company

Month	1	2	3	4	5
Revenue	\$30,000	\$50,000	\$65,000	\$80,000	\$100,000
COGS	\$16,500	\$27,500	\$35,750	\$44,000	\$55,000
Gross profit	\$13,500	\$22,500	\$29,250	\$36,000	\$45,000
Indirect costs	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Net profit	\$3,500	\$12,500	\$19,250	\$26,000	\$35,000
BOP cash	\$25,000	(\$1,500)	(\$39,000)	(\$54,750)	(\$58,750)
Cash collected	\$0	\$0	\$30,000	\$50,000	\$65,000
Cash disbursed	\$26,500	\$37,500	\$45,750	\$54,000	\$65,000
EOP cash	(\$1,500)	(\$39,000)	(\$54,750)	(\$58,750)	(\$58,750)
AR	\$30,000	\$80,000	\$115,000	\$145,000	\$180,000
AP	\$0	\$0	\$0	\$0	\$0

How CEOs can improve their cash-management skills

We will now offer six ways (**Figure 3**) for fledgling search fund CEOs to improve their cash-management skills. We encourage operators to embrace these half-dozen items comprehensively since no one item is a magical silver bullet. Furthermore, improving cash management is not a one-time event. Unfortunately, cash management is like a garden: it must be watered and weeded consistently; otherwise, the flowers will wither and yield to the weeds. Although we do not assert that our list is an exhaustive strategy, it should help CEOs advance their cash-management competencies.

Figure 3: Six ways a CEO can improve their cash-management skills

- 01 Be a cash-management champion
- 02 Use working-capital levers to manage cash
- 03 Understand what the cash conversion cycle is
- 04 Be realistic about the cash requirements to grow
- 05 Be an expense hawk
- 06 Have lots of capital capacity

Be a cash-management champion

Perhaps the single best way a CEO can improve their cash-management skills is to see themselves as the cash-management champion at their firm. When we use the word champion, we try to convey the notion

that the CEO *owns* and thinks about cash management regularly. This should start immediately in the CEO’s tenure when the company is first acquired. The CEO should not delegate the entire function to a CFO, controller, or accounting clerk – it squarely resides in their wheelhouse. To be a cash-management champion, a CEO needs to think about the topic, take action on the function, develop the tools and systems to have the correct information to be an effective champion, and communicate the importance of cash management to team members on a regular reporting cadence. Now, some CEOs will think cash management is below their station – they are flat-out wrong. Cash management *is* the CEO’s responsibility, especially in a small search fund business. Of course, components of it will be delegated to other team members, but ultimately, the CEO owns cash management, and if it falters, it is unambiguously the CEO’s fault. Cash management is a functional competency on par with other core finance and accounting competencies.

So, what are some ways to be a cash-management champion? First, CEOs should have the right information to measure and monitor cash flow on a *daily* basis. It is impossible to manage something that you cannot put some measurement tools around. Individual CEOs should develop a reporting mechanism that suits their specific needs, but we like a report that encompasses some of the components detailed in **Figure 4**. This illustrative report gives a quick snapshot of what is happening to cash each day. This information can give the CEO quick and early warning signs if a storm is brewing. To develop a useful cash report, CEOs need to build accounting systems and infrastructure to provide timely and accurate information. This implies having the right people in place with the right training and the right accounting tools and software. As part of understanding cash position, CEOs should also look at their cash balance at the bank on a daily basis. Not every part of running a company is alluring, and wallowing in cash management might be a good example, but it is extremely important. CEOs need to be cash-management champions (and should expect little reward and glory for doing so).

Figure 4: Illustrative daily cash-reporting mechanism

Day	1	2	3
BOP cash	\$250,000	\$200,000	\$125,000
Deposits:			
• From customers	\$100,000	\$25,000	\$182,000
• Revolver draw	\$0	\$100,000	\$0
• Equity	\$0	\$0	\$0
Total deposits	\$100,000	\$125,000	\$182,000
Disbursements:			
• Normal operations	\$125,000	\$200,000	\$0
• Growth CapEx	\$0	\$0	\$0
• Maintenance CapEx	\$25,000	\$0	\$0
• Principal and interest	\$0	\$0	\$0
• Other	\$0	\$0	\$0
Total disbursements	\$150,000	\$200,000	\$0
EOP cash	\$200,000	\$125,000	\$307,000

Second, CEOs should consolidate all their bank accounts into a single operating account with their preferred banking partner, who will likely provide term loans and a credit revolver. Managing cash flow and cash issues is simpler when all corporate cash resides in a single location. Although there might be bona fide reasons for having multiple bank accounts (like exceeding FDIC[†] insurance limits), we would fight that structure if at all possible. Having numerous bank accounts is like having a messy desk and looking for something; it is just harder to find. Streamlining and simplifying generally make things easier to manage.

Third, CEOs should build a rolling, 13-week cash-planning model that is continuously updated. Part of the cash-management process is prognosticating what cash will be in the future – this is hard, but it is a CEO’s job. CEOs will develop a feel for the timing and cycles of cash movements in their businesses over time and can input those nuances into the predictive cash model. If a company has seasonality, that must be accounted for, too. Part of being a cash-management champion is focusing on the issues in advance and knowing when cash trouble might develop. Unfortunately, CEOs need to be cash soothsayers, whether they like it or not. This 13-week model should go down to EBITDA, an important reporting metric, but also go further and account for changes in working capital, interest payments, mandatory principal obligations, taxes, and all capital expenditures. In other words, it should go down to a pure free-cash-flow number. We strongly recommend that CEOs adopt a conservative posture when building this forecast. Being wrong about cash is like a long-distance hiker being wrong about water and food resources – the consequences can be very unpleasant. CEOs need to be directionally correct when predicting cash. That is a big ask, but it comes with the CEO job.

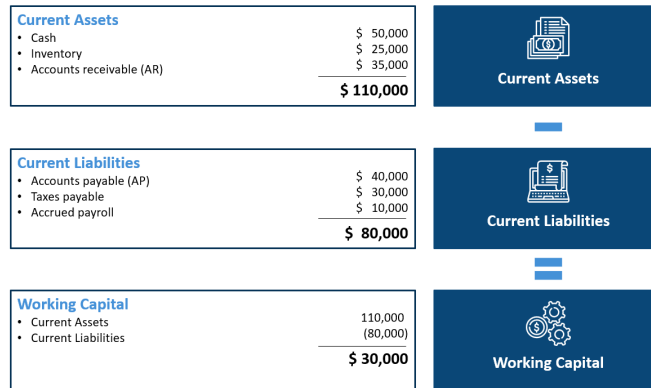
Fourth, CEOs need to pick a range of the cash necessary to have on hand in the business. Operating a business with scant cash on the balance sheet is impossible. When in that mode, CEOs make decisions with a false constraint rather than doing what is best for the business in the long term. We cannot tell CEOs the right amount of cash to have on hand; they need to determine that, and every business is idiosyncratic. However, CEOs, perhaps with their board’s guidance and engagement, need to target a range and do everything possible not to dip below the range nadir, and if they do, they should hit the panic button quickly.

Use working-capital levers to manage cash flow

The academic definition of working capital is a simple one: “the money a company needs to finance its daily operations,” or, mathematically, the firm’s current assets minus its current liabilities (**Figure 5**).¹⁰ The simplicity of the calculation disguises the importance of the idea in practice. Few seasoned operators, let alone young, first-time entrepreneurs, seem to truly internalize the influence that working capital has on free cash flows in a business.

[†] Federal Deposit Insurance Corporation.

Figure 5: Illustrative working-capital calculation



Source: [On the Nature of Working Capital: Understanding its Mysteries and Complexities](#)

Working capital can make or break an organization’s financial health. Attractive working-capital dynamics can transform a seemingly meager bottom line into hearty free cash flows. Conversely, weak working-capital dynamics in a growing company can create a perpetually cash-strapped situation despite an impressive bottom line on the income statement. Some companies with particularly large working-capital demands may even find that high revenue growth – a metric exalted by many – can lead to declining free cash flows. Business operators need to beware. Working capital is the blood and oxygen that sustains a business. Without adequate levels, the business perishes, regardless of how good everything else looks.

For an in-depth discussion about working capital, see our case note [On the Nature of Working Capital: Understanding its Mysteries and Complexities](#). We focus in this note on proactively managing the components of working capital to increase cash flow. When overseeing working capital, the goal is simple – less is more. Working capital is an unmitigated drag to a business, and every CEO’s plan should be to aggressively shrink and compress working capital as much as possible. The ultimate landing spot in the realm of working capital is to have *negative* working capital dynamics. We will now explore some of the blocking and tackling steps CEOs can consider when attenuating working capital.

When we decompose working capital, we derive three core components: AR, inventory, and AP. Thinking about these three vectors as potential levers to impact cash flow is a key component in the CEO’s role as cash-manager-in-chief. Keep in mind that, when managing working capital, companies can achieve a one-time gain. If working capital drops from \$1 million to \$0.9 million, the \$100,000 is a singular win and does not recur in additional periods. Furthermore, working capital will often snap right back to an inferior position unless the CEO is meticulously monitoring and managing it.

AR management

AR can be a bane in any business. Collecting cash can be formidable at times, and it might not seem like a CEO’s domain or strategic enough for executive time – we caution searchers not to fall into that mindset trap. AR management is crucial and is the last step in the arduous customer process (win the account, provide the service or product, and ultimately get paid). CEOs need to be all over AR and establish systems and protocols to do everything possible to speed up AR processing and shrink AR balances. This includes having the right accounting software to track AR components accurately. The function cannot be managed successfully without the correct information. This might seem obvious or easy, but it is not. Companies

with tens of thousands of customers need a high-functioning and robust cash-application process. When a customer pays an invoice, the company must accurately apply the cash to the correct account to know the AR balance has been satisfied. Without a proficient cash-application system, companies might chase customers who have already remitted or ignore customers who have not yet paid. Both of these courses can impair a business reputationally and financially. Be forewarned that cash application is a hard and cumbersome function at scale and will be detrimental to the AR process if it does not run smoothly.

Companies need an expert collections function to help convert AR into cash more quickly. This typically is composed of an individual or a team of people who are constantly communicating (phone, email, letters) with customers who have not paid on time. We encourage prompt action when a company is late with payment – the 31st day if terms are net 30. Do not allow AR to go stale; dated receivables become increasingly difficult to collect. The first communication should ask somewhat benign questions: Did you receive the invoice? Is the invoice accurate in your perception? Has the invoice been approved for payment? When will the invoice be paid? Any faults must be immediately cured to speed up payment. The aggressiveness of the collection process should amplify as AR gets older and can ultimately include service suspensions or pursuing the balance through legal action. CEOs should contemplate their invoice presentation system and aim for simple, easy-to-understand invoices that contain all the appropriate information (including mandatory purchase order information). A confusing or inaccurate invoice is an unpaid invoice. Although this is painfully obvious, invoices must be sent to the correct person and location (email address, portal, mailing address). A perfect invoice that does not land in the right place is an invoice stuck in limbo – and it will remain unpaid.

In some small companies, a single person is the AR expert and manages invoicing. CEOs must mitigate the key-person risk by developing backup systems and cross-training if that is the case. If the single AR expert is on vacation or quits, invoicing can grind to a halt and impair cash flow.

CEOs should consider the timing and speed of the invoice-presentation process. For example, invoices can be presented daily, weekly, or monthly. Deferring presentation delays the AR clock from commencing but might ease the administrative burden. Imagine a company whose practice is to bill monthly for services performed during the month. If a service or product is consumed on the first day of the month and the invoice is not issued until the last day of the month, the products and services sold on day one are delayed for invoicing by 30 days. If a customer pays on net 30-day terms, that product or service could actually be outstanding for 60 days.

Whatever the invoice-presentation policy adopted, companies should aim to get the invoice out the door as rapidly as possible. For example, if a firm bills monthly, do invoices go out on the first day of the following month, or is there a one- or two-week lag in presentation? Time is the enemy in invoice presentation. Systems, proficient processes, and attention can help compress any lag. If a firm presents invoices monthly in advance for a recurring service, it can consider issuing invoices early enough so that they are received by the customer by the first of the month instead of just starting the presentation process on the first day of the period.

A lockbox system[§] can help speed deposits, especially if customers are widely dispersed. Such systems effectively outsource part of the cash-management system to a bank that will collect customer payments at a post office box, burst envelopes, and deposit checks on the day of receipt. Better yet, companies can eliminate this process by seeking customer payments electronically by credit card, wire, or ACH payment. If a customer is on some type of auto-pay mechanism, collections might proceed more smoothly than the often-fraught dance of chasing an elusive check. The timing of these payments can be shifted to before a good or service is consumed or upon consumption. The goal is always to eliminate or reduce AR.

One available technique to speed up payment that we avoid is to offer customers 2/10 net 30-day terms, where the customer can take a 2% discount on the invoice for payment before ten days. This is akin to a 2% giveaway on revenue and has an effective cost of capital of 36.5%.^{**} We would rather wait an additional 20 days for full payment than incur the discount at a usurious interest rate.

CEOs should focus on AR dollars (lower is always better) when managing AR, but dollars do not tell the entire story. CEOs should also study AR days outstanding (sometimes called days sales outstanding or DSO). This metric normalizes AR dollars as a company grows revenue. This key metric must be included in the CEO's balanced scorecard. AR consumes valuable cash and is a mitigant to cash flow and a successful cash-management process.

Inventory management

Inventory is an asset like AR and can gobble up cash. Our opinion on inventory is a simple one – it is bad. CEOs should manage inventory aggressively and seek to have as little of it as possible at all times. Working with vendors for more frequent shipments and smaller order deliveries may shrink inventory. The objective here is to turn inventory as many times as possible in a period. Sometimes CEOs incorrectly believe having lots of inventory on hand is a benefit; it might be operationally, but it is a scourge financially. At times, CEOs could consider shrinking inventory by marketing it at a discount to free up the cash it consumes.

Inventory metrics should be included in the CEO's balanced scorecard. Similar to AR, the goal with inventory is always to have as few inventory dollars as possible. This can also be measured as days of inventory outstanding, or inventory turns. More sophisticated CEOs could parse inventory levels by product to understand where and how inventory flows. CEOs should aggressively manage these metrics. Reorder levels should be set as low as tolerably possible to mechanically squeeze inventory. Executives should establish inventory policies and could require their approval for atypically large orders – in advance.

AP management

AP is simpler to manage than AR and inventory – finally, a respite. AP management can straightforwardly boil down to paying as slowly as possible (but still on time). While managing AR, we want to be paid in advance; while managing AP, we never want to pay in advance – we want to pay on the exact date an invoice is due (after goods and services have been rendered), not one day earlier or one day later. We consider vendors key partners in the operation of a business. They should be treated with respect and appreciation and celebrated for the role they play and the value they add. But we do not want to be the vendors' bank.

[§] A lockbox is a service banks provide where customers mail checks to a post office box and the bank manages the deposit process.

^{**} $(365/20) * 2\% = 36.5\%$

CEOs should scrupulously pay when invoices are due, but not before. One exception to this philosophy is that if a vendor offers a 2% discount for payment within ten days, the CEO should absolutely take the discount with the attractive 36.5% effective return.^{††}

If CEOs can pay with a credit card, they can synthetically extend the payable period beyond the vendor's window. This would increase the vendor's costs because of a transaction and processing fee, but some vendors choose to accept credit cards for payment. For example, if an invoice is due on the 30th day and a credit card is used, the payable has been satisfied in the vendor's eyes, but the company has not used any cash. The credit card company starts the clock again with another 30-day window before cash is finally used. Additionally, CEOs can and should ask vendors for extended payment terms, perhaps 60 days.

Understand what the cash conversion cycle is

To be cash-management heroes, CEOs must understand how efficiently cash moves through their businesses and compare this movement across periods. The cash conversion cycle is the metric that facilitates this comparison and provides CEOs with the tools to improve cash efficiency over time.

The cash conversion cycle is the number of days it takes a company to convert an investment in inventory or service provision into cash. This investment typically begins with a payment to a supplier. Ideally, for the operator, that payment occurs after raw materials have already been delivered, speeding the rate at which the business can convert its inventory investment into cash. Next, the firm must hold inventory on its balance sheet. Finally, companies must await customer payment, which could come immediately, well after, or even before a product or service is delivered.

To calculate a cash conversion cycle, first convert AP, AR, and inventory, respectively, into days sales outstanding (DSO),^{‡‡} days payable outstanding (DPO),^{§§} and days inventory outstanding (DIO).^{***} Then, a simple equation provides the cash conversion cycle:

$$CCC = DIO + DSO - DPO$$

The longer the CCC, the higher the working-capital requirement, and vice versa. **Figure 6** provides a graphical example of the cash conversion cycle.

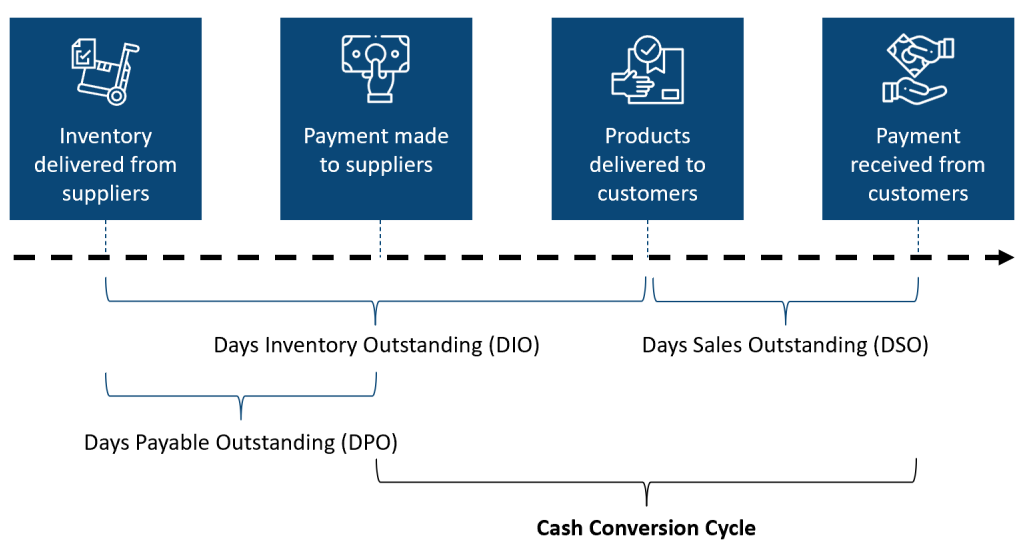
^{††} Not taking a 2% discount is akin to borrowing funds for 20 days since the invoice is due on the 30th day. The implied cost of capital for this decision is computed by calculating the number of 20-day periods in a year (365/20) = 18.25. Then, to annualize the cost of borrowing funds at 2% for 20 days, we multiply 18.25 * 2% = 36.5%.

^{‡‡} DSO = AR/Sales * 365

^{§§} DPO = AP/COGS * 365; COGS = cost of goods sold

^{***} DIO = Inventory/COGS * 365

Figure 6: Cash Conversion Cycle



Source: [On the Nature of Working Capital: Understanding its Mysteries and Complexities](#)

A key observation should be clear: A *shorter* CCC benefits the business. This might be counterintuitive to some when we have been ingrained to believe that owing people money is bad. However, when you owe people money, less capital is invested and tied up in a business. A shorter CCC results from lower working-capital requirements for the business, which we explored above.

We should emphasize that we can provide no single goal for CCC. It is an idiosyncratic number that varies greatly across industries and even businesses within the same industry. We might assume that producers of consumer goods have naturally higher CCCs than producers of computer software due to the costs of keeping physical inventory, but if a particular consumer goods company with an inimitable product can demand payment on delivery from customers and extend payment terms with suppliers, it is entirely possible that this company's CCC will be lower than that of a fledgling software manufacturer that has no credit with suppliers and is forced to accept long payment terms from customers as an incentive to convert business from its competitors.

What we can advise is that CEOs should calculate the CCC over one or more periods (this can also be done as part of the diligence process) and then work toward lowering it as much as possible (including CCC in the balanced scorecard would be helpful). We recognize that there are limits to this task, but we have seen our students' jaws drop when they realize that the most enviable companies have *negative* CCCs. It is as if we have shown them an exception to the laws of gravity.

Be realistic about the cash requirements to grow

Many business models require incremental capital to grow revenue and generate additional EBITDA. These capital requirements are, in effect, a regulator on the growth rate a company can pursue without supplementary external resources. If companies do not intend to gather fresh capital infusions, they can only grow at the rate at which they generate free cash flow from operations. While this might seem self-evident, we perpetually witness CEOs pursuing growth with a 'more is always better' orientation. While we are not biased against growth, we believe growth should be intentional and based on a targeted range

that crisply ties to a company's cash resources. We firmly abhor a 'more is always better' attitude. This usually results in a company growing itself into financial stress (and operational chaos, too).

To establish a growth rate that can be gracefully achieved, CEOs need to have a clear picture of how much capital is required to generate an incremental dollar of revenue and when that capital will be deployed. It is not unusual for capital-intensive businesses to need several dollars of investment to generate an additional revenue dollar. Furthermore, that capital might be frontloaded by several quarters to build out necessary infrastructure.

When pondering capital needed to grow, CEOs should think comprehensively. For example, capital expenditures are clearly one component of cash demand, but changes in working capital, investments in sales talent (hiring, training, deploying, and compensating), additional office or warehouse space, and expanding technology capacity are other resources that might require capital in the growth process. CEOs need to be brutally honest and realistic about how expensive it is to grow. Additionally, it is essential to ascertain *when* capital needs to be available to finance the growth. It is unlikely that a company can onboard a sales professional on Monday and expect them to be productive by Wednesday. Salespeople require a runway to develop proficiency and contribution, which spells a need for cash significantly before incremental revenue will manifest. Delusional or ignorant analyses will only impair the business and catalyze future pain.

We like the late Professor Neil C. Churchill and Professor John W. Mullins' approach to quantifying sustainable growth detailed in their May 2001 *Harvard Business Review* article entitled "How Fast Can Your Company Afford to Grow?" This excellent framework establishes just how much a firm can expand based on its organically generated cash resources. CEOs must internalize that there is math at play here and that this is not a touchy-feely topic. Churchill and Mullins argue that the self-financeable growth (SFG) rate can be calculated using a company's operating cash cycle (OCC),^{†††} the amount of cash needed to finance each dollar of sales, and the amount of cash generated by each dollar of revenue.¹¹

We will repurpose the example Churchill and Mullins use in their article here with full attribution to their ideas and work. The authors use an illustrative example featuring Chullins Distributors. The financial statements are in **Figure 7**. To calculate the SFG, Churchill and Mullins first convert the income statement into common values (percentages). Next, they tabulate the AR days (70 days), the AP days (30 days), and the inventory days (80 days). The sum of AR and inventory days is the OCC (150 days). Churchill and Mullins then calculate the SFG rate for Chullins (**Figure 8**). The first step is to target the amount of cash tied up in cost of sales and operations; this is the cash required for the OCC. The cost of sales cash requirement is \$.48, the operations number is \$.175, and the sum is \$.655. Since the cash generated per revenue dollar is \$.50, the OCC SFG rate is 7.63% (\$.50/\$.655). Since this is the rate per OCC period, Churchill and Mullins compute the number of periods by dividing 365 by the OCC to obtain 2.433 (365/150). The annual SFG rate is 18.58% (7.63% * 2.433); the compound annual SFG rate is 19.60% $((1 + 7.63\%) ^ 2.433 - 1)$.¹²

So, what does this all mean in simple English? Chullins can grow at 19.60% without requiring external capital; if it grows at less than 19.60%, it will produce excess cash, and it cannot grow at more than 19.60% without tapping outside sources of cash. While this is not particularly complex math for MBA students or pedigreed search fund CEOs, most do not do the math. If Chullins wants to grow more quickly without raising equity or debt, it can work on the OCC and reduce costs. When the OCC compresses by shrinking

^{†††} We refer to this as the cash conversion cycle in the previous section, but we will stick with the vernacular used by Churchill and Mullins for this section.

AR and inventory days, the SFG rate amplifies. Similarly, attenuating operating expenses (see the section below on being an expense hawk) generates more cash per revenue dollar, facilitating a higher SFG rate.¹³

Figure 7: Chullins Distributors financial statements¹⁴

	\$	%			
Sales	2,000	100%			
Cost of sales	1,200	60%	Days	120	150 less 30-day terms
Gross profit	800	40%			
Operating expenses	700	35%	Days	75	50% of 150
Net profit after tax	100	5%			
Cash	10				
AR	384		AR days	70	
Inventory	263		Inv days	80	
Current assets	657		OCC days	150	
Plant and equipment	25				
Total assets	682				
AP	99		AP days	30	
Bank loan	50				
Current liabilities	149		Cost of sales days	120	
Contributed capital	350				
Retained earnings	183				
Owners' Equity	533				
Total equities	682				

Source: "How Fast Can Your Company Afford to Grow?" Harvard Business Review, May 2001. R0105K.

Figure 8: Chullins Distributors SFG calculations¹⁵

SFG Calculation		
Sales	\$1.00	
Cost of sales	\$0.60	
Gross profit	\$0.40	
Operating expenses	\$0.35	
Net profit after tax (cash)	\$0.05	
<i>Amount of cash tied up per sales dollar</i>		
Cost of sales	\$0.480	$$.60 * (120/150)$
Operations	\$0.175	$$.35 * (75/150)$
Cash required for each OCC	\$0.655	
SFG Rate Calculations		
OCC SFG rate per period	7.64%	$$.05/$.655$
OCC periods per year	2.43	$365/150$
Annual SFG rate	18.58%	$7.64% * 2.43$
Compound annual SFG rate	19.60%	$(1+7.64\%)^{2.43}-1$

Source: "How Fast Can Your Company Afford to Grow?" Harvard Business Review, May 2001. R0105K.

An additional way to mitigate the cash demands for growth is to focus on profitable growth exclusively and have no tolerance for unprofitable or marginally profitable expansion. Too often, CEOs get enamored with growth and are not discerning enough when evaluating whether the growth is truly beneficial or not. In a business-to-business context, it is somewhat easy to be hyper-selective about adding only desirable new customers to the portfolio since customers tend to be won through direct sales, with a vendor-customer

matching process based on reciprocal evaluation. In a business-to-consumer model, it is likely harder to screen individual customers, and the CEO's best alternative is to focus on desirable customer segments.

While we are not against temporarily suppressing current period cash flows by investing in infrastructure and sales to catalyze growth and potentially equity value, CEOs must be deliberate and understand the implications and consequences of their choices. Ramping up a sales team might drive equity value in future periods and be a compelling strategy, but it is only tenable if the company has the cash resources to pay the burgeoning sales team. If the CEO pursues such a strategy, they should know how to fill the cash gap that the strategy will catalyze.

Be an expense hawk

Search fund CEOs do not acquire businesses to become detectives ferreting out unnecessary expenses, but this pedestrian act can be a boon to cash flow and is unmistakably part of the cash-management process. Compressing expenses is directly and immediately accretive to profitability and cash flow. CEOs should scrutinize expenses and look for superfluous costs. If a company is doing \$10 million in revenue, can a CEO find \$100,000 (1%) of payments to eliminate? We are not sure, but a potential \$100,000 of profit and cash flow is worth some time and effort. We will now offer a handful of approaches to help CEOs look for expenses to remove.

First, CEOs should get a report detailing the prior year's expenditures by vendor. This report should be sorted with the greatest dollar spend at the top. A CEO should first determine if any line items are wasteful, and those should be carefully parsed and considered for prompt elimination. Next, the CEO should consider sending a letter to all vendors explaining that the company is working on an expense-management program and that, since the vendor is a preferred partner, the company would like to extend the offer to reduce its costs before engaging in a competitive bidding process. Competitive bidding is anathema to vendors. We have engaged in this campaign and were shocked when many vendors blithely reduced costs by 10% or more – based solely on a letter. A possible next step could be to contact vendors and pursue a conversation about costs. Finally, the company can move to competitive bidding. On another tack, the CEO should audit quantity volumes and look for possible reductions in conjunction with targeting costs.

Second, CEOs should make it a practice to sign every single check (or electronic equivalent). There is no better way to have a pulse on disbursements than to see each check and its attendant invoice. Granted, this might be a trailing control mechanism because the expense has already been incurred, but it is an opportunity for CEOs to ask questions and push back on consumption, which will signal that expenses had better be legitimate and necessary. This practice can help mitigate expense creep, an invasive phenomenon in every company. A. J. signed all checks for his first 15 years as a CEO and only stopped when his CFO convinced him that he could just sign checks above \$5,000. Employees became careful about excess spending, not just because A. J. would catch it, but because they realized it was super important for him. Signing checks may be cumbersome and time-consuming, but so is a cash-flow crisis.

Third, CEOs should not distribute corporate credit cards to employees in their firms. Any permissible expenses should be charged to the employee's personal credit card and reimbursed when an expense report is submitted. This subtly shifts the obligation of bearing the burden of frivolous expenses to the employee and away from the business.

Fourth, CEOs should scrutinize all people costs. In many companies, labor is the largest expense line item, and CEOs should examine whether everyone is productive and needed. We acknowledge that this is a sensitive topic, but preserving and optimizing cash flow is important to prevent a cash crunch. CEOs can

approve payroll data when it is submitted to the payroll processing company as part of governing people costs. A potential solution here can be to outsource certain non-core and non-value-add roles or functions. One often-overlooked people cost is overtime. CEOs should understand how overtime is authorized in advance and establish strict, parsimonious policies on its use. As a CEO, A. J. received a daily report on the previous day's overtime by person – managers were often subjected to inquisitive emails and phone calls. The message was clear: do not be lax with overtime.

Our erudite economist colleagues might argue that it is impossible to lower costs. They would insist that if there were inefficiencies or opportunities to reduce expenses, the previous business owner would have done so. While we agree in theory, we realize that many small business owners are lackadaisical operators who lack the time, energy, or gumption to work on costs. A young search fund CEO might just be the fresh set of eyes and perspectives to find chances to whittle down some expenses. Furthermore, without outside shareholders, the selling owner might have been satisficing and not optimizing. We do not encourage operators to be shortsighted and miserly, but we do suggest that they embrace being frugal, which lies somewhere between penurious and prodigal.

Have lots of capital capacity

We periodically witness CEOs who do not build adequate capital (cash) capacity for their businesses. There are many mechanical ways to establish capital resources before the company frantically needs cash. We encourage CEOs to explore these potential toggles and embrace as many as possible. Building contingent cash resources is an art and worth the time investment and associated costs.

When closing on a target acquisition, we advocate for CEOs to finance the transaction in such a fashion as to put ample cash on the balance sheet post-closing. Too often, CEOs attempt to over-optimize the capital stack and start their CEO journey with sparse cash resources at the ready on the balance sheet. Post-closing, there are typically lots of moving pieces and plenty of fees to pay associated with the transaction. Additionally, getting current customers to remit to a new address or bank account might be choppy. CEOs should plan on some cash-flow lag and have adequate reserves to buffer disruptions. If this entails over-equitizing the purchase, that is just a cost of certainty and starting the adventure with the appropriate assets.

Sometimes, entrepreneurs pursue an all-equity deal and do not have any debt in the transaction. That is a fine approach when the situation calls for such a financing strategy. Even if that is the context, however, these no-leverage CEOs should consider establishing a revolving credit facility with a bank. We are huge fans of revolvers and think all companies should establish access to such a credit facility – whether they anticipate needing one or not. A revolver is akin to a credit card. It is a stand-by credit facility accessible by the company, typically under pre-established conditions (the draw does not put the firm in default). There are usually origination fees to establish a revolver, annual maintenance fees, and unused draw fees. These fees can add up, but they are well worth the cost. We consider the fees to be an insurance premium that must be incurred to have the protection and certainty of access to immediate cash when necessary. We would never suggest economizing by passing on fire insurance and the associated premium costs. Analogously, we embrace all the revolver fees while pursuing capital capacity insurance. When considering the revolver size, CEOs should go big. We like having lots of capacity and access. If the line goes unused, that is acceptable, but having it available can provide succor when a crisis is imminent.

When working with creditors to establish term loans used in the acquisition, CEOs should focus closely on amortization. Delaying and back-ending amortization places fewer cash demands on the business as the CEO learns and acclimates. Amortization might be the single most important feature in a term loan and

trumps interest rate. We explore this in our note [On the Nature of Debt](#). CEOs should also consider establishing a delayed draw facility in conjunction with the term loan. When this prearranged debt facility is installed, it can then be accessed under prescribed conditions. This financing is often used for capital expenditures or future incremental acquisitions. Regardless of its use, it is access to capital when a company might need it.

Beyond credit resources, CEOs can also build equity resources that are callable when needed. This often involves raising more equity than initially drawn at the closing, allowing the CEO to request additional equity in the future with less time and negotiation. Equity is expensive, dilutive, and can come with lots of unsolicited advice. However, having it available as a resource can help right-size a balance sheet when needed or provide resources to backstop a cash shortfall. While it is not our first choice, equity is one of several tools CEOs must contemplate when building future capital capacity.



Austin King (Providence College 2016) is a co-founder and CEO of [Steel River](#). He and his partner, Eric Factor, are purchasing overhead crane operators in a programmatic acquisition strategy. To date, they have bought nine companies. Before Steel River, King was director of business development at Alpine Investors, responsible for sourcing and closing north of \$200 million in enterprise value across various service industries.

I was focused on many things when we started to build Steel River. Unfortunately, cash-flow management was not high enough on my list. I thought we were in a great place because we were making acquisitions and growing organically – our P&L looked fantastic, and EBITDA kept increasing. But our exciting 30% growth rate consumed a lot of cash, and we just never seemed to have enough in the bank for us to feel comfortable. Growth was great, but cash stress was high, too. We service very large corporate customers without credit risk, but they are *slow* payers. They have a lot of power in our relationship. AR was ballooning, causing me a lot of worry and impairing operations. We overextended as well, using cash on hand to finance acquisitions in efforts to be fully capital efficient, which further increased the strain on cash. It was not fun.

Every time I sent out a management report, we had this one persnickety investor who would pepper me with questions about AR and cash management. It was like he kept hitting a nerve, and I knew he was right. We finally got our act together and figured out how to tackle our working-capital and cash-management issues. I spent a lot of time fixing this; it was a comprehensive overhaul. We changed some people and their roles, combined invoice presentation and AR, and implemented technology solutions to help present invoices more quickly and accurately. We became AR hounds. We also worked with our creditors to have larger revolver lines available for our cash needs, and we became a lot more intentional about our growth and now embrace more detailed cash forecasting associated with that growth. I now review and approve every single expense, and I find double payments and errors frequently. The most important thing we did was place cash management at the top of my priority list where it should have been all along.

Now, we are in much better shape. We have built some superior tools to predict our cash needs and availability. We also have a better dashboard that lets us know what the future will look like. *And* I have my priorities in order. I wish I had spent more time and energy on this topic earlier. It is super essential and underemphasized in the search world. I know

it is not a fun or cool topic to discuss, but cash management matters – a lot. We are on top of it now, and our AR has shrunk, which is excellent. I would tell new CEOs to focus on cash management or be prepared to suffer the consequences.

Conclusion

Cash management in a small business is often shirked to the side in a bucket of unglamorous CEO tasks. While we understand why this occurs, this can be a hazardous approach. Cash management is certainly not one of the more enchanting CEO responsibilities, but it is of paramount importance. Incipient CEOs can successfully tackle the cash-management role and avoid an unplanned cash flareup by following our proposed six-step framework. This will require time, commitment, and energy, but it will also lay the foundation for best-in-class cash-management hygiene. Leading an emerging business is filled with potholes and unpleasant surprises. However, cash-flow problems do not have to be among those. CEOs can elude a cash-flow disaster with some intentional and preplanned strategies.

Good luck with your search fund journey. We are rooting for you and looking forward to watching your success. Apply our principles, and you will be on the road to being a cash-management champion!

Exhibit 1: Additional resources

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This case has been developed for pedagogical purposes. The case is not intended to furnish primary data, serve as an endorsement of the organization in question, or illustrate either effective or ineffective management techniques or strategies.

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Endnotes

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³ Billy Bennett is an investment professional at [Hunter Search Capital](#).

⁴ A. J. Wasserstein is the Eugene F. Williams, Jr. Lecturer in the Practice of Management at the Yale School of Management.

⁵ Berman, Karen, et al. *Financial Intelligence: A Manager's Guide to Knowing What the Numbers Really Mean*. Boston, Mass., Harvard Business Review Press, 2013.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Churchill, Neil C., et al. "How Fast Can Your Company Afford to Grow?" *Harvard Business Review*, May 2001. R0105K.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.