CSE4708: Software Project Management

Unit II : Project Evaluation & Estimation

Topic: Project Evaluation

Name: Manka Sharma

Delivered on: 14th September 2020

Economic Assessment

Economic Assessment

How?

- Cash flow forecasting
- Cost-benefit analysis
- Various cost-benefit evaluation techniques
- NPV and IRR

Some Important concepts

- A cash flow statement is an actual representation of transactions that has already taken place.
- A cash flow projection / forecasting is a look into the future to predict what future cash flow will be.
- Cash Flow Analysis is the evaluation of a company's cash inflows and outflows from operations, financing activities, and investing activities

Cash Flow Analysis

- A **cash flow analysis** is a method for checking up on the firm's financial health.
- It is the study of the movement of **cash** through the business, also called a cash budget, to determine patterns of how to take in and pay out money.

Definition:

Cash Flow Analysis is the evaluation of a company’s cash inflows and outflows from operations, financing activities, and investing activities.

In other words, this is an examination of how the company is generating its money, where it is coming from, and what it means about the value of the overall company.

Cash Flow Analysis

What Does Cash Flow Analysis Mean?

- Cash Flow Analysis is a technique used by investors and businesses to determine the value of overall companies as well as the individual branches of large companies by looking at how much excess cash they produce.

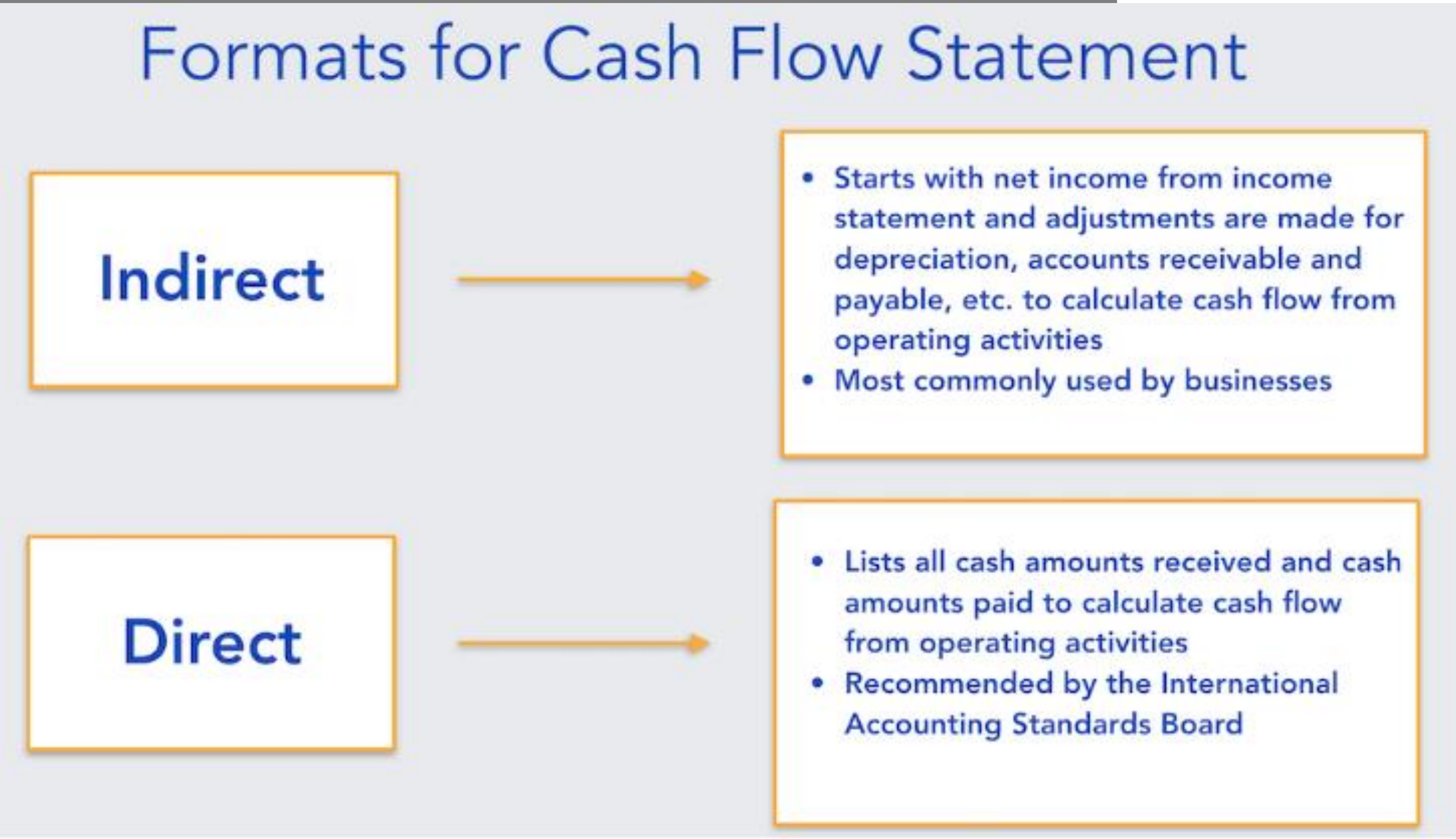
- They typically use the Statement of Cash Flows, a document that shows the actual cash that came in and out of the business during a certain period from investing activities, financing activities, and operational activities, as well as a few other reports.

Cash Flow Analysis

In the Nutshell:

- Cash flow analysis is a financial statement that records how money flows into and out of the business during a specific predetermined period of time. It can help you better understand where the money is going and how much cash is available at any given time. Ideally, this should be done at least once a month to ensure your company has a healthy cash budget.
- For a small business owner, performing a cash flow analysis regularly is essential for success.
- After all, running short of cash is one of the most common causes of small business failure.
- The good news: Regular analysis of your cash flow can help you avoid this pitfall and manage your business more effectively.

Cash Flow Statement



Cash Flow Statement

Here's what each of these parts should contain:

- **Operating activities:** This category covers your day-to-day business income and expenses, such as income from sales and paid receivables. Outflows can include payroll, payments to suppliers, insurance, and business taxes.
- **Investing activities:** Investment outflow covers bigger-ticket items like the purchase of equipment or real estate. These are sources and uses of cash from long-term investments of assets in your company, rather than daily purchases like supplies or goods for resale. For example, if you rent out or sell equipment or real estate assets, those proceeds count as investment inflow in your cash flow analysis.
- **Financing activities:** In this category, you'll track incoming capital from equity fundraising or business loans as inflow. Any payments you make on a loan during the reporting period or dividends paid to investors will count as outflows in this category.

Cash Flow Statement

FUNDERA CASH FLOW PROJECTION TEMPLATE

Instructions: Fill in the cells that have orange text with your business data and the template will compute cash flow

<Insert Company Name>

Starting date	9/3/19
Cash balance alert minimum	2,500

	Start	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	#####	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	#####	Jun-21	Jul-21	Aug-21	Total
Cash on hand (beginning of month)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
CASH RECEIPTS																										
Cash sales		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collections on accounts receivable		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CASH RECEIPTS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total cash available	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
CASH PAID OUT																										
Wages (less emp. credits)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Employee benefit programs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract labor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance (other than health)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rent or lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials and supplies (in COGS)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supplies (not in COGS)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Repairs and maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest expense		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loan principal payment		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital purchases		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Advertising		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taxes and licenses		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<Other>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CASH PAID OUT		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash on hand (end of month)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	

https://www.fundera.com/blog/cash-flow-statement

Cash Flow Statement

Sample 1. Cash flow budget (by quarter of the year)

Cash inflow	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Beginning cash balance	$5,000			
Sale of crop products		$50,000		
Sale of livestock products	25,000			
Government payments				$10,000
Total inflow	$30,000	$50,000		$10,000
Cash expenditures				
Seed	$10,000			
Fertilizer		$20,000		
Feed	10,000			
Processing			$10,000	
Marketing				$5,000
Capital purchases		10,000		
Interest			5,000	
Debt payments			10,000	
Total expenditures	$20,000	$30,000	$25,000	$5,000
Quarterly net cash flow	**$10,000**	**$20,000**	**-$25,000**	**$5,000**
Cumulative net cash flow	**$10,000**	**$30,000**	**$5,000**	**$10,000**

Cash Flow Statement

Step-by-Step

1. Enter your net income and cash balance at the beginning of the tracking period.
2. For each category, mark inflows as positive and outflows as negative.
3. Double check that you've entered all your expenditures and incomes for the analysis period.
4. Add up each category and total the balances to get your final cash balance.
5. Subtract your starting balance from your ending balance to determine whether your cash flow for the period was positive or negative.

Cash Flow Forecasting

What?

- Estimation of the cash flow over time

Why?

- An excess of estimated benefits over the estimated costs is not sufficient
- Need detailed estimation of benefits and costs versus time