

# How to Tell Your Business' Financial Story

2 September 2021

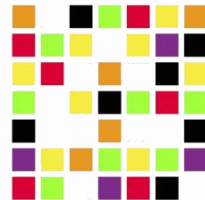


**Moolman Institute**

of Technology Commercialization



**AFRICA'S BUSINESS HEROES**



**SA INNOVATION  
SUMMIT.**

Humans love stories...



**Find and Contact the People You Need  
Through  
the People You Already Trust**

August 2004  
CONFIDENTIAL

# AirBed&Breakfast

Book rooms with locals, rather than hotels.

**A web platform** where users can rent out their space to host travelers to:

**SAVE  
MONEY**

when traveling

**MAKE  
MONEY**

when hosting

**SHARE  
CULTURE**

local connection to the city





# Dropbox

Moving the world's files

<http://www.getdropbox.com>

# Storage is a mess



Dropbox  
[www.getdropbox.com](http://www.getdropbox.com)

# Dropbox



- Keeps files:
  - In sync across computers
  - Backed up
  - Accessible from anywhere
  - Easy to share
- It just works



Dropbox

[www.getdropbox.com](http://www.getdropbox.com)

# Where will our journey take us today?



**1**

Why Financials & Financial Modelling are Important for Entrepreneurs & Startups



**2**

The Big 3 Financial Statements



**3**

The Basics of Valuation



**4**

How to Tell Your Business' Financial Story



**5**

Valuation for Fundraising: a Balancing Act





# 1 Why Financials & Financial Modelling are Important for Entrepreneurs & Startups

## 1 Need it to help you build a **financially viable** business model & plan



- › Understand levers of profitability
- › Understand impact of changes (scenarios)
- › Plan milestones & set targets

## 2 Need it for **fundraising**



- › Investors want to see the potential for high return – a compelling story & vision, supported by financials

## 3 Need it to **manage your business** and **inform** yourself and stakeholders



- › Progress against plans
- › Scorecard of business' performance & success
- › Help you manage cash flow
- › Optimise resource use
- › Manage runway
- › Refine model based on actuals



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## 2 The Big 3 Financial Statements



- |               |   |
|---------------|---|
| <b>What?</b>  | Lebombo bone (baboon fibula)            |
| <b>Where?</b> | Border of Swaziland & South Africa      |
| <b>When?</b>  | 41 000 – 42 000 BCE “Upper paleolithic” |

# 2 The Big 3 Financial Statements

Statement	Definition	Purpose	Time
 <b>Income Statement</b>	<b>Financial performance</b> of an entity over a specific period. Shows how the entity incurs revenues and expenses – both operational and non-operational.	Did the company make or lose money?	Over a <b>period of time</b>
 <b>Balance Sheet</b>	Shows the <b>financial position</b> of an entity at a specific point in time. A <b>snapshot</b> of the entity's financial health.  Assets = Equity + Liabilities	Answers the following questions: 1. What assets does the entity own? 2. How did it pay for them? 3. What does it owe (its liabilities)? 4. What is the amount left after satisfying the liabilities?	At a <b>specific point in time</b>
 <b>Cash Flow Statement</b>	<b>Summary of cash inflows and outflows</b> for an entity over a specific period.	How much cash was generated by the entity?  How did changes in the balance sheet and income affect the entity's cash?	Over a <b>period of time</b>



# The Income Statement

## Structure

	<b>Net Sales</b>
-	<b>Cost of Sales</b>
	<b>Gross Profit</b>
-	<b>Operating Expenses</b>
	<b>Operating Profit</b>
-	<b>Depreciation &amp; Amortization</b>
	<b>Earnings Before Interest &amp; Tax (EBIT)</b>
+	<b>Non-Operating Income (Expense)</b>
	<b>Earnings Before Tax (EBT)</b>
-	<b>Tax</b>
	<b>Net Profit</b>

## Description

Sales (net of taxes, returns, duties)
Costs directly attributable to products or services
Direct profit on business activity
All expenses relating to operations excl. direct costs
Profit based on all operating activities (also called EBITDA)
Decrease in value of assets: tangible (depreciation), intangible (amortization)
Measure of profitability that includes all expenses except interest and taxes
Gains and losses not related to the company's business activities
Measure of profitability including all company activity, before tax
Tax payable to tax authority
Final measure of company profitability





# The Balance Sheet

## Assets

=

## Equity

+

## Liabilities

### Current Assets

- Cash & cash equivalents
- Short-term investments
- Trade / Accounts receivable
- Prepaid tax
- Inventory
- Tax receivable (e.g. VAT)

### Non-Current Assets

#### Fixed

- Property, plant and equipment
- Furniture & fixtures
- Long-term investments

#### Intangible

- Intellectual Property (IP)
- Goodwill

- Retained earnings / income
- Shares / stock

### Current Liabilities

- Trade / Accounts Payable
- Tax payable (e.g. VAT)
- Short-term debt

### Long-Term / Non-Current Liabilities

- Long-term debt
- Contingent liabilities (e.g. lawsuits, warranties)



# The Cash Flow Statement

## Cash Pool



### Operating Activities



### Investing Activities



### Financing Activities

*Cash received from sales of goods and services*

–

*Cash paid to produce and deliver goods and services*

*Cash received from sales of investments and capital*

–

*Cash paid to purchase capital and for investment*

*Cash received from borrowings or issuing stock*

–

*Cash paid for dividends, debt or repurchasing stock*

**Net income**, adjusted by:  
Depreciation / amortization  
Changes in working capital  
Net receivables  
Net payables  
Deferred Taxes  
Other

Changes in capital  
Changes in investments  
Changes in loans to others  
Other

Dividends paid  
Issuance / repurchase of stock (shares)  
Net borrowings (debt)  
Other (e.g. foreign exchange effects)

Cash flows

How it is calculated

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### 3 The Basics of Valuation

 What is the **difference** between **value** and **price**?

## Valuation



## Pricing

Various techniques  
Different answers  
An opinion


A negotiation  
One outcome  
An offer / commitment

Without a valuation basis...

...You negotiate on **emotion**

With a valuation basis...

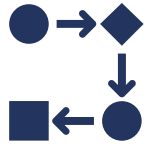
...You negotiate the **basis**



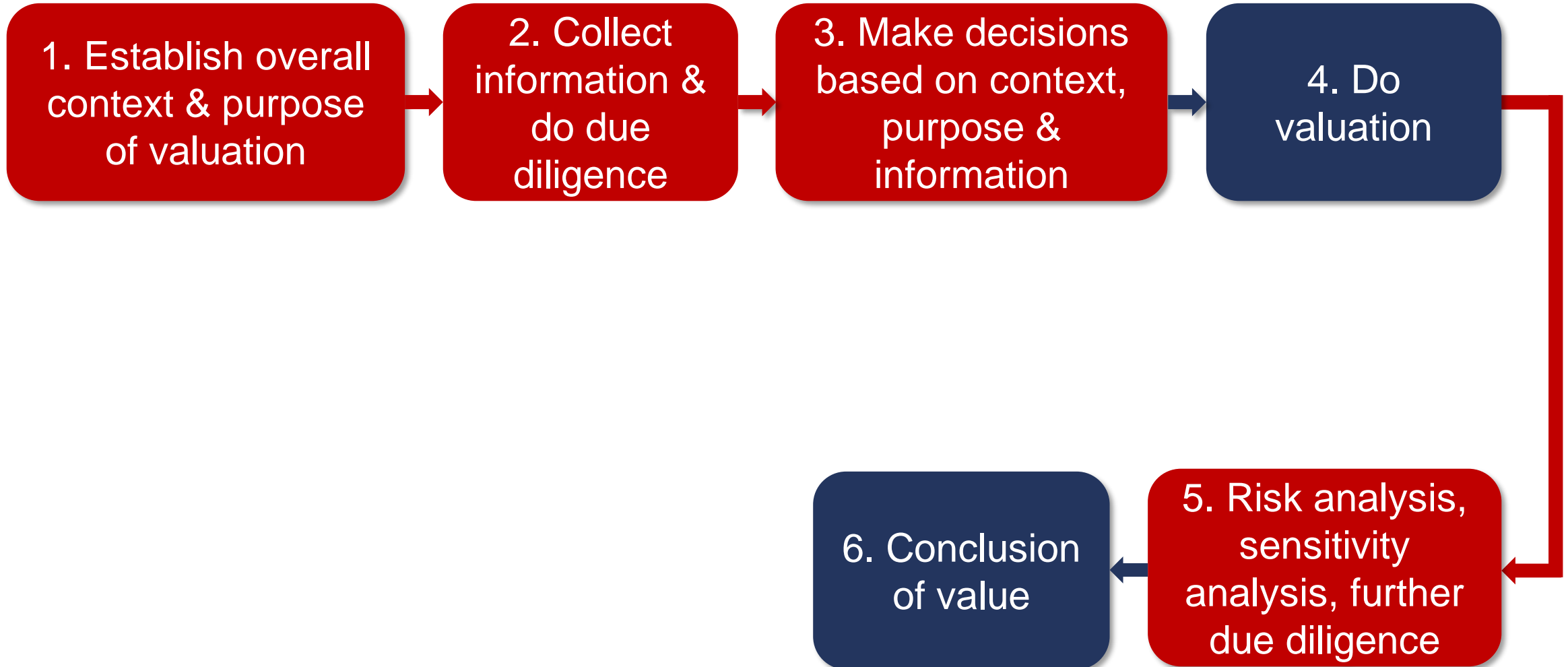
What creates (financial) value in a business?

**Positive Cash Flows!**





# Valuation Process





# Valuation Methodologies



## Cost

*Looking Back*

Replication /  
Replacement  
Cost



## Market

*Looking Around*

Market  
comparables

Industry  
Multiples

Venture  
Capital  
Method



## Income

*Looking Ahead*

Discounted  
Cash Flow  
(DCF)

First Chicago  
Method

Risk-  
adjusted  
DCF

Monte  
Carlo

Real  
Options



## Risk / Status

Berkus  
Method

Scorecard & Risk  
Factor Summation  
Methods

Discounted  
Cash Flow  
(DCF)

## 3 Basic Factors Determine Company Valuation:



**Cash Flow**



**Growth**



**Risk**

# Berkus Method

(Pre-revenue)

Hurdle: Gross revenue projected at end of 5 years > **\$20m**

Then If Exists:

Add to Company  
Value MAXIMUM of:

Sound Idea (*basic value*)

\$0.5 million

Prototype (*reducing technology risk*)

\$0.5 million

Quality Management Team (*reducing execution risk*)

\$0.5 million

Strategic Relationships (*reducing market risk*)

\$0.5 million

Product Rollout or Sales (*reducing production risk*)

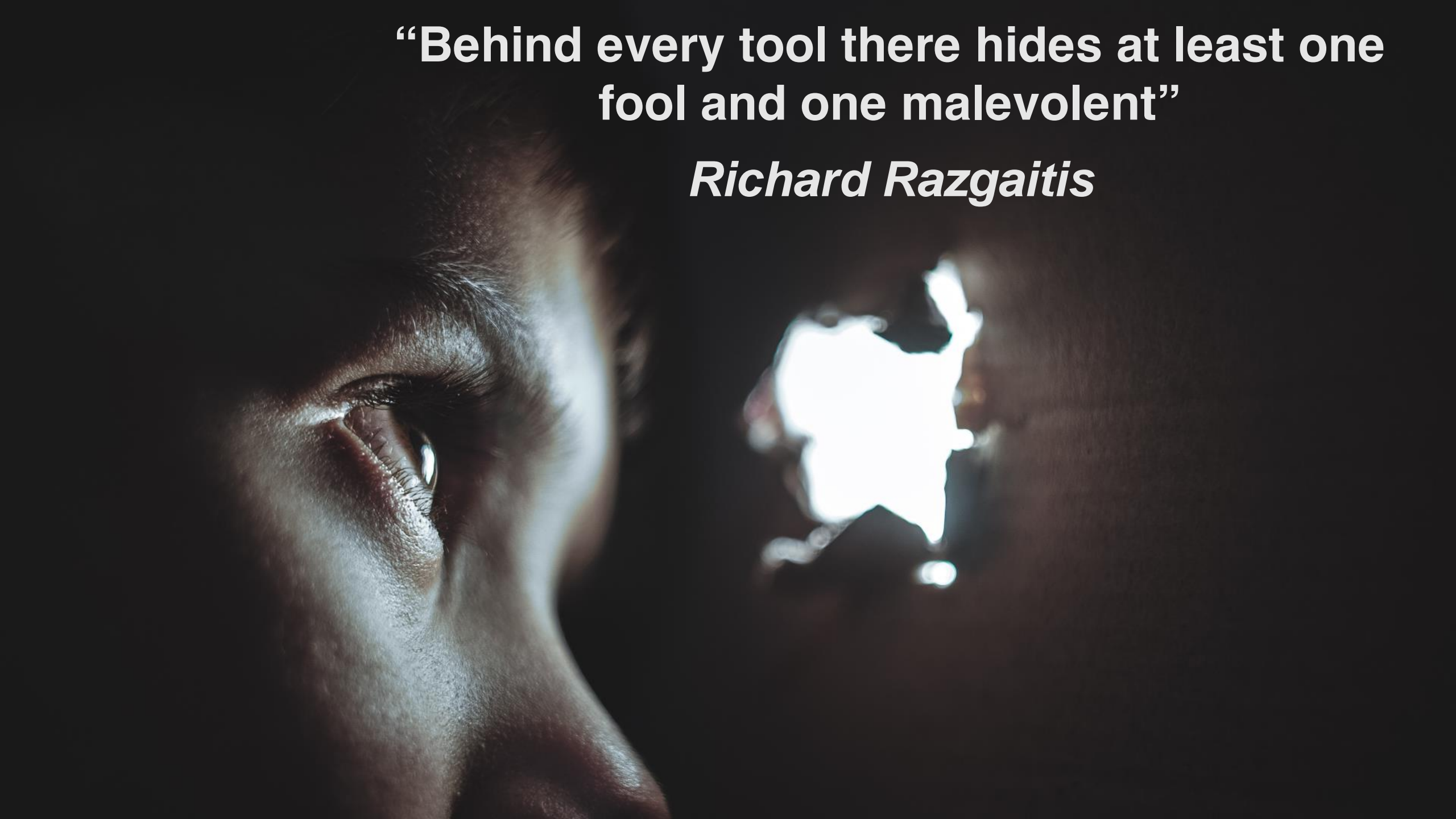
\$0.5 million

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**\$2.5 million**

**“Behind every tool there hides at least one  
fool and one malevolent”**

***Richard Razgaitis***





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# 4 How to Tell Your Business' Financial Story



How do your **compelling vision**  
and your **business model & plan**  
translate into a **financial story**?

# 4 How to Tell Your Business' Financial Story

## compelling vision business model & plan



## financial story

Business objectives & milestones



Financial targets & fundraising points

Sources of competitive advantage



Higher profit margins

Market need, product-market fit, territories, channels, competition



Sales volumes & sales prices

Business model



Financial model

# 4 How to Tell Your Business' Financial Story

~~Clear and  
compelling  
business story~~



~~Clear and  
compelling  
financial story~~

# 4 How to Tell Your Business' Financial Story



But **HOW?**

Try to distil everything  
you're doing into a  
**simple idea**  
that expresses the  
**emotional power**  
your product brings to its users.





Say hello to iPod.  
1,000 songs in your pocket.

# 4 How to Tell Your Business' Financial Story



## What are you all about?

One Simple Thing  
(OST)

“If you don’t create an OST for the market, the market will create an OST for you”

## 4 How to Tell Your Business' Financial Story



One Simple Thing  
(OST)

*For **[TARGET]** who are **[SEGMENT]**,  
**[BRAND]** provides the **[CATEGORY]** with  
**[DISTINCTION]** because of **[PROOF]***

Source: <https://www.forentrepreneurs.com/clarity-of-message/>

## 4 How to Tell Your Business' Financial Story

One Simple Thing  
(OST)

*For **[TARGET]** who are **[SEGMENT]**,  
**[BRAND]** provides the **[CATEGORY]** with  
**[DISTINCTION]** because of **[PROOF]***

**amazon**

*circa 2001*

For World Wide Web users who enjoy books,  
Amazon.com is the online bookseller that  
provides instant access to over 1.1 million  
books.

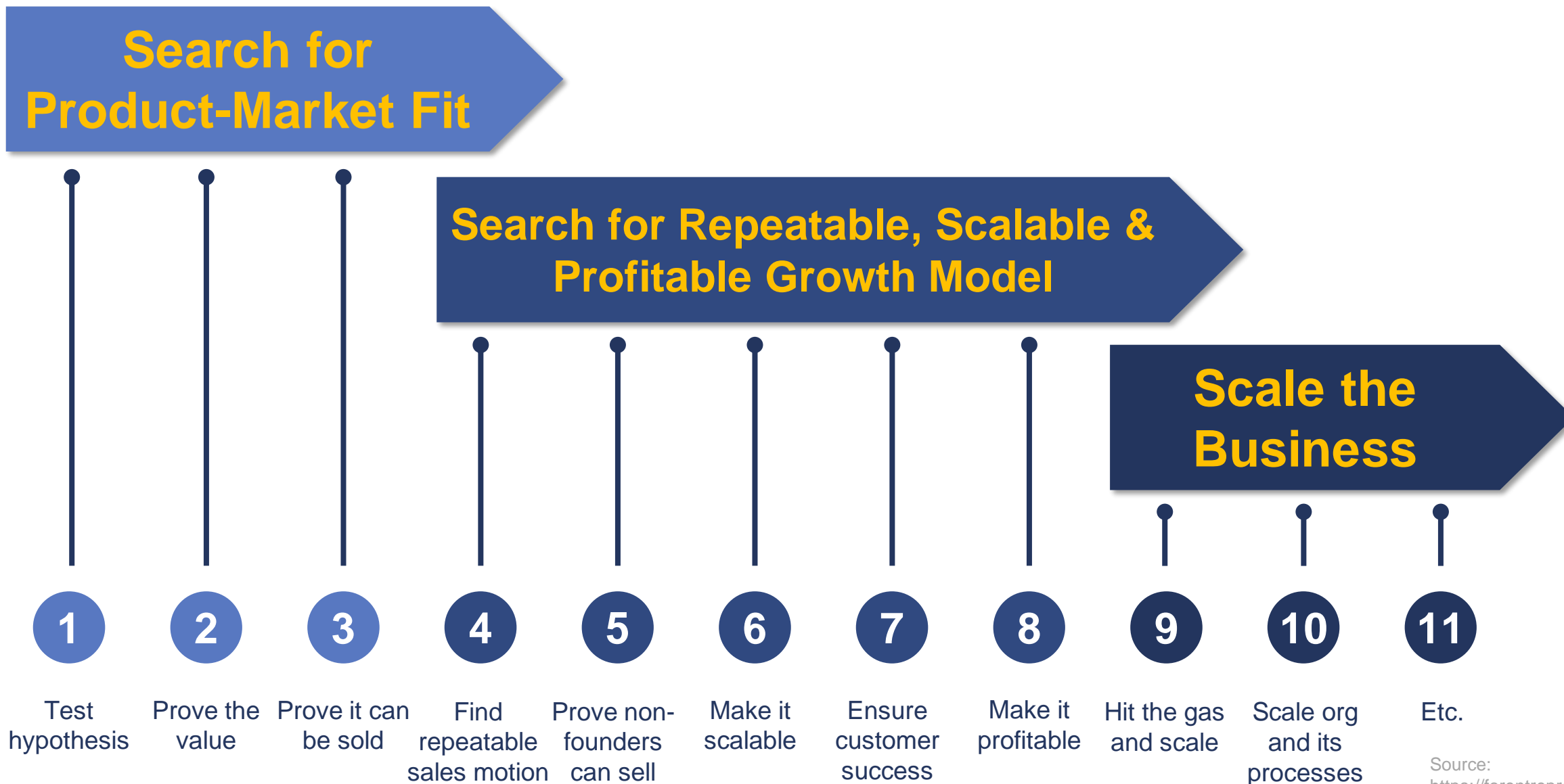
# 4 How to Tell Your Business' Financial Story



**Search for  
Product-Market Fit**

**Scale the  
Business**

# 4 How to Tell Your Business' Financial Story



# 4 How to Tell Your Business' Financial Story

**Search for  
Product-Market Fit**

**Search for Repeatable, Scalable &  
Profitable Growth Model**

**Scale the  
Business**

1

Test  
hypothesis

*Do we know  
what problem  
we are  
solving?*

2

Prove the  
value

*Does it  
actually  
work?*

3

Prove it can  
be sold

*Will  
someone  
pay?*

4

Find  
repeatable  
sales motion

*Will many  
people pay?*

5

Prove non-  
founders  
can sell

*Can non-  
founders  
sell this?*

6

Make it  
scalable

*Does this  
scale?*

7

Ensure  
customer  
success

*Can we scale  
without  
churn?*

8

Make it  
profitable

*Can we  
scale  
profitably?*

9

Hit the gas  
and scale

*Does this  
keep scaling  
when we hit  
the gas?*

10

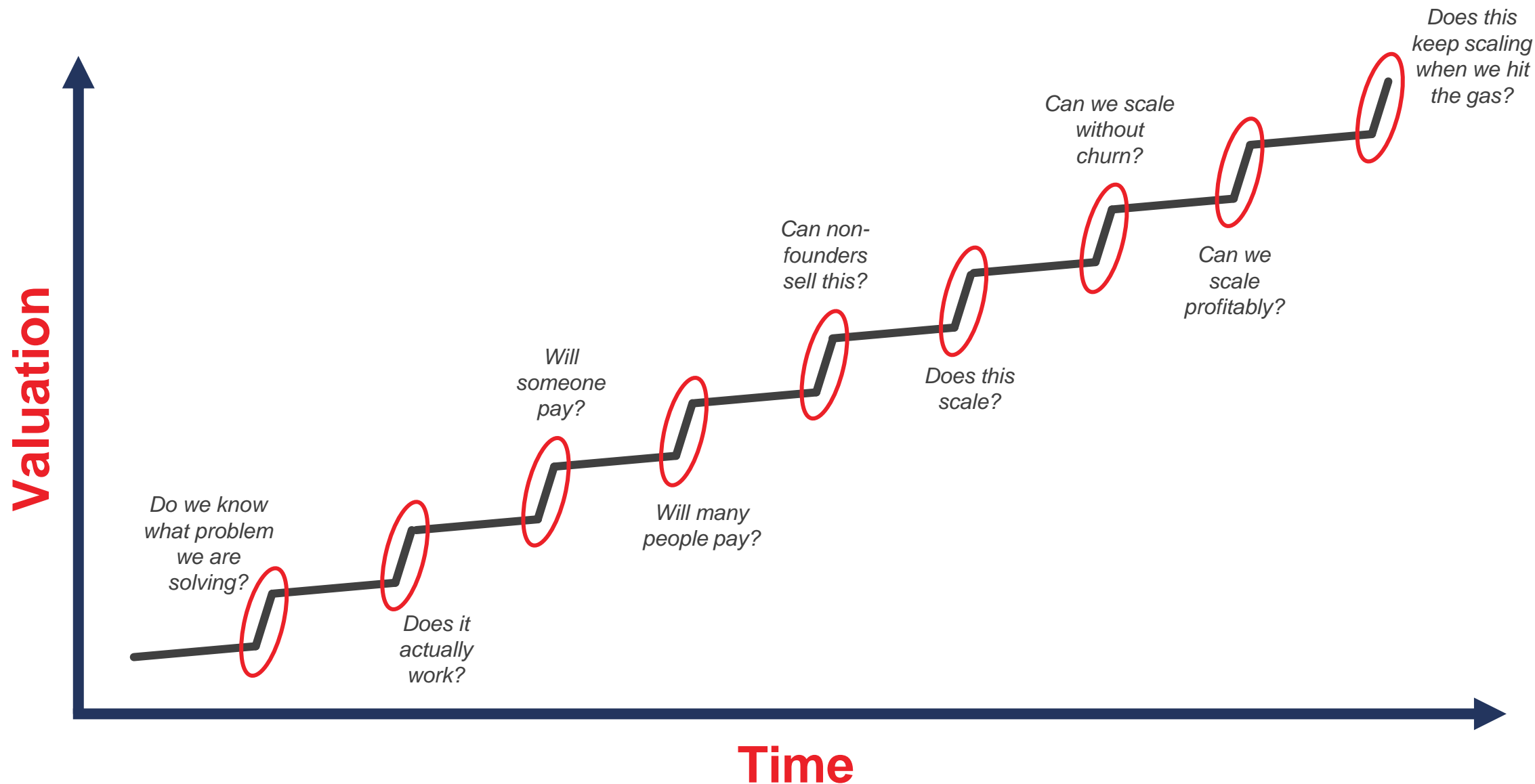
Scale org  
and its  
processes

11

Etc.



# 4 Key Startup Inflection Points



# Key Elements of Your Business' Financial Story

**1**

## **How you'll make money**

(business model, revenue & costs)

**2**

## **How much money you think you'll make & when**

(cash flow projections)

**3**

## **Money needed to get to next inflection point & how you're going to use it**

(budget)

**4**

## **How you'll finance the business**

(equity, debt financing)

**5**

## **What your key assumptions are**

**6**

## **How sensitive your projections are to changes**

(sensitivity analysis, scenarios)

## 4 How to Tell Your Business' Financial Story



# How **Credible** is your story?

for example...

Track record of  
founders

Current traction

Did you achieve  
previous  
promises?

Inflection points  
already  
achieved?

Market response  
to MVP?

Any off-take  
agreements?

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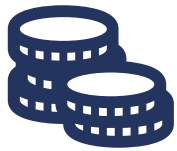


**5**

Valuation for Fundraising: a Balancing Act



# 5 Valuation for Fundraising: a Balancing Act

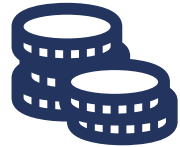


**Size of funding round?**



**Valuation?**

# 5 Valuation for Fundraising: a Balancing Act



## Size of funding round?

*“Seek the right funding, not the most funding”*



### Too little funding

- **Permanently in fundraising mode** instead of focusing on build-measure-learn
- **Not enough funding to get to next inflection point** – dilution & unhappy shareholders



### Too much funding

Risk of:

- **Overspending**
- **Complacency**
- **Defocusing** - side-tracks & chasing non-core business and opportunities

# 5 Valuation for Fundraising: a Balancing Act



## Valuation?



### Too low valuation

#### Dilute too quickly:

- **Loss of value** for founders & earlier round investors
- Risk of **founders losing motivation** due to too small share in business



### Too high valuation

- Risk of future “**downround**”
- **Loss of credibility**
- Forced to accept anyone willing to invest
- Inability to raise further investment



## 5 Valuation for Fundraising: a Balancing Act



### Valuation - Possible Solutions



**Phased release of funding**

*based on reaching milestones & adjusting valuation*



**Expect multiple rounds** & plan accordingly



**SAFE** *Simple Agreement for Future Equity – postpone valuation to next round (with cap, discount, downside protection)*

<https://www.ycombinator.com/documents/>

<https://seriesseed.co.za/>



**Convertible loan** *Loan converts to equity later (at a discount)*

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# Moolman Institute Online Courses



*Financial Modelling for  
Entrepreneurs 101*

**Master the Key  
Financial Concepts**



Make **Better Financial  
Decisions**

*Financial Modelling for  
Entrepreneurs 201*

**Kickstart Your  
Spreadsheet Skills**



Build **Spreadsheet Models  
& Charts** and Check for  
Errors

*Financial Modelling for  
Entrepreneurs 301*

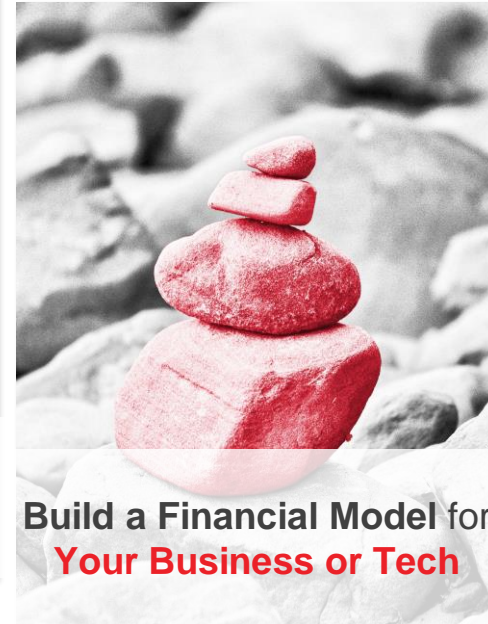
**How to Understand &  
Analyze Fin Statements**



Interpret and Analyze the **3  
Main Financial Statements**

*Financial Modelling for  
Entrepreneurs 401*

**Build Your Own  
Financial Model**



Build a Financial Model for  
**Your Business or Tech**

**Opportunity  
Assessment for  
Entrepreneurs &  
Innovators**

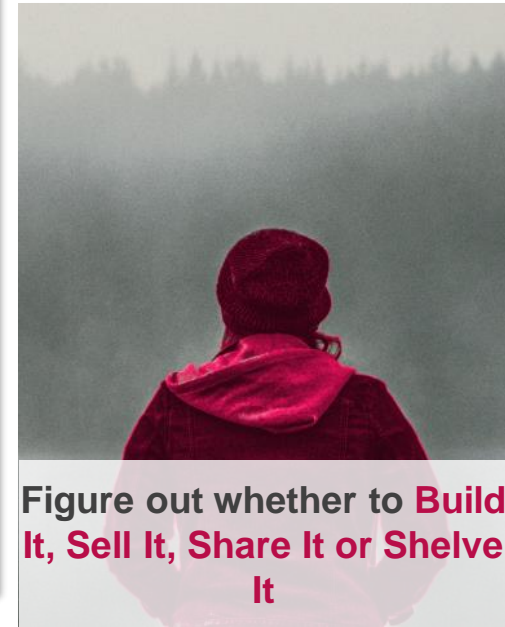


Figure out whether to **Build  
It, Sell It, Share It or Shelve  
It**

# Examples of templates & tools included in the courses

## Financial Ratios Calculation Template

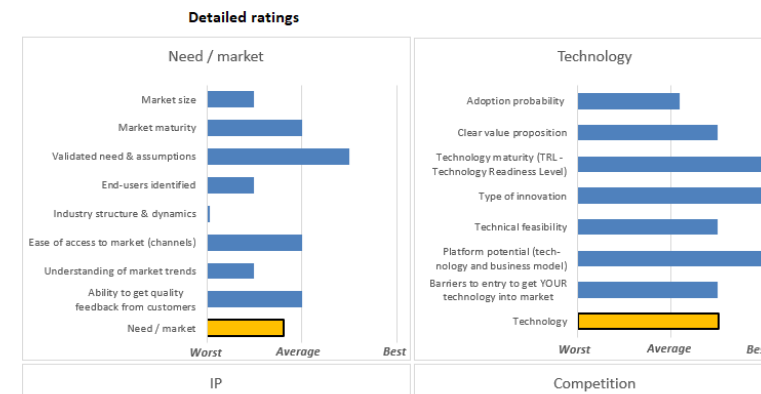
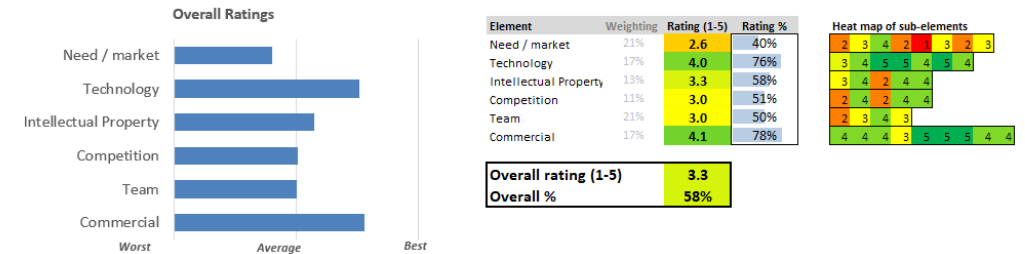
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	Receivables ratios	Receivables turnover ratio				Deteriorating	-3% -11%																																																																																																																																																																																													
		Receivables days				Deteriorating	3% 12%																																																																																																																																																																																													
	Payables ratios	Payables turnover ratio				Improving	-2% -5%																																																																																																																																																																																													
		Payables days				Improving	3% 5%																																																																																																																																																																																													
Working capital ratios	Working capital turnover ratio				Deteriorating	-11% -17%																																																																																																																																																																																														
	Fixed asset turnover ratio				Deteriorating	-30% -12%																																																																																																																																																																																														
Liquidity ratios	Ability to service short-term liabilities	Current ratio	Good			Improving	5% -5%																																																																																																																																																																																													
		Quick ratio	Excellent			Improving	7% -4%																																																																																																																																																																																													
		Cash ratio	Excellent			Improving	8% -2%																																																																																																																																																																																													
Solvency ratios	Debt (gearing ratios)	Cash conversion ratios				Deteriorating	3% 12%																																																																																																																																																																																													
		Liquidity index				Improving	-6% -9%																																																																																																																																																																																													
		Cash conversion cycle				Improving	60% 82%																																																																																																																																																																																													
Profitability ratios	Return on sales ratios	Debt to equity (gearing ratio)				Increasing	28% 47%																																																																																																																																																																																													
		Debt to capital %				Increasing	29% 47%																																																																																																																																																																																													
		Debt to assets				Increasing	24% 23%																																																																																																																																																																																													
Du Pont analysis	Coverage ratios	Interest coverage	Excellent			No change																																																																																																																																																																																														
		Gross margin	Excellent			Improving	1% -5%																																																																																																																																																																																													
		Contribution margin	Excellent			No change																																																																																																																																																																																														
Du Pont analysis	Return on investment ratios	Net margin	Excellent			Improving	20% 51%																																																																																																																																																																																													
		Return on Equity (ROE)	Excellent			Improving	26% 53%																																																																																																																																																																																													
		Return on Assets (ROA)	Good			Improving	1% 24%																																																																																																																																																																																													
Du Pont analysis	Economic Value Add (EVA)	Economic Value Add (EVA)	Creating value			Deteriorating	-7% 17%																																																																																																																																																																																													
		<p><b>Du Pont analysis</b></p> <p>ROE = Profitability x Efficiency x Leverage          ROE = Net margin x Asset turnover x Financial leverage ratio          ROE = NM x TAT x FLR</p> <p>For year ending Jun-17 29% = 24% x 0.37 x 3.3          For year ending Jun-16 23% = 20% x 0.44 x 2.7</p>																																																																																																																																																																																																		

## Opportunity Assessment Tool

### Results of Opportunity Assessment

Opportunity being assessed	Technology A
Person doing assessment	Bongi Ndlovu
Date of assessment	26/11/2019

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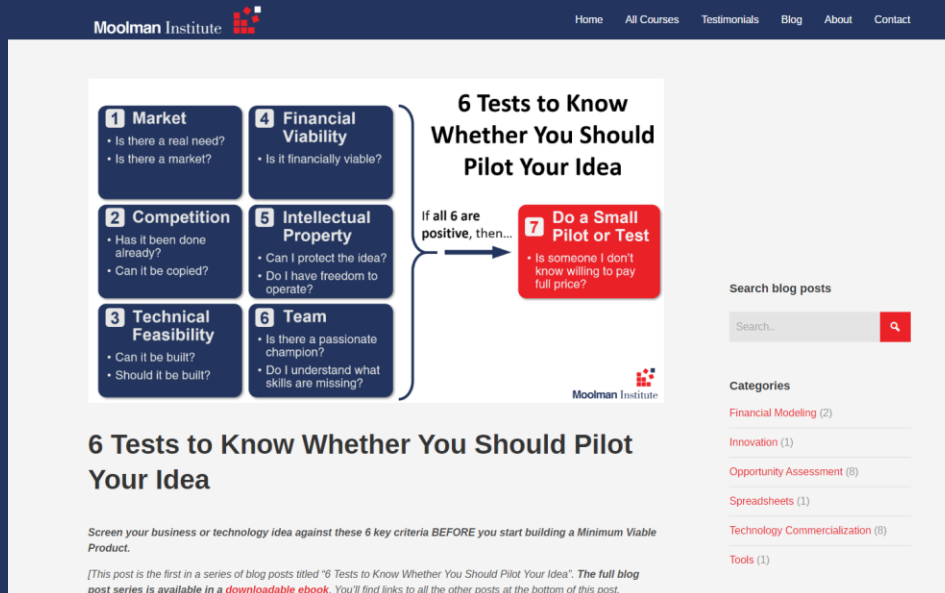
# Read more about the 6 key factors for innovation and start-up success...



**Moolman** Institute

...at the **Moolman**  
Institute blog:

...or download  
the free **ebook**:



*(Click on image to go to blog)*



*(Click on image to go to  
download page)*

# Thank you! Questions?

Success is the hangover of  
hard work  
– *Robin Kirkpatrick*

[sean@moolmaninstitute.com](mailto:sean@moolmaninstitute.com)



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# Some Additional Information

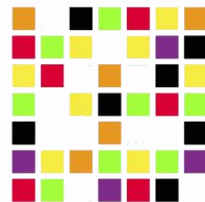


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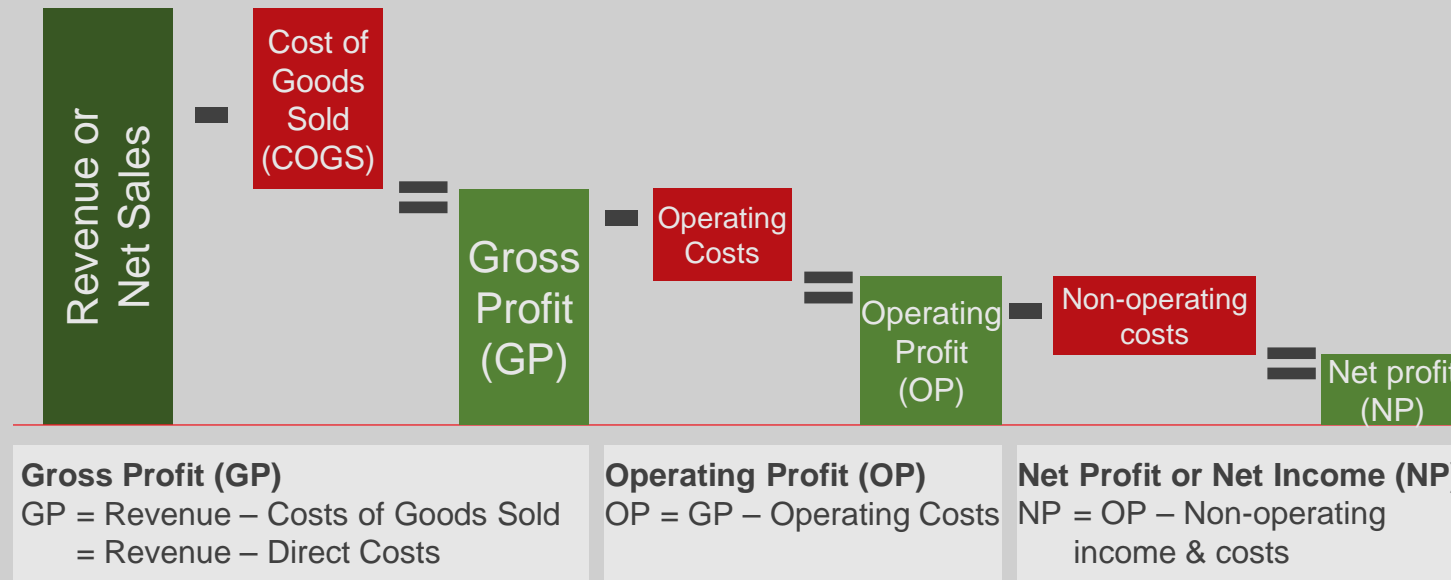


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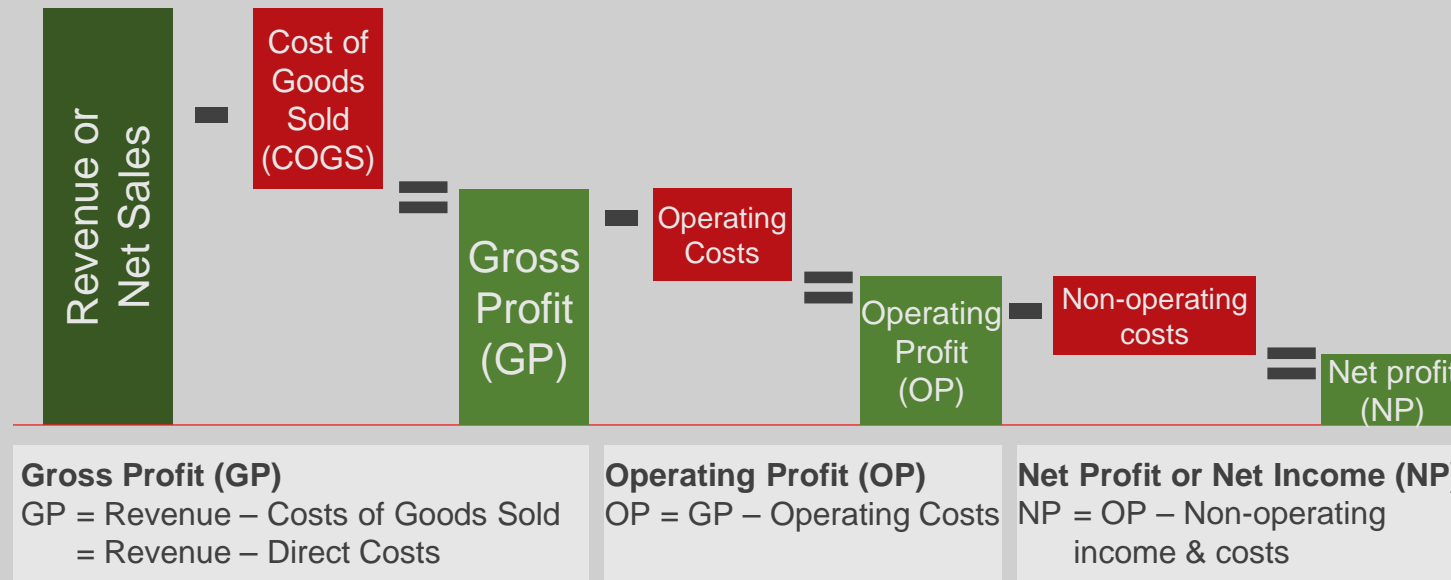




# Concepts: Gross vs Net

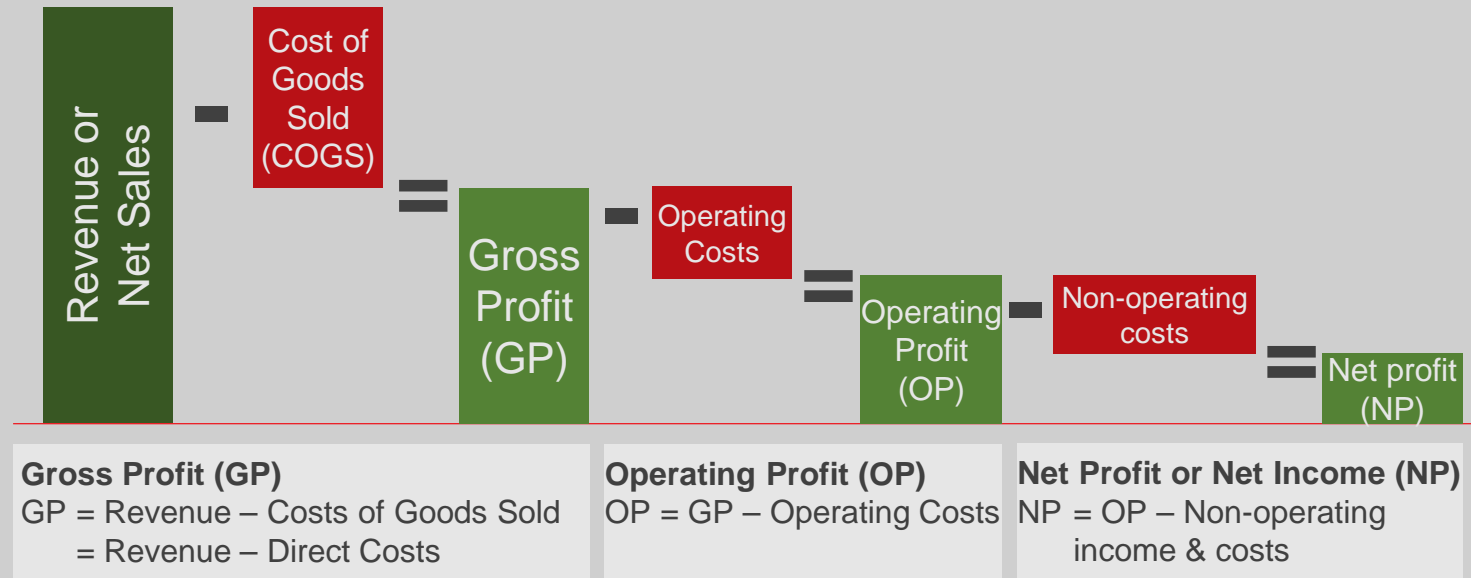


# Concepts: Profit, Margin & Markup



# Concepts: Profit, Margin & Markup

**\$**  
**Profit** is a  
**value** in dollars  
(currency)



**%**  
**Margin** is a  
**percentage** of  
**Revenue**

**Gross Margin %**

$$= \frac{\text{GP}}{\text{Revenue}} \times \frac{100}{1}$$

**Operating Margin %**

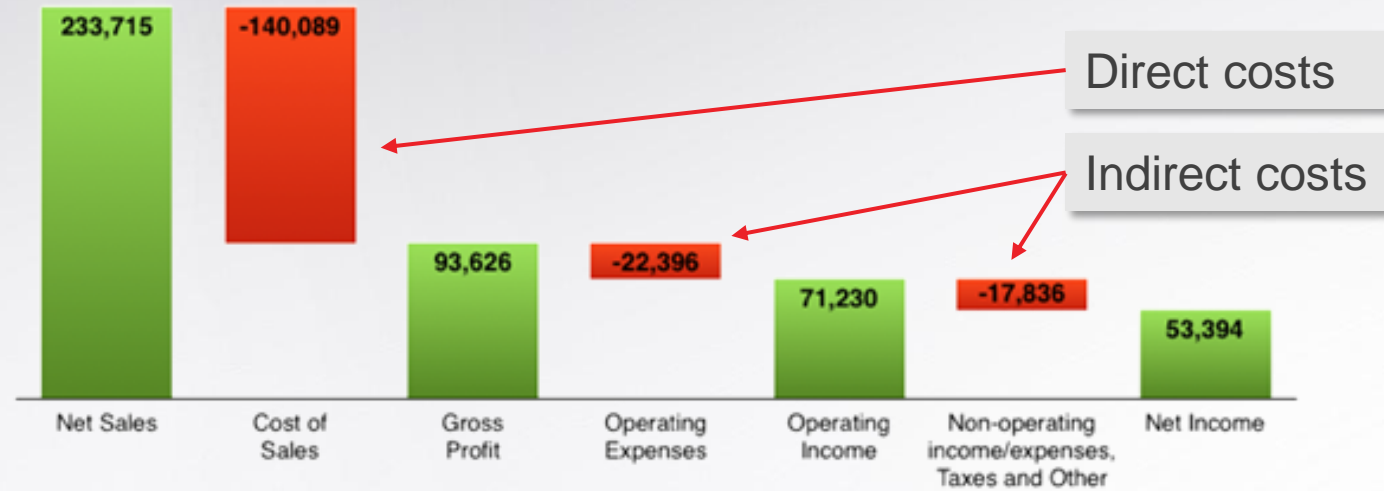
$$= \frac{\text{OP}}{\text{Revenue}} \times \frac{100}{1}$$

**Net Margin %**

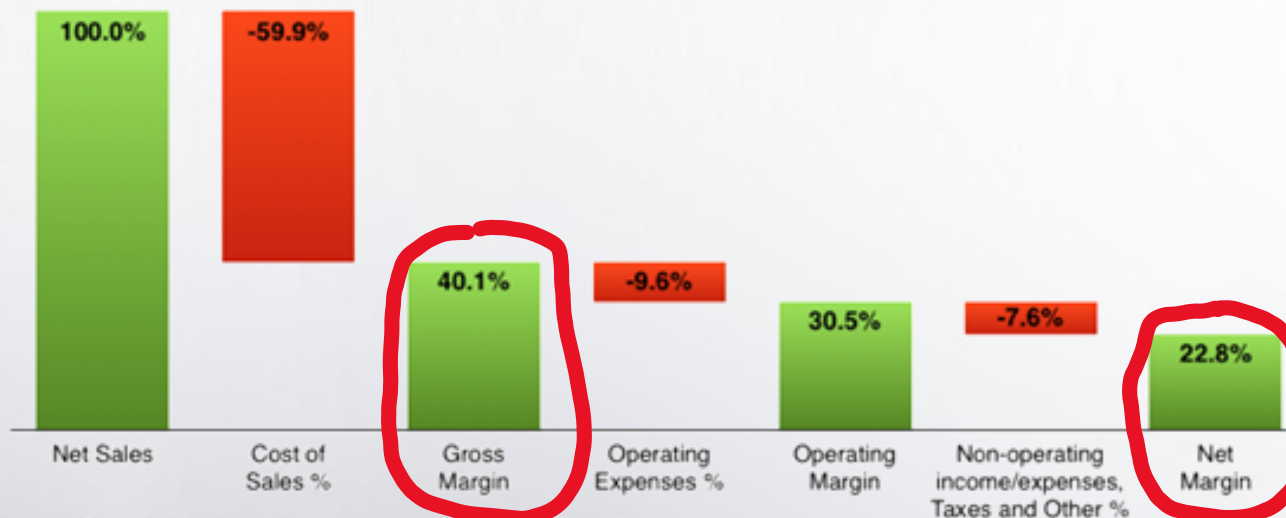
$$= \frac{\text{NP}}{\text{Revenue}} \times \frac{100}{1}$$

# Apple Profits and Profit Margins - FY'15

Apple Revenues and **Profits** FY'15 (In US \$ Millions)



Apple Profit **Margins** FY'15



\* Apple FY (Fiscal Year) ends in September

Apple profits image source: <https://revenuesandprofits.com/how-apple-makes-money/>.

Apple logo image source: victoria white2010 on flickr

# Concepts: Profit, Margin & Markup

## What is the difference between markup and margin?

### Markup

Mark-up is a **RATIO** - can be any number (e.g. 200%)

$$\begin{aligned}\text{Markup} &= \frac{(\text{Revenue} - \text{COGS})}{\text{COGS}} \times \frac{100}{1}\% \\ &= \frac{\text{Gross profit}}{\text{COGS}} \times \frac{100}{1}\%\end{aligned}$$

Based on **COST**

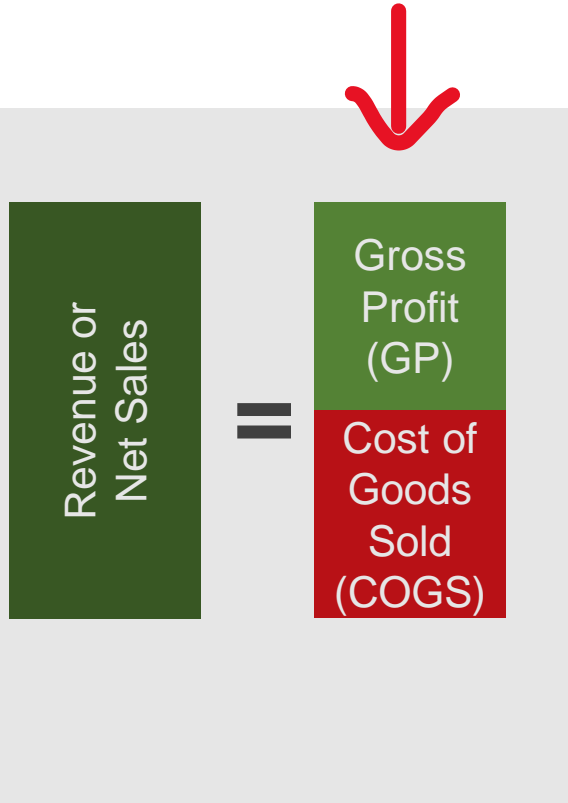
### Margin

Margin is a **PROPORTION** or **FRACTION** – can never be more than 100%

$$\begin{aligned}\text{Margin} &= \frac{(\text{Revenue} - \text{COGS})}{\text{Revenue}} \times \frac{100}{1}\% \\ &= \frac{\text{Gross profit}}{\text{Revenue}} \times \frac{100}{1}\%\end{aligned}$$

Based on **PRICE**

# Concepts: Profit, Margin & Markup



$$\text{Markup} = \frac{\text{Gross Profit (GP)}}{\text{Cost of Goods Sold (COGS)}} \times \frac{100}{1} \%$$

$$\text{Margin} = \frac{\text{Gross Profit (GP)}}{\underbrace{\text{Cost of Goods Sold (COGS)} + \text{Gross Profit (GP)}}_{\text{Revenue}}} \times \frac{100}{1} \%$$

# Concepts: Profit, Margin & Markup

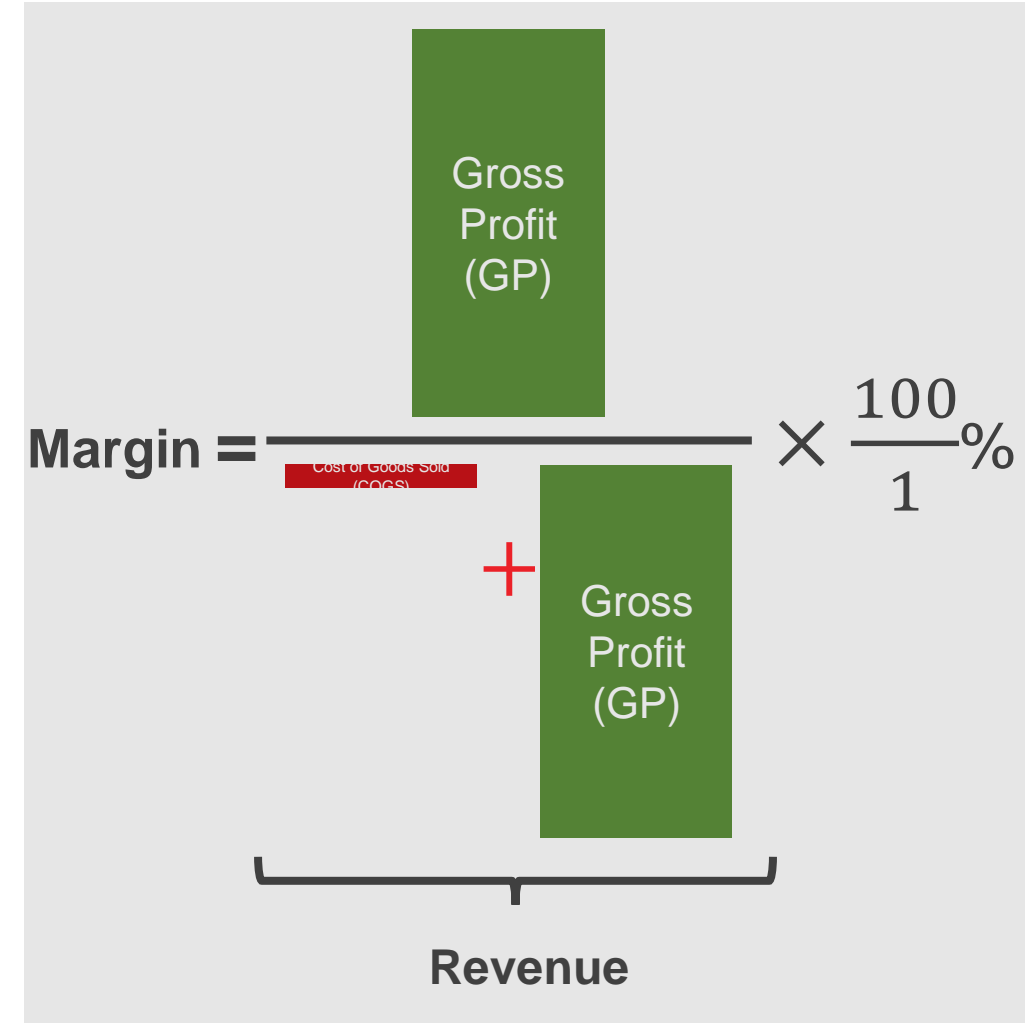
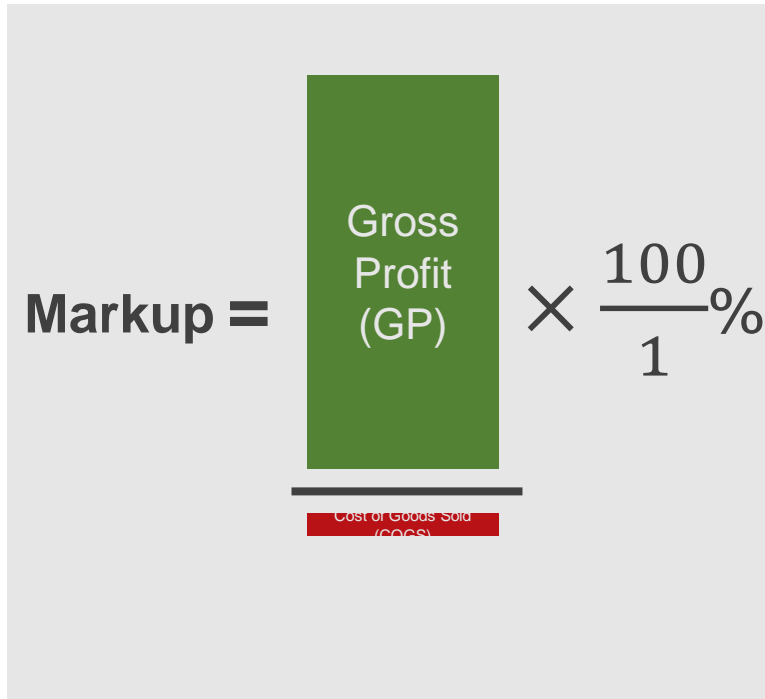


$$\text{Markup} = \frac{\text{Gross Profit (GP)}}{\text{Cost of Goods Sold (COGS)}} \times \frac{100}{1}\%$$

$$\text{Margin} = \frac{\text{Gross Profit (GP)}}{\underbrace{\text{Cost of Goods Sold (COGS)} + \text{Gross Profit (GP)}}_{\text{Revenue}}} \times \frac{100}{1}\%$$

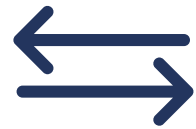


# Concepts: Profit, Margin & Markup





**Present Value**



**Future Value**



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**Present Value:** the value in the present of one or more future cash flow(s) given a specified rate of return or cost of capital.

$$P = \frac{F}{(1 + r)^n} \quad \Leftrightarrow \quad F = P(1 + r)^n$$

Diagram illustrating the relationship between Present Value ( $P$ ) and Future Value ( $F$ ) using the formula:

$P$  is labeled **Present Value** (indicated by a red arrow).

$F$  is labeled **Future Value** (indicated by a red arrow).

$r$  is labeled **Interest Rate per period** (indicated by a red arrow).

$n$  is labeled **No. of periods** (indicated by a red arrow).



**Present Value**



**Future Value**



**Present Value:** the value in the present of one or more future cash flow(s) given a specified rate of return or cost of capital.

**Discounting**



$$P = \frac{F}{(1 + r)^n}$$

Discount rate

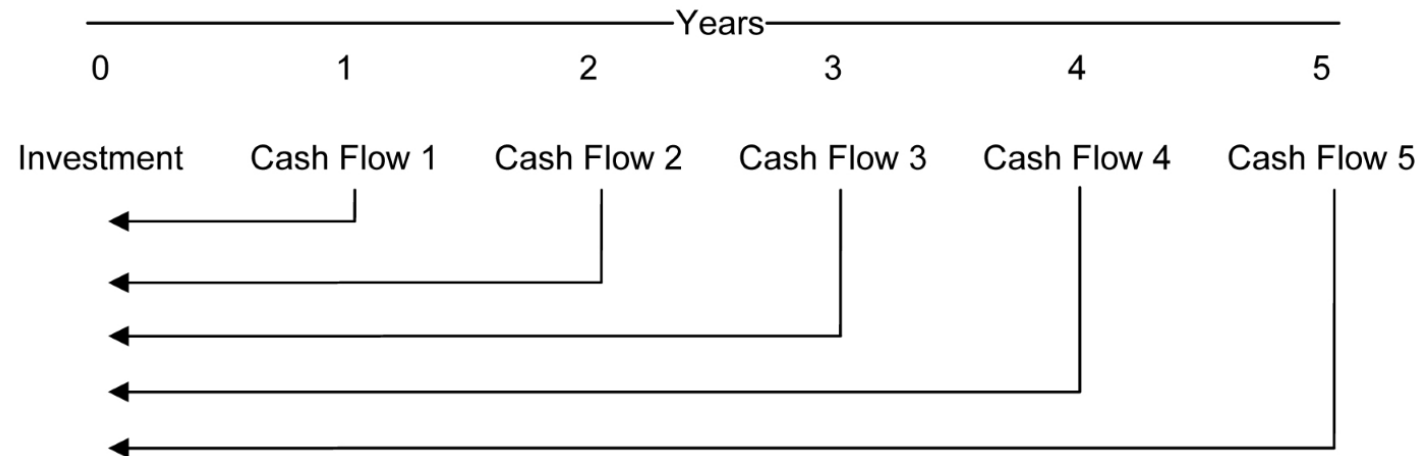
$$F = P(1 + r)^n$$

**Compounding**

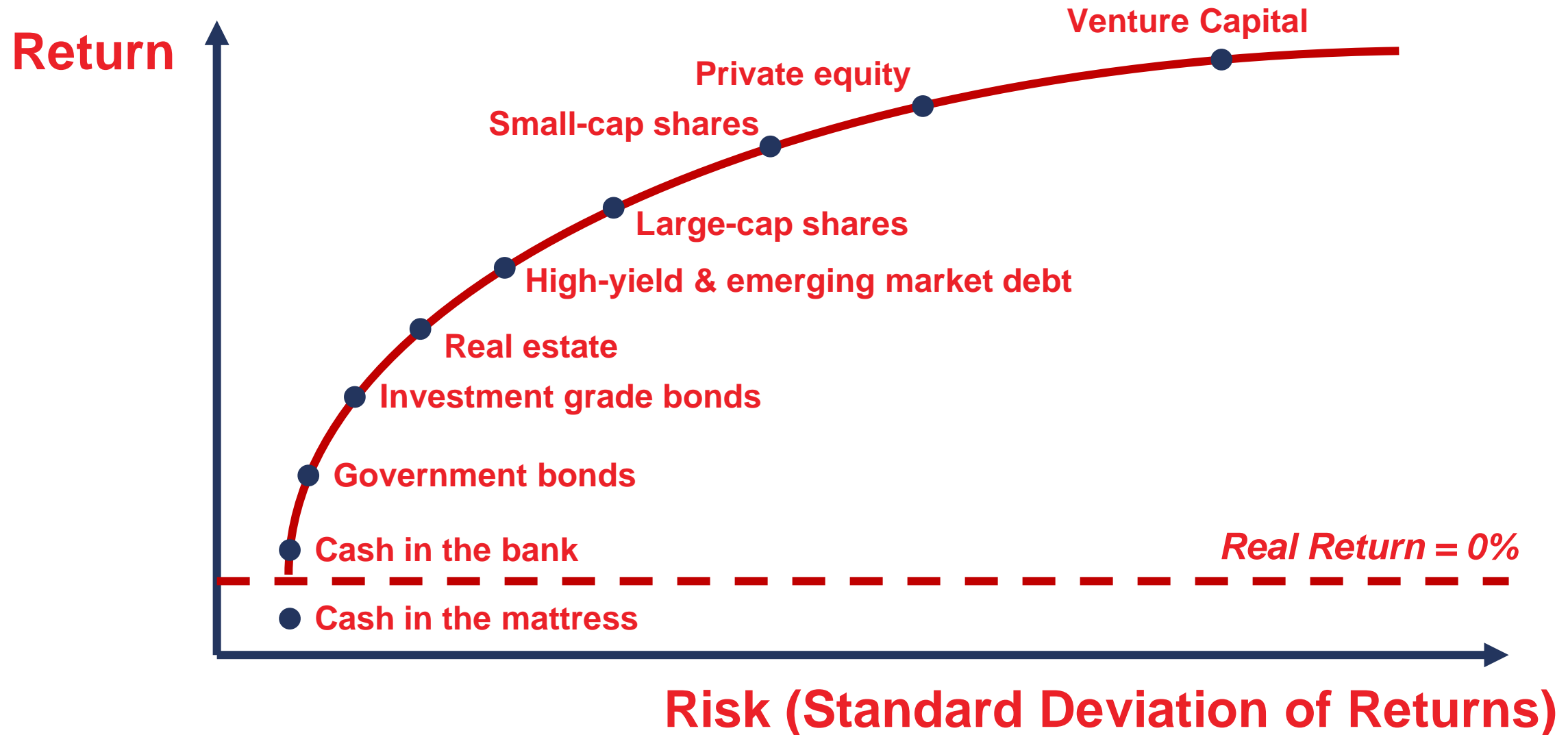


# Discounted Cash Flow (DCF)

**Discounted Cash Flow: a method of valuing a project, company, or asset using the concept of the time value of money. All future cash flows are estimated and discounted to give their present values.**

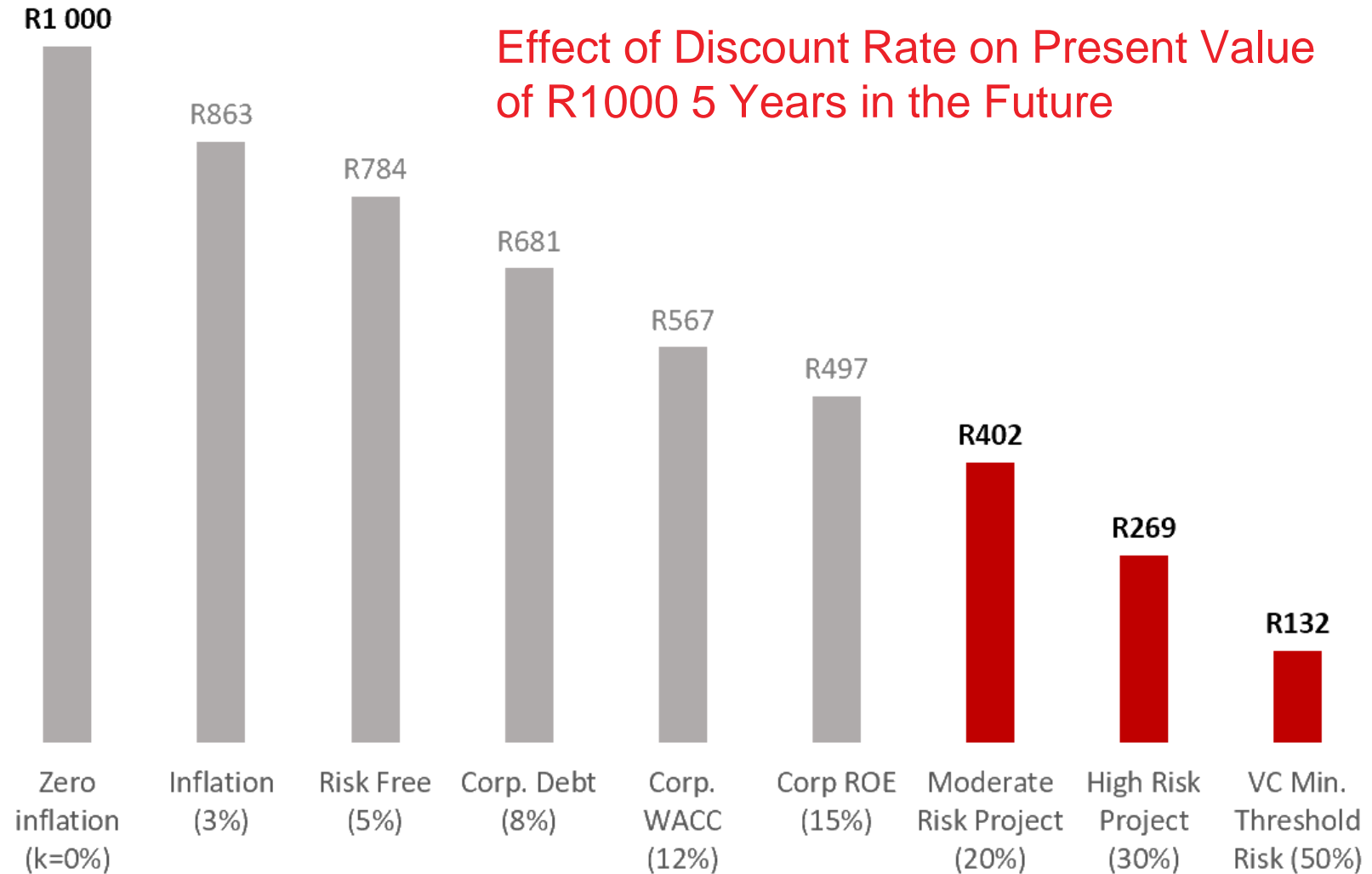


# Risk vs Return



# Risk-Adjusted Hurdle Rate (RAHR)

**RAHR (Risk-Adjusted Hurdle Rate):** minimum rate of return required by an investor that adequately compensates for risk



# Risk-Adjusted Hurdle Rate: Technology

Risk level	Description	Discount rates
<b>Risk free</b>	Building a duplicate plant to make more of a currently made and sold product in response to presently high demand approximates corporate rate of borrowing	<b>10-18%</b>
<b>Very low risk</b>	Incremental improvements with a well-understood technology into making a product presently made and sold in response to existing demand	<b>15-20%</b>
<b>Low risk</b>	Making a product with new features using well-understood technology into a presently served and understood customer segment with evidence of demand for such features	<b>20-30%</b>
<b>Moderate risk</b>	Making a new product using well-understood technology to a customer segment presently served by other products made by the corporation and with evidence of demand for such a new product	<b>25-35%</b>
<b>High risk</b>	Making a new product using a not well-understood technology and market it to an existing segment or a well-understood technology to a new market segment	<b>30-40%</b>
<b>Very high risk</b>	Making a new product with new technology to a new segment (IP development)	<b>35-45%</b>
<b>Extremely high risk</b>	Creating a start-up company to go into the business of making a product not presently sold or even known to exist using unproven technologies (IP development)	<b>50-70%</b>

# The 10 steps in building a financial model

01



## Inputs & assumptions

Collect data and information. Document initial assumptions and estimates. Note ranges of validity.

02



## Market information

Collect information on market sizes and growth rates for target market segments.

03



## Sales projections

Estimate the projected sales (volumes & prices) over the modeling period.

04



## Cost of Goods Sold

Estimate the direct costs of producing the product or delivering the service.

05



## Capital expense

Estimate the cost of any capital equipment or other capital investment required.

06



## Expenses

Estimate all other operating expenses apart from direct costs.

07



## Financial statements

Produce financial statements based on the outputs from the previous steps.

08



## Calculate key model outputs

Calculate the key financial outputs from the model based on the modeling objectives (e.g. NPV, IRR).

09



## Error checking & validation

Do error checking. Validate & compare outputs where possible.

10



## Scenarios & sensitivity analysis

Generate different scenarios (e.g. base case, low road, high road). Do sensitivity analysis.