7: REVENUE & COST STRUCTURES

Sections of this topic are adapted from the Business Model Generation (Osterwalder & Pigneur, 2010). Full references are included in the reference section of this topic if you wish to look at the source material for additional detail. A limited number of copies of this book are also available to read at the Enterprise Zone.

This section includes:

1. Revenues
2. Pricing Mechanisms
3. Costs
4. Capital funding
5. Profit & Loss Statements
6. Balance Sheets
7. Risks
8. Summary

Learning Outcomes

By the end of this section you will be able to:

- Differentiate between different revenue streams
- Describe a range of different pricing mechanisms
- Identify revenue structures and pricing mechanisms used in a variety of businesses
- Develop a cost model for a business
- Recognise which costs are fixed and which costs are variable.
- Evaluate the different types of capital funding and how to derive a minimum capital funding amount
- Produce a simple CFF, P&L statement
- Describe the purpose and content of a balance sheet
- Explain the reasons businesses produce a sensitivity analysis
- Describe some of financial risks faced by startups

1. REVENUE STREAMS – THE DIFFERENT WAYS BUSINESSES MAKE MONEY

Revenue streams are essentially the different ways in which your business generates cash from its customers. Many businesses have more than one revenue stream for each customer segment and each revenue stream may have a different pricing mechanism.

At the top level, there are essentially two different types of revenue streams:

a) Money that comes from a **one-off payment** – such as the purchasing of a wireless router.

b) Money that comes from **regular ongoing payments** – such as the use of broadband internet.

Types of Revenue Streams:

a) **Asset sales** – this is a rather fancy term applied to any income generated from the sale of a product. There are goods that once purchased you are free to do with as you wish, so a car, a DVD, a book, a loaf of bread. These are all asset sales.

b) **Usage fees** – this is income generated through the purchase of a service, where the more of the service a customer receives, the more they pay. So for example, broadband services, utilities such as gas or electricity, or piano lessons.

c) **Subscription fees** – income generated by selling continuous access to a service as opposed to a usage-based fee is called a subscription fee. Examples include gym membership where the fee remains the same whether you go once a week or once a year, or online services such as Spotify.

d) **Lending/renting/leasing** – here, income is generated by granting customers exclusive right to temporary access to use an asset for a fixed period of time. This differs from usage fees or subscription fees as it is for *assets, not services*. Examples include DVD rentals, car rentals or leasing, or accommodation. Note here that accommodation is taken to mean a flat or house or similar. A hotel room would *not* be included as that would be a service, not exclusive right to an asset.

e) **Licensing** – this relates specifically to income generated through granting the customer permission to use intellectual property, so not an asset or service. A good example of this would be a band, who retain the copyright to their song and receive a royalty fee from a radio station that plays it.

f) **Brokerage fees** – this is income generated by providing a service that mediates between two or more parties. Examples include estate agents or companies such as PayPal.

g) **Advertising fees –** these are fees resulting from advertising or promoting someone else's product, service or brand. Traditionally this was the preserve of magazines, newspapers and television, but many software companies, apps and web services now rely heavily on advertising to offer customers free basic services then charge a premium subscription fee for those wanting the service without advertising.

Reflection:

How many different revenue streams can you envisage for a horse stables? Selling horses, livery services, riding lessons, camps, treks, stud fees...

Which types of revenue streams to you think **your** business is likely to use?

Revenue Models For Social Businesses- The government definition of a social enterprise is "a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profits for shareholders and owners" (BIS 2011). What is absolutely clear is that a social enterprise is a business that needs to generate income through trade regardless of how it employs its surpluses and in that respect it is no different from a commercial business in its need to define its revenue streams and pricing structure. It is only what you do with the surplus (profits) that makes a difference

2. PRICING MECHANISMS

Each revenue stream will potentially need a different pricing mechanism. Pricing mechanisms fall into two types: **'dynamic'** and **'fixed'**.

Fixed pricing as the name would imply is a predefined price which is calculated based on a fairly static set of variables. Fixed pricing can be based on a number of dependent variables:

a) A **list price** for a product or service *regardless of who you are, how much you purchase or the number or quality*. So for example, fish and chips: it doesn't matter who you are or how many portions you buy; the price will always be the same even when the actual number of chip in a portion, size of fish or quality varies.

b) A **product feature dependent price** is a fixed price which is *varied based on the number or quality of the features* of that product – *not* on the quantity of the product itself. An example of product feature dependent pricing is two identical television sets, but one model has an integrated DVD player.

c) A **Customer segment dependent pricing** is a fixed price which *varies based on the type of customer you are*. Think about a hairdresser who may well wish to charge retired clients slightly less than ordinary clients for the same haircutting service after identifying that his retired clients have less disposable income and are unwilling to pay as much for their haircuts.

d) A **Volume dependent pricing** is a fixed price that is *quantity dependent*, so for example £2 each or 3 for £5.

Dynamic pricing describes a mechanism where pricing is variable depending on a number of market conditions:

a) **Negotiated pricing** which is essentially *bargaining to negotiate a price*. The obvious example of this would be the purchase of a house, where the asking price is the minimum amount the vendor wishes to receive for their property and where the final price is agreed upon by the purchaser and vendor negotiating. This price is not only influenced by the number of potential purchasers interested in the property, but also by the 'position' of the purchaser. Unlike an auction (see below), the highest bidder does not always win the negotiation.

b) **Yield management** prices *depend on the inventory at the time of purchase*, so for example a hotel at the beginning of the season will set a price for its room, then discount empty rooms as the accommodation dates approach – laterooms.com's revenue stream is a brokerage fee model based on the yield management of hotel rooms.

c) **Real time market prices** are dynamic and can be very volatile as they are *based on supply and demand*. Stocks and shares are a good example of this type of pricing.

d) **Auctions** are where the price is *determined by competitive bidding*.

In developing your revenue model you will need to consider the following:

- How might your revenue streams or pricing mechanisms affect the value you deliver to your customers?
- How might your revenue streams or pricing mechanisms solve a customer problem?
- How might your revenue streams or pricing mechanisms differ for your different customer segments?
- How might your revenue streams or pricing mechanisms impact on satisfying customer needs

By now, you should be able to start answering some of the following questions:

- What value are your customers really willing to pay for? Using our gardening service as an example, your executive customers may be paying you to mow the lawn, but the value they are really paying for is the time they save not having to do it themselves.

- What do they currently pay? You will have established this during your secondary market research phase.
- How are they currently paying? How would they prefer to pay? This information may help you to offer a different, more accessible way to pay, or it may just give you an idea of how payment schedules will impact on your cash flow forecast.
- How much does each revenue stream contribute to overall revenues? What is interesting to note here is that your largest revenue stream may not necessarily be your most profitable.

3. COSTS

The Cost Structure building block in the business model canvas is used to describe all the costs your business will incur to operate its business model. Almost all the other building blocks incur costs to deliver, and this block is where they are counted. As you defines all the other blocks of your business model canvas you should be able to list the types of costs you will incur in this block. Of course, the tricky bit when starting a business is to actually assign a £ value to these costs, and for this you entrepreneurs undertake significant market research.

Entrepreneurs need their cost structure to be realistic and to have some idea of when these costs will be incurred in order to produce a cashflow forecast. Without a realistic understanding of the items to be included in a cost structure and an assigned value, a business plan will lack credibility. Often people wanting to see a business plan, banks, investors etc., will read the business summary and then move straight to the financial sections. As experienced reviewed of business plans they are conversant with the types of costs different business types need to consider and have a good perspective of the relevant values.

Obviously, any start-up business needs to keep its costs as low as possible, but this cannot be at the expense of the *value* they hope to deliver.

For example, low cost airlines such as RyanAir and EasyJet try to create the leanest possible cost structure as the value they are delivering to customers is about *low pricing*. But a company whose value proposition is about *luxury and personalisation* will need to focus not on what is cheapest but on what is necessary to deliver this sense of indulgence to their customers.

The costs you will incur fall broadly into **two categories**:

- **Fixed costs:** These are the costs that remain the same regardless of the volume of goods or services that are produced or sold. Looking at a café example, some of the fixed costs for this business will include rent, salaries, and equipment hire or purchase.
- **Variable costs:** These are the costs that vary depending on the volume of goods or services that are produced or sold. A café, for example, would include coffee beans, food, and other beverages in its variable costs.

The 'walk in your customer's' shoes' exercise in your lecture next week will help you to develop your cost model.

4. CAPITAL FUNDING

Every business needs some form of capital funding to start to meet its initial costs before it starts to receive its revenues. Even business that take the customer's money before providing the goods or services will need some initial funding for activities such as marketing and handling sales.
How much capital funding a business needs will be entirely dependent on its cost and revenue models. To determine the amount of capital funding needed the entrepreneur creates a Cash Flow Forecast (CFF). This is a document which tracks the anticipated money going in and out of a business to determine where capital is needed.

Let's consider a very simple example. This business has a total predicted annual income of £132,000 and total annual expenditure of £104,930 giving an overall annual profit of £27,020. Sound viable doesn't it? But actually, this business, if it doesn't get the right amount of capital funding could go bust in the first few months. You will often hear business advisors saying 'cash is king' - this doesn't mean cash transactions or more valuable than cheque transactions. What is means is that money in the business is more important than debtors that owe you money

Revenues: For most businesses income is rarely steady month on month, and there will be some seasonal fluctuation.

Costs: Whilst variable costs will fluctuate according to revenues, fixed costs remain the same and will have to be met regardless of revenue.

Timing: A fixed or variable cost may be consumed in an even and steady manner but may for practical reasons, for example economies of scale, need to be purchased in large blocks.

We use Cash Flow Forecasts to help predict the financial position of the business over time. Many successful start-up businesses fail not because they are not making money, but because the money is not coming in in time to pay bills and creditors. The cash flow forecast is a way of looking at the way money flows in and out of your business. It helps a business to understand how and when there will be negative cash flow and prepare for that in advance – you can't really have negative cash; it's impossible. The CFF will help you to determine the amount of capital funding you will need

E.g. 1. **Cost of goods sold:** Let's say your revenue is £1000/month and cost of goods sold is Coffee at a cost of £500/month. Revenue £3000 - Coffee £1500 = £1500 profit. This would seem like a viable concern. But if the minimum coffee order from your supplier was enough to last you 3 months then the CFF would look like this:

	January	February	March
Revenue	1000	1000	1000
Coffee	1500	0	0
Balance	**-500**	500	1500

In month 1 we have negative cash. **Negative cash is impossible**; cash must always come from somewhere, even if it is a loan or overdraft. This business would cease trading before it even started as it would not have enough money to pay the rent.

Let's assume this entrepreneur had capital funding of £500 to start the business, then the CFF would look like this:

	January	February	March
Capital funding	500	0	0
Revenue	1000	1000	1000
Coffee	1500	0	0
Balance	0	1000	2000*

*A CFF is not is statement of profit, but a picture of the way cash flows in and out of the business - profit remains at £1500

So obtaining capital funding of £500 looks to solve the problem then, doesn't it?

Not really. All revenues on the first day of the month, people pay for coffee when they buy it,not a month in advance. Let's assume for ease that the the amount of coffee bought is averaged out. Then the CFF for January would look like this:

January	Week 1	Week 2	Week 3	Week 4
Capital funding	500	0	0	0
Revenue	250	250	250	250
Coffee	1500	0	0	0
Balance	**-750**	**-500**	**-250**	0

The reality is that the coffee would need to be purchase in advance of the very first coffee sold. So the entrepreneur actually needs the full £1500 capital funding in advance of starting the business. So where does capital funding come from?

Loans: This is money temporarily loaned to the business with the intention it is repaid, usually with loan interest due. Loans can come from banks, family members or even credit card debt. Loans can be directly into the business or can be a personal liability for the entrepreneur who then invests the loan amount into the business. Loans into the business are very hard to get. New businesses do not have a credit score, so it's hard for the loan provider to to ascertain how likely it is that the loan will be repaid, making it high risk. A business is more likely to obtain loans where a) the loan is not for the full amount (banks rarely loan more than 50% of anticipated capital funding required) and b) the loan is for a tangible asset which could be sold to recoup some of the losses should the business default on the loan. Many entrepreneurs rely on personal loans to 'bootstrap' their business as these are assessed against the personal creditworthiness of the entrepreneur as opposed to the business. However this comes with risk - if the business doesn't work out the entrepreneur must still repay the loan or face bankruptcy.

The UK government issue startup loans, through intermediaries, and whilst these are personal loans, not business loans, the terms are set to encourage startups.

Bootstrapping The term itself originates from the phrase "pulling oneself up by one's bootstraps," The entrepreneur relies on personal savings and personal debt to begin funding their startup company. Bootstrapping can be beneficial, as the entrepreneur is able to maintain control over all decisions as they don't have to issue equity to investors; however this places the financial risk wholly on the entrepreneur. Furthermore, bootstrapping may not provide enough investment for the company to become successful at a reasonable rate.

Investment: Investors put money into your business in return for an equity share. There are a number of possible sources of investment, and innumerable variations as each type of investor will typically seek a negotiated agreement as to the actual terms.

- **Friends & Family** may be willing to invest in your business in return for a share of the profits. This has pros and cons. The terms they set will usually be more favourable than other types of investor, but due to their being a pre-existing personal relationship there is potential for this relationship to breakdown which impacts on your personal life as well as your business.
- **Venture Capitalists** (VCs) usually only invest in business with a high growth potential, and expect to not only have a share in the company but also a say in how the company is run. VCs typically expect to be able to exit the company after a period of 4 to 6 years after the initial investment, through a merger, acquisition or initial public offering (IPO). VC's do not generally operate as individuals, but instead are companies who manage a s fund and investments are usually upwards of £1M
- **Angel Investors** are usually individuals who are as often as not motivated by the excitement of the opportunity get involved as by the potential financial rewards. Investment amounts are typically smaller than those made by VCs, but they are also more likely to invest at an earlier stage

Grants: Grants are few and far between and usually the preserve of socially focused startups. Examples of grant funders for socially focused businesses include Key Fund, Awards for All and the Esmee Fairbairn Foundation. Often grant funding is combined with loan funding to make up the total equity amount

Crowdfunding: Crowdfunding is a way of raising finance by asking a large number of people each for a small amount of money. Traditionally, financing a business, project or venture involved asking a few people for large sums of money. Crowdfunding switches this idea around, using the internet to talk to thousands – if not millions – of potential funders. There are 4 main types of crowdfunding

- Rewards crowdfunding - backers give a small amount of money in exchange for a reward.
- Donation crowdfunding - donors donate a small amount of money in exchange for gratitude and the feeling of supporting a cause they believe in.
- Equity crowdfunding - investors invest large amounts of money in a company in exchange for a small piece of equity in the company.
- Debt crowdfunding - lenders make a loan with the expectation to make back their principal plus interest.

5. PROFIT AND LOSS STATEMENT

Your Profit and Loss Statement lets you clearly see how much money you make from the sale of goods after accounting for both fixes and variable costs. Your Profit and Loss Statement accounts only for the costs consumed in that sale and not for the costs you have actually incurred. A profit and loss statement is usually prepared at the end of each financial year, and forms part of a business' submission to HMRC for tax assessment and – for limited companies – to Companies House. In most business plans, however, you will see a projected profit and loss statement to show what the business hopes to achieve in its first one to three years of trading.

A typical Profit and Loss Projection for a café would look like this:

Sales Income	
Coffee sales	£67,432
Food sales	£32,912
Other beverage sales	<u>£12,968</u>
Total sales income	**£113,312**
Cost of goods sold	**<u>£22,662</u>**
Gross Profit	**£90,650**

Operating (Revenue) Expenses

Salaries (incl. Employers NI & Pension contribution)	37,526	
Rent		12,000
Business rates	1,264	
Light/heat/power		3,798
Advertising/marketing	7,101	
Insurance		356
Loan Interest		2,485
Depreciation		100
Telephone		292
Total operating expenses		**64,922**
Net profit before tax		**25,728**

Let's look at some of these lines in a bit more detail:

i. Revenue and capital: Revenue expenses are for anything that is consumed by the business and should be included in the profit and loss. Capital expenses are for anything that is an asset. i.e. it is not all consumed within the financial year and would have a residual value if the business wound up and it was later sold. Typical capital assets include plant and machinery, stock in hand, vehicles and premises, if owned.

ii. Cost of goods sold: This is the costs involved in the actual production of the goods you have sold. They type of business you have will dictate what goes here. For example, a service industry may have no cost of goods sold; our café would have the cost of purchasing materials, in this case coffee, food and beverages; a manufacturing company would have the cost of materials, but would also have a manufacturing staff cost here associated with the cost of turning those materials into saleable goods – but this would not include the salaries of sales staff of administrative staff, these would still go in the operating expenses section. The cost of goods sold should be the costs of the goods consumed, and not the cost of the goods purchased. So for example, If I bought £3000 worth of coffee, but I only used £2000 worth to make the coffees I sold in this financial year, the costs of goods sold would include 5 Reflection: Think again about the costs you included in your cost structure earlier: Is there anything, on reflection, you think you might have missed out? £2000 for the coffee used in the profit and loss and the remaining £1000 coffee would be accounted for as 'stock in hand' in the balance sheet.

iii. Operating (revenue) expenses: You need to think very carefully about what goes into this section! You need to account for everything that is consumed. In the same way we apportioned the stock consumed in cost of goods sold, you will need to apportion expenses in your operating expenses. So for example. If, six months into the year, you take out a 12-month insurance policy for a new vehicle purchased at a cost of £400, only the six months of that policy consumed in the year can be included in the profit and loss statement. The remaining six months will appear in the balance sheet as a 'prepayment'. There are two items in our operating expenses that need special explanation: Loans: you only account for loan interest in the profit and loss. The capital repayment element of any loan is accounted for in the balance sheet. If we think about why this is – the loan monies received were not classed as taxable income, therefore the repayment of the loan amount cannot be used to offset against profit or tax, but the loan interest – the cost of procuring the loan – is an operating expense and that is why it is accounted for here. Depreciation: This is a tricky one. In looking at the overall profitability of your business, the depreciation on a capital asset – such as a company van – needs to be accounted for and many companies choose to do this within the profit and loss. So for example, if I buy a van for £10,000 and after 12 months it is only worth £6,000, then £4,000 of the van has been used up in running the business. However, whilst this gives the company a clear picture of the profitability of their business, depreciation is not allowable for tax purposes and for the profit and loss statement sent to HMRC depreciation should be removed from the profit and loss and is accounted for as a 'written down allowance' in the balance sheet. HMRC have strict guidelines on how written down allowances are calculated). Companies with capital assets therefore have to produce two sets of accounts. One to be used internally, the other for HMRC.

6. BALANCE SHEET

The Balance Sheet gives a snapshot of a business' financial position at a given moment in time, usually at year end as an add-on to the profit and loss statement as it includes items not considered or included in the profit and loss statement as they have not been 'consumed'. A balance sheet rarely appears in a business plan. This is a typical Balance Sheet for a café like ours:

Assets:

Current assets:

Bank balance	21,379
Cash in hand	120
Stock in hand	7,284
Fixed assets:	
Kitchen equipment	3,270
Total assets	**32,053**

Liabilities and capital:

Current liabilities:	
Trade creditors 1,702	
Tax payable	2,370
Long term liabilities:	
Loan balance	16,780
Total liabilities	**20,852**

Owners (or Equity) Capital:

Retained (share) capital	1,201
Owner's drawings	10,000 (or share dividend paid)
Total Owner's Capital 11,201	
Total Liabilities and Owners (or Equity) Capital	**32,053**

What is important to remember is that your balance sheet should always balance.

Owner's or Equity Capital: A sole trader is the owner of the business and does not draw a salary as such. Instead when they take money from the business this is classed as drawings. They may do this weekly, monthly, or annually. Retained capital is whatever is left in the business after the owner's drawing are taken and it is called owner's capital as is belongs to the owner and can be taken at any time. A Ltd company will have shareholders. Usually profits are dispersed to shareholders annually as a dividend. A shareholder employed by the business will also draw a salary. To future proof against the unexpected, limited companies rarely pay out all of the profits as a dividend and instead retain some for growth or as a cushion. This is referred to as Equity Capital. So if we think back to the Profit and Loss, the business looks very profitable at £25,782 – it's got cash and money in the bank adding up to £21,499. But when everything is accounted for, after the owner took a small profit from the business of only £10,000, if the business closed on the day it produced the accounts – even assuming it could get full value for selling its assets, which is unlikely – the business is actually only worth £1,201.

7. FINANCIAL RISK

Startups are more susceptible to financial risk than established businesses as they tend to have less cash reserves with which to meet either unexpected expenditure or shortfalls in expected income. For this reason many businesses will undertake a sensitivity analysis.

There are lots of rubrics out there for doing sensitivity analysis on your cash flow forecast. For a simple business model, however, creating duplicate pages in your spreadsheet and playing with them is adequate. What you are trying to establish here is 'what if' questions. What if sales weren't as high as expected in December? What if the cost of stock goes up by 10% in August? In your copy worksheet – not in your original – play with your figures, see how they change, and then use these to decide how much capital your business needs. What is the degree of risk, how likely is the risk, is an increased loan cost warranted to mitigate against these risks? Every business should have a financial 'cushion' if possible.

8. SUMMARY

You should now be able to:

- Differentiate between different revenue streams
- Describe a range of different pricing mechanisms
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