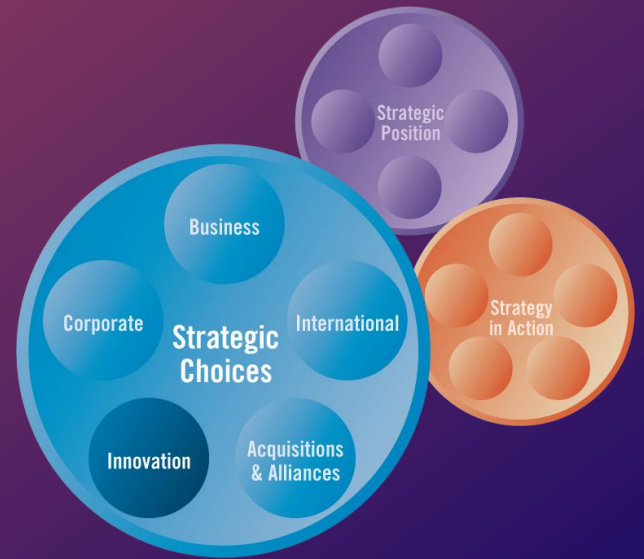


Strategic Choices

9: Innovation and Entrepreneurship



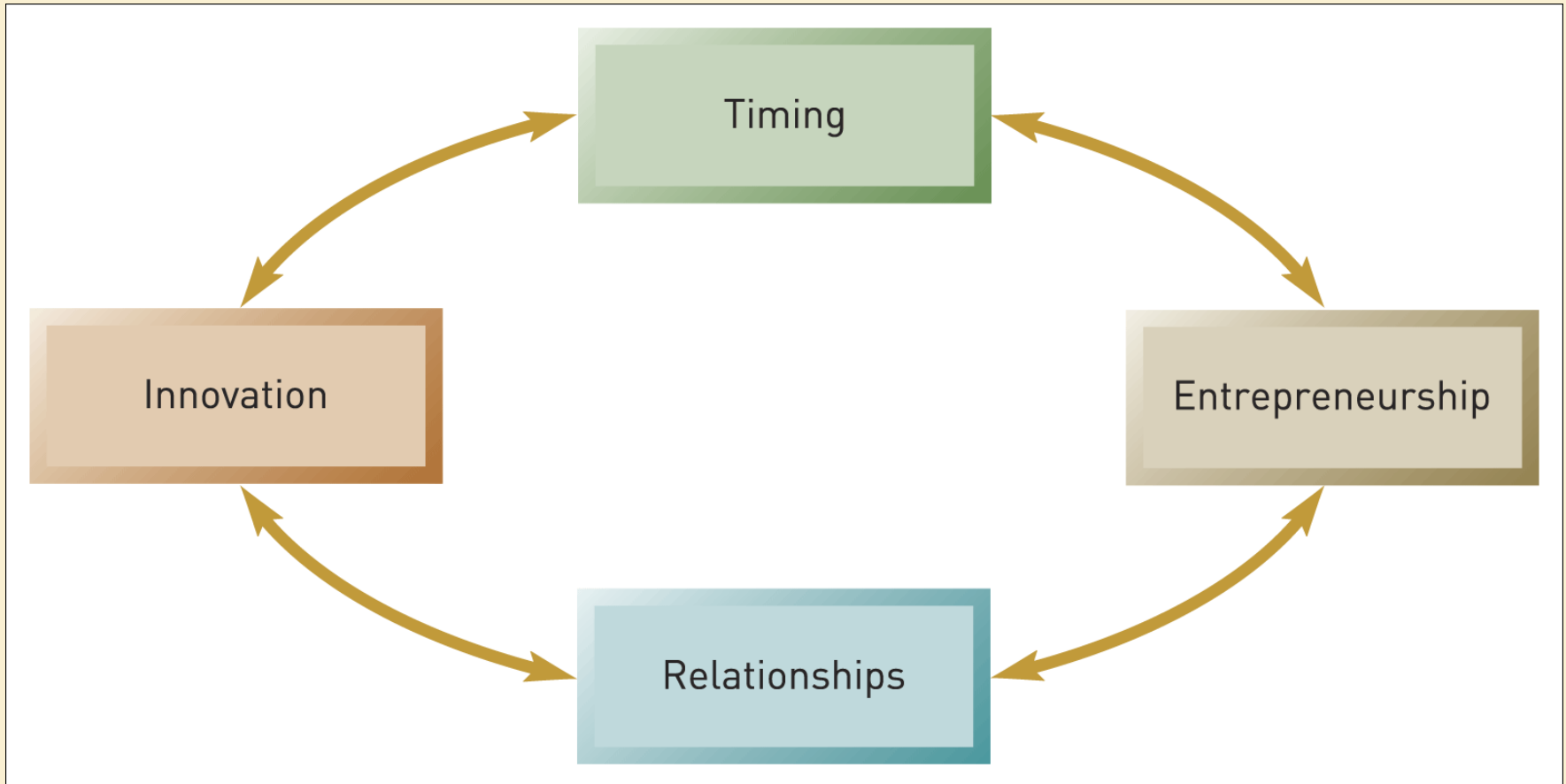
Learning outcomes (1)

- Identify and respond to key *innovation dilemmas*, such as the relative emphases to place on technologies or markets, product or process innovations, open versus closed innovation and the underlying business model.
- Anticipate and to some extent influence the *diffusion* (or spread) of innovations.

Learning outcomes (2)

- Decide when being a *first-mover* or *follower* is most appropriate in innovation, and how an incumbent organisation should respond to innovative challengers.
- Anticipate both key issues facing entrepreneurs as they go through the *stages of growth*, from start-up to exit, and the choices involved in *entrepreneurial strategies*.
- Evaluate opportunities and choices facing *social entrepreneurs* as they create new ventures to address social problems.

The innovation–entrepreneurship framework



Innovation

Innovation involves the conversion of new knowledge into a new product, process or service and the putting of this new product, process or service into actual use.

Innovation dilemmas (1)

Technology push or market pull

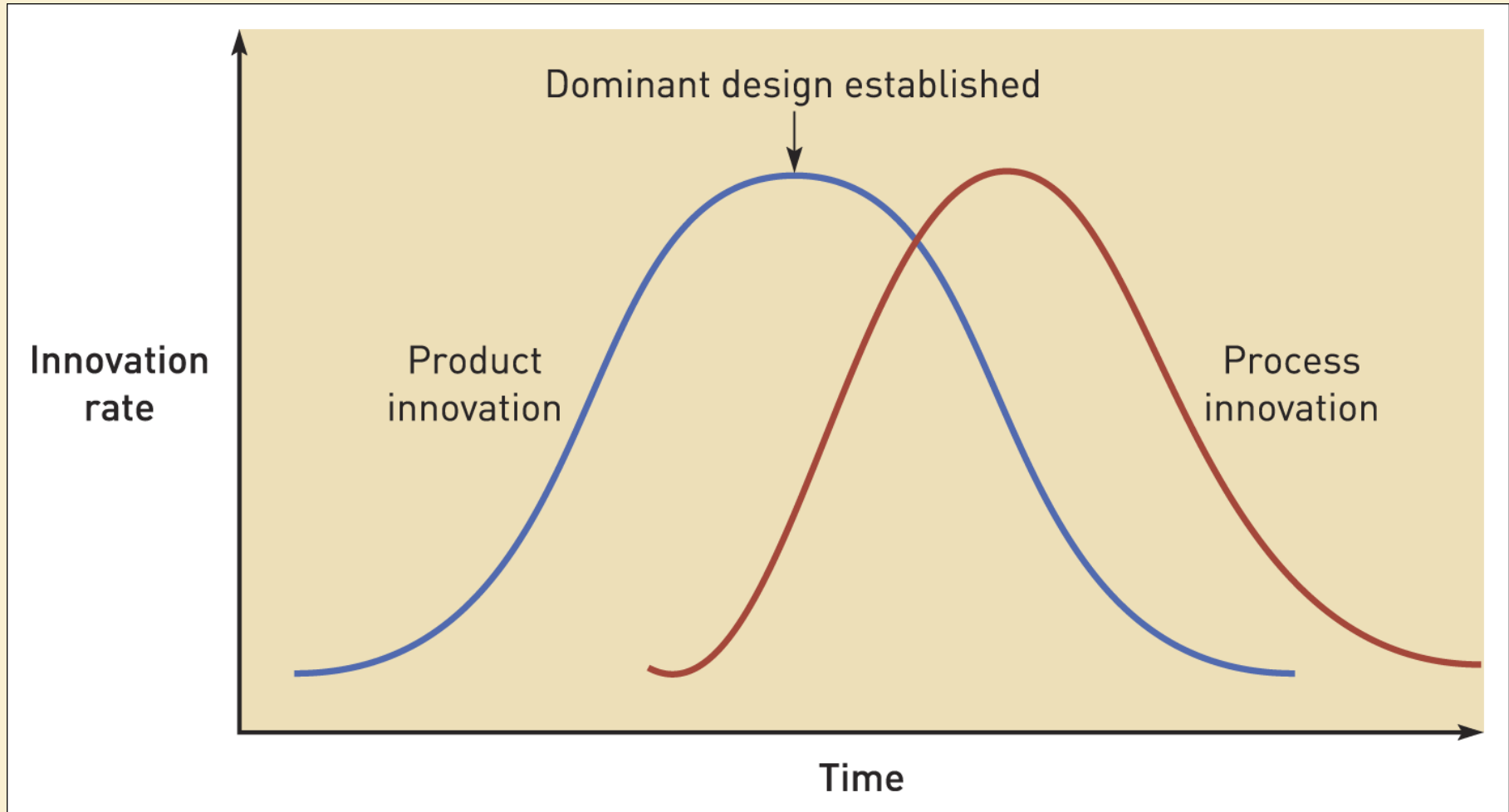
- **Technology push** is the view that it is the new knowledge created by technologists or scientists that pushes the innovation process (i.e. the outcomes from R & D labs).
- **Market pull** is the view that it is the pull of users in the market that is responsible for innovation. **'Lead users'** are of particular importance. In contrast, **'frugal innovation'** is also important – sensitivity to the real needs of poorer consumers (e.g. Tata's Nano car).

Innovation dilemmas (2)

Product or process innovation

- ***Product innovation*** relates to the final product (or service) to be sold, especially with regard to its features.
- ***Process innovation*** relates to the way in which a product is produced and distributed, especially with regard to improvements in cost or reliability.

Product and process innovation



Source: Adapted from J. Abernathy and W. Utterback, 'A dynamic model of process and product innovation', *Omega*, vol. 3, no. 6 (1975), pp. 142–60.

Implications of product/ process innovation model

- ***New developing industries*** favour product innovations.
- ***Maturing industries*** favour process innovations.
- ***Small new entrants*** have greatest opportunities in the early stages of an industry.
- ***Large incumbent firms*** have advantages in later stages.

Innovation dilemmas (3)

Open or closed innovation

- **‘Closed’ innovation** – the traditional approach to innovation, relying on the organisation’s own internal resources – its own laboratories and marketing departments. Innovation is secretive, organisations are anxious to protect intellectual property and avoid competitors free-riding on their ideas.
- **‘Open’ innovation** involves the deliberate import and export of knowledge by an organisation in order to accelerate and enhance its innovation. Exchanging ideas openly is seen as likely to produce better products more quickly.

Open or closed innovation

The balance between open and closed innovation depends on:

- ***Competitive rivalry*** – if it is intense closed innovation is better.
- ***'One-shot' or continuous innovation*** – open innovation is best where innovation is continuous (encouraging reciprocal behaviour).
- ***Complex and tight-linked innovation*** – closed innovation is best in order to avoid inconsistent elements in development.

Platform leadership

Platform leadership refers to how large firms consciously nurture independent companies through successive waves of innovation around their basic technological 'platform'.

Examples include: Microsoft and Sony (in the video games market) and Intel (in the computer industry).

Innovation dilemmas (4)

Technological or business-model innovation

A business model describes how an organisation manages incomes and costs through the structural arrangement of its activities.

Business model innovation involves re-organising all the elements of a business into new combinations. This involves innovation in:

- ***The product.*** It may redefine what the product or service is and how it is produced.
- ***The selling.*** It may change the way in which the organisation generates its revenues – its selling and distribution activities.

Innovation diffusion

Diffusion is the process by which innovations spread amongst users. This can vary with respect to both speed and extent.

Supply side determinants of diffusion

Degree of improvement

Compatibility

Complexity

Experimentation

Relationship management

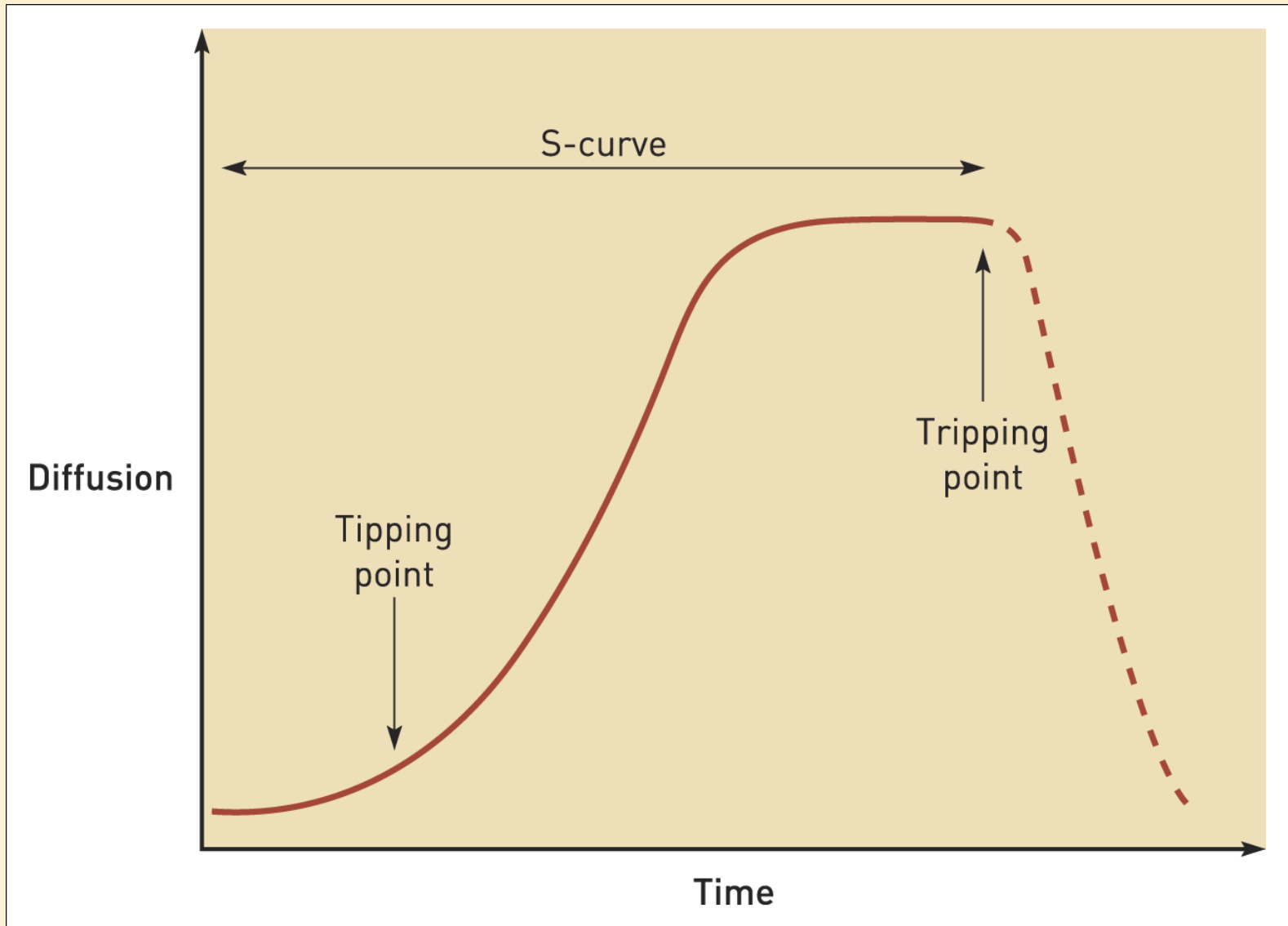
Demand side determinants of diffusion

Market awareness

Network effects

Customer propensity to adopt

The diffusion S-curve



The S-curve

The **S-curve** reflects a process of initial slow adoption of innovation, followed by a rapid acceleration in diffusion leading to a plateau representing the limit to demand.

Decision points are:

Timing of the
tipping point

Timing of the
plateau

Extent of
diffusion

Timing of the
'tripping' point

Decision points along the S-curve

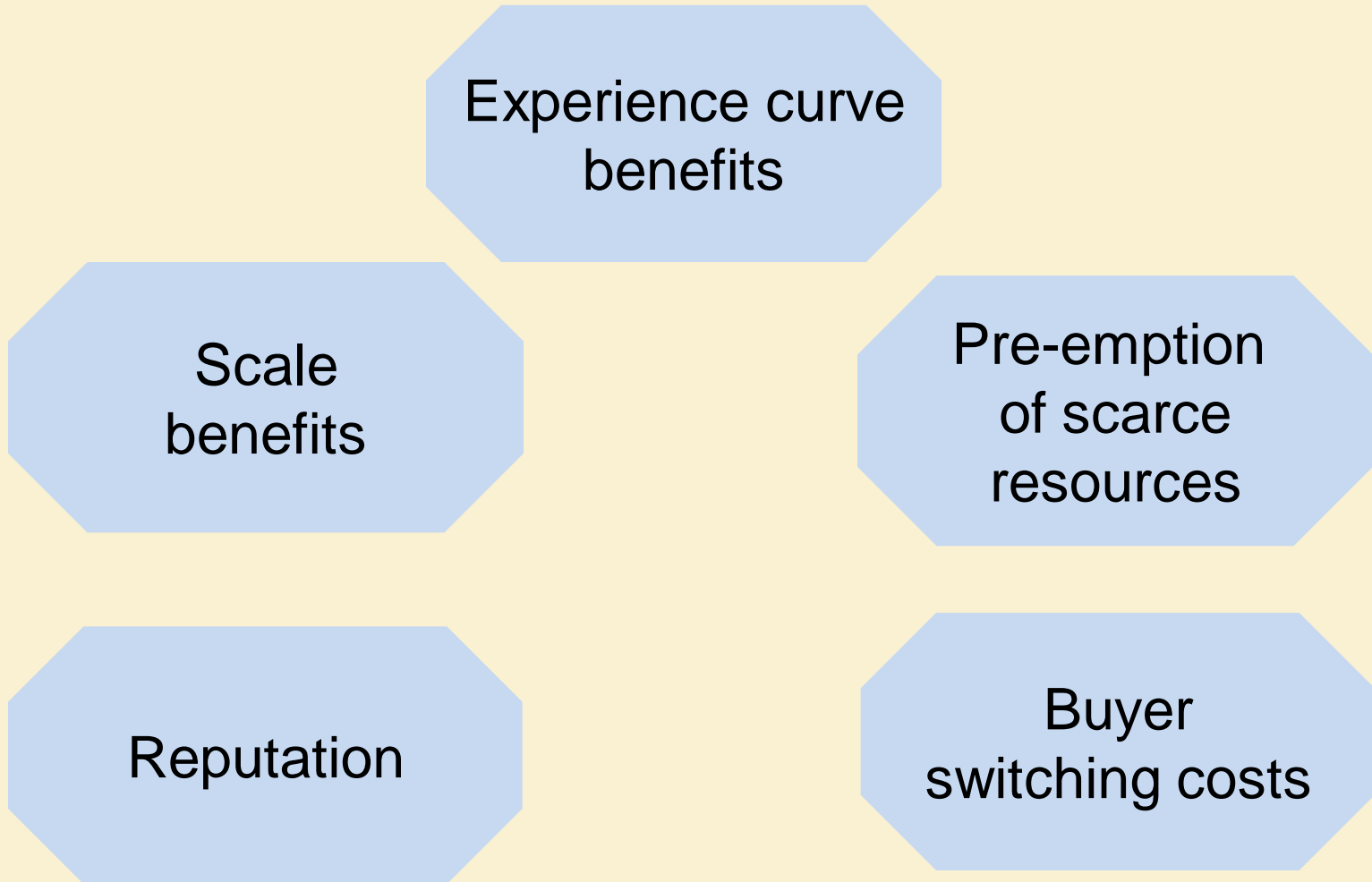
- ***A tipping point*** is where demand for a product or service suddenly takes off, with explosive growth.
- ***The tripping point*** is the opposite of the tipping point, when demand collapses – sometimes drastically but often more gradually.

Innovators and followers

First-mover advantage exists where an organisation is better off than its competitors as a result of being first to market with a new product, process or service. However there are also some disadvantages.

Examples include Coca-Cola (in soft drinks) and Hoover (in vacuum cleaners).

First-mover advantages



Late-mover advantages

Free-riding – imitating
pioneer's strategies
but more cheaply

Learning – from the
mistakes made
by pioneers

First or second?

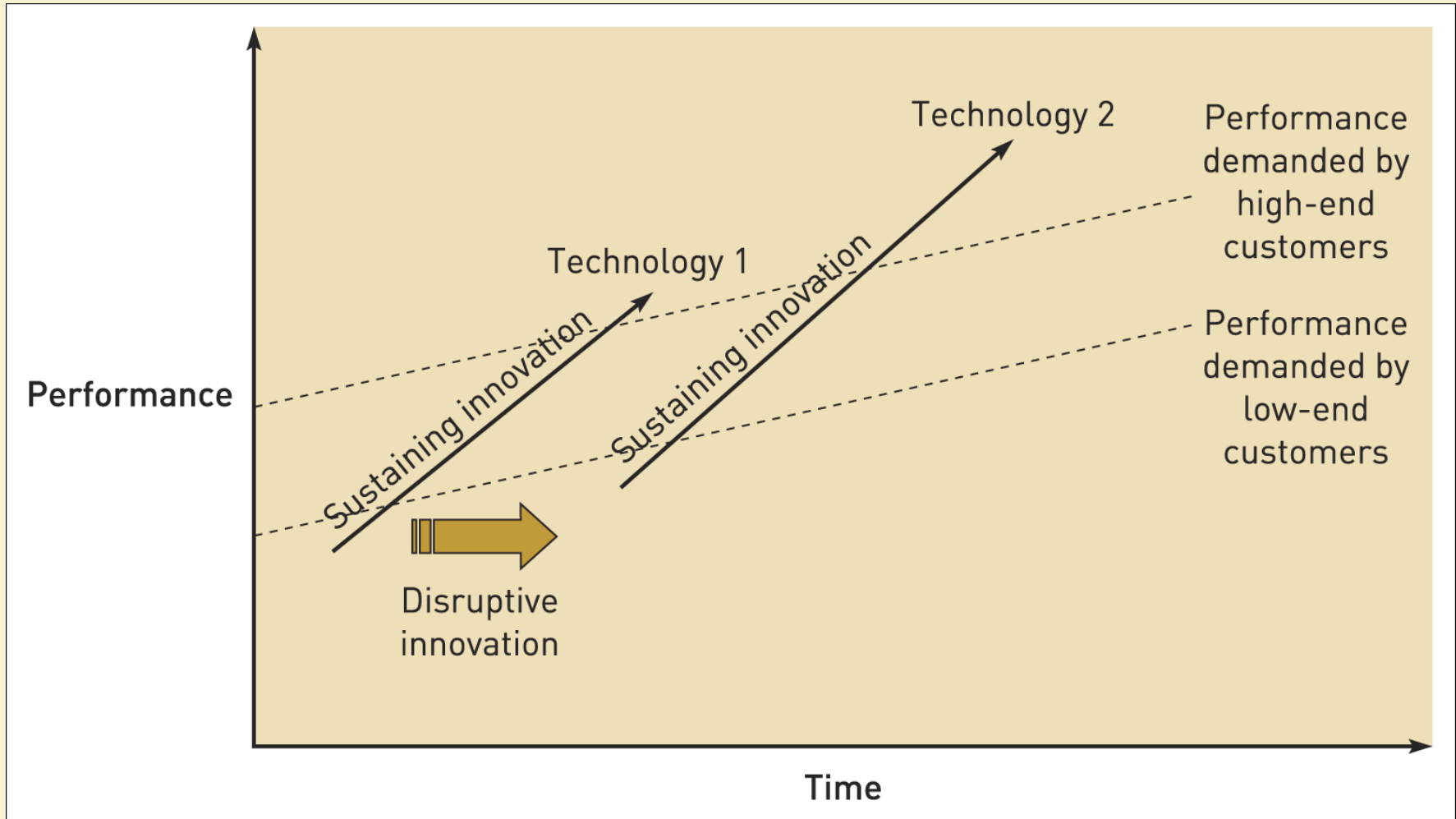
Three contextual factors in choosing between innovating and imitating:

- *Capacity for profit capture*
- *Complementary assets*
- *Fast-moving arenas*

What is a disruptive innovation?

Disruptive innovation creates substantial growth by offering a new performance trajectory that, even if initially inferior to the performance of existing technologies, has the potential to become markedly superior.

Disruptive innovation (1)



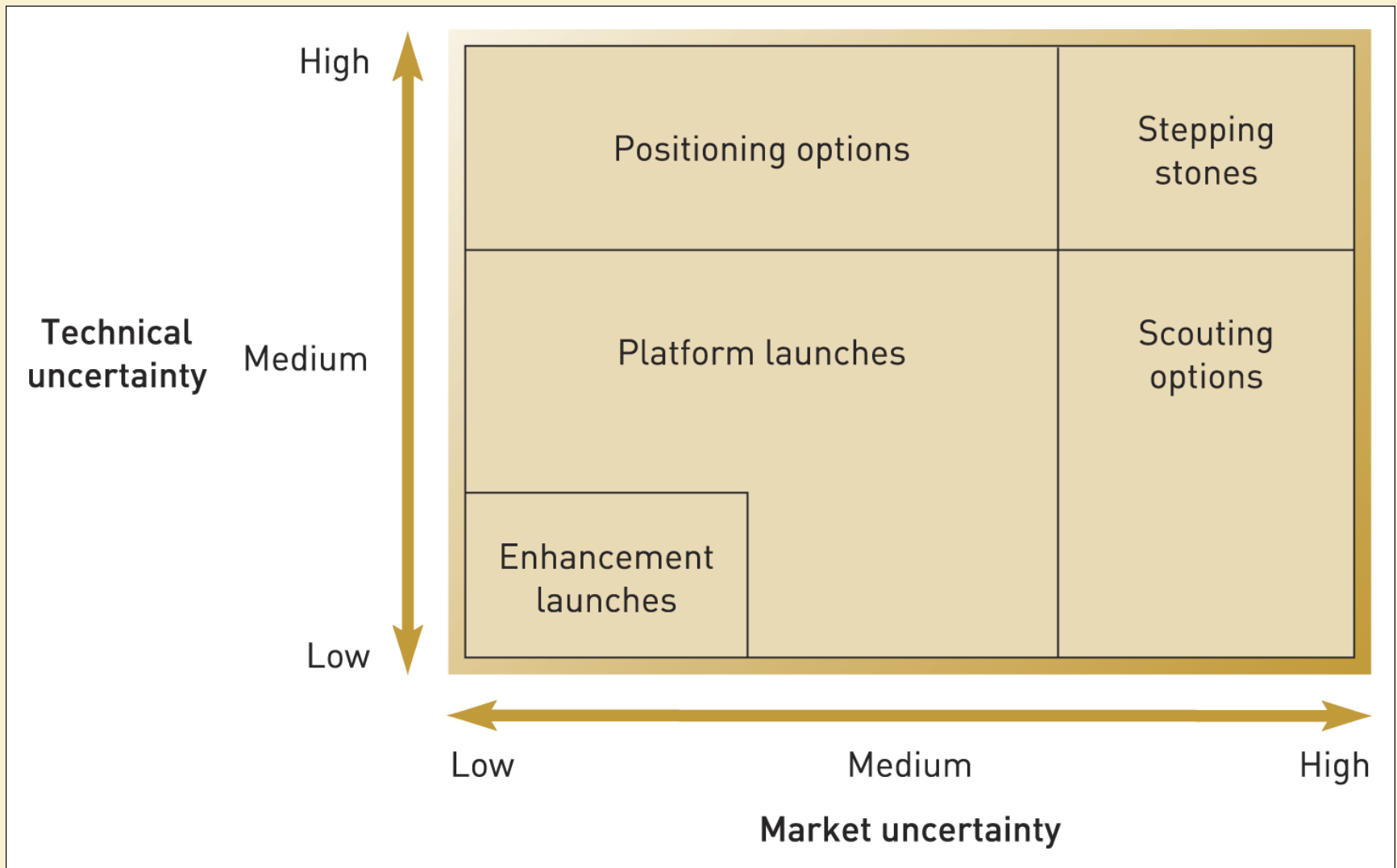
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Disruptive innovation (2)

Incumbents can follow two policies to help keep them responsive to potentially disruptive innovations:

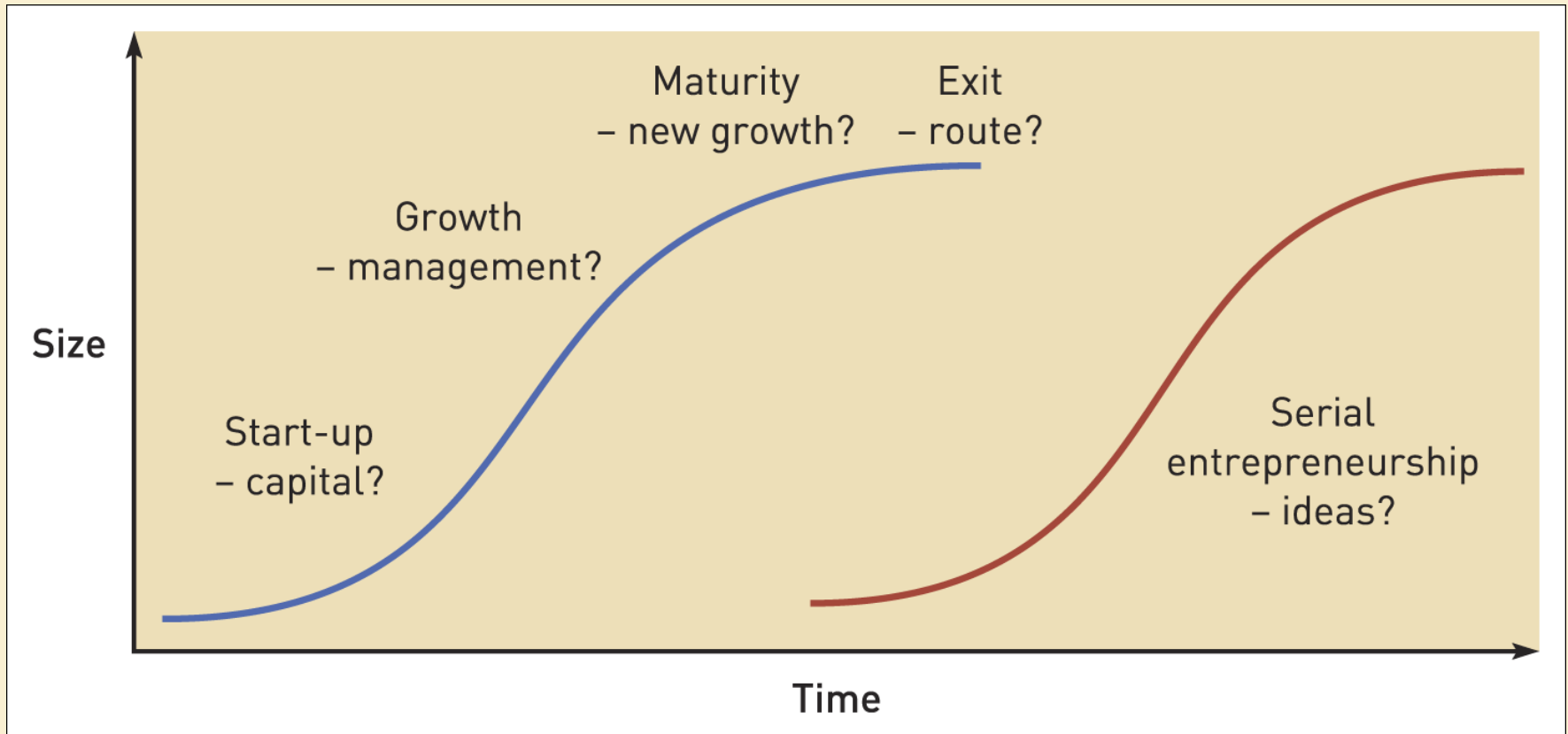
- ***Develop a portfolio of real options*** (limited investments that keep opportunities open for the future)
- ***Develop new venture units*** – small, innovative businesses with relative autonomy.

Portfolio of innovation options



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Stages of entrepreneurial growth



Entrepreneurial strategies

Two key characteristics of entrepreneurial businesses have an impact on strategy:

- **Resource scarcity** – in terms of finance and managerial capacity
- **Relative invisibility** – small businesses are less likely to prompt a competitive response from incumbents.

The impact depends on whether the market is new (speed of response is key) or mature (finding a niche is key).

Entrepreneurial relationships

Entrepreneurship often involves managing relationships with other companies:

- **Corporate venturing** – investing externally in new ventures thereby protecting early-stage ventures from internal bureaucracy and also spreading risk.
- **Spin-offs (or spin-outs)** – the generation of small innovative units from larger organisations.
- **Ecosystems** – fostering communities of connected suppliers, agents, distributors, franchisees, technology entrepreneurs and makers of complementary products.

Social entrepreneurship

Social entrepreneurs are individuals and groups who create independent organisations to mobilise ideas and resources to address social problems, typically earning revenues but on a not-for-profit basis.

Social entrepreneurship decisions

Social mission

Organisational form

Business model

Summary (1)

- Strategists face four fundamental dilemmas in innovation: the relative emphasis to put on *technology push* or *market pull*; whether to focus on *product* or *process innovation*; how much to rely on '*open innovation*'; and finally how far to concentrate on technological innovation as opposed to broader *business model innovation*.
- Innovations often diffuse into the marketplace according to an *S-curve model* in which slow start-up is followed by accelerating growth (the tipping point) and finally a flattening of demand. Managers should watch out for 'tripping points'.
- Managers have a choice between being first into the marketplace and entering later. Innovators can capture *first-mover advantages*. However, '*fast second*' strategies are often more attractive.

Summary (2)

- Established incumbents' businesses should beware of *disruptive innovations*. Incumbents can stave off inertia by developing portfolios of *real options* and by organising autonomous *new venture units*.
- Entrepreneurs face characteristic dilemmas as their businesses go through the *entrepreneurial life cycle* of start-up, growth, maturity and exit. Entrepreneurial strategies are particularly influenced by *resource scarcity* and *relative invisibility*. Entrepreneurs have to choose how they relate to large firms, particularly as they may become involved in *ecosystems* or strategies for open innovation.
- *Social entrepreneurship* offers a flexible way of addressing social problems, but raises issues about appropriate missions, organisational forms and business models.