

Using business models to shape business success



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The Advanced Institute of Management Research (AIM) develops UK-based world-class management research. AIM seeks to identify ways to enhance the competitiveness of the UK economy and its infrastructure through research into management and organisational performance in both the private and public sectors.

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Current AIM research projects focus on:

UK productivity and performance for the 21st century.

How can UK policymakers evaluate and address concerns surrounding the UK's performance in relation to other countries?

National productivity has been the concern of economists, government policymakers, and corporate decision-makers for some time. Further research by scholars from a range of disciplines is bringing new voices to the debates about how the productivity gap can be measured, and what the UK can do to improve the effectiveness of UK industry and its supporting public services.

Sustaining innovation to achieve competitive advantage and high quality public services.

How can UK managers capture the benefits of innovation while meeting other demands of a competitive and social environment?

Innovation is a key source of competitive advantage and public value through new strategies, products, services and organisational processes. The UK has outstanding exemplars of innovative private and public sector organisations and is investing significantly in its science and skills base to underpin future innovative capacity.

Adapting promising practices to enhance performance across varied organisational contexts.

How can UK managers disseminate their experience whilst learning from others?

Improved management practices are identified as important for enhancing productivity and performance. The main focus is on how evidence behind good or promising practices can be systematically assessed, creatively adapted, successfully implemented and knowledge diffused to other organisations that will benefit.

Business models provide an effective way for business leaders to understand and shape an organisation's activities, capture elements of organisational strategy, bring them together in a coherent and cohesive manner, and provide important strategic insights into a firm's business.

Our research identifies the constituent elements of the business model and the relationships between those elements, and it provides a business model framework that helps practitioners analyse these elements within their own business. We also investigate the way that business models exist and evolve at multiple levels and in multiple forms, and how managers develop, innovate and practise business models to bring about growth and improve the performance of the firm.

Business models provide an effective way for business leaders to understand and shape an organisation's activities...

1 Business Models in action – the recorded sound industry

To bring the concept of the business model to life and examine its constituent elements and evolution we studied the development of the recorded sound industry from phonograph to iPod. The research revealed three common elements consistently associated with business models: technology, network architecture, and market offering.

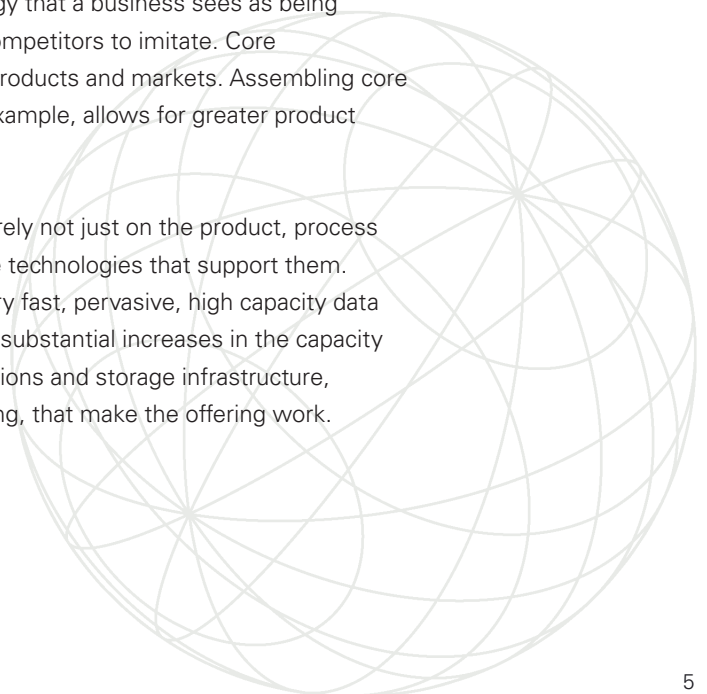
a Technology

The technology element includes not only product and service technology but also process, core, and infrastructure technology. Managers should not view the various technological innovations as sequential, but rather as iterative, interacting with and influencing each other as they evolve.

Product and process technologies: Product technologies provide stable configurations of physical things to be sold to a customer, while process technologies are the organisational techniques used to buy components and make and distribute the products.

Core technologies: The concept of core technologies is also important in business models. A core technology is a specific technology that a business sees as being central to its market offering and is difficult for competitors to imitate. Core technologies can be leveraged widely for many products and markets. Assembling core technologies in clever and innovative ways, for example, allows for greater product segmentation and differentiation.

Infrastructure technologies: Many innovations rely not just on the product, process and core technologies, but also the infrastructure technologies that support them. So in the case of the iPod and iPhone it is the very fast, pervasive, high capacity data storage and transmission systems, facilitated by substantial increases in the capacity and capability of international digital communications and storage infrastructure, and embodied in the internet and cloud computing, that make the offering work.



b Market offering

What counts as a product or a service depends on the nature of the producer-user interactions and patterns of asset ownership, rather than any essential technical feature of a particular product or service. There are three elements of the market offering: activities, access and artefacts. Each contributes to the customer value creation process.

Activities: Activities are what companies do directly for customers as part of the market offering. They are what we typically think of as services.

Access: A market offering can be based on access – paying to use a music download service, for example. Here, access can be an alternative to outright asset-ownership by the customer, but presents new challenges in making transactions possible. Edison had to work out how to charge for access to recorded music in music parlours, as did Apple when digital music became the new market offering.

Artefacts: These are the physical embodiment of the offering. Ownership is an important aspect here – a business model may or may not involve the exchange of ownership of an artefact. Physicality is also important – the physical appearance and feel of an artefact may encourage purchase.

Value: There is a difference between value and acquisition price. Value is the benefit derived by a customer from an exchange. Understanding the value created by a market offering (and the specific combinations of artefacts, access and activities being offered) helps organisations understand markets, customer needs, and pricing decisions.

c Network architecture

To make and shape markets, multiple players need to interact and co-operate with each other, in order to create a new network architecture. There are four important dimensions of this network architecture: markets and standards, capabilities, transactions, and relationships.

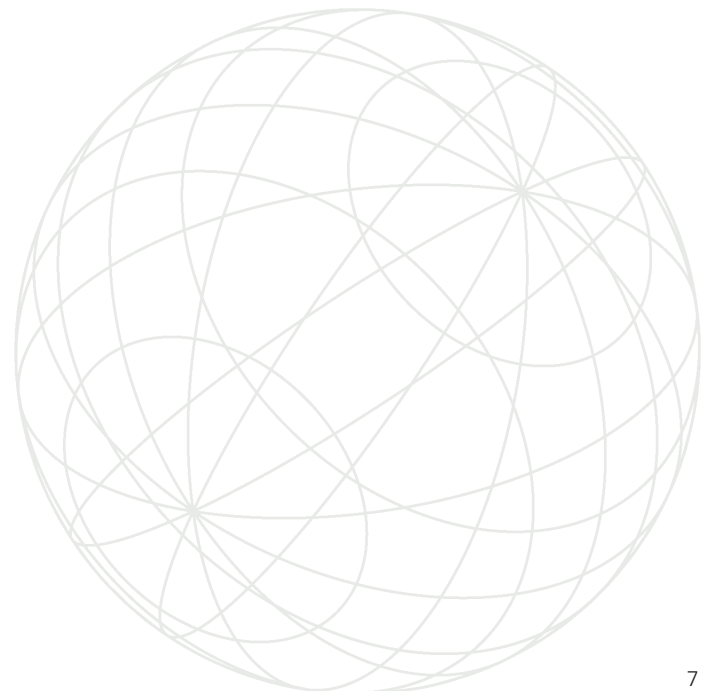
Markets and standards: As markets evolve, so standards emerge. These standards stabilise markets, frame the way managers identify and pursue market opportunities, and frame practices for market-making as managers seek to influence and shape standards in a strategic move to influence standards and their adoption. For example, standard disc sizes and playing speeds in recorded music led to inter-changeability, allowing firms to join the network more easily.

Capabilities: Capabilities are forms of specialist know-how retained, maintained and developed by an organisation over time. Direct capabilities relate to the core activities of the firm and can be understood as the clusters of distinct skills, technical and managerial systems, deeply rooted in the values that constitute how the firm understands its business strategy and future direction. Indirect capabilities relate to how a firm can access and utilise the capabilities of others in its wider business network through the development and management of effective relationships and transactions. Business models are about how to access, assemble and reassemble different combinations of capabilities both within the firm and the wider business network to transform capabilities into revenue.

Relationships: Business models are almost always inter-organisational. Some aspects of inter-organisational working can be achieved through relatively uncomplicated transactions, but innovation can also lead to a blurring of the boundaries between firms in the business network as the relationships that support such innovations emerge. Firms benefit from relationships, for example, through the combination and re-combination of distributed capabilities. Managers can use indirect capabilities to access and manage the capabilities of others distributed in the wider business network.

Transactions: These are the means by which a capability or technological insight are made tradable within business networks and markets. Transactions have to be institutionally as well as technologically shaped, and the technologies to enable counting and payment have to be available and economical to use. The ease and cost of making transactions happen is related to other business model elements such as market standards and relationships.

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2 A practical approach

Within the firm, business models can be seen as framing devices for influencing and shaping collective and individual action at three distinct levels: the strategic level – where individuals share ideas about what they think the firm should achieve; the operational level – where individuals go about making organisational goals happen; and the level of individual transactions or economic exchanges – where the business model has implications for the actions of individuals dealing with a specific exchange.

Within business networks and markets, business models can also be seen as frames for collective action. Business models are co-developed through interaction with suppliers, buyers and consumers, and both influence and are influenced by these important external players.

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The original and simple business model framework we provide identifies three different types of management practices that drive the development of business models: technology practices; market offering practices; and network architecture practices.



Understanding these elements and how they relate to one another is essential to understanding management innovation. The management of an organisation is about shifting activity and emphasis from one element to another, and understanding how such shifts may be important competitive moves. By doing this managers are able to direct their actions more productively and drive their business to greater success.

It is important to note too that there are a number of practical steps that managers can take to maximise the way that business models are used to drive the success of the organisation. These are described in detail in section three of this executive briefing.

introduction: why business models are important

A decade ago, the term 'business model' was inextricably linked with the dot com boom. But the business model concept is not confined to internet-based business. Far from it. In fact business models are highly relevant to all firms, whether they are operating in finance, engineering, computing or music.

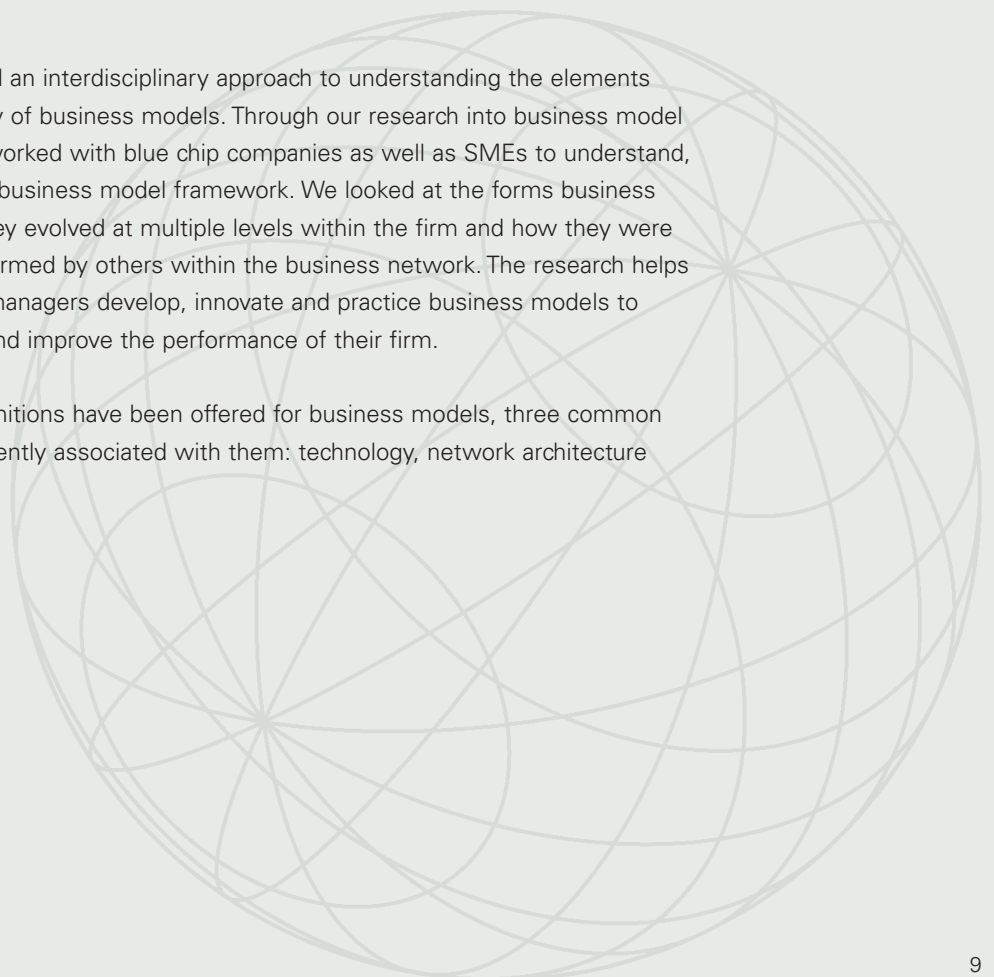
One of the great attractions of business models is their ability to capture critical elements of organisational strategy and bring them together in a coherent and cohesive manner, providing important strategic insights into a firm's business. For example, while business structures and management have tended towards increased specialisation and functional separation, business models emphasise the importance of a holistic approach to doing business.

Yet although business models are a fundamental part of operating a successful business, there has been very little research on the elements that make up a business model, or attempts to provide managers and business leaders with a useful way of understanding how business models work.

To date, most of the research on business models has treated the business model as a mere description of the underlying elements of the business – an objective representation of how the business works (or should work) – rather than identifying the elements of the business model itself and the relationships between them. By understanding both the elements and their links, business models can work as analytical tools within a strategising process as well as acting as frames for directing and co-ordinating activities both within the firm and within wider business networks and markets.

Our research adopted an interdisciplinary approach to understanding the elements and underlying theory of business models. Through our research into business model innovation we have worked with blue chip companies as well as SMEs to understand, develop and test our business model framework. We looked at the forms business models took, how they evolved at multiple levels within the firm and how they were picked up and transformed by others within the business network. The research helps us understand how managers develop, innovate and practice business models to bring about growth and improve the performance of their firm.

While numerous definitions have been offered for business models, three common elements are consistently associated with them: technology, network architecture and market offering.



business models in action – the recorded sound industry

As a way of reaching a better understanding of business models, the way that they work and evolve, we looked at a real life example of a business and business models that spans three centuries – the recorded music industry. From our research of this industry we were able to explore the nature of business models, where they are located and how they happen.

The phonograph, patented in 1877 by Thomas Edison, enabled the recording and playback of short passages of sound. Recording quality was poor, though, as the sound was recorded onto a fragile, tinfoil cylinder which wore out after being played a few times.

Taking into account the limitations of the technology, Edison identified a number of possible applications, most notably recording the last words of dying relatives, recording telephone conversations (the telephone had recently been invented by Alexander Graham Bell), and recording music.

The first commercial use of the phonograph came when Edison sold the phonographs to a network of travelling entertainers who charged for attendance at demonstrations of this new innovation. For a short time, the entertainers made large sums of money, as did Edison through royalties and a percentage of the exhibition fees. However, the novelty soon wore off.

Soon, wax cylinders were introduced to overcome the fragility of the tinfoil cylinder technology – and the next commercial use of the phonograph was as a business dictation machine. But Edison was running short of capital and so, while retaining the manufacturing rights, he sold the patent for the phonograph to an entrepreneur called Jesse Lippincott. Lippincott set up a network of regional licensees who leased the machines for \$40 per annum.

Commercial success remained limited, though. The machines were cumbersome and inconvenient to use and didn't deliver the anticipated benefits. However, some agents created a new market offering, using the phonographs to play recorded music. Phonograph parlours, where customers could pay a nickel to listen to a tune, quickly became the major revenue earner. An important complementary development was the invention of self-serve, coin-operated devices. The development of more easily duplicated, moulded wax cylinders increased the commercial significance of the sale of pre-recorded music.

Before long phonograph technology improved enough to allow consumers to operate the machines, and sales of machines and cylinders to private households became the most important market. Production of media and playback equipment separated as industry standards for playing speeds and cylinder size were established.

In broad terms this remained the business model for the next 80 or 90 years, albeit that phonographs were replaced by gramophones, and then CD players, and cylinders were replaced by discs – first vinyl and then CDs. Record companies generated revenue by selling information embodied in physical artefacts that became the property of the customer.

Skip to the 21st century and business models in the music recording industry are once again in flux. The development of the internet has led to the distribution of music via internet downloads. Music downloads may be paid for, as with Apple's iTunes online shop, which began trading in 2003. But there is also a significant trend toward the downloading of music for free, not necessarily legally. Either way, the sale of recordings as physical artefacts is no longer the single dominant business model.

Accordingly, participants in the industry have developed various business models in response to these trends. Take Nokia's 'Comes with Music' mobile phones, (now Ovi Music Unlimited). Subscribers could pay a certain price for a handset and also get an 'all you can eat' entitlement to download unlimited music from the Nokia online music store for the period – 12 or 18 months – of their initial contract.

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Nokia shared their concept of the market offering with the music companies to do this, and Apple is doing something similar now.

This market offering bears many of the hallmarks of a business model innovation: it is inter-organisational, being dependent upon a deal between Nokia and the major music labels: it involved a shift in the price-carrier from the recorded sound – or tune, as per Apple’s iTunes business model – to the purchase of the phone itself. As we write, Nokia’s fortunes are in steep decline, but Apple are busy agreeing deals with the major music labels to offer music streaming via its new iCloud offering.

The point is that business models move. For example, firms co-develop business models by talking to suppliers about what market offering they might create between them. The concept of ‘business models in action’ is about how representations (or partial representations) of business models are shared and developed with key players in the network in ways that enable managers to collectively act in a market. Business models form part of an important co-ordination mechanism for collective action. Nokia shared their concept of the market offering with the music companies to do this, and Apple is doing something similar now.

The evolution of a business model

The recorded music business example illustrates considerable interplay between innovations in three key aspects of the business model: technologies, market offerings and network architectures. (Each of these elements is explored in more detail in Section Two).

Edison’s original product technology had no saleable form as an artefact and no business model existed, notably because no link had been forged between the product technology and a market that would value and pay for it.

The first commercial offering was the performance by a travelling showman. This business model attached the product technology to an existing distribution network and market form – the entertainers and pay-per-performance – and operated by transferring capabilities, notably how to operate the equipment, to the showmen. A revenue model that involved machine sales to the showmen, plus fees and royalties, enabled Edison to make money for a while (see Figure 1).

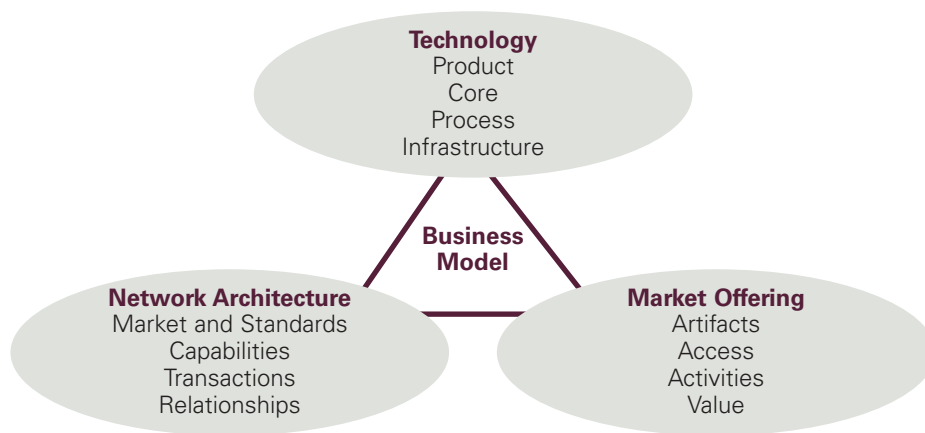
Incremental product and process innovation led to a more reliable machine, which in turn paved the way for a move from leasing the machines for use in business dictation to a business model that used recorded music from within the distribution network. There were two offerings developed: the service-based phonograph parlour; and product-based phonograph-and-recording sales. Each had a different revenue model.

Thus an emphasis on technology innovation was followed by shifts to innovation in the market offering (i.e. business dictation), then network architecture innovation, a subsequent innovation in the market offering – recorded music – that eventually made money. This, in turn, drove volume and the incremental product and process innovation that made full industrialisation possible. The business dictation market offering can be seen as a transitional but essential step on the way to a more successful outcome, because it created the network from which the recorded music offering and business model emerged.

A business model framework

The development of the business model can be represented as a framework showing the essential elements. Each element is broken down to explore the theoretical basis and the practices that relate and entangle them. Understanding these elements and how they relate to one another is essential to understanding management innovation. The management of an organisation is about shifting activity and emphasis from one element to another, and understanding how such shifts may be important competitive moves.

Figure 1: Business Model Elements

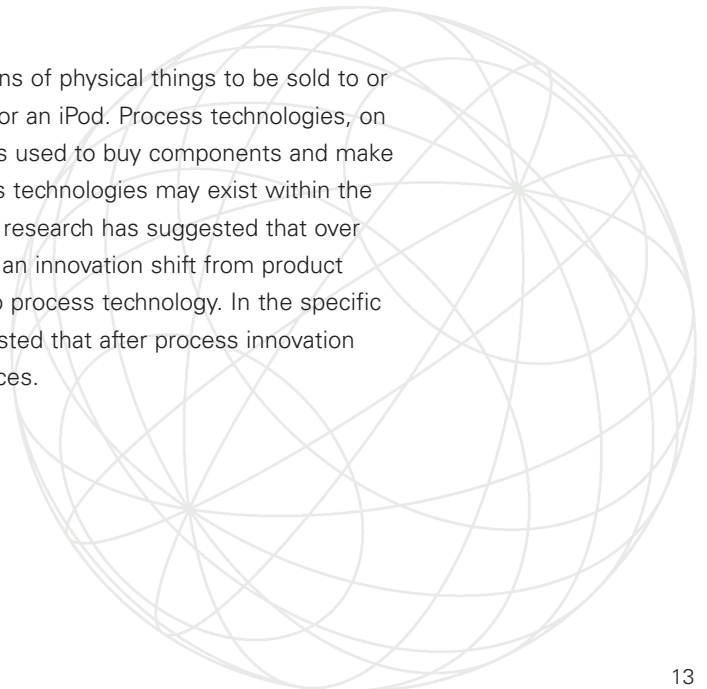


a Technology

In Edison's case, part of the technology element – the usage and knowledge of tools, techniques, systems and methods of organisations or material products – is easily identifiable, as his initial business model begins with an invention – the phonograph. The phonograph is an example of product technology innovation. However, while attention is often focused on product technologies, other types of technology – process, core, and infrastructure – are also important.

i Product and process technologies

Product technologies provide stable configurations of physical things to be sold to or accessed by a customer, such as a phonograph or an iPod. Process technologies, on the other hand, are the organisational techniques used to buy components and make and distribute the products. Product and process technologies may exist within the same firm or in different, specialised firms. Past research has suggested that over time, as the product matures, there tends to be an innovation shift from product technology in the early stages of the life cycle to process technology. In the specific case of the software industry it has been suggested that after process innovation there is a third phase: that of innovation in services.



Our research suggests, however, that it is important that managers do not view the various technological innovations as sequential, but rather as interacting with and influencing each other. With the development of the iPhone, for example, Apple was considering the network services and applications that might form part of the market offering while process innovations were still underway. Product, process and service innovation were all happening at the same time.

ii Core technologies

The concept of core technologies is also important in business models, and managers need to consider how core technologies can be assembled and configured to provide solutions for customers and create competitive advantage.

The iPod, for example, represents the assembly of core technologies in a clever and innovative way. Apple drew on the core technologies of integrated circuits, small LCD screens, and small, long-life batteries, to create a light, versatile, user friendly and fun product. Various configurations and assemblages of these particular core technologies are offered for different customer groups: the iPod Shuffle (light, small, cheap); the iPod Classic (huge storage capacity, video and imaging capacity); and the iPhone (iPod with additional functionality such as phone calls, text, diary, video camera etc).

Figure 2: The technologies of an iPod classic



iii Infrastructure technologies

Core technologies are important, as they often have a significant influence on the innovations identified by organisations. However, many innovations, such as those associated with the iPod and iPhone, rely not just on the product, process and core technologies, but also the infrastructure technologies that support them.

In the case of the iPod and iPhone it is the internet that makes the offering possible. This is enabled by huge investment and advances in server technologies and capacity, and intercontinental communications. Without these infrastructure technologies, the market practices of iTunes customers (purchasing and downloading digital music files online) would not be possible. Thus there is complex interplay between innovation in underlying technologies on the one hand, and innovations in product form and market practices on the other.

iv Development of technology innovation

Theory suggests four distinct but inter-related dimensions to the technology element of business models – product, process, core and infrastructure. As we have suggested, innovation doesn't happen across these in any particular sequence. But managers must also bear in mind that this does not mean that a firm has to innovate across all four dimensions of technology for themselves: they might be active developers of some technologies, passive users of others, and indirect influencers of yet others. In other words there is an important interplay between direct and indirect capabilities in relation to technologies, and these in turn shape and are shaped by the network architecture. Developers of personal computers, for example, may work closely with a chip maker such as Intel (to access core technology) and with a contract manufacturer and service provider such as Flextronics (to access process technology).

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b Market offering

While managers may be tempted to delineate market offerings solely on the basis of whether the offering is a product or service, this may be a misguided approach. What counts as a product or a service is context-specific and dependent on the nature of the producer-user interactions and the structure of ownership of assets, not any essential feature of a particular product or service. So, for example, the phonograph in the phonograph parlour that is providing a service is essentially the same phonograph as that bought as a product by a music enthusiast.

There are three elements of the market offering: activities, access and artefacts. Each makes a contribution to the process of creating value for customers. An important associated concept is that of the price-carrier – simply the element or elements to which the price is attached. With Nokia's 'Comes with Music' offering, for example, the price carrier is the phone contract or phone, rather than the music itself.

i Activities

Activities are what we typically consider to be services: what companies do directly for a customer as part of the market offering. In business markets, these might include maintenance, consultancy or cleaning. These activities, which are an important dimension of the market offering element of business models and are capable of adding significant value for customers, may or may not be explicitly priced and exchanged in the way that a product might. Importantly, they are often difficult to scale up cost-effectively, but may present the best way to tailor offerings to individual customers' needs.

ii Access

A market offering can be based on access, such as paying to use a phonograph parlour. An appropriate basis for charging for access evolves through innovation over time, as with the change from Edison's original pay-per-tune for a one time experience to the iPod's pay-per-tune for a lifetime experience. In this case the difference in the business model, and the means of accessing and experiencing the market offering, lies in the technology available to deliver it as well as the supporting payment mechanism.

iii Artefacts

Artefacts are the physical embodiment of the offering. The ownership of artefacts may or may not be exchanged, but they nevertheless offer a way for customers to generate valuable outcomes. In the recorded music industry, the model is moving from one based on the repeated sale of artefacts – records and CDs – to one based on downloaded files or streamed music. The important artefact is now the MP3 player or smartphone, in conjunction with the user's computer. The physicality of artefacts is an important element of the business model. The physical appearance and feel of an artefact often plays a large role in encouraging customers to purchase a market offering, even if it is no longer the price-carrier.

iv Value

Value can be defined as the benefits derived by a customer from an exchange. There is a difference between value and acquisition price. Understanding the value created by a market offering helps organisations understand markets, customer needs, and pricing decisions. Nokia's 'all you can eat' digital music downloads market offering was a result of exploring alternative ways in which artefacts, access to capacities and service delivery activities can be combined to provide value – or, rather, opportunities for the co-production of value.

c Network architecture

Although Edison and his distributors initially used the phonograph in the dictation machine market, they continued to experiment to find new markets. They soon identified recorded music as more promising. To make and shape the recorded music market, however, multiple actors needed to interact and co-operate with each other, in order to create a new network architecture.

There are four important dimensions of network architecture: markets and standards, capabilities, transactions, and relationships.

i Markets and standards

As markets evolve, standards emerge with them. One of the principal stabilising factors in the recorded music market was the standardisation of record players and records (standard record sizes were 7", 12" and others); each size had, for example, standard playing speeds (78rpm, 45rpm and 33 1/3 rpm). While most consumers are less conscious of industry standards since the introduction of CDs and digital music, nevertheless they are still present.

The introduction of standards has two important implications for business models. Firstly, the standards recognised by firms frame the way managers identify and pursue market opportunities. Within any business network they are indicative of what might be traded and how. Secondly, the notion of markets and standards might also help managers frame practices for market-making as they seek to influence and shape standards in a strategic way. Where widely available and easily purchased services exist, e.g. containerised systems or courier services, firms know they don't need to undertake these activities themselves. The business network becomes extended.

Such market standards offer opportunities for firms to specialise because they can be more confident in accessing other firms' complementary capabilities, products and processes. Organisations find ways to reduce the recurring transaction costs of using the market. In doing so, firms create and proliferate markets and standards.

ii Capabilities

Markets and standards are one determinant of the extensions of a particular firm's boundaries: another determinant is the activities a firm chooses to specialise in. Capabilities are the specialist know-how retained, maintained and developed by an organisation over time. Business models are about how to turn these capabilities into money.

The ability to transform capabilities into money depends not just on the internal capabilities of a firm, but also on the capabilities of other parties where they can be accessed. So, for example, Edison's capability lay in understanding the phonograph's technologies. Apple's capabilities, however, are connected with both understanding the iPod's technologies, but also with how to access different capabilities from a wider business network e.g. contract manufacturers.

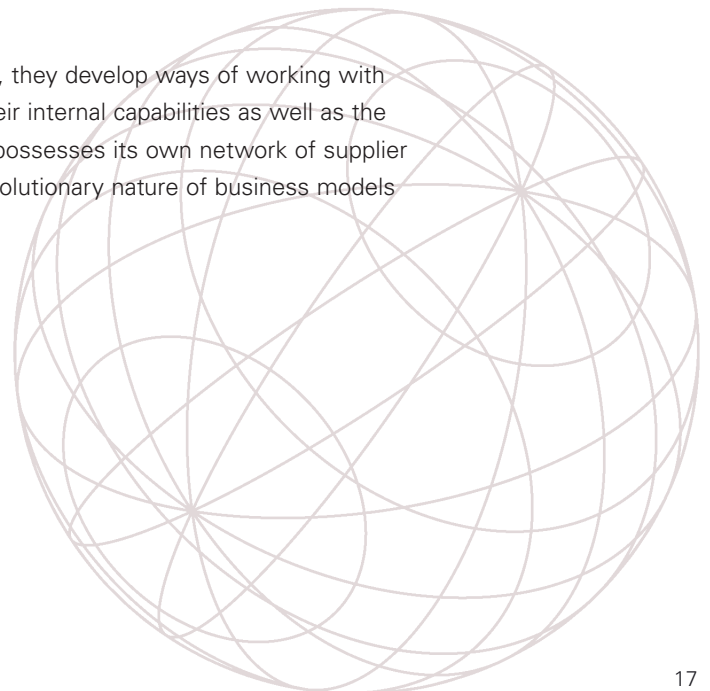
One common way for firms to learn new skills and capabilities is to recombine existing capabilities. Thus what a firm has done in the past will tend to shape what it can do in the future. There are two distinct types of capability involved here:

- Direct capabilities which relate to the activities of the firm, and the firm's identity regarding what it does;
- Indirect capabilities which relate to how a firm can access and utilise the direct capabilities of others in its wider business network.

Thus the value of capabilities comes from a manager's understanding and ability to access, assemble and reassemble different combinations of capabilities that are acquired not only within the firm's boundaries, but also within the wider business network.

And, as managers design network architectures, they develop ways of working with other organisations that allow them to utilise their internal capabilities as well as the wider capabilities of the network. As each firm possesses its own network of supplier and customer relationships, the dynamic and evolutionary nature of business models quickly becomes apparent.

The ability to transform capabilities into money depends not just on the internal capabilities of a firm, but also on the capabilities of other parties where they can be accessed.



iii Relationships

Relationships play a fundamental role in the creation and evolution of business models. Business models are almost always inter-organisational from the outset. It was due to Edison's relationship with Jesse Lippincott that the business model for the phonograph evolved. After Lippincott had bought the patent but failed to make money using the phonograph as a dictation machine, he turned to its use as a music player. Further product technology innovations emerged through competition with the American Gramophone Company and collaboration with Lippincott. By 1890, Lippincott had good working relationships with his distributors and manufacturers and the music market was making money.

Indeed, innovation, whether it is developing products, processes or infrastructure technologies can lead to a blurring of the boundaries between firms as the relationships that support such innovations emerge. If a firm develops close working relationships with other firms in their business network, it can change the nature of the original firm and in turn what that firm might offer to the market.

Firms benefit from relationships when they have both direct capabilities themselves – in the form, for example, of technologies that can be combined and re-combined in innovative ways with the technologies of others in the network – but also indirect capabilities, in the form of the know-how to access and manage the capabilities of others distributed in the wider business network.

iv Transactions

Transactions are an important consideration in the business modelling process. To turn a capability or technological insight into profit, firms need to transact. However, transactions have to be institutionally as well as technologically shaped, and the technologies to enable counting and payment have to be available and economical to use. As Edison found out, when product innovation occurs, and standards do not exist, the costs associated with establishing standards and markets can be significant. In the early recorded music market, the invention of the coin operated machine was central to the development of the Phonograph Parlour business model.

Changes in institutions and in transaction-making technologies, such as coin-operated machines, enable existing transactions to be made more efficiently but also make entirely new transactions possible. Things that were not previously calculable and measurable (and therefore which could not be traded) can become calculable and measurable because of technological innovations. Take, for example, the incorporation of information technology into mechanical products in a way which allows charging on the basis of usage, thus supporting an access-based offering. Apple invested significant resources in developing the iTunes transaction technology in order to facilitate the trading of recorded music for their iPod and iPhone products.

Understanding the business model elements enables us to use them as analytical tools, to explore the business for holes, inconsistencies or missing links between the elements or identify new opportunities for business development and growth. Firms are then in a better position to make choices about what action might be taken next.

framing and co-ordinating business networks and markets

As Edison discovered, ideas can quickly be translated into new markets. The business model is an integral part of this process as an idea becomes part of a business model which then translates that idea into revenues.

Edison had a technology that he transformed into a market offering – pay-per-use musical entertainment. But he could not have done so without the numerous contributions of a variety of other players, whether in his direct business network, or in the wider market as it evolved.

First Edison used entertainers as distributors to create a network architecture. This was his business model. Then, as distributors became involved in the practices of the business, the shaping of the business model was extended to other sites – those of the distributors – as the market evolved, i.e. the dictation/transcription market and the music market.

Edison opened a substantial research lab in Menlo Park, New Jersey and employed over one hundred people to help him achieve incremental technological development. When he started to run out of money he sold the patent to Jesse Lippincott but kept the manufacturing rights. Lippincott had also acquired the gramophone patent from Edison's competitors, the AGC Company. By purchasing the patents for the competing technologies Lippincott had enough control of the market to introduce market standards.

The business model is an integral part of this process as an idea becomes part of a business model which then translates that idea into revenues.

Figure 3: The multiplying sites of business models in early 19th century recorded sound

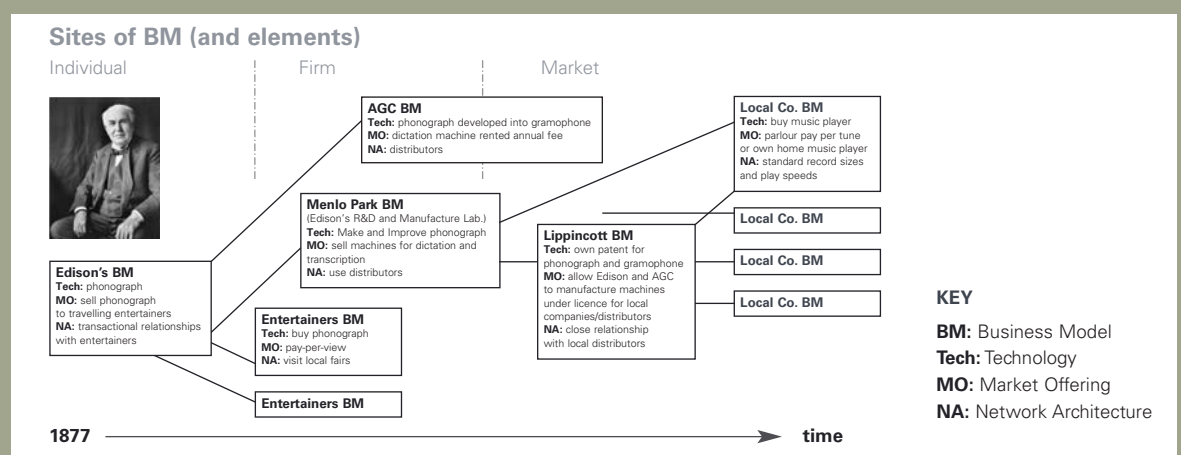


Figure 3 shows the emerging network as the evolving business models of the network actors overlap and spread across the network. Business relationships and opportunities make and shape the business model over time; and as such, some elements of the business model remain stable but move into different constellations, in different sites, to form markets. Similarly, changes in technologies, market offerings, or the network architecture of connected firms may have more or less influence on the business model and markets at different points in time.

Business models and their elements are dynamic, moving to different sites over time. Their movement creates overlaps between the different business models of networked firms as they are co-developed through network interactions and in this way they provide a frame for co-ordinating collective action within markets.

Focusing on business models

The good news is that there are a number of actions that managers can take to maximise the way that they use business models to drive the success of their organisation:

- Consider *all* the business model elements. One way of doing this is to pose a series of questions that explore the existing business. Then identify problem areas within the business or missing components that might not have been emphasised during the firm's strategy development processes. This exercise can be used to systematically identify and explore opportunities that might otherwise have been missed.
- Consider the links *between* the elements. For example, how does the process technology affect the market offerings that can be made, or the quality of their delivery? Understanding the links between the elements or even identifying that some of the elements are relatively unlinked or inconsistent within the business model will help managers identify areas in need of attention. This might be a starting point for business model innovation.
- Make business model innovation part of strategising routines. Understanding what elements need adaptation and why is an ongoing and iterative process. As changes in the network occur (as new technologies are introduced, for example, or as new relationships are formed) new possibilities are identified and new combinations of technology, market offering and network architectures emerge.

Modelling your business

Business modelling is the practice of iteratively working with and innovating the way the business works and creates value. It helps managers to link micro, firm level activities, with macro, market level activities.

- Consider sharing business models within organisations. Business models need to shape the actions and practices of actors within the firm as well as within the network and within markets. Thus, managers need to translate, reveal and share different parts of the business model, with different business activity groups or functions, at different times, for different purposes. Making these judgements of what to reveal, how, and when, will depend on strategic intent.

Business models operate at multiple levels within the firm, from the strategic level to the operational, helping to frame action. In order for them to be meaningful they must be translated into different forms (for example, from market offering descriptions to specific named geographies, market size and market growth targets and so on).

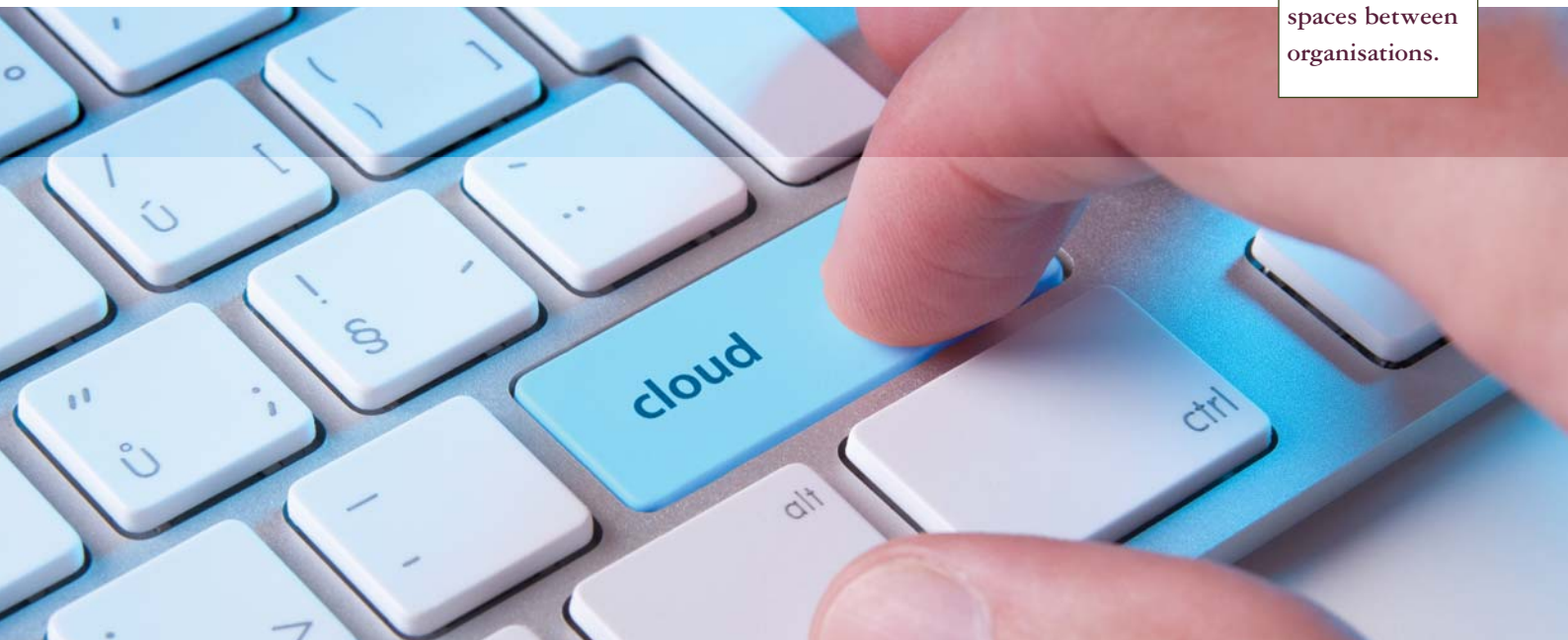
- Consider the business model in its business network context. Managers need to develop their business model through their inter-firm relationships. By adopting a network approach to business model innovation from the outset, network architecture, technology and market innovations can be developed and captured in the model. Through an interactive process managers can understand how other firms' overlapping business models complement, contribute, and add value to consumers. In this way, business models can act as a frame for identifying and directing action in developing strategic inter-firm relationships.

- Consider sharing business models across business networks. Managers make judgments about how they share their business model with other players in the network – which parts of their business model, with which players, and in what form. By sharing parts of their business model – in accessible and comprehensible forms – with key players in the network, managers can seek to influence the business models of others by enrolling them in their product and/or market innovation activities.

This might mean translating parts of the business model into a description or representations of, for example: a market segment; a product technology development; or strategic relationship development initiatives. Managers should seek to understand the business models of others in ways that create a shared language to explore innovation spaces between organisations.

- Consider sharing business models across markets. By understanding how business models work and where the overlaps are with other organisations, managers can use business models to describe and explore emergent market descriptions. Edison did this with the entertainment market, the dictaphone market, and finally the recorded music market.

Managers should seek to understand the business models of others in ways that create a shared language to explore innovation spaces between organisations.



The business model acts as a co-ordinating mechanism for collective action in such a way that the market is shaped and 'becomes' through the coordinated activities.

The heterogeneity of markets has long been the challenge for managers but finding new ways of combining and recombining technologies and network architectures to deliver different market offerings for different customer values seems achievable through business model innovation.

conclusion

Having an effective business model is essential in order to create a successful business.

Business models can be viewed as bundles of interconnecting practices, institutionalised in the performance of individuals, firms and markets, across multiple sites over time. They evolve with the context within which they are practised – and in turn influence and shape that context. Thus, changes in technology practices, for example, are likely to lead to changes in network architecture and so on. Having an effective business model is essential in order to create a successful business.

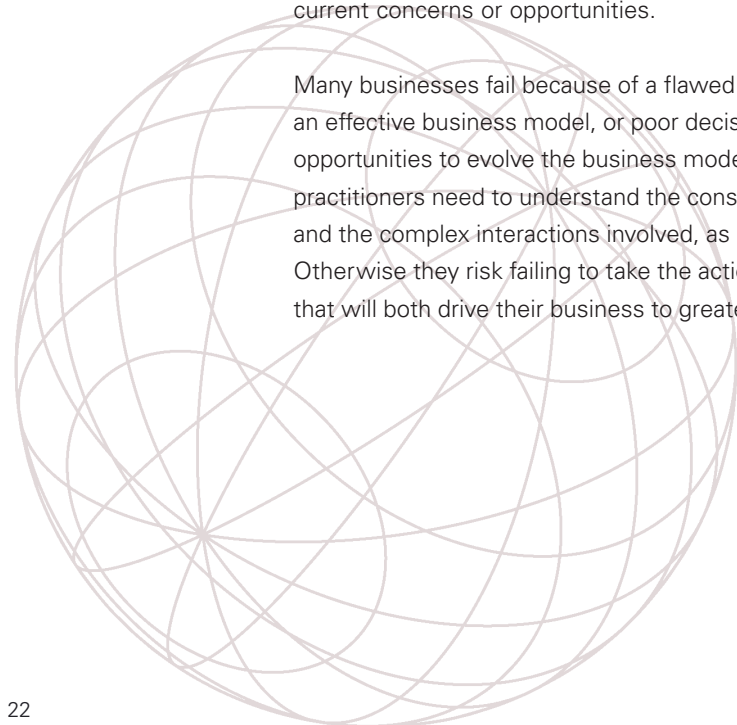
Perhaps most importantly, though, our research shows that having a business model is only part of the story. What matters is what managers do with that business model; the forms it is translated into, the way it is shared, discussed and interpreted in multiple contexts, both within the firm and outside of the firm.

In this sense business models can be seen as framing devices for influencing and shaping collective and individual action at three distinct levels within the firm: *the strategic level* – where individuals share ideas about what they think the firm should achieve; *the operational level* – where individuals go about making organisational goals happen; and *the level of individual transactions or economic exchanges* – where the business model has implications for the actions of individuals dealing with a specific exchange.

We have created an original and simple business model framework that identifies different types of management practices that drive the development of business models in manufacturing and service settings: *technology practices*; *market offering practices*; and *network architecture practices* – practices which interconnect and enable the business to operate as a whole, connecting silos of work that are often seen as distinct.

This framework will not only help business practitioners understand the constituent elements of a business model better, but in doing so allow them to direct their actions more productively. It is a flexible framework in the sense that, being non-sequential, analysis can begin in any element or elements, depending on current concerns or opportunities.

Many businesses fail because of a flawed business model, an inability to develop an effective business model, or poor decision making related to capitalising on opportunities to evolve the business model and shape the business. Business practitioners need to understand the constituent elements of the business model and the complex interactions involved, as set out in this executive briefing. Otherwise they risk failing to take the action necessary to develop a business model that will both drive their business to greater success, and help them avoid failure.



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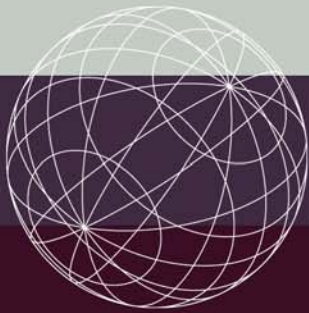
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