



# The Cash Conversion Cycle

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The cash conversion cycle is the number of days negotiated financing is needed to support the operating cycle of a business. A business's operating cycle is simply the number of days its goods are tied up in inventory plus the number of days its sales are tied up in receivables. The cash conversion cycle then is a measure of how efficiently a company operates. But more importantly, it's a measure of cash creation efficiency in the business.

A third factor in the equation is how long it takes the company to pay its vendors. I'll discuss the three factors in a little detail, but first, the calculation:

$$\begin{array}{r} \text{Days Sales Outstanding} \\ + \text{Inventory Days Outstanding} \\ - \text{Payables Days Outstanding} \\ \hline \text{Cash Conversion Cycle} \end{array}$$

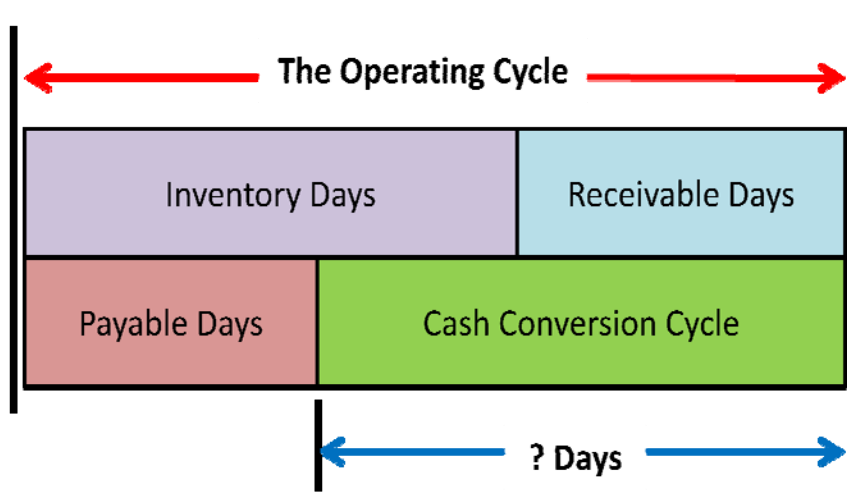
Calculating the cash conversion cycle, sometimes called the asset conversion cycle, tells you a lot more about ability to pay than the quick or current ratio. Using the average number of day's inventory, receivables and payables are tied up gives clear meaning that is easy to understand. By using the average days method, the how do I make improvements to my process question, is also easily answered by most managers. Simply put, you don't have to be a CFO or CPA to understand how the measure works and how to use it to improve your business.

The cash conversion cycle simply indicates the amount of time, in days, it takes the firm to convert its activities requiring cash back into cash. The period or cycle varies by industry and the individual



company. But, as with most ratio analysis, it's important to view the cash conversion cycle in a trend. A downward trend is positive, indicating that the operating cycle is shortening, while an upward trend is negative, indicating that the cycle is lengthening, that is tying up cash for a longer period.

A graphical depiction of the metric can be useful in understanding how it works:



**Inventory Days**, or Days Inventory Outstanding (DIO), measure how quickly inventory flows through the company from purchase to sale. It's one of the efficiency ratios for a reason; it is an excellent measure of how efficiently a company is managing its inventory. The trade-off comes in deciding how little cash is tied up in inventory while still meeting the needs of the customer. You want to make sure everyday items are on hand every day. With items purchased once a year or less, maybe the customer should expect to wait a few days. This is as much about managing your inventory assets as it is managing your customer expectations. The calculation is:

$$\text{Days Inventory} = \text{Ending Inventory} \div (\text{Cost of Goods Sold} \div 360)$$

**Receivable Days**, or Days Sales Outstanding (DSO), is a measure of how many days it takes to collect the cash from sales. Generally, the greater number of days outstanding, the greater the probability of delinquencies in accounts receivable. A comparison of a company's daily receivables may indicate the extent of a company's control over credit and collections. The terms offered by a company to its customers, however may differ from terms within the industry and should be taken into consideration. The calculation is:

$$\text{Days Sales Outstanding} = \text{Ending A/R} \div (\text{Revenue} \div 360)$$



**Payable Days**, or Days Payable Outstanding (DPO), is the average numbers of days it takes a company to pay its vendor invoices. The higher the DPO, the more cash a company keeps on hand, but the less happy its vendors are likely to be. The calculation is:

$$\text{Days Payables Outstanding} = \text{Ending A/P} \div (\text{Cost of Goods Sold} \div 360)$$

While the inventory days and receivable days are a function of your company's general operational efficiency, the Payable Days are completely under management control, to the extent that cash is available to make or not make payments. To this extent, a company can manipulate the metric with relative ease. However, it must consider the value of the vendor relationships and their contribution to an efficient and effectively run business. You may depend on vendor support for sales initiatives or marketing efforts. If you are 'abusing' your vendors by delaying payment of their invoices, how willing will they be in participating in your success? Most vendors will give a customer support far in excess of the value they bring by paying quickly. They do this because of the reduced risk of dealing with your company, especially if your company is a big customer. A big, slow-paying customer is a huge risk to a company and requires lots of attention internally. How willing are they going to be to increase their credit exposure with you if they just spent the last half hour discussing how scared they are of your going out of business? How a business leverages its vendors to receive the maximum value from the relationship is a tricky relationship, and not one to be abused lightly.

The cash conversion cycle, while a relatively new metric, is widely used in corporate finance, credit functions, investment analysis and banking. You can use the measure in your own business for managing your internal processes or evaluating the credit risk of your biggest customers.