

Innovation management

Topic Gateway Series No. 38



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Topic Gateways are intended as a refresher or introduction to topics of interest to CIMA members. They include a basic definition, a brief overview and a fuller explanation of practical application. Finally they signpost some further resources for detailed understanding and research.

Topic Gateways are available electronically to CIMA members only in the CPD Centre on the CIMA website, along with a number of electronic resources.

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Innovation management

Definition and concept

'Innovation ... is generally understood as the introduction of a new thing or method ... Innovation is the embodiment, combination or synthesis of knowledge in original, relevant, valued new products, processes or services.'

Luecke and Katz, 2003

Creativity is often seen as the basis for innovation. For innovation to occur, there needs to be a creative idea and the ability to convert that idea into action to make a difference. The result is a specific and tangible change in the products, services or business processes provided by an organisation:

'All innovation begins with creative ideas . . . we define innovation as the successful implementation of creative ideas within an organisation. In this view, creativity by individuals and teams is a starting point for innovation; the first is a necessary but not sufficient condition for the second.'

Amabile et al, 1996

The Department of Trade and Industry (DTI) describes innovation as the successful exploitation of new ideas.

Context

CIMA students are unlikely to study innovation for their professional examinations. However, they are likely to become involved in evaluating and managing innovation during their professional careers. It will be to their career advantage to develop good innovation management skills at an early stage.

Related concepts

Creative destruction; invention; patent; research and development; user innovation.

Overview

Innovation is essential for business survival in highly competitive markets where it is increasingly difficult to differentiate products and services. Innovation is important for the following reasons:

- it allows businesses to expand their customer base by refreshing the market with new and improved products
- it is a key component of competitive advantage and helps companies stay ahead of competitors before rivals' innovations take market share
- it supports the ability to charge a premium
- it provides incremental revenue and profit and also increases shareholder value.

Businesses that are not growing through new product and service introduction are likely to decline as their existing sales portfolio inevitably matures.

It is not surprising that companies such as Procter & Gamble and General Electric have actively embraced the management of innovation. Their principal goal is to drive growth and then to improve shareholder value.

'Nothing is more central to sustain growth than innovation that leads an industry and not only product innovations, but innovative design, innovative marketing, innovative in-store shopping experiences, innovation across the entire business. The companies and brands that lead innovation are the catalysts for growth.'

A.G. Lafely, Chairman, President, Procter and Gamble, 2004

Application

Innovation is relevant in any organisation and can be applied in a number of different ways.

Product/service innovation – introducing new goods or services that are new or substantially improved. This could include improvements in functional use, convenience or technical capabilities.

Process innovation – implementing new or significantly improved production or delivery methods.

Business model innovation – changing the way business is done, for example, EasyJet, Dell computers and global outsourcing.

Organisational innovation – creating or changing business structures, practices and models.

Marketing innovation – developing alternative marketing techniques to deliver improvements in price, position, packaging, product design or promotion.

Supply chain innovation – improving the way that materials are sourced from suppliers or improving methods of product delivery to customers.

Financial innovation – bringing together basic financial concepts. This might include credit, risk-sharing, ownership or liquidity to produce new financial services, products or ways of managing business operations. For example, financial innovation adapts to new circumstances and develops new value chains as the compliance and legislative environment evolves.

The common link between each of these is an improvement in efficiency, productivity, quality and/or competitive positioning for the organisation.

While innovation typically adds value to an organisation, it is not without risk. Key innovation risks include:

- **Operational**

Operational risks include failure to meet specification, costs or launch date. Damage to company reputation and brand is another potential operational risk.

- **Commercial**

Consumer resistance and competition are examples of commercial risk.

- **Financial**

Investment yield may be less than planned. There is also a risk that debt/equity investors become dissatisfied.

Figures from research on innovation failures vary considerably. Some research suggests that 50% of innovations fail to reach their organisational goals while other studies reveal that 90% of innovations fail. However, the risk of not innovating at all can often be much higher as businesses lose competitiveness and market share.

A key challenge in innovation is managing the balance between process and product innovations. Process innovations can enhance shareholder satisfaction by improving efficiencies, whereas product innovations can develop customer satisfaction. However, the latter may occur at the risk of expensive R&D which can erode shareholder returns.

Innovation management

Innovation management is the process of managing innovations, that is, ideas, in organisations through the stages of the innovation cycle.

The innovation cycle describes the activities involved in taking an innovative product or service to the marketplace. In essence, there are two aspects to this:

1. Developing the innovative product or service.
2. Building the business to market the product or service.

The chart below provides an example of a typical innovation cycle with activities at each stage:

Stage	Description	Typical activities
1	Ideas	Identify a market opportunity
2	Resources	Organise people, finance and facilities to match the goals of the organisation
3	Investigate	Research the possibilities
4	Patent	Protect the intellectual property
5	Design	Model and test it for users
6	Develop	Improve the technology
7	Make	Start production
8	Sell	Advertise and inform people
9	Service	Communicate with the customers

Source: Australian Academy of Technology, Sciences and Engineering.

The first stage in the innovation cycle is ideas generation. Ideas will often arise from observation of a current or future problem. They could be inspired by the organisation's objectives or by a new market situation that suddenly becomes an opportunity.

Once the opportunity has been recognised, it needs to be evaluated. An important test for an idea is that it matches the goals of the organisation and available resources – people, finance and facilities.

If there is alignment with the objectives of the organisation, the idea moves to a new stage where it can be investigated and further developed. The development phase may involve further research into the opportunity or the patenting of the concept. Prototypes may well be designed, developed and tested at this stage.

The decision to start selling the innovation is a critical stage. This is when significant resources are often required to support the launch. Sometimes an organisation might wait at the end of the development phase for suitable market conditions.

The final stage of the innovation cycle is commercialisation, where the innovation is marketed and sold to the customer. The innovation now moves out of the organisation's control and into the hands of the users. This is the hardest stage of the innovation cycle for organisations to 'manage'. It is crucial that the organisation monitors the innovation's performance so that any shortcomings are corrected.

Innovative organisations will typically be working on new innovations that will eventually replace older ones. This is important as product life cycles show reduced growth for older products and services. Growth may even begin to decline eventually, therefore impacting an organisation's ability to expand.

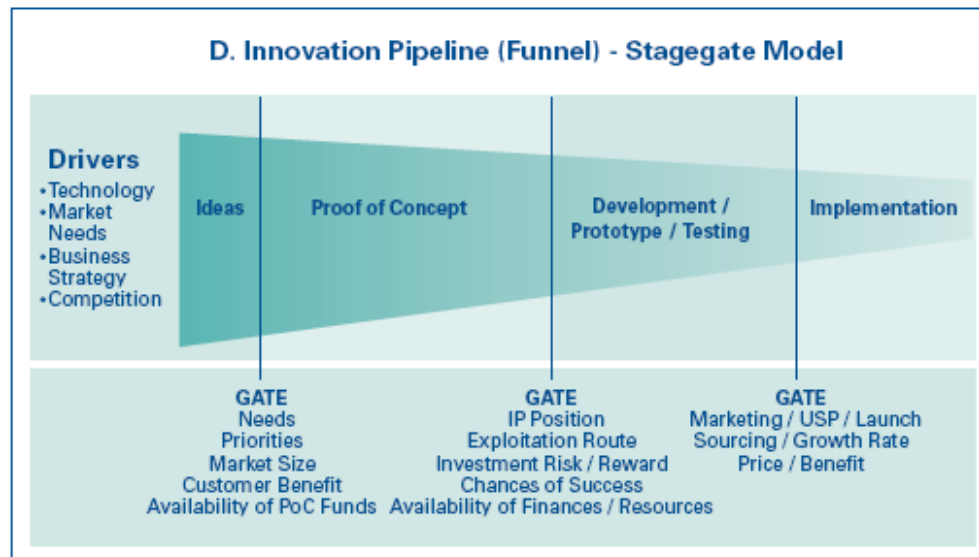
New incremental innovations or changes to the product allow growth to continue. Companies typically generate far more technical innovations than they can possibly hope to bring to market effectively. There is a need for structured management and processes to handle innovation from the ideas stage to commercialisation.

Innovation funnel

The 'innovation funnel' is a framework for managing innovation:

- it provides structure and discipline, and facilitates the innovation process
- it can allow faster development of innovations that drive growth
- it defines and tracks innovations according to predetermined criteria
- it provides 'gates' to control innovation resource decisions. This allows the passage of projects more likely to succeed by killing those more likely to fail as early as possible.

Many organisations will have their own version of the innovation funnel. An example of this is the 'Stagegate'™ model, used by the DTI:



Source: DTI '60 Minute Guide to Innovation'

Activities are typically categorised into stages

1. **Concept** - The focus is on generating ideas and concepts and assessing them against strategic fit, market opportunity, organisational impact and the chances of success, to decide which are worth exploring further.
2. **Feasibility** - Projects are selected for further development based on an evaluation of market acceptability, the investment risk/reward, and the availability of the required resources (people, facilities and money).
3. **Development** - Market launch is dependent on satisfactory feedback of the product prototype or service pilot, an evaluation of likely competitor response, and ability to deliver the required supply chain, marketing and pricing/margins.
4. **Implementation** - Executing the innovation business plan, monitoring the launch and performing post launch reviews to understand whether the implementation has been successful and what, if any, changes need to be made.

Between each stage are decision points (or 'gates') where the idea or project is assessed against selected criteria. This is to determine whether it should progress and continue to receive funding and resources. Progression only occurs after satisfying certain criteria, designed to ensure that the investment is minimised in the early stages. If necessary, the project is abandoned sooner rather than later.

It is this prioritisation process that gives the funnel its shape. It means that those innovations that are most likely to succeed are not starved of resources from those that are most likely to fail.

The role of finance

Finance plays a critical role in the innovation process. This requires a delicate balancing act between managing risks without allowing this to blunt innovation.

In essence, it requires finance to:

- support innovation by providing analytical insight at both the strategic and detailed levels across the whole organisation
- provide an objective viewpoint and inject realism into discussions
- rely on the facts and structured analysis to support decision making
- understand the financial implications of marketing decisions
- ensure that there are clear, measurable gates throughout the project
- focus on sustainability of innovation (going beyond year one volume)
- prevent escalation of commitment from clouding judgement. It is human nature to stay committed to a course of action despite receiving negative feedback. It often takes more courage to kill a futile project than it does to sustain it
- monitor the success of the innovation post launch and provide feedback on performance for future innovation projects.

Case studies

The BERR (formerly DTI) website provides a good selection of different case studies, allowing readers to choose between innovation case studies by sector or by innovation issue. <http://digbig.com/4wxmr>
[Accessed 16 May 2008]

The Powerhouse Museum has nine case studies that relate directly to the different stages of the innovation cycle mentioned in this topic gateway.

<http://digbig.com/4wxms>

[Accessed 16 May 2008]

The Dell case study provides an interesting insight into an innovation process that revolutionised the personal computer industry. <http://digbig.com/4wxmt>

[Accessed 16 May 2008]

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Further information

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The Innovation Unit – one of the UK's leading organisations for promoting innovation to improve education.

www.innovation-unit.co.uk

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European Union – innovation articles.

<http://cordis.europa.eu/cip/index.html>

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Innovation Point_– provides a useful source of White Papers, articles and presentations on various aspects of Strategic Innovation.

www.innovation-point.com/resources.htm

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