Chapter Summaries

# Chapter 7 – Product innovation and development strategies

## Introduction

From a strategic perspective, innovation is based upon technological superiority and posits that buyers will seek goods and services that provide the greatest interest, performance, features, quality, and/or value for money. Innovation can be an integral part of marketing strategy owing to its ability to reduce costs and/or differentiate. The ‘and’ part of the sentence has provided one of the biggest challenges to Porter’s cost-differentiation framework in that in many markets the name of the game is to both reduce costs AND differentiate. Buyers have become increasingly demanding and no longer see a contradiction between product innovation and development and falling prices. Innovation can be used to find ‘comfort zones’ in the marketplace. The best strategic place for any organization is to occupy a space that rivals have no interest in or cannot easily emulate. Patek Philippe uses established technology to build classic watches while Seiko uses innovation to produce digital watches with kinetic energy. Innovation and development only have strategic value if positioned appropriately. On the face of it Patek Philippe has no interest in advances in Velcro strap technology!

## What is innovation?

Innovation is a noun with a definition along the lines of ‘the introduction of something new’ or ‘a new idea, method, or device’, as with how Netflix has disrupted the traditional broadcast television model or Samsung’s Gear VR (virtual reality) has enhanced gaming and Bitcoin has disrupted banking payments. Strictly speaking, the difference between innovation and invention is that invention applies to things that are ‘new-to-the-world’, whereas innovation refers to subsequent changes and adaptations. An obvious example would be Alexander Graham Bell’s ‘electrical speech machine’ of 1876. Looking back, we can see that the telephone was the precursor to the Internet, but it would be a ‘stretch’ to say that Bell invented the Web. So, we recognize that both the telephone and the Web were new-to-the-world, despite the myriad of innovations that can be traced back to the telephone. When it comes to competitive marketing strategy, the talk is mainly of innovation rather than invention.

## Disruptive business models and products

A disruptive technology fundamentally shifts the production paradigm and often how a product or service is used. For example, digital technology has changed a number of markets, from cameras to radios to telephony (Christensen, 1997). People still take pictures; but the dominance of the 35-mm film market has evaporated. People still listen to radio, but not solely by tuning to a channel on a radio. Hardbound copies of the Encyclopaedia Britannica ceased in 2012 after 244 years of production in face of internet competition—though the company continues to thrive with a web presence (Cauz, 2013), including a Google Chrome extension introduced in 2018. However, the scope of the disruption has to include disruptive business models (Markides, 2006) such as discount shopping, low-cost airlines, and online businesses such as Expedia (see, also, Christensen, et.al. 2016).

The term ‘business model’ arose in the early 1990s and is used to express the nature of the activities and processes a company performs to deliver goods and services to customers. Every company operates according to a business model, which may or may not be effective; for example, the different business model in terms of strategy and implementation between a high-street shop selling physical CDs compared to a website offering music downloads. A disruptive business model is the discovery of fundamentally new ways of doing business in an existing market. New business models attack existing markets by emphasizing different product or service attributes than established organizations do.

## Products

Launching disruptive goods and services is a risky business, especially if the technology is discontinuous (requires a significant change in behaviour and/or in complementary technology); e.g., Nespresso espresso machines require the insertion of pods that required a change in behaviour and the development of a completely new supply chain whereas bean-to-cup espresso machines allowed the use of regular coffee beans. Nestlé Nespresso S.A. took a gamble. Had it gone wrong, the costs in lost investment would have been enormous.

## NPD (new product development) issues

New ideas have been traditionally developed by a three-stage process:

1. *Idea generation*—involves activities like problem analysis, listing attributes and changing combinations, suggestion boxes, brainstorming, and customer requests. Ideas are then screened by their market attractiveness and market competitiveness.
2. *Business screening analysis*—involves identifying positioning, creating a concept, and attempting to predict market behaviour.
3. *Development and test marketing*—sales forecasting, product development, market tests, possible marketing mix, and break-even analysis.

Once a company has established the qualitative and quantitative nature of its objectives it has to ensure that there is a process in place to enable innovation to happen and to transplant innovative ideas into manageable projects. It may help to break the process into stages.

From an organizational perspective the whole process might be driven functionally: the new product passes sequentially between departments and ends with marketing. Alternatively, a parallel approach might be adopted where all the elements are developed in tandem so that marketing has involvement from the generation of the idea onwards. Alternatively, Bonabeau, Bodick, and Armstrong (2008) advocate separating the early stage of NPD from the latter with two completely detached organizational structures. They argue that the first phase is for ‘truth-seeking’ to identify prospects or eliminate bad bets. The second is to focus on maximizing the value of products that have made it through the first stage. They broadly estimate that between 60 and 80 per cent of candidate new products will be eliminated at stage 1 and around 70 per cent will go to market launches.

## Market preparation and branding

Having developed a new product, market preparation is about ‘warming-up’ the marketplace for the innovation. In the case of high-tech products co-operative strategies with rivals are becoming the norm (Easingwood and Koustelos, 2000). This is because alliances and licensing helps signal to consumers that this new technology will not be leaving them marginalized such as Betamax tape recorders which were overtaken by VHS despite being of superior quality. Many lessons have been learnt and operating standard agreements enable planning and stability have mushroomed.

## Product rollovers

Short product life cycles increase the frequency of ‘product rollovers,’ the displacement of old products by innovations (Billington, Lee and Tang, 1998). Solo-product roll aims to have the entire range of old products sold out at the planned introduction date (e.g., HP’s Deskjet 510 replacing the Deskjet 500). This is a high-risk and high return strategy. It can prove to be expensive if the old product is sold out too early or there are high inventory levels in place as potential sales may be lost. Dual-product roll is where both old and new products sell simultaneously for a period (e.g., the Pentium III and IV). It is less risky than the solo option, but requires the marketing of both old and new products with the consequent risk of confusing the marketplace. Geographic rolls can reduce confusion (e.g., Mercedes first introduced the 190C in Europe and then North America).

## Disruptive technologies

An innovation strategy without any idea of buyer behaviour is a non-starter. Everett M. Rogers’s (1983) seminal work on the adoption of innovation was the first to compellingly categorize consumers’ readiness to adopt disruptive technologies. Rogers identified five adopter types: innovators, early adopters, early majority, late majority, and laggards.

* Innovators: risk-taker and willing to try new ideas.
* Early Adopters: respected opinion leaders in the product field who are more cautious.
* Early Majority: do not seek leadership but are more likely to adopt than the average buyer.
* Late Majority: more risk-averse and will adopt an innovation after there has been a sizeable take-up already.
* Laggards: highly risk-averse and traditional. Once an innovation has reached ‘traditional status’ they will come into the market.

**Rogers’s** view of adoption largely held sway until the late 1990s when Geoffrey A. Moore introduced his ideas of the ‘chasm strategy’ (1999, 2004a and see 2004b). Moore pointed out that innovative products do not normally slide in from the left-hand side and work their way steadily across to the right. Instead, they often meet with failure, which he categorized as falling into ‘the chasm’. Studies indicate that only about 10-12 per cent of new products make it to market. **Moore** has argued that the fundamental issue for success in crossing the chasm is to understand the difference between the early and late markets. His perspective is oriented towards B2B rather than Rogers’s B2C view although the implications of chasm marketing may be equally applicable to B2C markets.

## Innovation ‘modes’

Despite strongly contended cases to the opposite by such companies as Sony, very little technological innovation is developed without some sense of a strategy. Once a new innovation or development has reached the market, people’s perceptions and expectations are often changed (as with flat-screen televisions or photocopying) and often re-shape how people live or work. Market success normally requires an overall strategic framework. Overall, companies learn from markets, and the customers learn from new technologies. For any organization the degree of focus on either innovation and/or the customer can vary. There are, therefore, four strategic options of low/high market orientation matched with low/high innovation orientation (framework modified from the work of Berthon, Hulbert, and Pitt, 1999).

## Customization

Customization and ‘mass customization’ are especially relevant to innovating and developing new services. It is worth bearing in mind that most of the product innovation and development research has been focused upon products rather than services, though products and services are on a continuum rather than on any fixed points. Nevertheless, relatively few researchers have examined the challenges of service NPD, or might it be termed NSD (New Service Development)? The difficulty is that services are fluid, dynamic, and co-produced in real time with buyers, whereas many of the invention/innovation techniques are focused on tangible ‘hard’ technologies (Bitner et al., 2008). In particular, Bitner et al. recommend deconstructing a service into its component parts (a technique they call ‘service blueprinting’), including physical evidence, customer actions, onstage/visible contact employee actions, backstage/invisible contact employee actions, and, finally, support processes and most importantly keeping the focus on the customer throughout to find potential sources of innovation. Customization and adaptation are the foundations of NSD.

# Conclusion

Product innovation and development can play a pivotal role in marketing strategy. Central is the concept of new product development (NPD), a creative activity towards which there are many different approaches, such as systematic invention thinking. Particular strategic issues to consider are market preparation and product rollovers, which can have a dramatic impact on product innovation and development. Strategic frameworks that can provide considerable insight include Rogers’s product adoption curve and Moore’s concept of ‘crossing the chasm.’ Smaller players in the market should consider judo strategy. An organization’s overall innovation mode is worth giving careful thought to. Customization is becoming an increasingly important area of marketing strategy.