PIPSO
Pacific Islands Private Sector Organisation

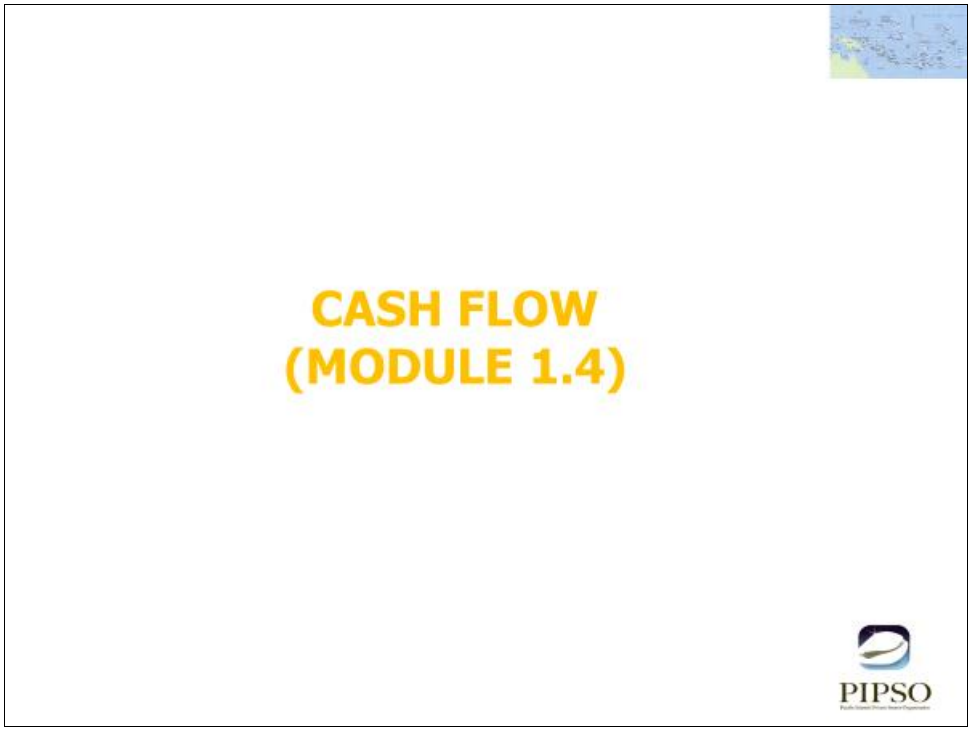
CASHFLOW

November 1

2016

This Module introduces cash flow as a critical element of a business that requires constant attention & management. An example is used to show the difference between cash flow & profit. The impact on cash of the other components of working capital is explored in some detail here. Cash flow planning is introduced (will be expanded in Module 1.6, Cash Flow Forecasting).

MODULE
1.4



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PURPOSE

This module is devoted to:

- An introduction to cash flow
- Making a clear distinction between cash flow & profit
- Cash flow management, & planning
- The impact of other working capital components on “cash on hand”.

The module is intended to stress to all participants the need to gain a better understand of their business cash flow & to manage & plan for it beyond day to day activity. Cash flow forecasting is further developed in, Module 1.6.

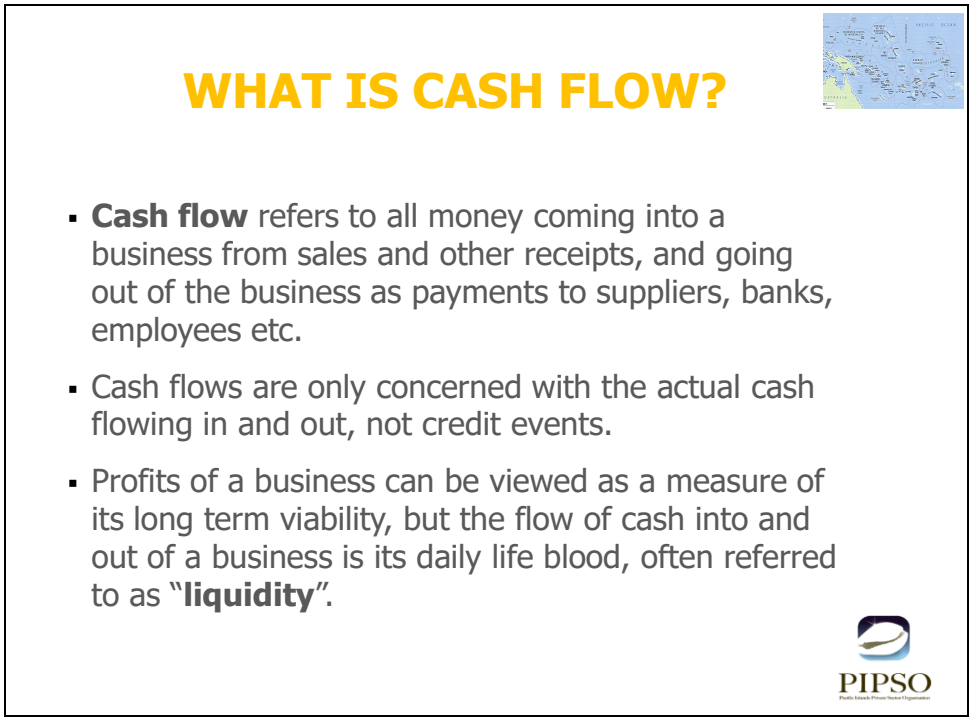
The cash on hand of a business at a point in time is defined as its liquidity.

Working capital is a measure of business access to liquidity, but is not only cash, as it includes items that areregarded as“near cash”, i.e. debtors, creditors & inventories.

This module emphasises the concept that for a small business “cash is king”.

On completion of this Module participants should be appreciative of the benefit of opening a business bank account & monitoring the impact of their debtors, creditors & inventories on the cash in the bank account.

WHAT IS CASH FLOW?

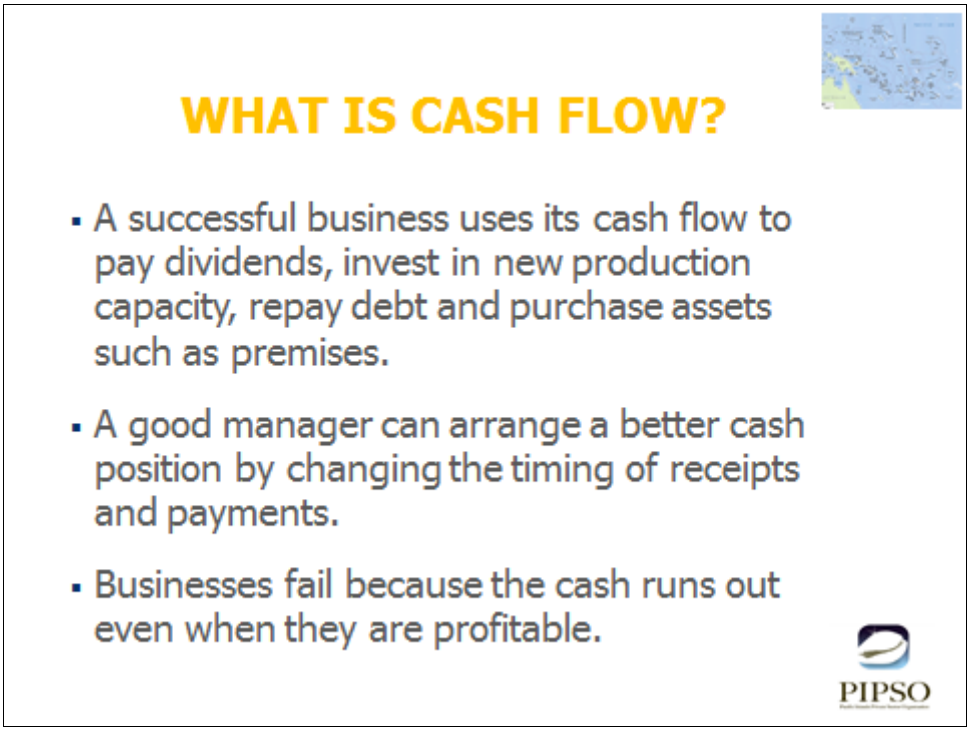


Any exploration of cash flows must start with a clear statement of what it is & what it is not. Participants are reminded that cash flow excludes **all** credit events & is clearly different from the accounting concept of profit.

Issues include timing differences caused by:

- The receipt of credit from suppliers
- The granting of credit to customers
- Credit management procedures once a business operates receiving & giving credit
- Timing of discretionary payments
- Timing of receipts
- Management of assets & liabilities, in particularloans

Permanent differences also arise due to profit allowing for the loss in value of assets over time while cash flows do not.



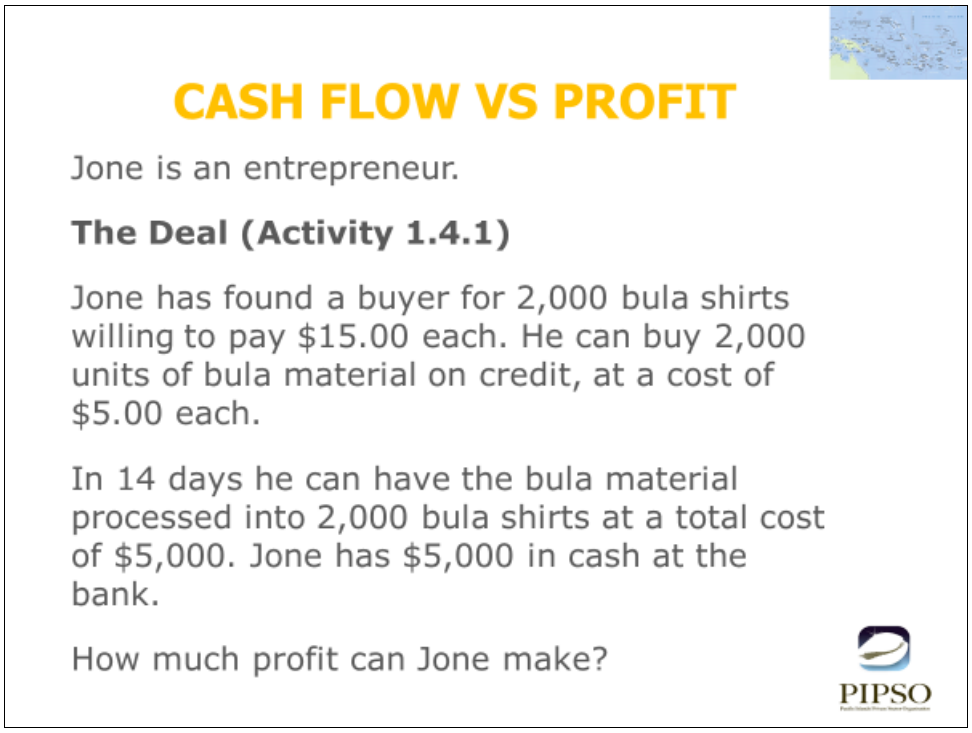
It must be emphasised that cash management is an active part of business management. The uses to which cash is put are management decisions &receipt & payments of cash are not a passive act. Cash flow should be managed to the greatest advantage of the business &, in a small business, what is most important is to eliminate & smooth out cash shortfalls& to avoid unexpected deficiencies.

Small businesses fail because they run out of cash even when profitable &long before they become unprofitable due to a lack of cash management skills of the proprietor(s).

CASH FLOW VERSUS PROFIT

The practical example that follows is designed to highlight the difference between cash flow & profit.

In two stages, we calculate firstly a profit&secondly explore the consequences of the differences in timing of cash flows.



What is Jone's profit potential from the making,& sale, of the bula shirts?

CASH FLOW VS PROFIT

Profitability

	$
2,000 units bula material @ $5.00 each	10,000.00
Processing costs	5,000.00
	15,000.00
Sold 2,000 shirts @$15.00 each	30,000.00
Profit	**15,000.00**

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Profit = $30,000 - $10,000 - $5,000)

=$15,000

His receipts are double his outlays & Jone finishes with three times his initial cash investment if successful. This is a good deal, yes/no?

But there is a catch.

CASH FLOW VS PROFIT

The Real Deal

Jone can buy the 2,000 unit of bula material on 30 days credit for $5.00 each.

When negotiating with the buyer, the buyer requires 60 days credit if the sale is to proceed.

Should Jone proceed?

What is Jone's cash flow after 30 days and 60 days?

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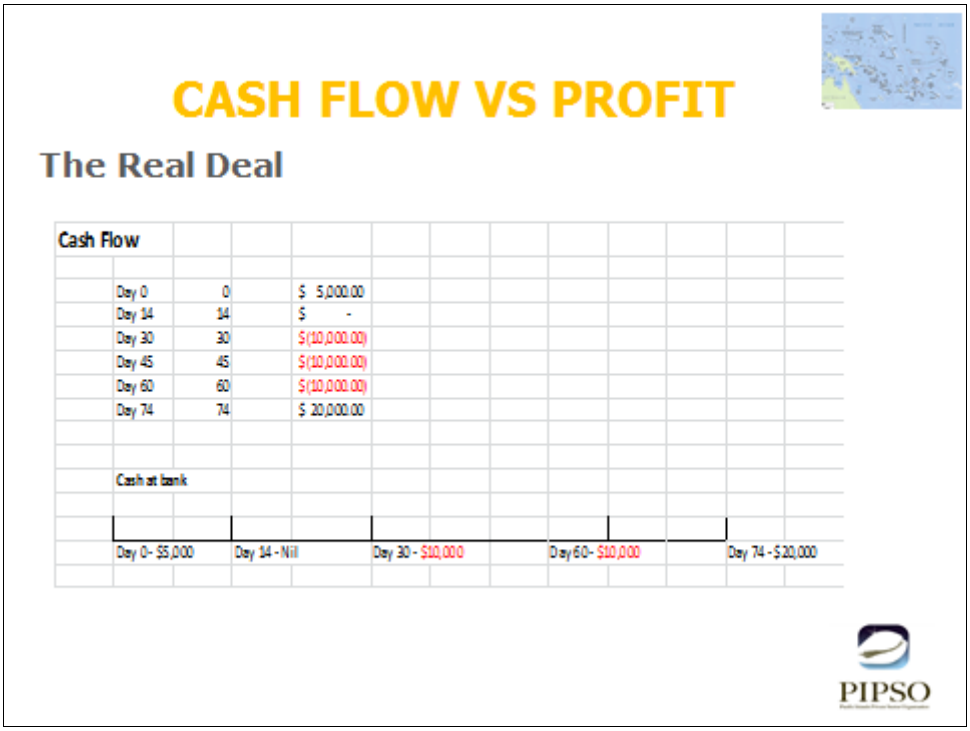
If Jone does nothing the deal no longer works due to lack of cash to complete the required tasks.

Questions for Jone to ask are:

1. How can he move forward?
2. What is the length of the period he is short of cash?
3. What are his risks?
4. Can he mitigate the risks?
5. What canhe do to get the deal done & achieve the profit he anticipates?
6. What options may he have to delay his payments
7. What choices does he have to raise the funds to meet his commitment?
8. Why might the buyer want terms, time to sell items before paying perhaps?
9. Considering 8 above, are Jone's risks increased?

Let's look at the cash flows graphically before considering the risks & options available to mitigate them & the decisions Jone may face.



The first noteworthy risk is the period Jone lacks funds or liquidity, i.e. he is out of cash. The transaction actually takes 74 days to complete. Jone is short of cash by $10,000 from day 30 to day 74 (44 days), assuming payment in full is made as per contractual arrangement

The second risk Jone faces is the credit risk of receipt of funds on time from the buyer.

Assuming a contract will be signed, are there other contractual risks that Jone may have to deal with?

Other risks may arise depending on the way Jone raises the funds required to fill the cash shortage period.

This example is not intended to suggest that the problems highlighted are insurmountable. To the contrary there are several options. Looking at the problems before they occur may allow a solution to be sought & found that minimises business risks.

Recognise that he will not overcome the problem if he acts prematurely& cancels the deal.

What are the options?

1. Borrow $10,000 – this option resolves the cash flow problem but creates an additional obligation &increases Jone's risk of loss from $5,000 to $15,000 plus interest
    a. Friends & family may be more patient if buyer is slow paying or fails to pay
    b. Microfinance or bank will charge interest & be less sympathetic in the event of a buyer default or delay
2. Request a non-refundable deposit – this option moves the risk back, in part, to the buyer & offers Jone a reduction in risk
    a. $10,000 solves his liquidity problem& reduces his risk of loss to his $5,000 risk capital
    b. $15,000 guarantees no loss& allows Jone to use the buyer's money to fund the entire venture

Now look at the problem from the buyer's perspective, outside Jone's box.

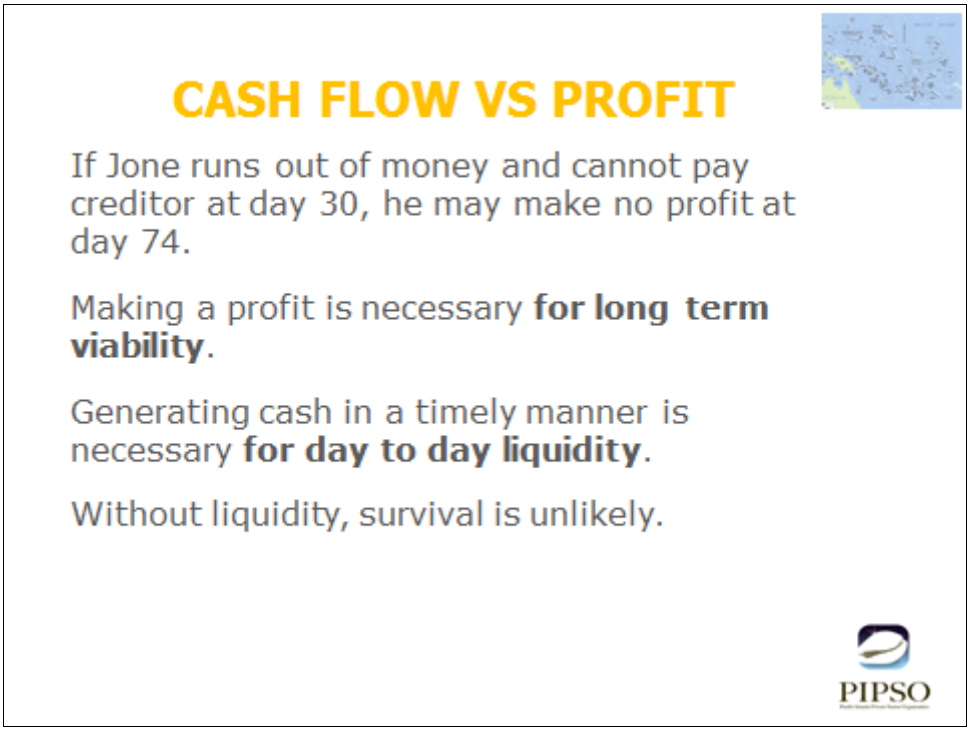
Question: Why does buyer want 60-days credit?

Answer: To sell (get the cash for) the bula shirts before they pay Jone.

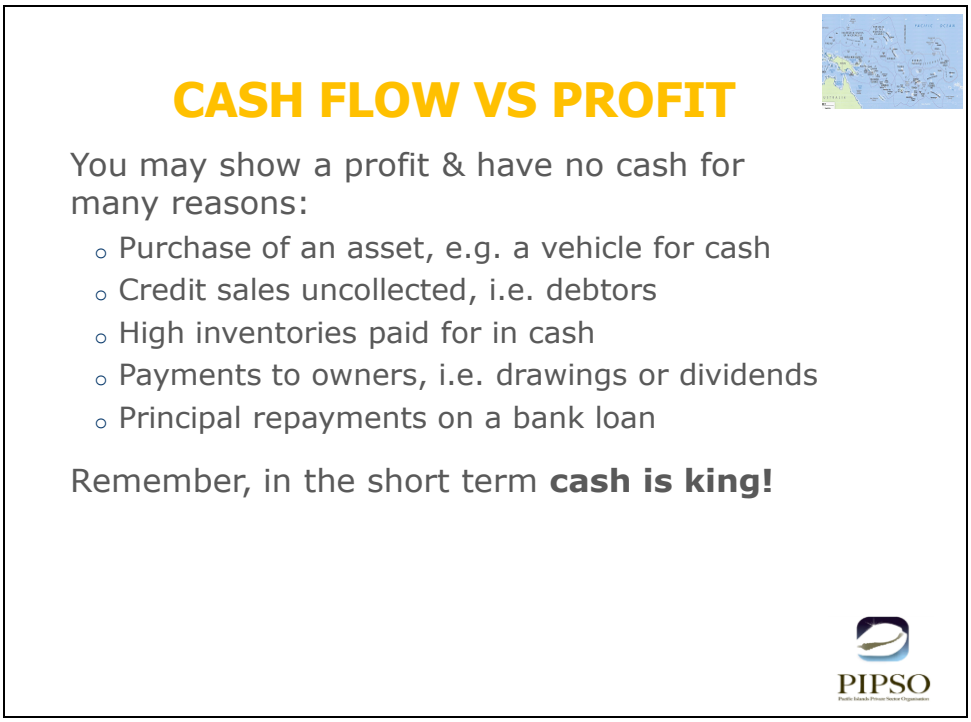
What if they don't sell all the shirts? Consider the consequences. Is there a returns clause in the contractual arrangements? This shifts risk back to Jone.

In this event, option 2 choices above offers a risk sharing arrangement that is clearly superior to Jone. If this was your opportunity & the buyer says no to an up-front payment, but you can borrow the funds, what would you do?

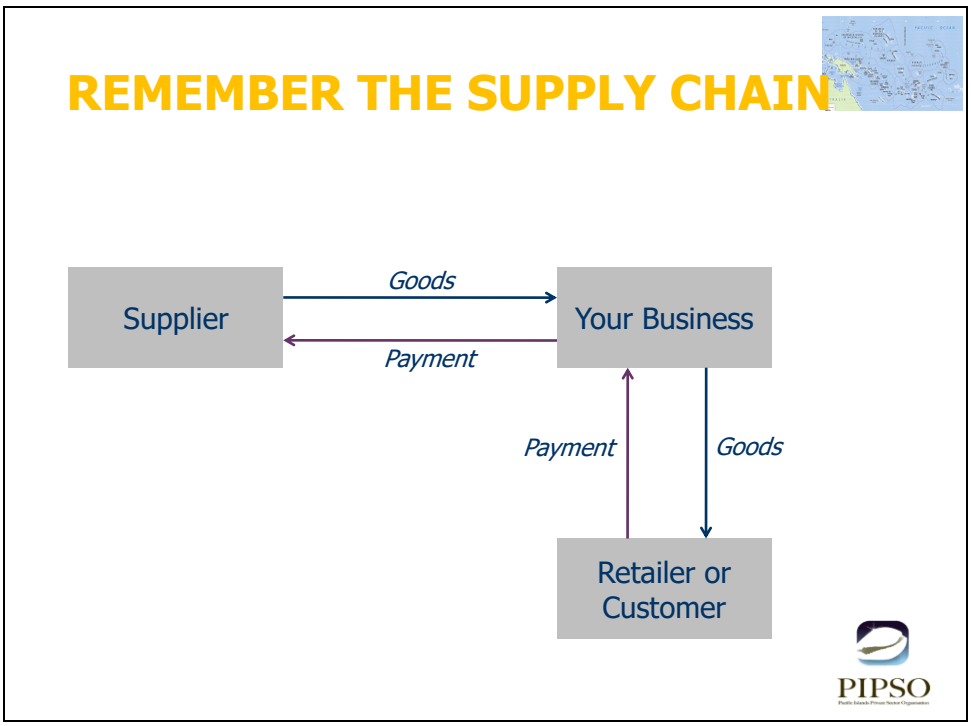
Based on this example it should be clear that profit is a longer-term concept that is only achieved by the careful management of contractual arrangements&cash flow along the way. You should clearly understand the consequences of running out of cash due to delays in receipt, returns or default.



There are a range of reasons why cash &profit have significant timing differences. The following lists &highlights several of the ways that this may occur.



REMEMBER THE SUPPLY CHAIN



In a start-up manufacturing situation,this cycle is accentuated, as assets for use in the business, goods/services for manufacture, manufacturing or processing costs & storage/retailing costs must be paid for before the sales & payments.

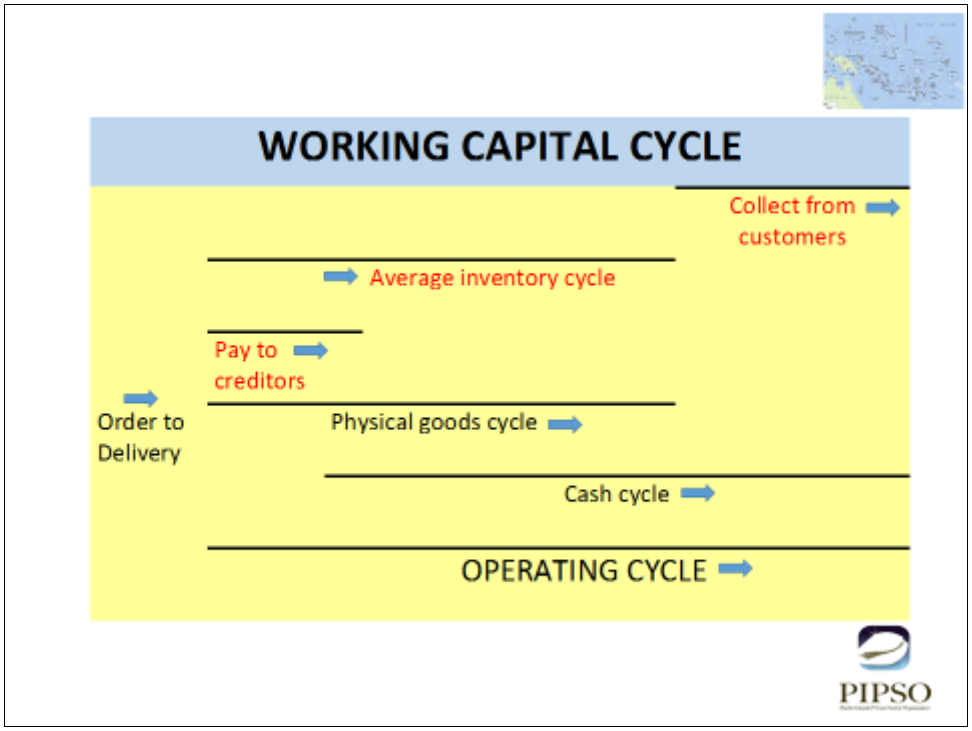
For a farmer, the assets, seed, water, cultivation, harvest storage & transport all come before the sales & payments.

For a retailer, the purchase or lease of premises & facilities, purchase of goods for sale, storage & possibly delivery all precede sale & payment.

Even for many service provider, payment usually comes after the service is provided.

In most businesses creditors are due for payment before revenues are received, **even in a cash only business**.

The cash impact of the cycle is also affected by the difference between the cost of purchases &proceeds of sales – the wider the gap the smaller the cash flow problem, i.e. a higher profit margin will usually improve cash flow.



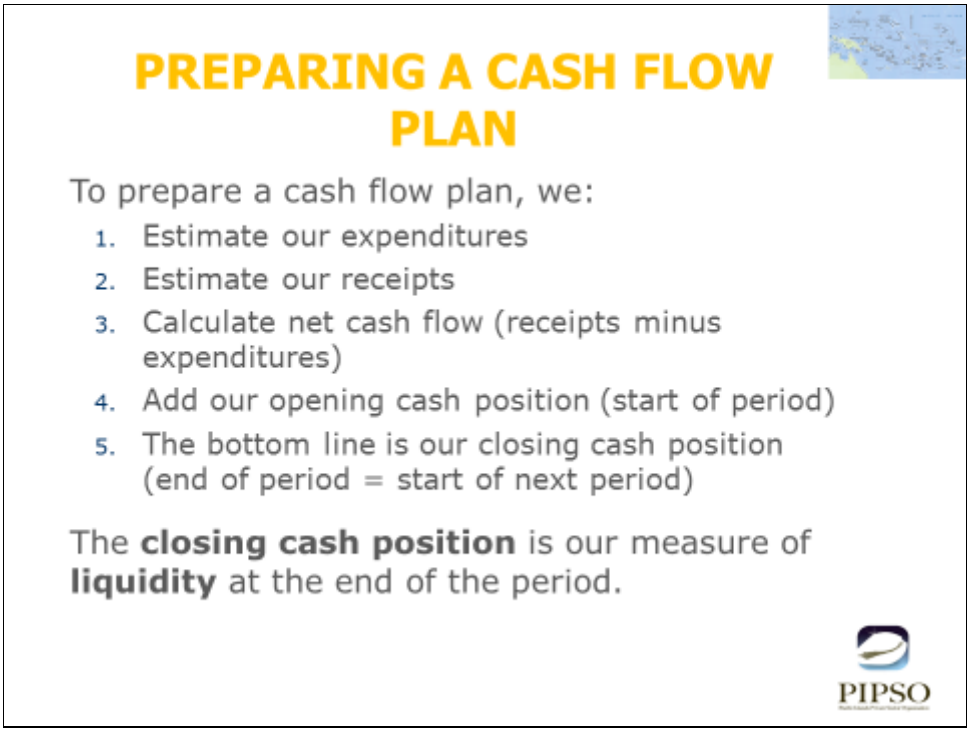
The above diagram illustrates the complete Working Capital Cycle. We will look at the components individually in the next Module.

IMPORTANT: In a normal cycle, a business must make payments to suppliers before receiving payments from customers.

There are exceptions, e.g. cash only retail businesses that have access to credit from suppliers, tourism operators where payment is made in advance. The timing gap between the payment & the receipt must be funded from the proprietor's own resources.

This topic leads us naturally to a discussion on cash management & cash forecasting & budgeting.

THE CASH FLOW PLAN



For a micro or small business,where the business is reporting on a cash basis, a good cash flow plan or cash budget is probably sufficient for planning purposes. It can be combined with a forecast balance sheet to complete the required financial statements. Some other records on debtors, creditors & inventory may be needed, but this is all.

The format for a cash flow plan is described in the slide.

What are typical business expenditures? Note that there is a distinction between:

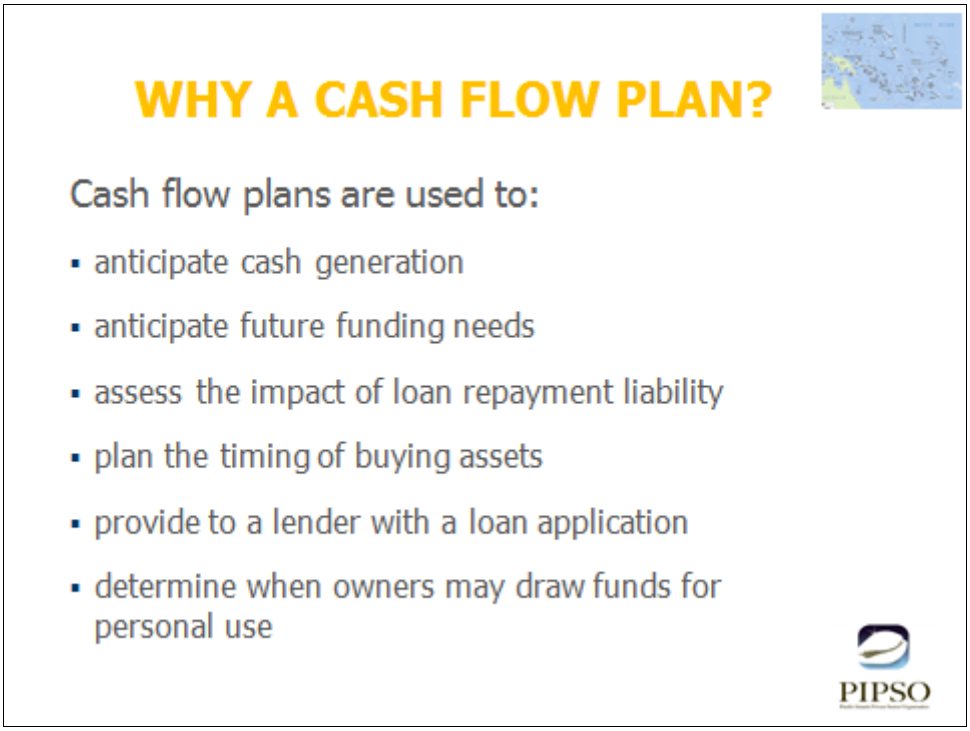
- Expenditureson assets &payments to meet liabilities & owner's drawings
- Normal operating expenses.

What are typical receipts? Note the distinction between:

- Sale of assets, borrowings & injections of owner's equity
- Normal business revenues.

The preparer of a cash flow forecast should be able to read the story it tells, looking for periods of positive & negative cash flow to amend outcomes where there is the flexibility to do so in the planning stage. For other times where cash flows cannot be adjusted, there may be a need to seek finance. This is best known now before the issue becomes critical. Yes?

A cash plan is not a static document. It represents a flow of business activities the outcomes of which are financially recorded as cash flows. The flow is not normally beyond the ability of a proprietor with vision to change or manage.

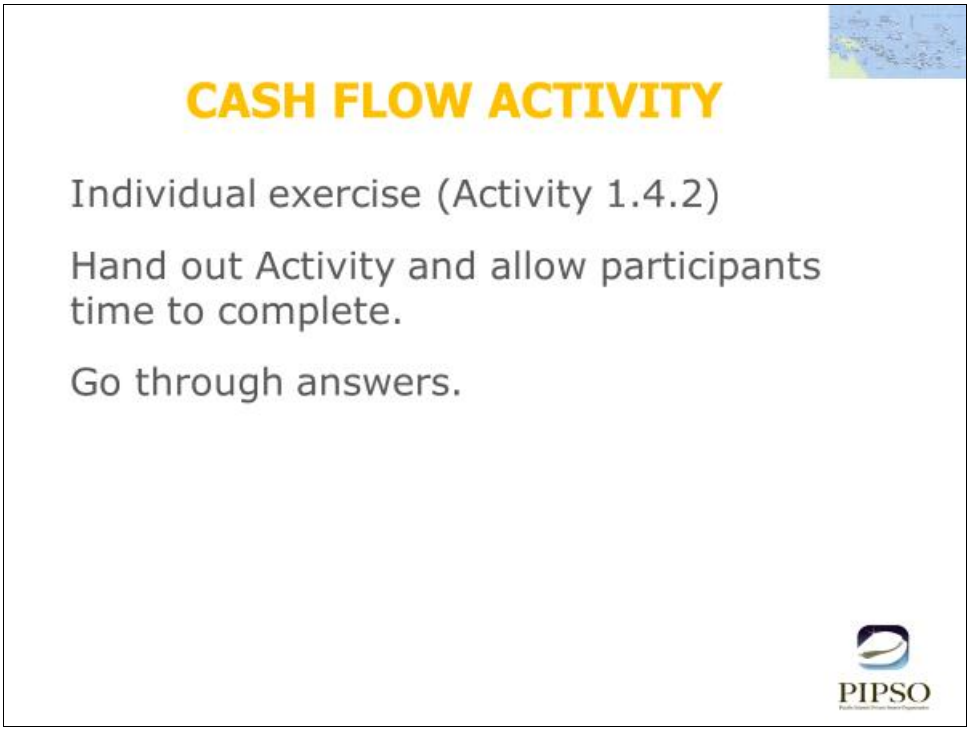


A cash flow plan is prepared to avoid surprises.

Cash planning informs a proprietor when the business has funds for reinvestment or drawing out for personal use.

A cash plan is a minimum requirement of a lender if a business is seeking to borrow funds. It can also be used to assess the impact of loans in terms of interest payments & repayments ofprinciple.

Without at least a cash plan, a business is flying blind. Cash flow forecasting will be looked at more closely in Module 1.6, including a practical example.



NOTE FOR FACILITATOR

This exercise is to be used to emphasise that:

1. Preparing the plan is not the objective, but the means to achieving the objective.
2. There are messages or questions to be asked as a result of preparing the plan:
    a. Is the plan consistent with the business strategy?
    b. Are there any periods of cash deficit?
    c. Can the cash flows be managed differently to avoid shortfalls?
    d. If external funding is required, a lender will want to see the plan.
3. The plan provides a benchmark against which future performance may be measured.

Activity 1.4.2

Cash Flow Activity

Quick Quiz

1. Liquidity refers to:

A net cash flow for a period
B cash position at any time
C profitability for a period
D short-term obligations at any time

2. Which of the following is *not* a valid reason for preparing a cash flow plan?

A to assess loan repayment liability
B to set profit targets
C to anticipate future funding needs
D to determine when surplus funds are available

3. The opening cash position for a month in a cash flow plan at monthly intervals is equal to:

A estimated monthly receipts
B the net cash flow for this month
C the net cash flow for last month
D last month's closing cash balance

4. Your cash position at the start of the week is ($1,060). Receipts and payments expected over the week are $3,020 and $4,200 respectively. Your expected net cash flow for the week is therefore:

A ($120)
B $1,180
C $2,240
D none of the above

5. A partially completed cash flow plan is shown as follows:

	Month one	Month two	Month three
Total receipts	$3,020	$4,680	$3,716
Total payments	$2,840	$3,217	$5,960
Net cash Flow	……	……	……
Opening cash position	-$660	……	……
Closing Cash position	……	……	……

Using the data above, the expected cash flow position at the end of Month two is:

A $983
B $1,463
C $2,303
D none of the above

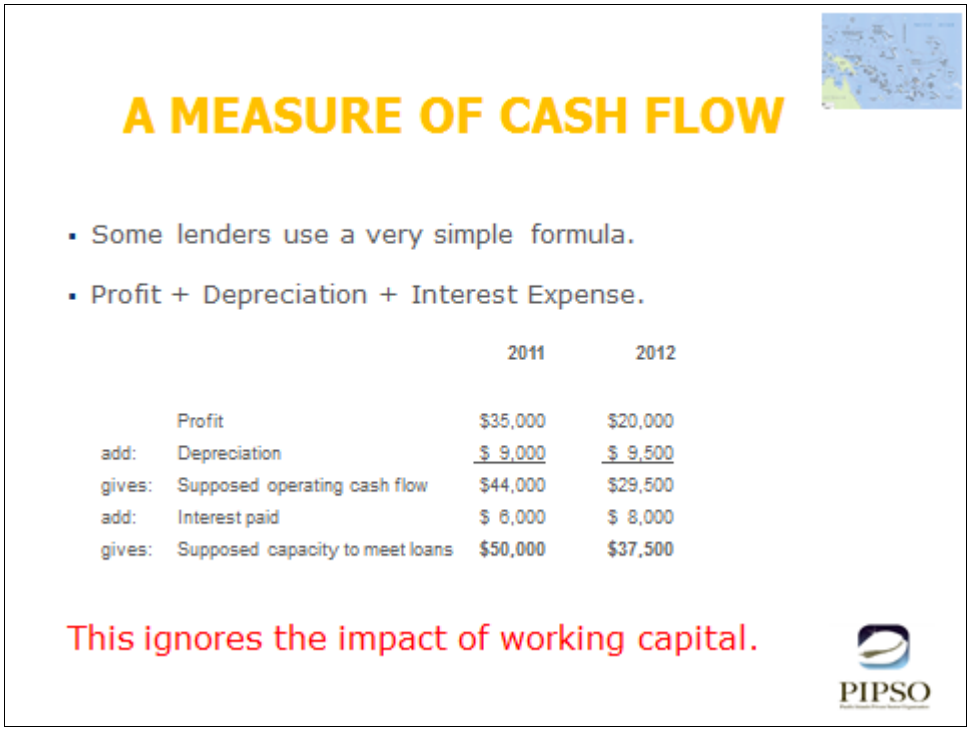
6. Based on the cash flow plan item 5, if the overdraft limit is $1,000 the business will have liquidity problems at the end of:

A month one
B month two
C month three
D no months

7. Which of the following actions will ***not*** improve the net cash flow of a business in the short term?

A selling idle assets
B increasing the bank overdraft
C deferring paying creditors
D reducing owner's drawings

IMPORTANT: The opening balance for each month in a cash flow is equal to the closing balance of the prior month.



Looking at a business from the outside, a bank makes the above calculation to assess the health of the business cash flow. This looks at a business's cash generation during a reporting period.

The bank wants to be sure that there is sufficient cash being generated to meet interest payments & principal repayments as & when they are due.

This is all well & good from the point of view of a bank or other lender, but as a proprietor, we want to consider the impact of the non-cash components of working capital, also. The above analysis is not sufficient for a business owner.

Firstly, we need to define the term "working capital".

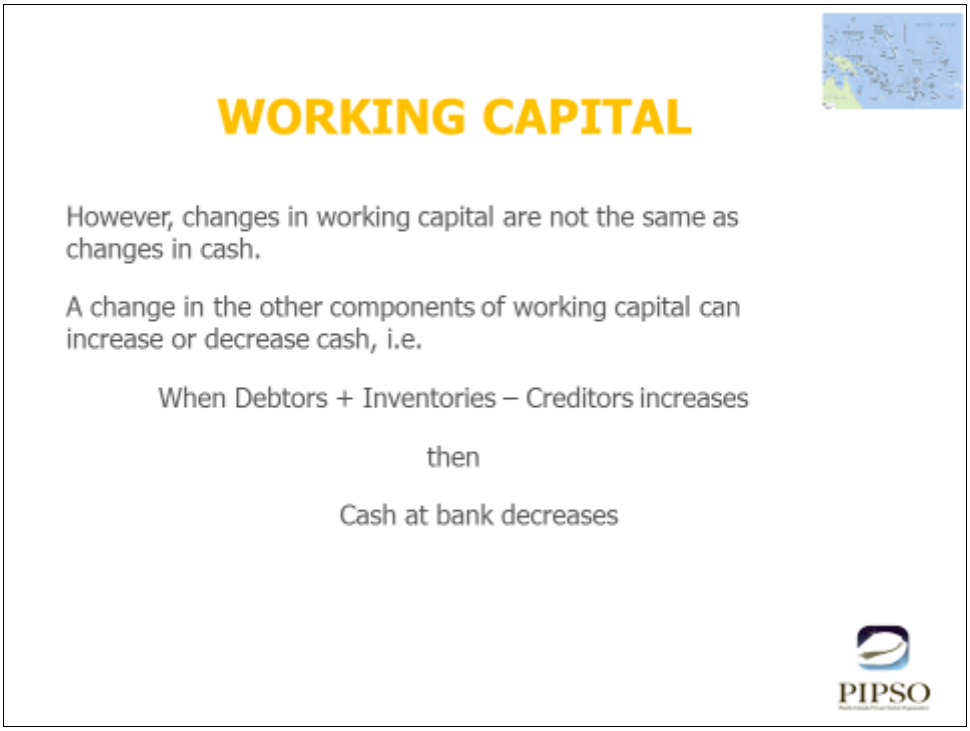
WORKING CAPITAL

Simply put, working capital equals current assets less current liabilities. A commonly used measure of working capital is:

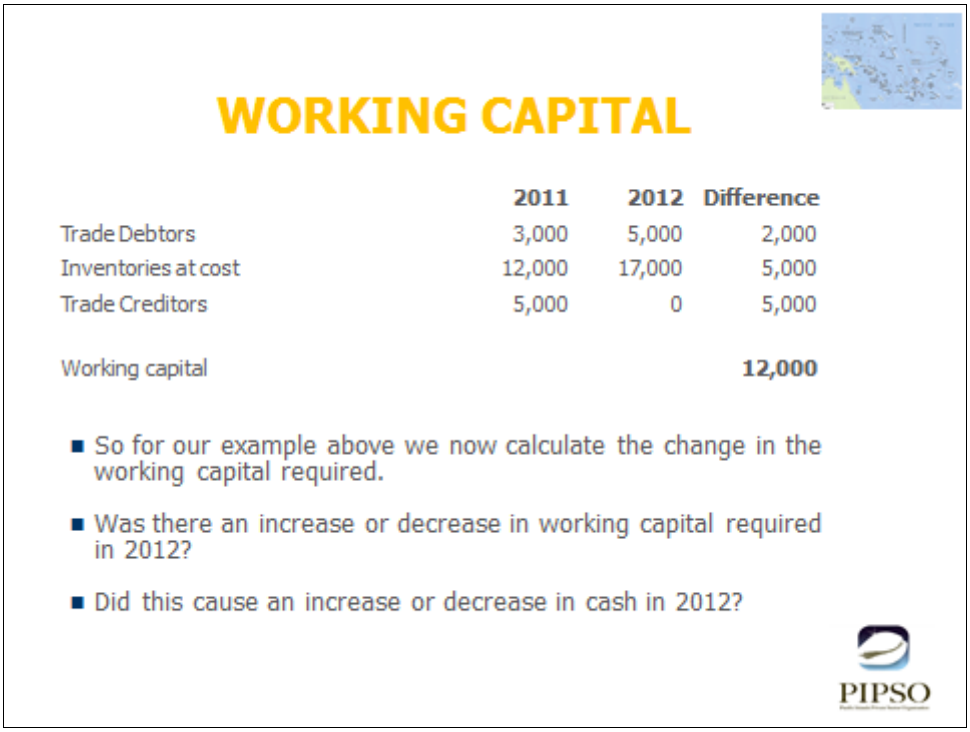
Working Capital Ratio = Current Assets / Current Liabilities

The higher this ratio the healthier the business. A minimum ratio of from 2 to 3 is preferred.

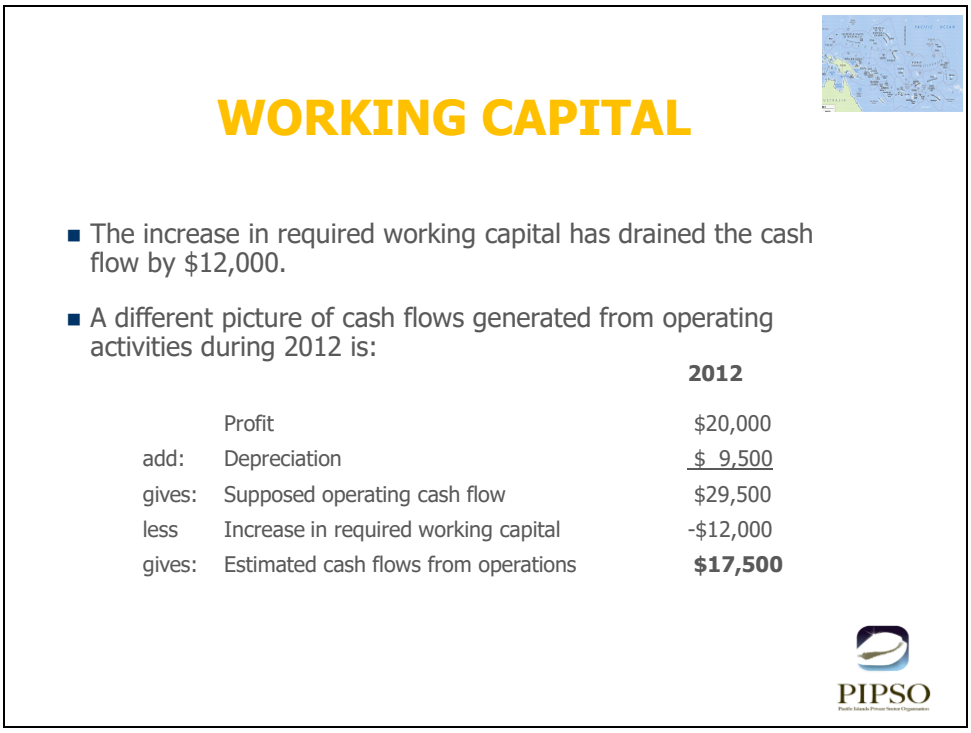
These are all essential to the day to day business & yet each of the non-cash components affects cash directly. An increase in debtors &/or inventory drains cash, while an increase in creditors retains cash. A decrease in creditors drains cash, while a reduction in debtors &/or inventories provides cash.



If we add changes in the non-cash elements of working capital, refer the following slide, we get a different picture.



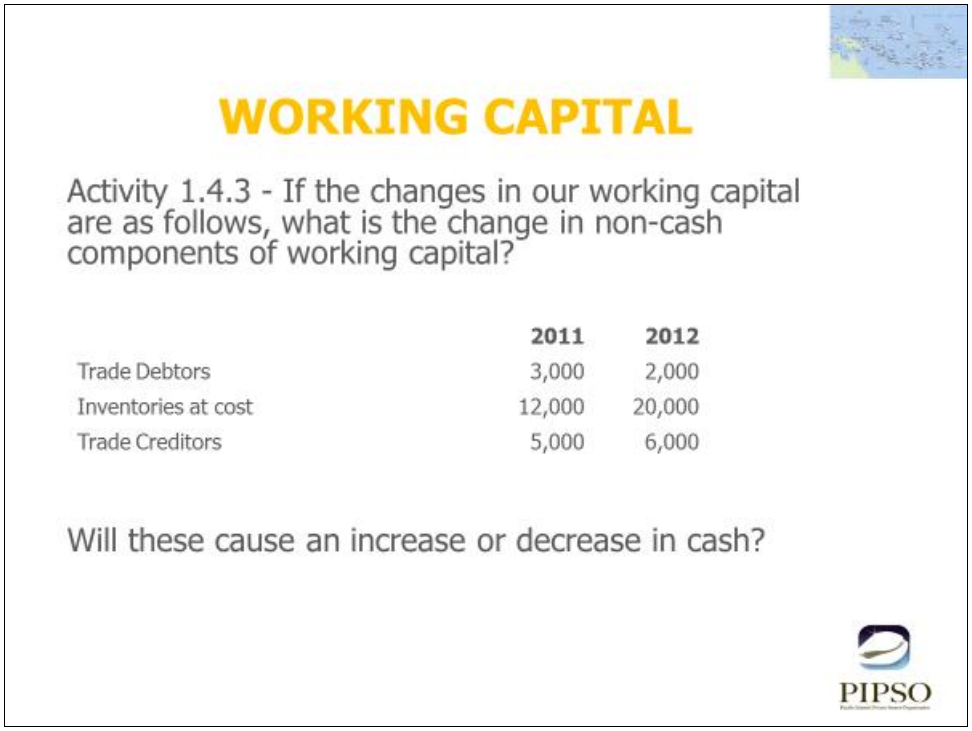
Each of the asset non-cash components of working capital have increased & the liability component decreased resulting in an increase in non-cash working capital of $12,000. In turn this has the opposite effect on cashat bankresulting in a decrease in cash over the year of $12,000.



This significantly changes the view of cash available from a management perspective.

To look at the cash impact during the year from a management point of view, not a banker's point of view, we start with the profit, deduct the depreciation as this is not a cash transaction & then take off the negative impact of the non-cash elements of working capital to view the amount of cash generation. Applying this method, we get an entirely different point of view of our cash generation during the year.

So now let's look at another scenario to 'demonstrate this approach again.

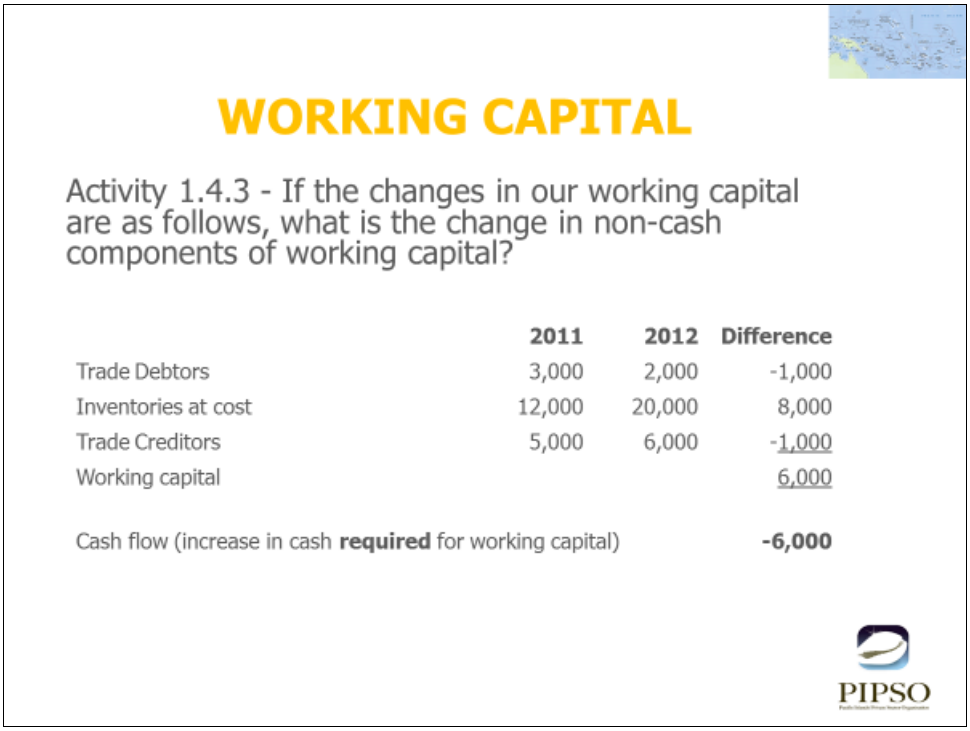


NOTE FOR FACILITATOR

1. Allow participants time to calculate the changes, the total impact
2. It may be necessary to remind participants that an increase in creditors subtracts the balance & a decrease in creditors adds to the balance of working capital required.

The increase in working capital required under this new scenario is $6,000.

In cash terms this represents a decrease in cash, see the calculations that follow.



Both views of cash flow are valid, but are intended for different audiences with different perspectives & concerns. It is wise for management to understand the difference. The view you use depends on what information is relevant to your interests in the business. Level 3, Module 3.6, A Bank's View of Finance, looks at working capital from a lender's view point.

A creditor's view might be different again. What might be your interest if you were a creditor?

If cash flow management is so important, we need to look at cash flow forecasting to:

- Understand our business better
- Avoid running out of cash
- Know in advance if we need extra funding
- Understand whether a change in cash flow is temporary or permanent
- Look for seasonal patterns in the cash flow in our business
- Determine the impact of growth and other cyclical factors, e.g. changes in demand & more or less competition, on our cash generation

This is the end of this Module.

ANSWERS TO ACTIVITIES

Activity 1.4.1

Answer is provided in the Module.

Activity 1.4.2

Cash Flow Activity

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5. A partially completed cash flow plan is shown as follows:

	Month one	Month two	Month three
Total receipts	$3,020	$4,680	$3,716
Total payments	$2,840	$3,217	$5,960
Net cash Flow	**$180**	**$1,463**	**-$2,244**
Opening cash position	-$660	**-$480**	**$983**
Closing Cash position	**-$480**	**$983**	**-$1,261**

Using the data above, the expected cash flow position at the end of Month two is:

A ***$983***
B $1,463
C $2,303
D none of the above

8. Using the completed forecasts in the previous item, if the overdraft limit is $1,000 the business will have liquidity problems at the end of:

A month one
B month two
C ***month three***
D no months

9. Which of the following actions will ***not*** improve the net cash flow of a business in the short term?

A selling idle assets
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Activity 1.4.3

Answer is provided in the Module.