Management innovation is a proven source of long-term competitive advantage. Yet, compared to other forms of innovation, it remains an under-explored area.

“Management innovation” refers to the implementation of new management practices, processes and structures that represent a significant departure from current state-of-the-art practices and are intended to further organisational goals. The subject has not traditionally received much attention, either in the management of companies or the teachings of business schools. Companies do not have “management innovation labs” in the way they have research and development labs, or “management innovation executives” like they have chief technology officers. Business schools, if anything, teach their students how not to innovate by extolling the virtues of existing practices and encouraging students to apply standard templates and models when they enter the workplace. Academic researchers have by and large been more interested in how innovations diffuse within a population of organisations than in the innovations themselves and how they are created.

As a consequence, there is a wealth of knowledge and literature about technological or product innovation, addressing...
such questions as how they ought to be managed and the conditions under which they take place. We have also seen a focus in the literature on process innovation, which looks at operational efficiency but not at the work of management.

Management innovation is in many ways the missing piece of the innovation puzzle. Management innovation is often needed to make technological innovation work. It is an important driver of competitive advantage, yet it remains poorly understood and scarcely researched. Of course many of us are familiar with hallmarks of management innovation, like the introduction of industrial research labs by healthcare company Bayer and General Electric in the late nineteenth and early twentieth centuries, the divisional form of organising developed at General Motors in the 1920s, and more recently activity-based costing at General Motors and industrial equipment manufacturer John Deere. But what do we know about the processes through which these management innovations came into being? What caused the individuals behind these successful innovations to try something new? And what were the consequences for the individual innovators and the firms for which they worked?

All three questions are important and by tackling them it is hoped that a new management innovation agenda can be built for both practitioners and researchers (Birkinshaw and Mol 2006; Hamel 2006). In this article we will specifically look at the third question, the consequences of management innovation for innovating companies and individuals. Over the past two years we have undertaken a comprehensive study of management innovation, looking at both the major historical cases of management innovations that shaped the modern company, and some of the contemporary cases that are currently being played out in companies around the world. In this article, we start by exploring how management innovation affects a company’s performance and its other objectives, before turning to the role of innovators. Although we will draw partly upon historical examples, the general principles we sketch are aimed at informing contemporary management practice.

Performance
There are many instances where management innovation has contributed to a firm’s long-lasting competitive advantage. Consider, for example, the history of competition and leadership in the car industry. At first glance, one might expect the long-run changes in industry leadership to be driven by technological changes or the introduction of breakthrough products. But in reality, these factors have played a relatively minor role. Toyota, the undisputed current industry leader, grew into a position of dominance largely on the basis of its lean manufacturing platform, and through specific management innovations such as Kanban, Target Costing and Just-In-Time. Although Toyota cars were technologically advanced, that is not what has distinguished the company from its competitors.

Before Toyota, the global industry leader was General Motors, which had achieved dominance in large part through its invention of the divisionalised “M-form”. That allowed GM to achieve unprecedented levels of growth (and allowed the divisions to segment their markets according to different brands and models – another important management innovation). These innovations, in turn, helped GM overtake Ford Motor Company, which famously stuck to its Model T until the bitter end, despite customers’ appetite for greater choice. Henry Ford had, of course, steered his company to fame and initial industry leadership through the invention of the moving assembly line, which streamlined the management of production operations. In the automobile industry, then, it was management innovation, not technological innovation, which drove long-term competitive advantage.

Why do management innovations offer the potential for long-term competitive advantage? Consider the yardsticks by which we judge the existence of “strategic” resources and thus the potential for competitive advantage: (1) a resource should be valuable, (2) it should be rare and hard...
to imitate, and (3) it should be under the control of the firm.

In the examples discussed, value is perhaps the most obvious common theme. The moving assembly line was valuable because it greatly increased the productivity of Ford’s workers. And market segmentation helped GM tap into new sources of value because it encouraged the creation of products that were closer to actual customer demand.

But management innovation often leads to the creation of rare resources as well. An example is Toyota’s understanding of how to put in place and relentlessly improve its Just-In-Time system. Despite the concerted efforts of Ford, GM and others to replicate Toyota’s manufacturing capabilities, the evidence suggests that Toyota continues to hold a significant cost advantage over its US and European competitors.

Inimitability is the third criterion against which management innovations do well. The M-form organisation looks easy enough to copy on paper. Yet research has shown that it took other companies decades to implement. The reasons are two-fold. The M-form organisation suited GM’s needs particularly well at the time. M-form is not just a structure on paper, but requires lots of co-ordination processes between headquarters and the divisions that are hard to copy.

Finally, management innovation is under the direct control of the organisation, rather than something that is bought in from elsewhere or shared with other stakeholders. For example, Alfred Sloan at GM deliberately set out to create the M-form from scratch. Taiichi Ohno was similarly original at Toyota when coming up with lean production. In both cases the innovators took some cues from elsewhere but what they created was theirs.

Types of management innovation

Of course, by talking about management innovations such as the assembly line, the M-form organisation and lean production, we are potentially ignoring the many thousands of small innovations companies implement all the time, as well as the relatively more rare cases of major management innovations that failed - such as Volvo’s experiments in cellular automobile manufacturing. In our research, we therefore addressed a broad spectrum of types of management innovation, with a view to identifying the key dimensions on which they vary. The research suggested that management innovations have the greatest potential for firm-level competitive advantage when they are radical, systemic and platform-based (see Figure 1).

1 The management innovation should represent a radical, rather than an incremental, departure from the state-of-the-art. Activity-based costing (ABC), created by John Deere and subsequently made famous by Robin Cooper and Bob Kaplan, was truly a new way of looking at costing issues. It allowed John Deere a much better understanding of its true production costs, which led to better bids for new business and a more rational cost structure. Essentially, ABC promoted deep change in the way John Deere thought about its cost structure, and this proved to be difficult for competitors to copy.

2 The management innovation should be systemic in nature and cross-functional. This makes it more likely that other companies that are potentially trying to make sense of the innovation will struggle to implement it. For example, Toyota’s lean production process does not just operate within the plant. It also affects the company’s HR practices, its systems for supplier management and its accounting systems.

3 The management innovation should build on a platform of previous innovations and become part of an ongoing programme of change. In isolation, one innovation can potentially be copied by a competitor. But if the innovation builds on previous layers of innovation that the competitor does not understand, it will be hard for the competitor to do anything with it. GE provides an interesting example of this point. In the 1990s GE became well known for its application of the Six Sigma methodology, and generated enormous quality and efficiency benefits as a result. Interestingly, it was actually Motorola that invented Six Sigma in the late 1980s, but Motorola was not as effective as GE at implementing the methodology or generating performance improvements. The reason for this discrepancy, we would suggest, is that GE had already put in place a series of its own management innovations in quality management and human performance management. It was thus better positioned to generate value from the stringent processes
required by the Six Sigma methodology than Motorola. GE, in fact, is probably the most consistent management innovator among contemporary companies, with such recent innovations as boundaryless management and work out, and historical examples such as management-by-objectives and the industrial research laboratory.

Other management objectives

Another important finding from the research is that bottom-line performance is not the only objective of management innovation. Many management innovations have been put in place with other objectives in mind. Some are concerned with reputation and legitimacy; others are concerned with enhancing the satisfaction and working conditions of employees.

Reputation and legitimacy were integral to the invention and implementation of the matrix organisation at Lockheed Martin and other aircraft and aerospace manufacturers in the US in the late 1950s. The matrix organisation, which implied that an employee was now “managed by two bosses” – one a functional head, the other a project leader – came into place as a consequence of government demands for new ways of organising. The US government made it a condition of consideration for research and development contracts that the contracting firm should have a “project management system”. NASA and the Pentagon being their largest customers, these manufacturing companies had no choice but to follow the government’s new regulations, because not doing so would render them illegitimate in the eyes of the government. But these firms did not want to give up their traditional functional structure either, as it continued to produce important advantages. As firms implemented the project management system, this serendipitously gave rise to the emergence of two separate structures, a functional and a project structure. This culminated in the matrix structure. The matrix organisation was subsequently implemented in a variety of organisations, though even today it is seen as complex and hard-to-manage.

Employee satisfaction lies at the heart of another group of management innovations, mostly in the domain of human resource management. For example, General Foods generated a lot of publicity for its “quality of work life” initiative in the 1970s, in particular around its dog food factory in Topeka, Kansas. It did this because there was a widely perceived need to find a better balance between the private lives and work lives of employees and to provide employees with what was thought of as a “home away from home”. Likewise, a number of experiments in improving employee satisfaction emerged from Sweden in the 1970s and 1980s, such as Volvo’s cellular production system, in part because of the country’s long-standing commitment to the ideals of social democracy. Interestingly, there is some evidence that employee satisfaction-oriented innovations appear in waves. They are often popular in periods of economic decline, while more “rational” or bottom-line-oriented innovations occur during economic upswings (see the work of Abrahamson 1997). Management innovation, in other words, does not always have to be concerned with company performance.

Management innovators

Apart from consequences for the company as a whole, the creation of management innovations is often a turning point in the careers of management innovators themselves.

Our research sought to identify similarities among the group of management innovators we identified. In terms of basic attributes, such as age, gender, nationality and functional background, there were no patterns at all. But when we started examining these individuals’ personal networks and their employment histories, we identified some common themes. In essence, it turned out that while the innovators were strong-willed individuals, who knew how to drive through new initiatives, they never operated in isolation; they used some outside form of knowledge. The notion of the innovator as being a lone genius locked up in a lab did not seem to hold true. Table 1 shows the typical ways management innovators stand out. Some, such as the Whizkidas, brought in outside experience from other industries, or sometimes from government or academia. Others, like Alfred Sloan, drew upon specific training or academic knowledge they gained at university prior to joining the company. And yet others, including Ohno at Toyota, drew upon an outside network of knowledge.

These management innovators invariably attracted a lot of attention inside their companies. Yet that did not always lead to lasting relations with those companies. In fact we saw two rather different outcomes for management innovators. Sometimes by pushing a particular management innovation, the individuals in question were propelled to the top of their company, or strengthened their positions at the top, as was the case for Sloan and Neil McElroy. But in other instances the management innovators were such mavericks that they no longer felt at ease inside the company or simply decided to
pursue better opportunities outside: examples here include Art Schneiderman and Robert McNamara. So, although all the management innovators we spoke to and investigated described the period of invention and experimentation with enormous enthusiasm, the result was not always a long employment relationship.

The case for management innovation
Potential management innovators face severe barriers. For the most part they have not been trained to experiment with processes, practices and structures, because that is not what business schools do. Their companies do not have organizational structures or incentive systems in place to support management innovation. There is an implicit and widespread, yet often unfounded, belief that technological innovation matters more than management innovation. Consultants are keener to propagate existing practices, which allows them to repeatedly sell the same package, than on helping to create new ones. And academics have shied away from the messy topic of studying the creation of management innovations, opting instead for the safe haven of studying diffusion.

Yet the rewards for management innovation are potentially great as well. Companies that successfully create management innovations can improve their performance, employee satisfaction or legitimacy. And management innovators can make their working lives more exciting and potentially more rewarding. In the longer run, management innovation allows both innovating firms and individuals to become a part of the annals of management history.

Michael J. Mol, a CEMS Master, is a senior lecturer in strategic management at the University of Reading and a visiting researcher at the Management Innovation Lab at London Business School. Julian Birkinshaw is a senior fellow at the Advanced Institute of Management Research and professor of strategic and international management at London Business School.

REFERENCES