Chapter 1

The concept of business ecosystems

Chapter learning objectives:

Lead	**Component**	**Indicative syllabus content**
A.1 Explain the ecosystems of organisations	Explain: a. Markets and competition b. Society and regulation	Definition of ecosystems • Participants and roles • Interactions and dynamics • Rules and governance • Technology • Risks and opportunities

1. Introduction and background

The traditional approach to understanding markets

Understanding the market:

- A place where two parties can gather to facilitate the exchange of goods and services
- Parties involved – buyers and sellers
- Markets – physical and online
- Operate in an environment governed by the law of supply and demand

Analysis of traditional markets:

Traditionally business environment has been analysed by:

- PESTLE
- Porter's Five Forces
- Porter's Generic Strategies

PESTLE - to help organise the analysis of the business environment into broad categories

Porter’s five forces analysis

Porter’s three generic strategies

Cost leadership

- Offering products and services of the same quality as competitors but at lower prices

Differentiation

- Charging higher prices by offering more innovative products or products with a higher perceived quality

Focus

- Concentrating only on a small part of the market

The impact and effect of technology on traditional markets

- **Rapid changes in customer expectations** – e.g. wanting more individualised and integrated experiences. Customers also have more information with which to make comparisons and are more willing to switch brands to get what they want.
- **New types of products and services** – technology now strongly influences how value is created and delivered. E.g. the importance of using semi-autonomous features to differentiate within the car industry
- **New business models** – e.g. Uber vs normal taxis and car hire
- **Market disruption** – e.g. many of Topshop's problems stemmed from not taking the threat of internet shopping seriously.

Drivers of the digital revolution

Mobile and internet penetration

By 2025, the number of smart phone subscriptions will reach 4 billion, with much of growth coming from emerging economies.

Connected devices

The number of connected devices is expected to grow from 2.5 billion in 2009 to 30 billion by 2020.

This will help enable real-time customisation of products and services.

Data analytics and the cloud

The increasing use of e-commerce platforms, social networks, apps etc will result in increased need for automated data analytics.

User interfaces

Advances in how human beings interact with machines mean that carrying out tasks becomes quicker and more efficient for humans.

Global accessibility

More and more people are gaining access to the internet and so increased connectivity.

Increasing urbanisation

The United Nations estimates that, from approximately 54% of the global population in 2014, this will grow to almost 60% by 2050.

2. The emergence of business ecosystems

The external competitive environment for industry and business is similarly changing rapidly as these emerging technologies create an environment that is:

- Connected and open:
  - The proliferation of mobile devices and internet access
  - Necessitates new levels of trust and accountability to partners and consumers
- Simple and intelligent:
  - Advances in technology reduce and mask complexity
  - Organisations gain more information
  - Use data analytics and insights to drive decision-making
- Fast and scalable:
  - Transactions increase in both number and frequency
  - Cost of collaboration inside and outside the organisation continues to decline

The increasing technological sophistication is leading to:

- More information to consumers, allowing more choices and giving them more opportunity to influence organisations
- Higher expectations of integrated and sophisticated experiences that are simple to use and access
- Decreasing brand loyalty, as customers have less patience and are more willing to switch interchangeably among brands

Test Your Understanding 1: Fast and scalable environment

Emergent technologies create an environment that is fast and scalable. A fast and scalable environment is where:

A. Transactions and cost of collaboration increase.

B. Transactions and cost of collaboration decrease.

C. Transactions increase and cost of collaboration continues to decline.

D. Transactions increase in number and decrease in frequency.

Correct option: C

Transactions increase both in number and frequency, but the cost of collaboration inside and outside the organisation continues to decline.

3. What are business ecosystems?

An ecosystem is a complex web of interdependent enterprises and relationships aimed at creating and allocating business value.

- **Web** – ecosystems are a network of organisations—suppliers, distributors, customers, competitors, government agencies, etc.—who are involved in the delivery of a specific product or service through both competition and cooperation.
- **Interdependent** – new technologies are making business more intelligent, fast and scalable. As the world becomes more connected, organisations will find it increasingly hard to compete on their own and need to see themselves as part of an ecosystem.
- **Relationships** – e.g. Apple, Fitbit and Garmin created an ecosystem focused on developing fitness and health apps.

Ecosystems and traditional markets are not un-alike, however, being composed of participants and interactions. These are:

- **Participants:**

  The individual players or organisations within the environment, defined by:

  - Participants' function
  - Participants' ability to extend activity or interactions through the environment
  - The range of activities that participants are able to pursue or undertake within the environment

- **Interactions**:

  The products or services exchanged among participants, defined by:

  - A set of explicit or implicit principles governing conduct within the environment
  - Linkages across the environment connecting elements such as data, knowledge or products
  - The speed and direction at which content or value is exchanged among participants

Test Your Understanding 2: Ecosystems

Select the correct option:

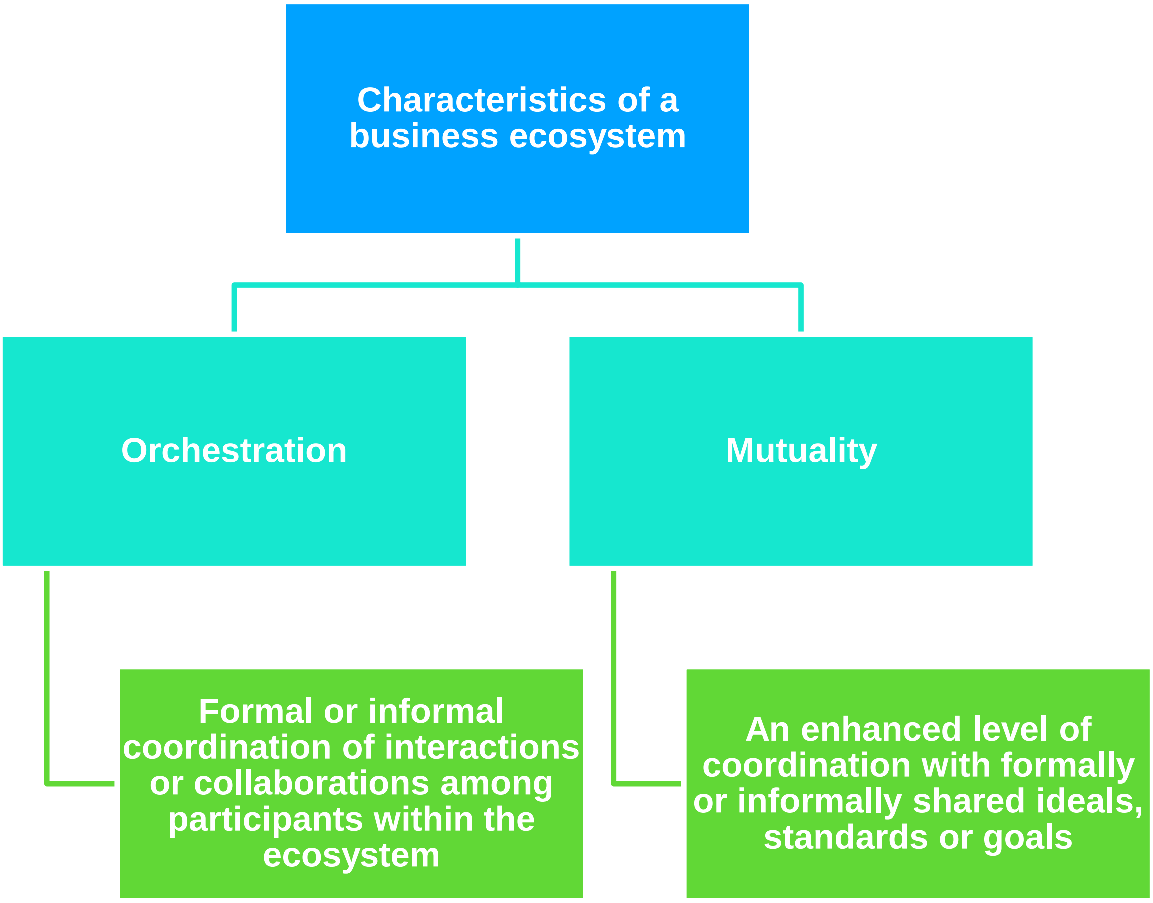
___________ (Participants/Interactions) are the individual players within the environment.

Solution:

Participants

Fundamental characteristics of a business ecosystem

Ecosystems exist because participants can deliver more value within the ecosystem by acting together and have two defining characteristics.



The goals of business ecosystems

The goals of a business ecosystem include:

- Driving new collaborations to address rising social and environmental challenges
- Harnessing creativity and innovation to lower the cost of production or allow members to reach new customers
- Accelerating the learning process to effectively collaborate and share insights, skills, expertise and knowledge
- Creating new ways to address fundamental human needs and desires

4. Value creation and value capture in a business ecosystem

How is value created?

- Value creation is an act of bringing something of value into existence.
- Participants can create value by product enhancement, product development and creation of new services or customer experiences.

How is value captured?

- Value capture is the act or process of appropriating or allocating value.
- Participants can capture value directly through transactions or indirectly from an orchestrator.
- The ecosystem complexity and the extent or intensity of orchestration impact the potential and govern the nature of value capture.

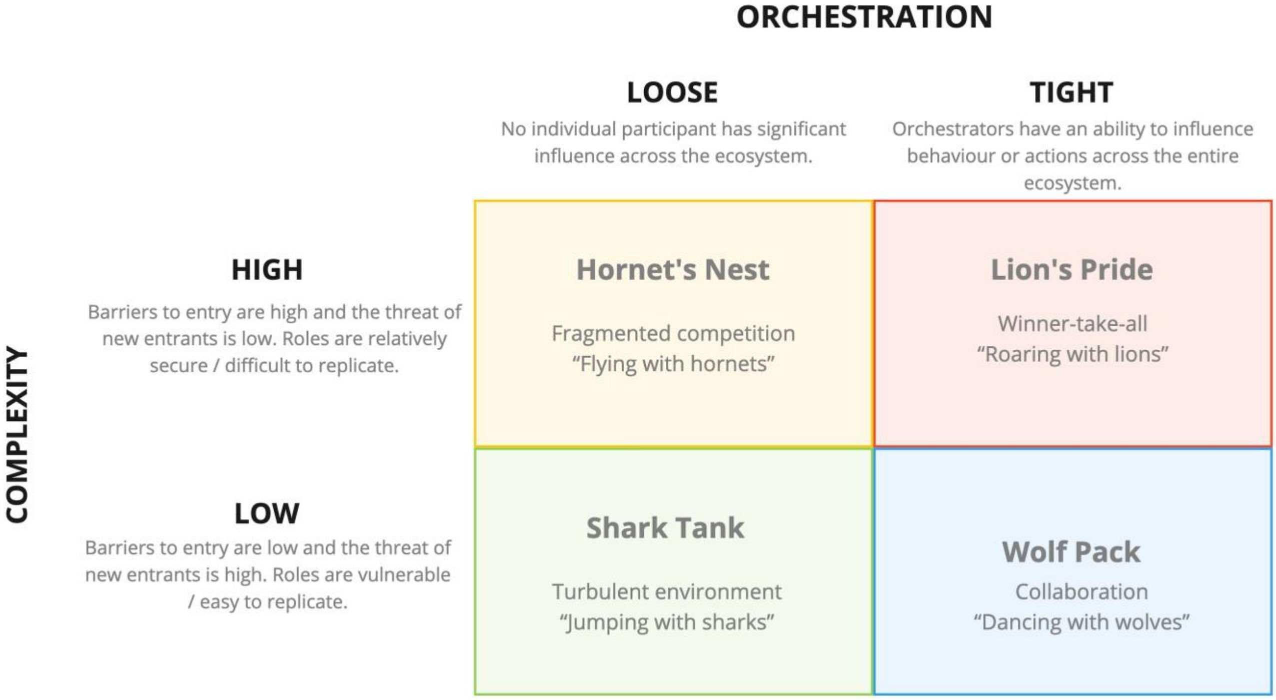
As a result, ecosystems can produce more value as a whole than the sum of the individual participants acting independently.

5. The difference between traditional markets and ecosystems

Traditional markets	Ecosystems
• Value creation is incremental and focusses on covering costs and gaining a return • Value capture is additive, sequential and based on exchanges	• Value creation is collaborative. Ecosystems create more value as a whole, than the sum of individual participants acting independently • Value capture reflects a networked, dynamic, everyone-to-everyone process of exchange

Strategies to capture value (Ecosystem Archetypes)

The strategy depends on the degree of complexity and orchestration.



Test Your Understanding 3: Shark tank

A shark tank is where:

A. Low complexity and loose orchestration create a turbulent environment

B. Low complexity and tight orchestration promote collaboration

C. High complexity and loose orchestration promote fragmented competition

D. High complexity and tight orchestration motivate a winner-take-all mentality

Correct option: A

An ecosystem where low complexity and loose orchestration create a turbulent environment is known as a shark tank.

6. Participants and their roles

- Ecosystems enable and encourage the participation of a diverse range of organisations, and often individuals, who together can create, scale and serve markets beyond the capabilities of any single organisation.
- Participants interact and co-create in increasingly sophisticated ways that would historically have been hard to formally coordinate in a "top-down" manner, by deploying a proliferation of technologies, tools of connectivity and collaboration. There is dynamism and substantial potential for increasingly productive ecosystem development in the years ahead.
- Participants—including customers—are bonded by some combination of shared interests, purpose and values that incentivise them to collectively nurture, sustain, and protect the ecosystem as a shared common ground. Everyone contributes and everyone benefits, enhancing the longevity and durability of ecosystems.

7. Regulating ecosystems

Challenges

- **Speed of change** - changing regulations can take years—too long for investors looking at new markets.
- **Innovators find 'back doors'** - Uber argued they were a technology company, not a taxi service.
- **Ecosystems evolve** - regulators must be careful not to limit small innovators when trying to control larger players.
- **Innovations cross jurisdictional lines** - who has oversight of the ecosystem created by Uber?

8. What does the digital customer want?

According to World Economic Forum/Accenture analysis, there are a number of factors that drive customer demands in the digital era. These include the following:

- **Contextualised interactions** (new movies to watch from Netflix)
- **Seamless experience across channels** (desktop, phone, etc.)
- **Anytime, anywhere** (real-time inventory levels)
- **Great service** (doesn't matter who – low loyalty)
- **Self-service** (using 3D printing)
- **Transparency** (more information for research)
- **Peer review and advocacy** (Trustpilot reviews, etc.)

Keeping ahead of customers' expectations

- **Design thinking** (designing experiences rather than products/services)
- **Experiential pilots** (reactions, emotional and behavioural)
- **Prototyping** (first-generation product may only be 80% ready)
- **Brand atomisation** (the ability to tell multiple stories in many ways by producing content in pieces big and small)

Test Your Understanding 4: Customers

The need to monitor how customers behave and to gain an appreciation of their reaction to new experiences is addressed with:

A. Design thinking
B. Experiential pilots
C. Prototyping
D. Brand atomisation

Correct option: B

The need to monitor how customers behave and to gain an appreciation of their reaction to new experiences is addressed with experiential pilots.

9. Chapter summary