

# MIS782

## Value of Information

Class 3 (week 3)



# Value of information

## HOW DO ICT INVESTMENTS GENERATE VALUE?

### Firms need to understand:

How to gain competitive advantage based on the their underlying resources.

How competitive advantage from business and how emerging IT opportunities, such as social media analytics, can generate business value from investments in these areas.

Analyse how organisations adapt to changes or disruptors in the technology landscape to preserve and sustain an advantage.

### In this unit, we will discuss:

#### Module One + Two

1. Business Value Returns from IT Investments
2. IT Portfolio Theory
3. **Analysing competitive advantage - RBV**
4. **Analysing competitive advantage - VRIO**

#### Module Three + Four

5. Analytics as a capability - I
6. Business Case Development
7. Analytics as a capability -II: From business data to business insight

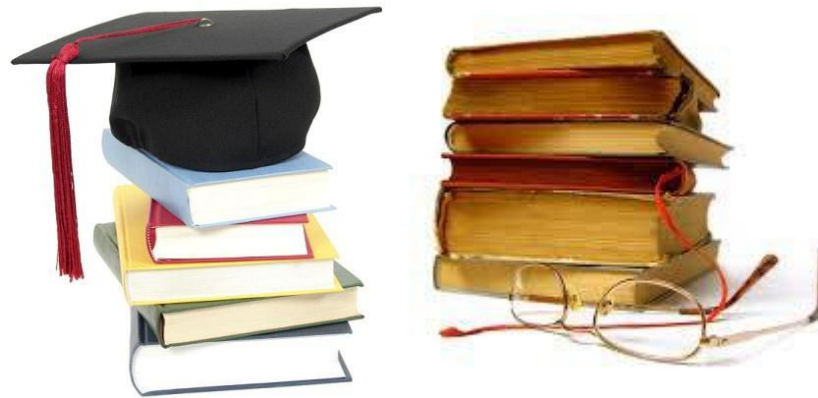
#### Module Five

8. Dynamic capabilities through Information Asymmetries
9. Competing on Information Asymmetries



## Week 3

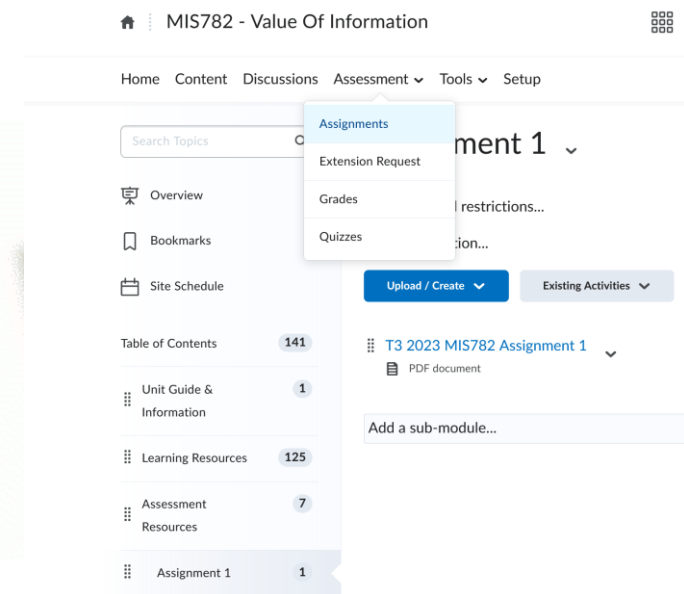
- Assignment 1
- The Strategic Management Process
- Resource-Based View (RBV)



# Assignment 1

## Where is Assignment 1?

CloudDeakin site → Content → Assessment Resources  
You have all of the information you need to complete the task.



## Where to submit my completed Assignment 1?

CloudDeakin site → Assessment → Assignments

Given the 1,500 words limit,  
an update in assignment 1:

### Specific Requirements

This report should be no more than 1,500 words (excluding the references and appendices). To complete this report, you should conduct research on GPU business of Nvidia and its competitiveness. Your task is to understand its investments in information and IT for business value returns to support the GPU business (note our focus is not on the actual GPU manufacturing and innovation). You also need to examine its key resources and capabilities to assess its competitiveness in a highly competitive market. More specifically, you should find answers to the following two questions:

1. To what extent does this organisation have an IT portfolio which provides a balanced view of value, risk and return? Answer the question using examples of key IT assets the organisation seems to have invested in the last five years for gaining real business value for competitive advantage. **Indicate if the business returns are tangible or intangible.**



# Assignment 1 – Any Other questions?

- You are encouraged in the first instance to ask questions to your lecturer/tutor during the class/seminar.
- You can also post questions on the CloudDeakin site in the relevant discussion forums as a last resort. The teaching team will respond to this forum.



# January 1999 – Start of Digital Music Era



<b>January 1999</b>	Shawn Fanning launched Napster.
<b>December 1999</b>	The Recording Industry Association of America (RIAA) sued Napster
<b>July 2001</b>	Napster terminated
<b>2002</b>	Forrester Research predicted, 1/3 of all music sales would come from downloads by 2008.
<b>2003</b>	<b>iTunes</b> is introduced, 200,000 tracks
<b>2007</b>	Others join: Amazon
<b>Today</b>	<b>iTunes:</b> 43 million tracks <b>Spotify:</b> 75 million monthly active users (20 million subscribed users) <a href="https://www.youtube.com/watch?v=Z1Dh3lp9jC8">https://www.youtube.com/watch?v=Z1Dh3lp9jC8</a>



## VALUE OF INFORMATION

- |                    |  |
|--------------------|--|
| <b>Phenomenon</b>  | <ul style="list-style-type: none"><li>• Understanding Competitive Advantage</li><li>• The Strategic Management Process</li></ul> |
| <b>Abstraction</b> | <ul style="list-style-type: none"><li>• The Resource Based View (week 3)</li><li>• The VRIO Framework (week 4)</li></ul>         |
| <b>Application</b> | <ul style="list-style-type: none"><li>• Google / Microsoft case</li><li>• Amazon GO case</li><li>• Netflix case</li></ul>        |

# What is Strategy?



- ↴ A firm's strategy is defined as its theory about how to gain competitive advantage.

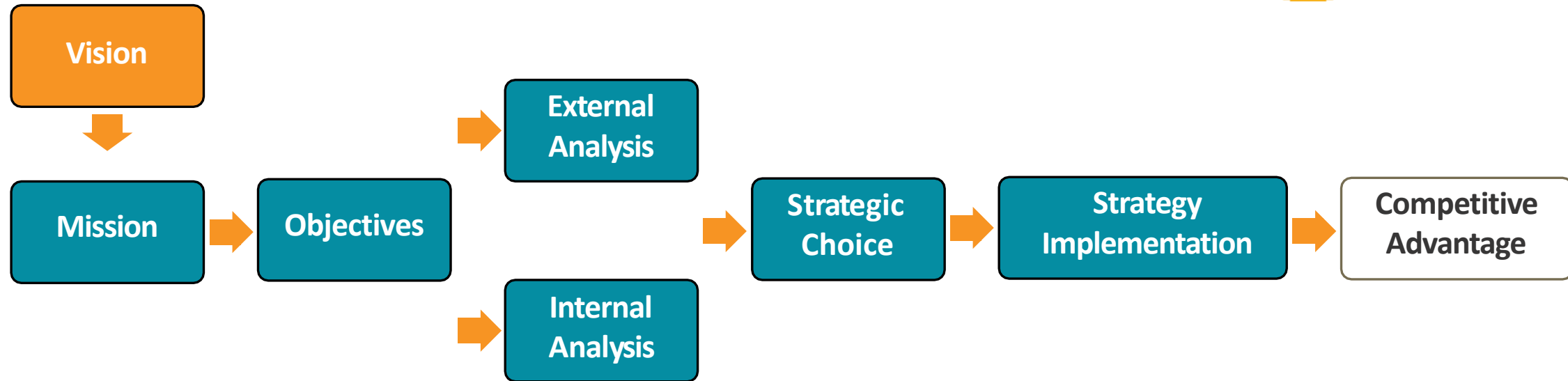


# Strategic Management Process: The definition

- ↴ A sequential set of steps (analyses/choices) that can increase the likelihood that a firm will choose a good strategy.



# The Strategic Management Process



(Barney and Hesterly, 2012)



“to provide **access** to the **world’s information** in **one click**”.

Larry Page (1998)

***ACCESSIBILITY*** → Offering its search engine services to everyone around the world

***WORLD’S INFORMATION*** → Maintains databases containing indexes of websites

***ONE CLICK*** → easy-to-use Google Search

# Mission Statement



“To organize the world’s information and make it universally  
accessible and useful.”

Larry Page (1998)



# Vision & Mission Statements

	VISION	MISSION
<b>Purpose</b>	What does the organization aim to achieve in the <b>FUTURE</b>	What a company is <b>CURRENTLY</b> doing
<b>Answers</b>	What do we want to become?	What do we do?
<b>Includes</b>	<ul style="list-style-type: none"><li>• Purpose</li><li>• Values</li></ul>	<ul style="list-style-type: none"><li>• Customers</li><li>• Products/Services</li><li>• Markets</li><li>• Technology</li><li>• Concern for survival</li><li>• Philosophy</li><li>• Self-Concept</li><li>• Concern for public image</li><li>• Concern for employees</li></ul>
<b>To whom it is developed?</b>	Employees of the company	Employees, customers, suppliers, distributors, partners and communities
<b>Order</b>	Developed first	Developed only when vision is available



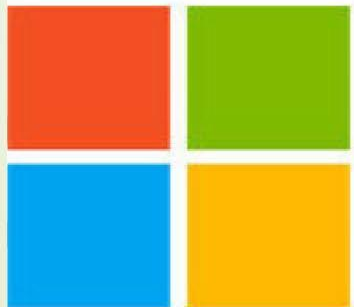
## Vision STATEMENT – Microsoft

WHAT  
DO  
YOU  
THiNK?



“A computer on every desk and everyhome.”

- Bill Gates and Paul Allen, 1975



Microsoft

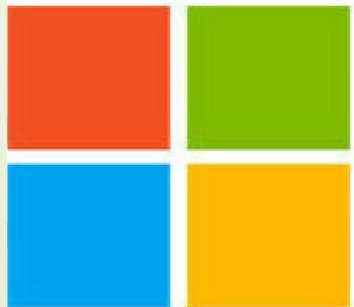
## Vision STATEMENT – Microsoft

WHAT  
DO  
YOU  
THiNK?



“Empower people through great software  
anytime, any place and on any device.”

- Bill Gates, 1999



Microsoft

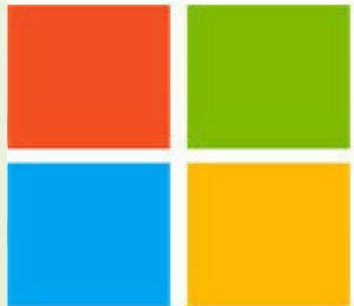
# Vision STATEMENT – Microsoft

WHAT  
DO  
YOU  
THiNK?



“To be led by a globally diverse workforce that consistently delivers outstanding business results, understands the various cultural demands of the global marketplace, is passionate about technology and the promise it holds to tap human potential, and thrives in a corporate culture where inclusive behaviours are values.”

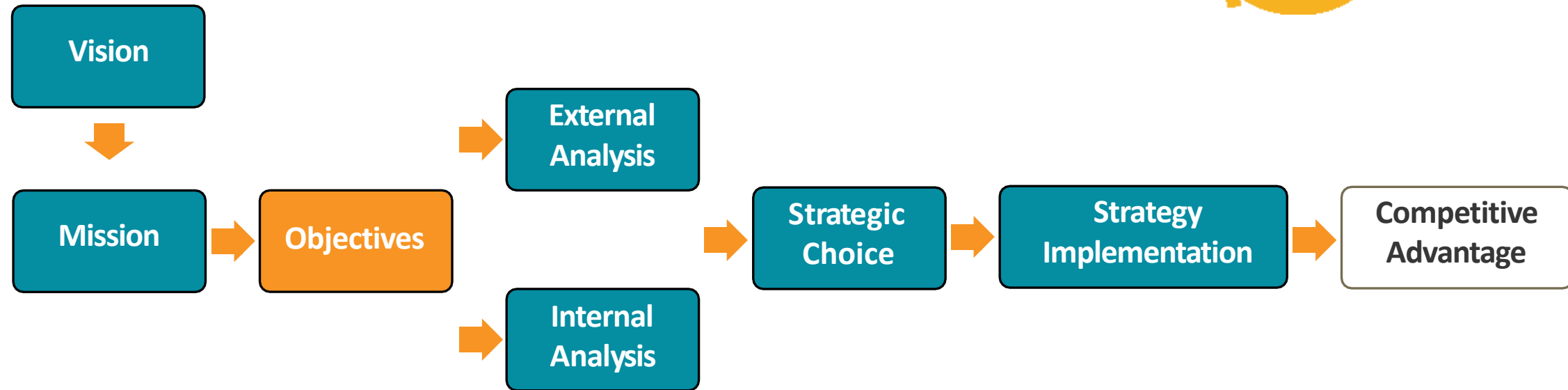
Steve Balmer, 2013



# Microsoft



# The Strategic Management Process



(Barney and Hesterly, 2012)

# Objectives



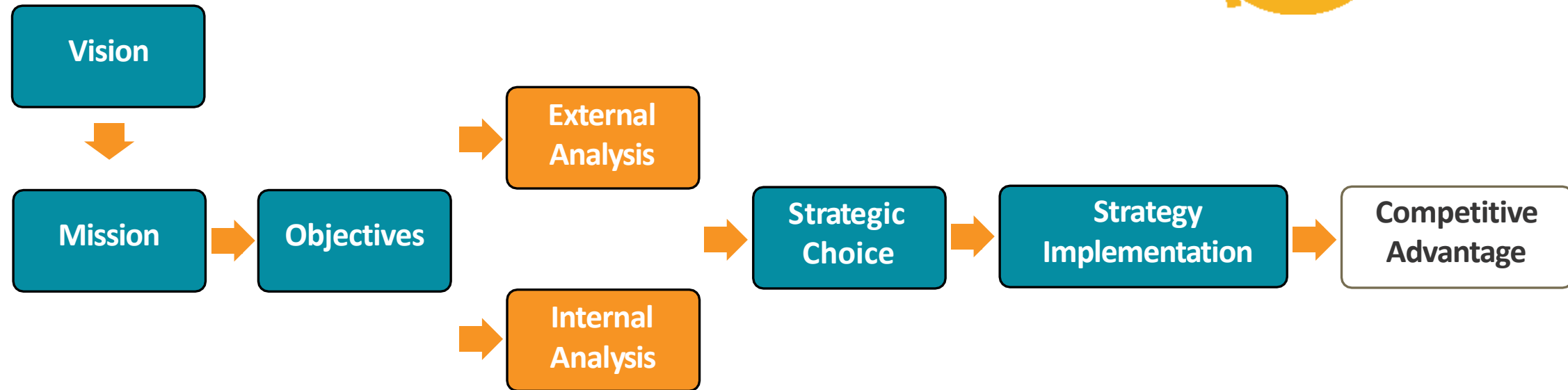
- Objectives are **measurable** targets a firm can use to evaluate to what extent it is realizing its mission.
- Can also be referred to as the **business value targets** of the firm.
  - ↯ Examples:
    - ↯ Maximize profit by 5%
    - ↯ Increase Australian market shares of Honda Civic by 3%
    - ↯ Maximize energy efficiency by 15% by 2020

# Objectives

- What can be a business value target flowing on from the transactional asset class?
- ↵ What can be a business value target flowing on from the strategic asset class?



# The Strategic Management Process



# External and Internal Analysis

## ➤ External Analysis

VRIO

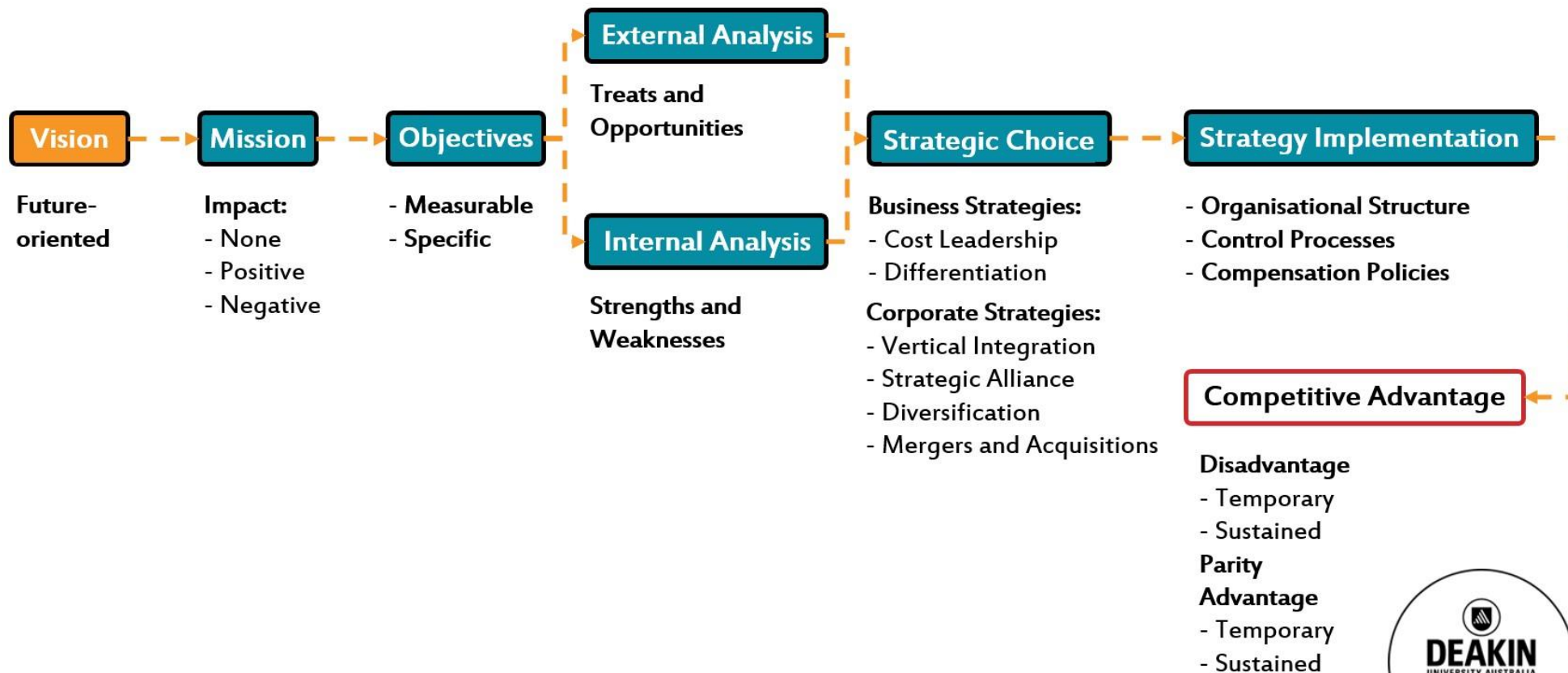
- ↵ Identification of threats and opportunities in competitive environment
- ↵ Evolution of competitive environment (how competition is going to evolve)

## ➤ Internal Analysis

RBV

- ↵ Identification of organizational strengths and weaknesses
- ↵ Source of competitive advantage (resources and capabilities)
- ↵ Identification of areas that require improvement or change

# Summary: The Strategic Management Process



# Strategic Choice

## “Theory of how to gain competitive advantage”

- Business-level Strategies (single market or industry)
  - Cost leadership
  - Product differentiation



- Corporate-level Strategies (multiple markets or industries)
  - Vertical integration (suppliers/buyers)
  - Diversification strategies (new markets, new products)
  - Strategic alliances (business partners pursuing one goal)
  - Mergers and acquisitions (buying, selling, dividing, combining companies)
  - Global strategies (presence)



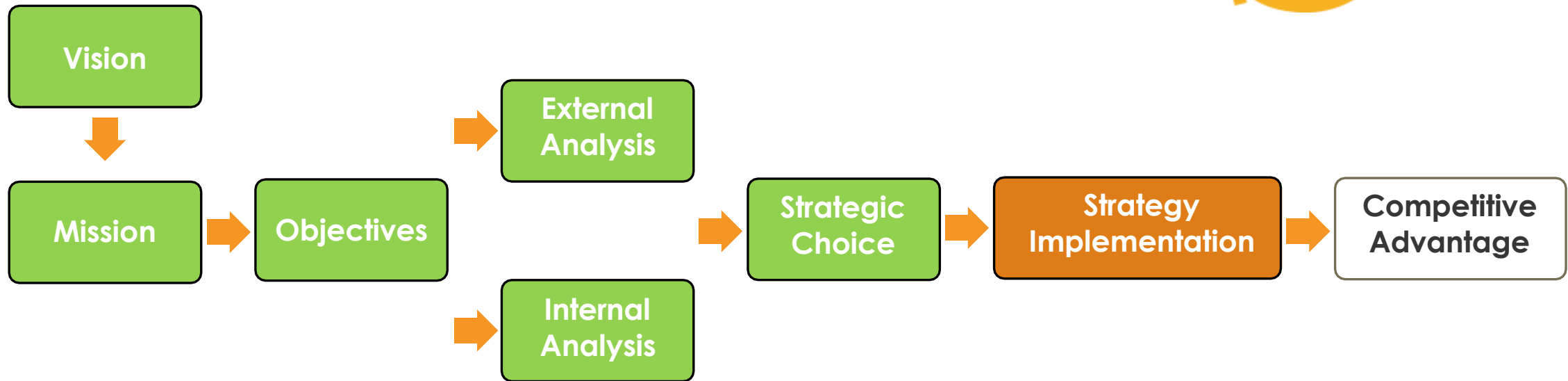
# Strategic Choice




- What technology companies can you think of that focus on product differentiation (innovation)?
- What technology companies focus on cost leadership?
- Can you think of any companies (technology or otherwise) that have switched from cost leadership to product innovation or vice versa?
- Reflecting back on last week, how can the IT portfolio asset theory aid a firm's strategic choice?
  - Are some assets more important than others when pursuing different strategies?



# The Strategic Management Process



# Strategy Implementation

- ' Strategy implementation occurs when a firm adopts organisational policies and practices consistent with its strategy:
    - ' Formal organisational structure
    - ' Management control system
    - ' Employee compensation policy
  - ' How does Deakin align its IT with its strategy?
- 



# Competitive advantage

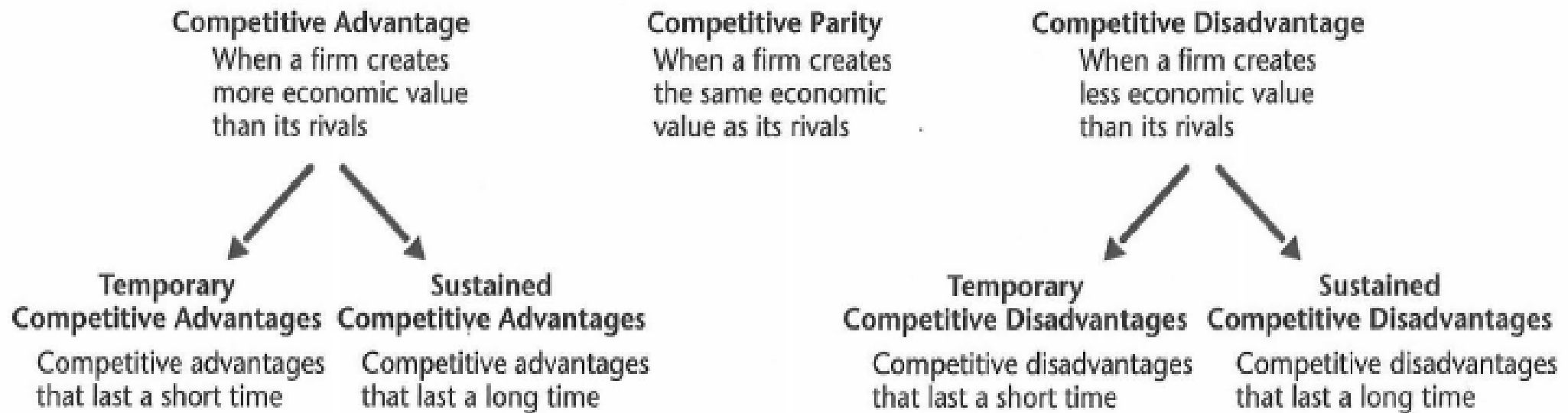
- A firm is said to have a competitive advantage when it acquires or develops an attribute or combination of attributes that allows it to outperform its competitors by **creating more economic value**.

(Barney & Hesterly, 2012)

- Economic value is the **difference** between **perceived customer benefits** from using a product and service and the **full economic cost** of these goods and services.



# Competitive Advantage



# The Resource-Based View (RBV) of the Firm

The Resource-Based View (RBV) as a basis for the competitive advantage of a firm lies primarily in the application of a bundle of tangible or intangible **resources** and **capabilities** at the firm's disposal.

A model of a firm performance that focuses on **resources** and **capabilities** controlled by a firm as **sources of competitive advantage**.



# Key Assumptions of RBV

## 1. Resource and capability **heterogeneity**

Different firms may possess different bundles of resources and capabilities (e.g., different skill levels in accomplishing business activities).

## 2. Resource and capability **immobility**

Competitors may find it difficult to obtain the same resources/capabilities.

Does this hint at two ways in which to gain competitive advantage?



# RBV: Resources

## 1. Tangible resources:

- **Financial**

(e.g., cash reserves, investments, debt and equity, etc.)

- **Physical**

(e.g., machines, office buildings, manufacturing facilities, raw materials, etc.)

- **Certain ICT resources**

(e.g., infrastructure, hardware)

## 2. Intangible resources:

(e.g., brand names, patents, trademarks, copyrights)

## 3. Structural and cultural resources:

(e.g., organizational history, culture, policies, level of trust)

### Examples?

- *Factories*
- *Reputation*
- *Teamwork*

➡ Can you name one of each kind for Deakin?



# RBV: Capabilities

Subset of resources that **enables a firm to utilize** (take full advantage of) other resources it controls.

## Four types of capabilities (Leonard-Barton, 1992)

- ↓ **Skills and knowledge of employees** (e.g., technical and professional skills)
- ↓ **Technical systems** (e.g., advanced technologies, novel tools)
- ↓ **Managerial systems** (e.g. incentive systems)
- ↓ **Values and norms** (e.g. employee empowerment)

## Examples?

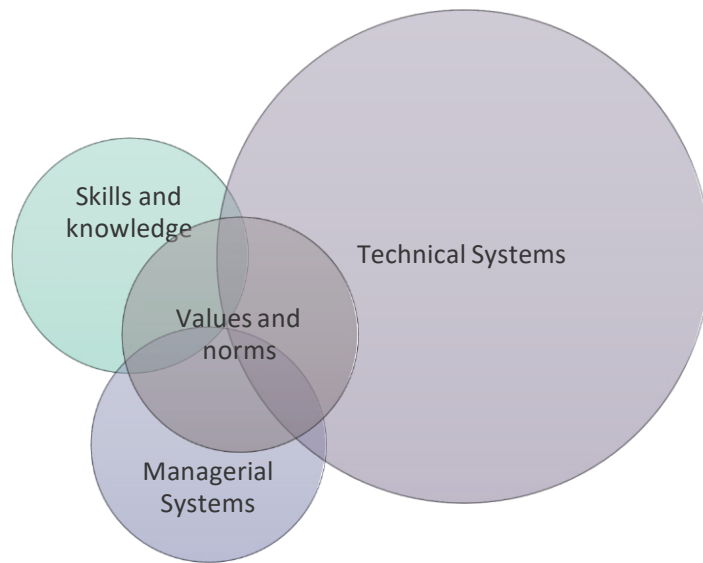
- Marketing skills
- Business analytics systems
- Salary package
- Working atmosphere



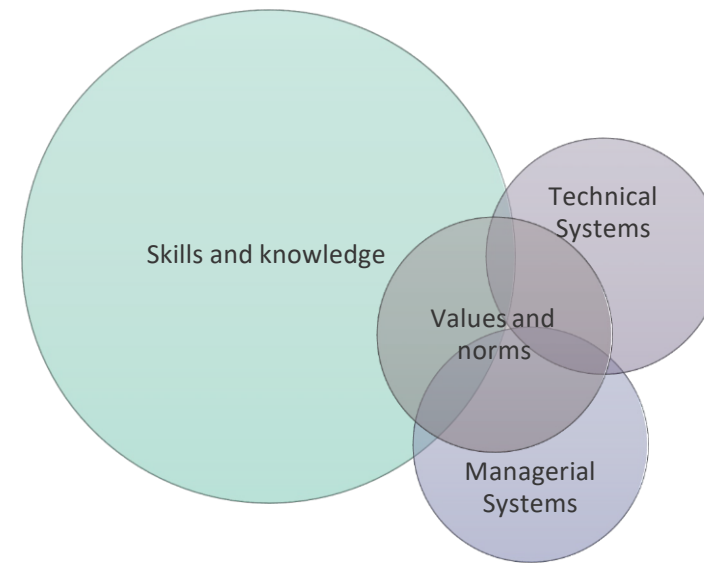


# The four dimensions of core capabilities

- The four dimensions may represent different proportions in various capabilities.



Manufacturing Company



Pharmaceutical Company

# Exercise on RBV

Amazon/Spotify/Tinder

Watch the video for a quick Intro to their business models

<https://www.youtube.com/watch?v=avWVPaJFgFk>

- Choose a single case study. Use the case study to develop a list of resources and capabilities that they have access to.
- Identify at least 3 resources/capabilities and explain whether they can be considered as sources of competitive advantage.
- Time to share it with the class.

