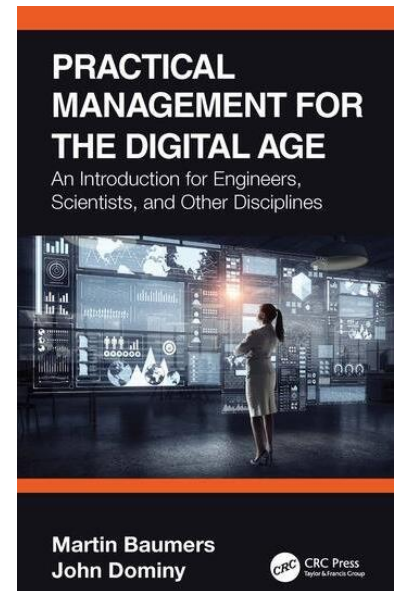


Review question solutions

First edition

21 February 2023

Version 1.2



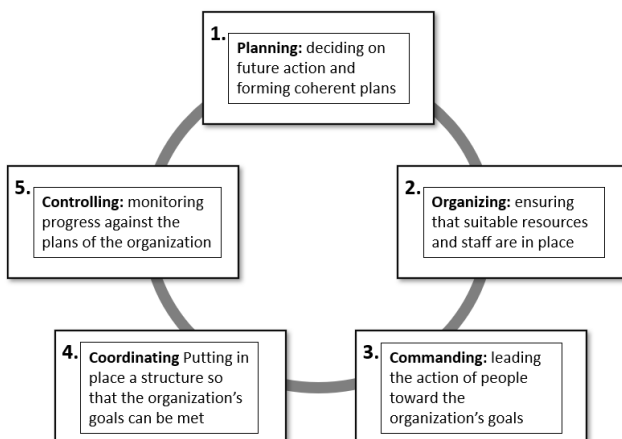
NOTE ON THE FORMATTING OF THE REVIEW QUESTIONS:

The review questions included in this book have been designed with electronic assessment in mind. In keeping with conventional user interfaces found on the web, the *radio button* symbol (“○”) indicates that only one of the options provided in a review question or question element can be chosen. In contrast, the *ballot box* symbol (“□”) indicates that multiple elements can, but do not have to, be selected.

Chapter 1

1. “Management is that **group of functions** in an organization which concerns itself with the direction of **various activities** to attain the organization’s **objectives**. Management deals with the active direction of **human effort**”.

2.



3. ● Specialist craftspeople generally working alone or in small, local groups

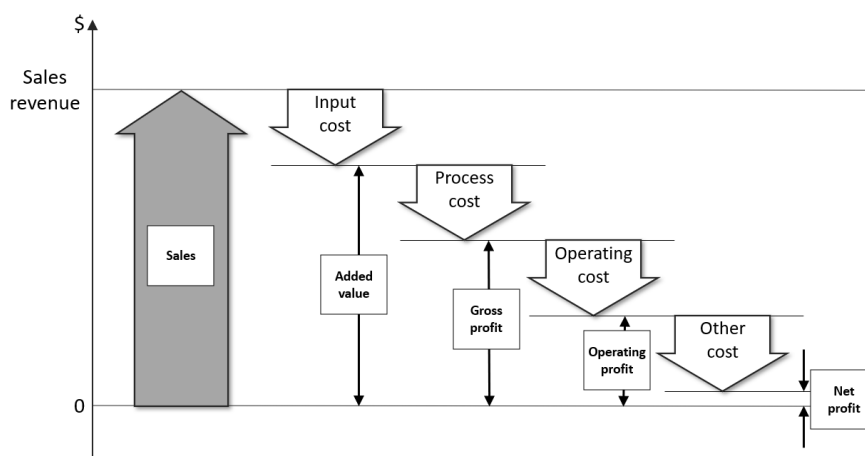
4. ● Petrol engines

5. False
6. Profit centers
7. Worker unrest and a high degree of unionization
 The rise of foreign competitors using superior management methods
8. "Lean is an **on-the-job learning method** based on two pillars: **continuous improvement**, which means continuously challenging oneself and learning by taking small steps, and respect, which means making the best effort to **understand the obstacles each person encounters**, supporting **their development**, and making the best possible use of **their abilities**".
9. Staff working in small groups under a team leader
10. Rapid urbanization
 Demographic changes

Chapter 2

1. Business enterprises
 Limited liability companies
 Privately held corporations
 Companies listed on the stock market
 Firms
2. \$199,500
(HINT: The question asks for gross profit, hence the branding costs are not considered)

3.



4. Technology development

5. Generality of skills
 - Responsibility
 - Length of time horizon of planning

6.
 - Chairman of the Board
 - Managing Director or CEO
 - Director
 - Middle Manager
 - Worker

7. **Public limited company** - Shares can be bought and sold on the stock exchange
Proprietorship - Owned by one person
Partnership - Multiple owners that are responsible for debt
Private limited company - Shares can be bought and sold but not offered to the public

8. True

9. "Capital is any kind of **financial or valuable** object, **physical** or **intangible**, that is owned by a business or an individual and is useful in **generating profit** or progressing development otherwise".

10. "The objective to acting socially responsibly has led to the development of **corporate social responsibility** frameworks. Such frameworks act as mechanisms by which an organization evaluates its **compliance** with ethical standards, the spirit of the law and social norms".

Chapter 3

1. True

2. The intersection between demand and supply defines the point at which the **market** is in **equilibrium**. This point is of special interest in economics because it defines the quantity and the price at which the buyers' and the sellers' **preferences** are in **balance**. At this point, no additional **buyer** would be able to buy the product at a price a **seller** would agree to".

3. Improvements in business processes
 - Changes in available manufacturing technology

4.
 - Ⓐ True - From the data provided, it is not possible to make statements on absolute levels of price elasticity
 - Ⓑ False - Relative to good A, good B will be perceived as a basic necessity
 - Ⓒ False - Price elasticity of demand for good B will be zero
 - Ⓓ False - Relative to good B, good A will be perceived as a luxury product
 - Ⓔ True - The price of good A will affect the quantity demanded of good B
 - Ⓕ False - Price elasticity of demand for both products will be greater than zero because they are normal goods
 - Ⓖ False - Demand for good A will be perfectly elastic
 - Ⓗ False - Demand for good A will be more elastic than demand for good B

5.
 - Ⓐ The own-price elasticity of demand is 0
 - Ⓑ Demand for this good is perfectly inelastic

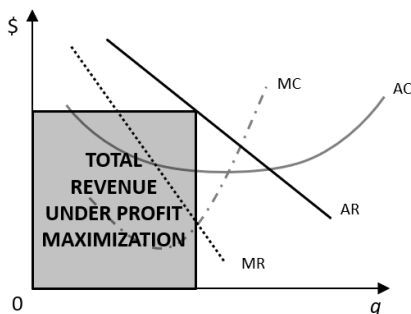
6. \$7.58
(HINT: The question indicates that only the slope of the supply function is affected)

7. 2,447.37 units

8. Ⓐ True

9. Ⓐ False

- 10.

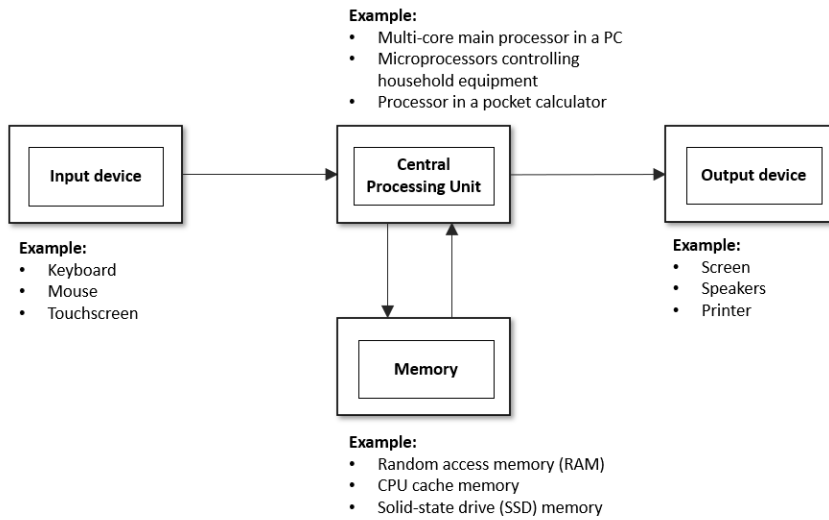


Chapter 4

1. “Transistors form **the basic building blocks** of computers today and represent a **leap forward** in technology because they are **solid-state semiconductor** devices. They employ **quantum** effects in order to act as **logical switches**”.

2. **MOSFET** - Solid-state transistor technology, based on quantum mechanics
IC - Electronic elements deposited on a flat substrate
Information as bits – Symbolic representation allowing error-free processing
Delayed differentiation - This is not a characteristic of information technology
Von Neumann architecture - Basic structure of most computers

3.



4. Anything that can be encoded as digital information can be an information good

Comparatively high fixed costs

Low variable costs

Low marginal costs

5. It is about the expansion of Random Access Memory (RAM)

6. \$3351.77

(HINT: To solve this problem, the X intercept of the demand function is required)

7. -1.87

(HINT: quantities can be obtained by dividing total market revenue over average price)

8. Material handling systems

Computer control systems

Work machines such as CNC systems

9. It is based on advanced statistics

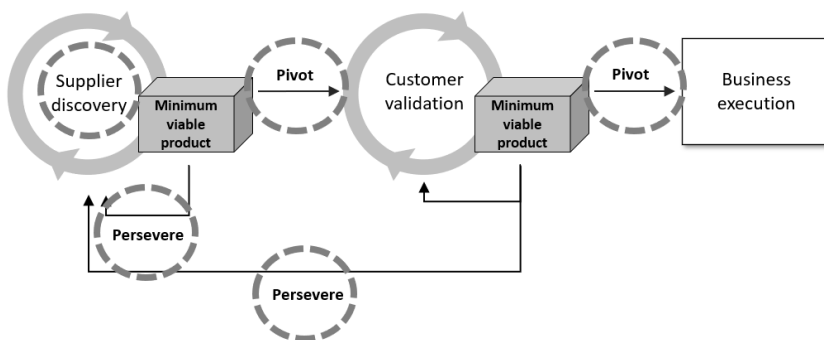
10. False

Chapter 5

1. To maintain an efficient company structure

2. False

3. "Disruption is the process of creating **radically different new** products or services that can be sold in a market. In this process the new products or services destroy the **existing market** and the advantages held by **the businesses in the market.**"
4. It is created by the possibility of disruptive innovation events in a market
 It is the result of established businesses prioritizing existing products
 It threatens the existence of incumbent businesses
5. 2
6. -0.44
7. Put in place Kanban systems
 Prioritize documentation
 Target cost engineering
- 8.



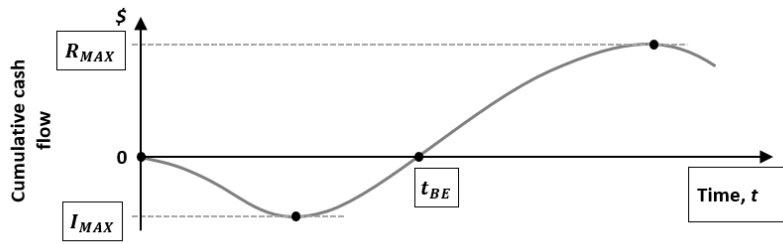
9. True
10. **Copyright** - A painting
Patent - A new technology for power generation
Trademark - The logo printed on business stationery
Industrial design - A distinctively designed vacuum cleaner

Chapter 6

1. "The underpinning idea of life cycle thinking is that **products, services, projects, and businesses** exist in time and that it necessary to systematize **their positive and negative effects** to enable decision-makers to **make optimal decisions**".
2. It is not possible to calculate scores because no numerical value is given for importance

3. True

4.



5. \$196,078.43 per year

6. \$0.051 per container mile

(HINT: Since the vessel will be sold at residual value, the purchase price is not needed in the calculation)

- 7.
- Define a list of alternative courses of action
 - Decision on whose costs and benefits are taken into account
 - Decide on categories of impact and select measurement metrics
 - Estimate the impacts quantitatively throughout the life of the project
 - Convert all costs and benefits into a common metric
 - Modify the value of future costs and benefits to reflect their value at present
 - Calculate the value of each alternative in the present
 - Conduct a sensitivity analysis
 - Recommend a particular course of action

8. **Primary stakeholder** - Owner of preference shares

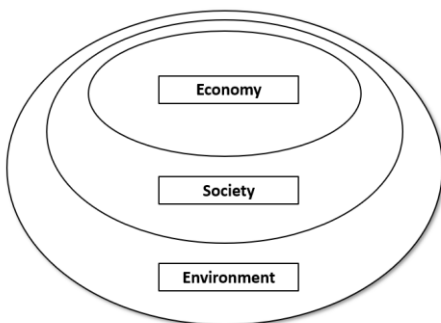
Primary stakeholder - Debtor

Primary stakeholder - Local government

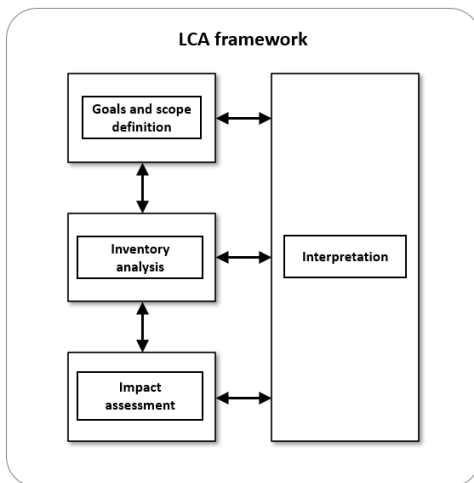
Secondary stakeholder - Child of an employee

Non-stakeholder - Employee of an unrelated business

9.

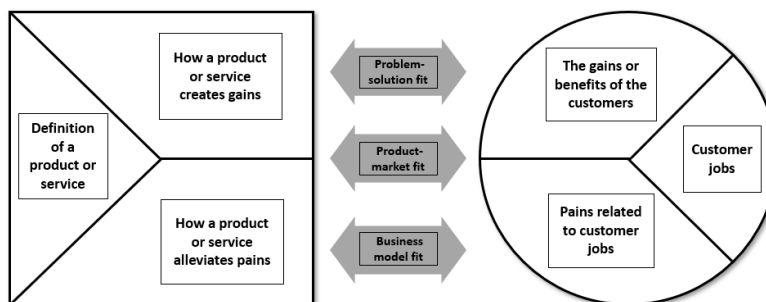


10.



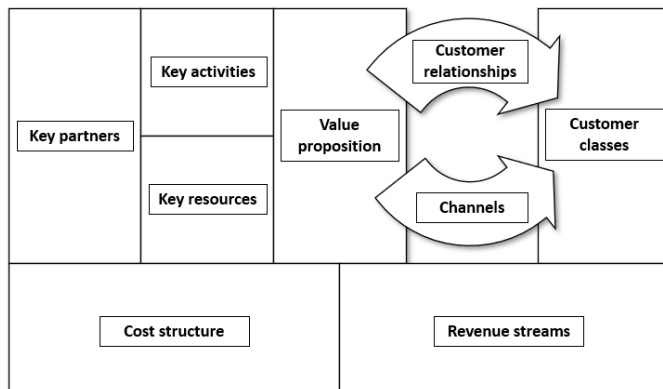
Chapter 7

1. "A business model is a representation of the **rationale** of how an organization creates, delivers, and captures **value**, in economic, social, cultural, or other contexts".
2. False
- 3.



4. True - A successful value proposition captures customers' attention
 False - It is a statement of guaranteed benefits
 True - It often involves a solution to a customer's problem
 False - Value propositions cannot be established clearly

5.



6. Conglomerates aim to capitalize on economies of scope
 Economies of scale are important for conglomerates
7. Developing matching products and services
 Aligning the value proposition to organizational objectives
 Creating a complementary capabilities system
8. **Vertically integrated businesses** - Owning multiple elements of a supply chain
Platforms - Facilitating the interaction between different groups
Specialized businesses – Pursuing coherence
Conglomerates - Presence in diverse unrelated markets
9. False - Network effects are always positive
 True - Network effects can create lock-in
 True - Negative network effects are also called demand-side economies of scale
 True - Network effects can create feedback loops
 True - Network effects are driven by complementarities between members
10. True

Chapter 8

1. “A new business is an **organization** attempting to establish a viable and profitable **business model** under conditions of **extreme uncertainty**. New businesses are **temporary** because they either transition to being an established business or they **fail and cease to exist**”.
2. False

3. False - It involves the decision to persevere, pivot, or reject
 - False - It increases the chances of successfully starting the business to over 50%
 - False - Its purpose is to identify the needs of the customer
 - True - Its goal is to test the hypotheses held about the business by the founders

4.
 - Customer discovery
 - Customer validation
 - Customer creation
 - Build the business

5. The new business is acquired by a competitor and shut down immediately
 - The new business is acquired by a competitor and grows further
 - The new business is floated on the stock market

6. False

7. 20 months

8. **Government grants** - Often offered for specific projects
Venture capital - Typically sought after the seed stage
Crowdfunding - Money from amateur investors
Bank loans - Are likely to require collateral
Friends and family – Potential negative impact on close personal relationships
Business angels - Funded by wealthy private individuals

9. False

10. Invention disclosure

Chapter 9

1. “The transformation system operated by a business is one that takes in **inputs**, such as **capital, equipment, materials, labor, and information**, and processes these into **outputs**, such as products and services for customers. Note, however, that any such transformation system will also generate **unintended and, most likely undesirable, externalities as outputs**”.

2. Controlling operations
 - Inventory management

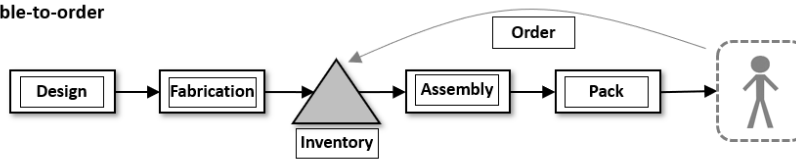
3. False

4. **Dispatching** - Immediate
Aggregate scheduling - Up to five years into the future
Master scheduling - A few months into the future
ERP forecasting - This is not an accepted scheduling activity and has no time horizon

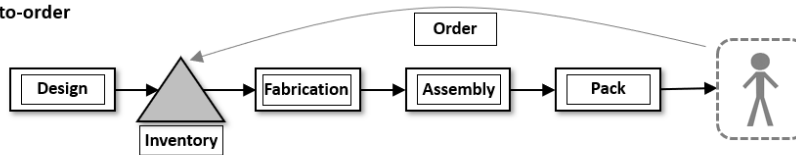
5. • Line and continuous operations systems
• Batch operations systems
• Job-shop operations systems
• Project operations systems

6.

a) Assemble-to-order



b) Make-to-order



7. ● Seasonality and trend
8. ● Waste of opportunity
9. ● False - A Kanban is a push signal
● False - Kanbans are always machine-readable
● True - A Kanban travels through operations against the flow of the work
● False - Kanbans facilitate demand planning
● True - Kanbans are an essential part of pull systems
● True - A Kanban can be a physical object
● False - A Kanban is purely a signal and never contains additional information
10. 64%

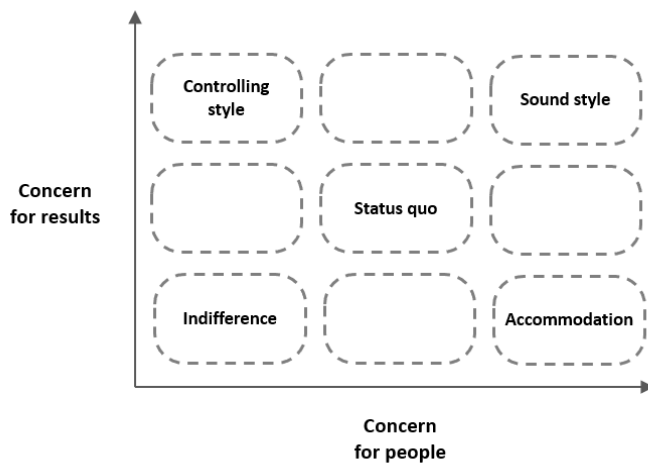
Chapter 10

1. Recruiting employees
 Devising reward structures
2. “Human capital is the overall **explicit and implicit** knowledge, habits, skills abilities, behaviors, social attributes and personality traits embodied by **people that can be** used for the attainment of **business goals**”.

3. Advisor
4. 8,240 days
(HINT: Factory output is not needed in the calculation)
5. **Skills-based pay** - Payments based on the level of knowledge
Non-monetary benefits packages - Provision of a company car
Employee stock options - Granting the right to buy shares
Time rate pay - Pay determined by a time clock

6. False

7.



8. It can be based on the threat of violence

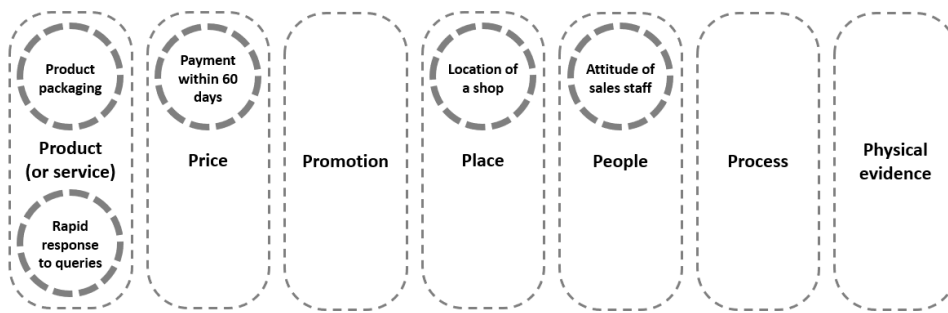
9.
 - Self-actualization
 - Esteem needs
 - Belongingness
 - Safety needs
 - Physiological needs

10. True - Managers cannot order employees to be motivated
 False - High salaries are an excellent motivator factor
 False - It is based on factors of motivation, dissatisfaction, and acceptance
 False - Achievement and recognition for achievement are hygiene factors
 True - Relationships with peers are a hygiene factor
 True - Responsibility is a motivating factor
 True - McGregor's theory Y has similarity with Herzberg's two-factor theory

Chapter 11

1. Identifying, anticipating, and satisfying customer requirements
2. Product development
3. False - Value is sometimes co-created
 True - Value is always co-created
 False - Value is created for the customer by the manufacturer
 True - The transaction of physical goods can be reduced to a service
 False - The transaction of a service can be reduced to a physical good
 True - The business cannot know with certainty what the value of its offering is
 True - The process that creates value is complex and influenced by culture
4. “The accurate identification of customer **wants** allows businesses to collaborate with **customers** to generate an attractive market offer, which embodies the combined **products and services the business intends to supply to satisfy the identified wants**”.
5. \$17.60
(HINT: Annual revenue is be established by using remaining cohort size at EOY)
6. Involvement
 Interaction
 Intimacy
 Influence
7. Normally focused on creating an emotional response in customers
 Successful B2C campaigns tend to be very expensive
 B2C marketing frequently involves an element of B2B marketing
8. **B2B** - Behavioral factors, concentrating on how the product is used by a business
B2C - Socioeconomic factors
B2B and B2C - Geographic factors
This is not a factor in market segmentation - Political factors

9.



10. False

Chapter 12

1. “Failure to meet **expectations** by failing to deliver acceptable levels of quality is likely to have negative consequences for a business. In minor cases, such failure will result in **the need to undertake rework at additional cost or delay the delivery of a product or completion of a service**. In more serious cases, **the customer will reject the product or service on the grounds of poor quality, seeking an alternative supplier**”.
2. There appears to be a trend in the data, indicating a problem
3. Potentially lead to excessive cost increases
4. False
5. 0.002 defective parts per million parts produced
6.
 - Define
 - Measure
 - Analyze
 - Improve
 - Control
7. Status of risks
 List of attendance
 Frequencies and probabilities of risk
8. 25%
9. False
10. **Avoid** - The risk is dangerous and must be eliminated
Retain - The risk is acceptable and part of normal business

Exploit - There is an opportunity for greater return on investment

Compensate - This is not a relevant risk choice

Transfer - The involvement of a third-party supplier allows this

Reduce - It is possible to implement risk controls

Chapter 13

1. "The objective of financial management is to arrange **financial resources** such that the business can **achieve its goals in the best possible way**. Financial management involves activities such as ensuring that the business has an adequate level of **cash to carry out its activities according to its plans and without disruption**".
2. 7 years
3. Depreciation creates a cost for the company that diminishes net profit
4. **Fixed assets** - An office building
Current assets - Inventory
Long-term investments - Land owned for investment purposes
This is not an asset - Deferred revenue
5. \$16,200
(HINT: This question is asking for operating profit so depreciation is included in the calculation as an operating expense)
6.
 - Identify transactions
 - Record journal entries
 - Post general ledger entries
 - Create an unadjusted trial balance
 - Adjust ledger entries
 - Create an adjusted trial balance
 - Generate financial statements
 - Close the books
7. It forms the basis for double-entry bookkeeping and the general ledger
8. Current assets
 Common shares
 Added value
9. True - It is incorrect if the sum of assets and liabilities equates to owners' equity
 False - Only incorporated legal forms produce balance sheets
 True - It provides a snapshot of the financial situation in a business
 False - Assets are always on the left side and liabilities are on the right side
 False - Intangible assets are impossible to value and are not shown

● True - Inventory is shown as an asset

10. "In the most common formats of cash flow statements, the **flows of money** are broken down into **operating activities**, **investing activities**, and **financing** activities. The cash flow statement can thus be summarized as a report of the flow of **money** into and out of the business. The cash flow statement indicates whether or not the business can operate in the **short run** and will be able to **pay its bills**".

Chapter 14

1. ● Anyone with access to the financial statements issued by the business

2. Stability

Solvency

Performance

3. ● The ease with which an asset can be converted into cash

4. **Gross profit to sales ratio** - Expresses gross profit as a percentage of revenue

Current ratio - Measures the level of liquid assets in the business

Return on capital employed - Expresses how well resources are utilized

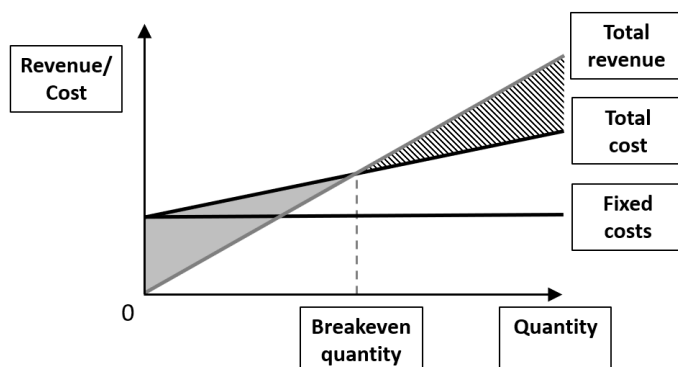
Expenses to sales ratio - Measures how well the costs are controlled

5. 25.56

(HINT: COGS can be obtained by subtracting gross profit from sales revenue)

6. 6.7

7.



8. \$350

(HINT: The variable cost can be obtained by dividing total variable cost by quantity)

9. 55.36%
(HINT: The total revenue arising at actual quantity equates to the sales revenue)
10. True - Models of this kind do not reflect stepped fixed costs
 False - Models of this kind are generally not applicable
 False - Due to their specific nature, they are not applicable outside of finance
 True - It is difficult to apply such models to multi-product businesses
 True - Models of this kind bring together cost and revenue functions
 False - A linear total revenue function implies a downward-sloping demand curve

Chapter 15

1. "Time preference is the **current relative value** assigned by a person to receiving a good or an object at **an earlier time** rather than receiving it **at a later time**".
2. \$9,300
3. True
4. It is a sum that can be borrowed
 It is a sum that can be lent
 It is a sum that can be deposited
5. The discount factor
6. \$2,315.25
7. It allows for the variation in the value of money in different time periods
8. \$5,621.37
9. 14.37%
(HINT: The X-intercept can be approximated by interpolation between the discount rates of 15% and 10%)
10. \$0.38
(HINT: Establish current annual cash flows, discount to present value, sum up and divide by mileage)

Chapter 16

1. Rewards must be great enough to begin it
 Using careful analysis, risk can be eliminated
 Headed by a project manager

2. False

3. False - Both show activities as nodes connected by arrows

True - Activity-on-node networks show activities as nodes connected by arrows

True - In activity-on-arrow networks activities start and finish at nodes

True - Events have zero time duration

False - In activity-on-arrow networks, activities have zero time duration

True - Insight on project structure can be extracted from these networks

4. 10 weeks

5. Duration cannot be stated using the information given

6.

Earliest activity start	Activity duration	Earliest activity finish
Activity identifier		
Latest activity start	Float	Latest activity finish

7. True

8. \$28,200

9. \$22,750

(HINT: Since no other information is given, it is assumed that spend occurs evenly each activity)

10. 0.61

--- END ---