

Value innovation and a cognitive map of stakeholder-oriented quality management

Djoko Setijono
Department of Quality Technology & Management
Gotland University College, Sweden
djoko.setijono@hgo.se

Abstract

Purpose – This paper discusses the influence and the contribution of value innovation on the existing quality management philosophy (paradigm) and principles which then be used for developing a cognitive map of stakeholder-oriented quality management.

Methodology/approach – The concept of value innovation suggests that “focus on stakeholders” is an implicit rethinking and reflection of “focus on customers”, where creating radically attractive quality is aimed to satisfy and delight both existing and new customers, which eventually lead to the creation of value to shareholders and other business partners (stakeholder value creation). The EFQM business excellence model (which is described as a representation of quality management at a business level) is being used as a conceptualisation of stakeholder orientation. After modification and adaptation, the EFQM business excellence model is integrated with value innovation in order to develop a cognitive map of stakeholder-oriented quality management.

Findings – Value innovation implies that creative market exploration, future-pull orientation, and supply chain/network orientation should be included in the contemporary quality management principles. Based on the developed cognitive map of stakeholder-oriented quality management, stakeholder value creation requires integration between marketing and operations and is the result of managing properly the exogenous forces (e.g. market conditions and supply chain characteristics) and the endogenous forces (e.g. leadership, people, policy & strategy).

Research limitation/implication – The cognitive map of stakeholder-oriented quality management implies the needs for further research in quality management that integrate between marketing and operations as well as broaden the scope of quality management from a single company to supply chain/network.

Originality/value – This paper redefines/challenges some of the existing assumptions in quality management and offers insights regarding contemporary quality management perspective.

Keywords – Value innovation, stakeholder value, quality management, cognitive map, business excellence.

Paper type – Conceptual paper.

Introduction

Recently, the search toward a new quality management paradigm has, once again, become a “hot” topic (e.g. Zink, 2005; Conti, 2006; Mele and Colurcio, 2006; Zink, 2007). The *International Journal of Quality and Reliability Management* even dedicated a special issue (Vol. 24, No. 7): *Quality Management and Corporate Social Responsibility*, to build an understanding of stakeholder-oriented quality management paradigm (see Foster and Jonker (2007) in particular).

Williams et al (2006a) suggest that the challenge of new quality management will no longer be on reducing variation in the manufacturing, but on managing *market-related variation*

(market changes), such as volatility of customers, volatility of price, etc. The focus on variation in the market may require us to deeply rethink and reflect on the *focus on customers* in TQM (that it is a generic term and mostly refer to existing customers). The TQM concept assumes that by focusing on customers, financial advantages can be gained through customer satisfaction and loyalty.

However, this assumption requires a further clarification in the sense that satisfying and retaining customers, as well as gaining financial advantages may require a radical transformation of doing business – *value innovation*, where continuous improvements (as generally prescribed by TQM in order to gain success) may no longer be enough. Value innovation focuses on satisfying not just existing customers but also delighting new customers in “newly created” markets. Here, innovation is not defined narrowly as product/service innovation, but broadly as the way of doing business (in which the product/service is offered). This means that innovation may also occur at a “higher” (business) level in order to “match” between *what is offered* and *the way it is offered*.

In order to satisfy and delight customers through value innovation, an organisation needs to collaborate with other actors in the supply chain/network because an organisation may not have certain external resources (owned by other firms) and competencies which are important (required) for value innovation. Consequently, *focus on customers* should give “pay-off” to, not only, the organisation (shareholders) but also other actors in the supply chain. Hence, it may be clear that *focus on stakeholders* should actually be “built-in” in the *focus on customers*.

The “essence” of value innovation can be described as creating *stakeholder value* through *radical (disruptive)-attractive quality*. If Lilja and Wiklund (2006) describe the obstacles (hinders) for the development of practices of attractive quality creation, *value innovation* (e.g. Kim and Mauborgne, 1997; Matthyssens et al, 2006), which is also known as *strategic innovation* (Markides, 1997; Schlegelmilch et al, 2003) or *business-model innovation* (Markides, 2006) may provide insights or explanations regarding the *enablers (facilitators)* of attractive quality creation that may delight customers and create value for other stakeholders. Therefore, the purpose of this paper is to discuss the contribution of value innovation in building a *cognitive map* of stakeholder-oriented quality management, although the term “stakeholders” mainly includes customers, the organisation and its partners.

Value innovation

Together with *radical product innovation* and *disruptive technological innovation*, *value innovation* is categorised as *disruptive innovations* (Markides, 2006). Value innovation is different to technological innovation (Kim and Mauborgne, 1999a). The focus of value innovation is not on technological aspects, but rather on the reconceptualisation of the industry/business model (or “breaking” the rules of the “game”) in order to create fundamentally new and superior customer value, where successful value innovation are embedded in a company’s entire network of relationship, i.e. company’s suppliers and other network partners (Matthyssens, 2006).

The logic behind value innovation is to provide a package (total solution), extraordinary experiences, while reducing cost for the company, in which there are three platforms where value innovation can take place: product, service, and delivery (Kim and Mauborgne, 1997). Value innovation is the result of a combination between *eliminating*, *reducing*, *enhancing*, and *newly creating* key elements of product, service and delivery (Kim and Mouborgne,

1999b). Therefore, Value Analysis/Engineering is a useful method in the attempts of eliminating and reducing the features, while enhancing and creating new key elements are common activities in the product/service design and development processes.

According to Schlegelmilch et al (2006), strategic (or value) innovation is driven by culture, processes, people, and resources, and it contains three elements: 1) fundamental reconceptualisation of the business model, 2) reshaping of existing markets, and 3) dramatic value improvements for customers.

Value innovation is neither about striving to outperform competition nor about segmenting markets and accommodating customers' individual needs and differences (Kim and Mauborgne, 1999a). It is about making the competition irrelevant and creating new markets (Kim and Mouborgne, 1997, 1999b) to delight the existing customers and attracting new ones (i.e. mass market) by finding the shared common/sought values. Consequently, it is important to identify the values (in a non-competition context) that are *critical for customers* as well as finding the critical product (or quality) attributes that are critical for creating those values (Setijono, 2007).

In order to create barriers for the imitators, value innovators may need to “cut” the cost in order to maximise profits (shareholder value) by e.g. strategic pricing, target costing, business line extensions, and continuous improvements before another value innovation is launched (Kim and Mauborgne, 1999a).

Knowledge and ideas are the input of value innovation (Kim and Mauborgne, 1999a), thus the capability to create value innovation is related to the concepts of *absorptive capacity* (i.e. the ability to recognise the value of new information, assimilate it, and apply it to commercial ends) and *dynamic capabilities* (i.e. the firm's processes that use resources to match and even create change) (Matthyssens et al, 2006).

Value innovators are “...characterised by cultures that promote experimentation and risk taking, loose and decentralised structure with limited hierarchy...” (Markides, 2004; p. 37). This description is very similar to the culture practised by Toyota Production System, where changes or improvements are seen as experimentation and facilitated by limited hierarchy between leaders and employees (see Spear and Bowen, 1999; Spear, 2004). Therefore, *Lean Thinking* may be a part of the underlying “spirit” or philosophy behind value innovation. Womack and Jones (1996) describe that value to customers should be expressed in terms of specific product *capabilities*, at a specific *time* and *price*. However, the primary focus of applying Lean Thinking has been on creating or delivering at a specific time and price, not much on the specific capabilities that customers are looking for. Realising this “gap”, Womack and Jones (2005) introduce *Lean Solution* in order to ensure that customers' problems are solved “completely” without hassle by taking into account customers' experiences when shaping/improving the processes. Activities that cause customers' irritation are simplified, reduced, or eliminated, which eventually lead to time and cost advantages. Therefore, Lean Solution seems to be an important part of value innovation in the sense that it is an approach to continuously improve value once value innovation has been created.

Value innovation: the impacts on quality management

Value innovation is considered as a high-priority research in innovation that integrates (interfaces) marketing and operations (Karniouchina et al, 2006). Therefore, the future quality management paradigm will likely be featured by integration between marketing and

operations. Since value innovation is at a business level then we need to find a similar level of analysis to represent quality management when discussing the impact of value innovation on quality management. In this case, the EFQM business excellence model may be used as an appropriate approach for such analysis. However, it should be noted that the focus should not be on competition (i.e. being the best). Therefore, the EFQM business excellence model can be an inspiration to build a cognitive map of stakeholder-oriented quality management based on value innovation.

Value innovation may require a new insight on *market orientation* and/or *customer focus*, meaning that being market-oriented is not just about fulfilling customers' existing needs (*pull*), but also about using creativity and knowledge to offer new solutions. The proactiveness in offering new solutions makes value innovation as if it is *push-oriented* although it actually has a *future-pull orientation* (Krinsky and Jenkins, 1997), i.e. solutions that are derived from the future (or latent) needs, as the result of a creative exploration process. Therefore, value innovation is not only about satisfying and delighting the existing customers but also new customers in newly created markets. This means that *creative market exploration* and *future-pull orientation* should be some of the contemporary quality management principles.

Considering the fact that value innovation should be embedded in a network of relationships, then the effort and the perspective of managing quality should be broadened from a single company to a supply chain (or network) perspective.

Discussing the implications of value innovation on quality management “elevates” the stakeholder orientation issue. The stakeholder orientation is not new in quality management, although it recently gains more attention again in the quality management literature. The following section compares two approaches in explaining the concept of *stakeholder orientation*.

Stakeholder orientation: is business excellence model a relevant approach?

Balanced scorecard (figure 1) is usually used to accommodate the stakeholder perspective by translating vision and strategy into measurements related to *financial*, *customers*, *internal process*, and *learning and innovation* (Kaplan and Norton, 1992; 1996; 2007).

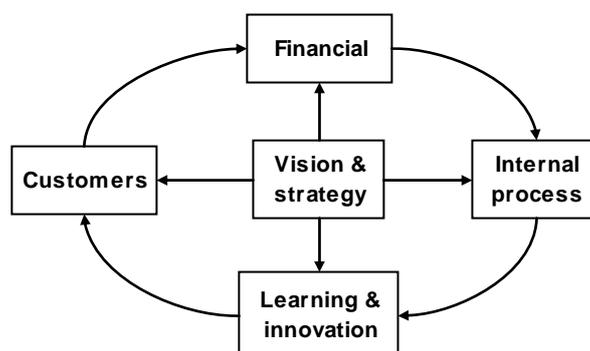


Figure 1. Balanced scorecard

Comparing balanced scorecard and the EFQM business excellence model (figure 2), it can be seen that these two methods is structurally similar in the sense that we can find symmetry

(equivalence) of the components in one model to another (see table I). *Key performance results* can be stated in, for example, in *financial* term. The *customers* include not only the *external customers*, but also internal customers (*people*) and the *society*. The *process* can be defined as *internal process*. *Learning and growth* is a function of *leadership, partnership & resources, policy & strategy, and people*.

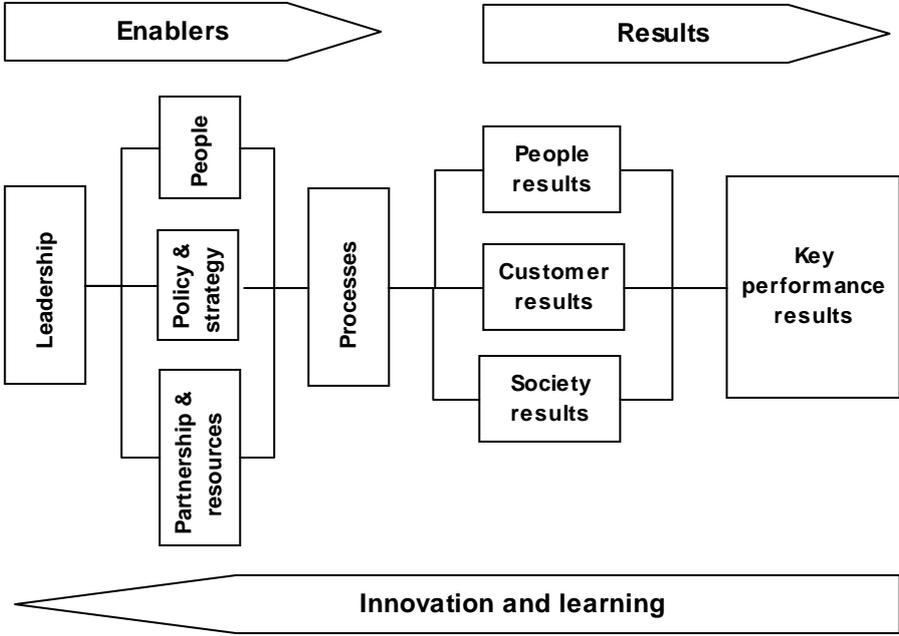


Figure 2. EFQM Business Excellence Model

Table I. Symmetry (equivalence) between balanced scorecard and business excellence model

Balanced scorecard	Business excellence model
Financial	Key performance results
Customers	Customer result [incl. people results and society results]
Internal process	Process
Learning and innovation	Leadership; partnership & resources; policy & strategy; people

The main advantage of balanced scorecard is that it is linked to vision and strategy (an important aspect in value innovation) although the components are not exactly specified. The EFQM business excellence model, on the other hand, provides a more detail description, although it: 1) is not directly linked to vision and strategy, 2) focuses on being the best (except when it is used as a self-assessment tool), and 3) innovation and learning is a feedback mechanism in the model, not a component of the model (unless we refer to the *EFQM framework for innovation*).

Since our focus here is on stakeholder-oriented quality management, then it will be appropriate to use the EFQM business excellence model to represent the focus of quality management on stakeholders. Using the EFQM business excellence model to build a cognitive map of stakeholder-oriented quality management requires a revisit and an adjustment on business excellence model. In fact, the EFQM business excellence model has

been critically reviewed by, e.g. Williams et al (2006b) and Kim and Mauborgne (2005), where one of the criticisms was that excellent business is not enough for survival in the market.

Cognitive map of stakeholder-oriented quality management: inspiration from the EFQM business excellence model

Based on Spicer’s (1998) presentation about different definitions and description of *cognitive maps* (in the field of organisational learning) by different researchers, a cognitive map is:

A graphic (picture or visual) representation of a set of *discursive* (i.e. ranging over a wide field; utilising or based on analytical reasoning contrasted with intuitive) representations made by a subject with regard to an object in the context of a particular interaction. It provides graphical description of the unique ways in which individuals view a particular domain (field of thought or action). Hence, a cognitive map represents individual’s *idiosyncratic* (personal; peculiar to individual) perception of reality.

The cognitive map of stakeholder-oriented quality management (figure 3) consists of three parts: *enablers*, *value innovation*, and *results* (*stakeholder value*).

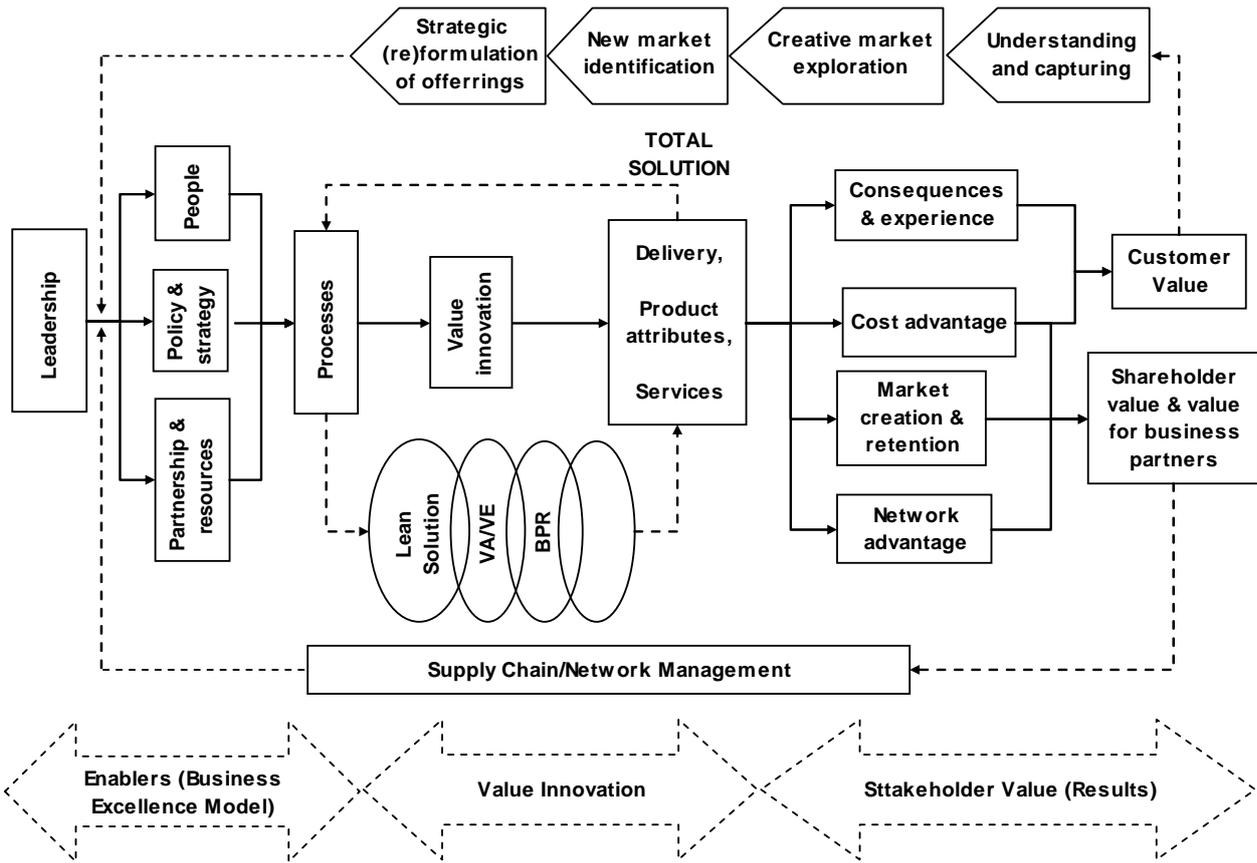


Figure 3. A cognitive map of stakeholder-oriented quality management based on business excellence model

The first part is the *enablers* of stakeholder value creation, which is directly adopted from the *enablers* in the EFQM business excellence model because the drivers of value innovation (i.e.

culture, process, people, and resources) are essentially the same as the enablers of the EFQM business excellence model.

The second part, *value innovation*, emphasises the necessity of *total solution* when creating stakeholder value. It can be argued that value innovation is a part of the *enablers*. Value innovation (as well as other types of innovation) can be described in terms of certain paths/flows to follow that we may call as process (which is why value innovation is a part of the *process*), but value innovation also involves redefinition/reflections (i.e. strategic business reformulation by management and supported by leadership) that may be too complicated to be described simply as a process (which is why value innovation may even be included in the other elements of the *enablers*). In figure 3, value innovation is placed after the *process* in order to make it obvious that value innovation represents the creative changes in the process that lead to the launch/delivery of new offerings to the market. Changes do occur in the process but not all of them are feasibly/successfully creating “something” new to be launched in the market.

It should be noted that, once created, value innovation needs continuous improvements in order to achieve operational excellence (“perfection”) and to maximise shareholder value. *Lean Solution* (Womack & Jones, 2005) intends to provide total solution that “completely” solves customers’ problem by managing business processes. Therefore, it is suggested that Lean solution could be used to complement value innovation by continuously improving the created value. Other methods/tools such as Value Analysis/Engineering and Business Process Reengineering may also be useful for striving towards “perfection”. This part of the map explains the *endogenous* force for creating stakeholder value.

The third part of the model is the *results*, i.e. creating value for stakeholders (customers, shareholders, and business partners), in which value creation can be specified in terms of consequences/experience for customers, cost advantage, market creation and retention, and network advantage.

The map (figure 3) suggests that customer value (through a series of *understanding and capturing customer value, creative market exploration, new market identification, and strategic (re)formulation of offerings*) and value to other stakeholders (through the management of supply chain/network) “inspire” organisational *policy & strategy*, as well as the way of managing *people* and *partnership & resources*, which is further deployed to the *process* and becomes the source of value innovation. This part of the map explains the *exogenous* force for stakeholder value creation.

Conclusion

Value innovation plays an important role in creating [radically] attractive quality for customers and at the same time creating value for other stakeholders. Therefore, value innovation is an important part of a cognitive map of stakeholder-oriented quality management. Since value innovation is at a business level, developing the cognitive map of stakeholder-oriented quality management should adapt quality management at a business level, e.g. the EFQM business excellence model. The cognitive map of stakeholder-oriented quality management, inspired by the EFQM business excellence model, consists of three parts: enablers, value innovation, and stakeholder value (results). Here, value innovation is the link between the enablers and the results of stakeholder value.

The cognitive map of stakeholder-oriented quality management indicates that creating stakeholder value requires both *endogenous* and *exogenous* forces. Endogenous forces are generated by internal factors in the organisation such as leadership, policy & strategy, and people. Meanwhile, exogenous forces are external factors outside the organisation, for example: customer value, market conditions, and supply chain/network characteristics. Hence, organisation's ability for being value innovative (and thus creating value for its stakeholders) depends on the ability to manage these forces.

References

- Conti, T. (2006), Quality Thinking and System Thinking, *The TQM Magazine*, Vol. 18, No. 3, pp. 297-308.
- Foster, D., Jonker, J. (2007), Towards a Third Generation of Quality Management: searching for a theoretical re-conceptualisation of contemporary organisations based on the notions of stakeholders and transactivity, *International Journal of Quality and Reliability Management*, Vol. 24, No. 7, pp. 683-703.
- Karniouchina, E.V., Victorino, L., Verma, R. (2006), Product and Service Innovation: ideas for future cross-disciplinary research, *Journal of Product Innovation Management*, Vol. 23, No. 3, pp. 274-280.
- Kaplan, R.S., Norton, D.P. (1992), The Balanced Scorecard: measures that drive performance, *Harvard Business Review*, Vol. 70, No. 1, pp. 71-80.
- Kaplan, R.S., Norton, D.P. (1996), Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review*, Vol. 74, No. 1, pp. 75-86.
- Kaplan, R.S., Norton, D.P. (2007), Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review*, Vol. 85, No. 7-8, pp. 150-161.
- Kim, W.C., Mauborgne, R. (1997), Value Innovation: the strategic logic of high growth, *Harvard Business Review*, Vol. 75, No. 4, pp. 103-112.
- Kim, W.C., Mauborgne, R. (1999a), Strategy, Value Innovation, and the Knowledge Economy, *Sloan Management Review*, Vol. 40, No. 3, pp. 41-54.
- Kim, W.C., Mauborgne, R. (1999b), Creating New Market Space, *Harvard Business Review*, Vol. 77, No. 1, pp. 83-94.
- Kim, W.C., Mauborgne, R. (2005), Value Innovation: a leap into the blue ocean, *Journal of Business Strategy*, Vol. 26, No. 4, pp. 22-28.
- Krinsky, R.J., Jenkins, A.C. (1997), When worlds collide: the uneasy fusion of strategy and innovation, *Strategy & Leadership*, Vol. 25, No. 4, pp. 36-41.
- Lilja, J., Wiklund, H. (2006), Obstacles to the Creation of Attractive Quality, *The TQM Magazine*, Vol. 18, No. 1, pp. 55-66.
- Markides, C. (1997), Strategic Innovation, *Sloan Management Review*, Vol. 38, No. 3, pp. 9-23.
- Markides, C. (2004), Rethinking Innovation, *Leader to Leader*, Vol. 34, pp. 35-42.
- Markides, C. (2006), Disruptive Innovation: in need of better theory, *Journal of Product Innovation Management*, Vol. 23, No. 1, pp. 19-25.
- Matthyssens, P., Vandenbempt, K., Berghman, L. (2006), Value Innovation in Business Markets: breaking the industry recipe, *Industrial Marketing Management*, Vol. 35, No. 6, pp. 751-761.
- Mele, C., Colurcio, M. (2006), The Evolving Path of TQM: towards business excellence and stakeholder value, *International Journal of Quality & Reliability Management*, Vol. 23, No. 5, pp. 464-489.
- Setijono, D. (2007), *Customer Value: knowledge, sustainability, and transformation*, Proceedings of 10th QMOD Conference, Helsingborg-Sweden.

- Spear, S., Bowen, H.K. (1999), Decoding the DNA of the Toyota Production System, *Harvard Business Review*, Vol. 77, No. 5, pp. 96-107.
- Spear, S.J. (2004), Learning to Lead at Toyota, *Harvard Business Review*, Vol. 82, No. 5, pp. 78-87.
- Spicer, D.P. (1998), Linking Mental Models and Cognitive Maps as an Aid to Organisational Learning, *Career Development International*, Vol. 3, No. 3, pp. 125-132.
- Williams, R., van der Wiele, T., van Iwaarden, J., Bertsch, B., Dale, B. (2006a), Quality Management: the new challenges, *Total Quality Management*, Vol. 17, No. 10, pp. 1273-1280.
- Williams, R., Bertsch, B., van der Wiele, A., van Iwaarden, J., Dale, B. (2006b), Self-Assessment against Business Excellence Model, *Total Quality Management*, Vol. 17, No. 10, pp. 1287-1300.
- Womack, J.P., Jones, D.T. (1996), Beyond Toyota: how to root out waste and pursue perfection, *Harvard Business Review*, Vol. 74, No. 5, pp. 140-152.
- Womack, J.P., Jones, D.T. (2005), *Lean Solutions: how companies and customers can create value and wealth together*, Simon and Schuster, London.
- Zink, K. (2005), Stakeholder Orientation and Corporate Social Responsibility as a Precondition for Sustainability, *Total Quality Management*, Vol. 16, No. 8-9, pp. 1041-1052.
- Zink, K. (2007), From Total Quality Management to Corporate Sustainability Based on a Stakeholder Management, *Journal of Management History*, Vol. 13, No. 4, pp. 394-401.

Further readings

The EFQM framework for Innovation, 2005