

Chapter 4

Business Process Change Management for MPE

Change is a dominating factor in today's business environment. This is a key driver for applying business process-oriented management approaches in modern enterprises. New, flexible IT architectures like SOA support this change from a technology point-of-view, as we have discussed in the previous chapter. But how can you prepare people and help them cope with impending adjustments? People change management has become one of the greatest challenges for organizations if they are to achieve high performance. They have to cautiously manage their talent.

Looking at today's business world, there are various reasons for continuous change of business processes, such as the following examples [1]:

- New or changing customers, suppliers, or other market partners
- New or altered market offerings (goods, services, information, etc.)
- Changing legal regulations
- Availability of new or modified technologies, like IT applications
- Outsourcing processes or subprocesses
- Mergers and acquisitions
- New business models
- Cultural differences in new enterprise locations

All of the resulting changes affect one or several business processes. The execution of most of the processes requires a combination of people and technologies. Therefore, people change management is relevant for all. Even if a new technology is used to automate an entire process, this may result in change of processes for employees in the IT department. Again, change management is necessary.

In this chapter, we will discuss how to handle the people side of such process changes. People are the key process asset when using MPE. Consequently, we will discuss related topics in this chapter. This focus is shown in Fig. 4.1. People aspects are relevant for all phases of MPE, as shown in the life cycle model.

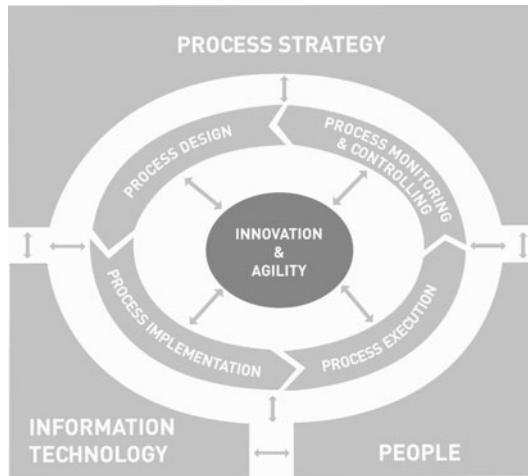


Fig. 4.1 Focus on people aspects of MPE

4.1 What Is Business Process Change Management?

Let us look at a few examples of business process change. The business-driven application of new technologies, like “mobile-business” (m-business), can result in many business process changes [2]. An example is shown in Fig. 4.2. In a traditional process, a truck with office supplies arrives at an office supply store. Then, the truck driver checks with the store clerk, who consults his IT system to find out which supplies are needed. The truck driver documents the necessary inventory changes and fills the store shelves. Then, the store clerk books the inventory adjustments for his shop. The m-business process improves this procedure. With his mobile device, the truck driver accesses the store application systems so he can do all bookings by himself.

The ways in which cultural differences can influence business processes is visualized in Fig. 4.3. In a process typical of Japanese environments, there is a high focus on quality. The quality-assurance activities are carried out twice: on the customer side and on the supplier side. The redundancy ensures the highest-quality standards and demonstrates the characteristic Japanese attention to details, although the process is not 100% efficient. If efficiency is the main goal, these redundancies are eliminated. Depending on business goals and the cultural environment, one of the processes may be changed to the other. This is a question global companies would have to answer (we will discuss the effects of globalization more in detail later on).

All the described changes require the related modifications of existing business processes or the creation of new ones, thus business process change management is necessary. To ensure that such a change is really effective for an organization, the following conditions should be fulfilled [3]:

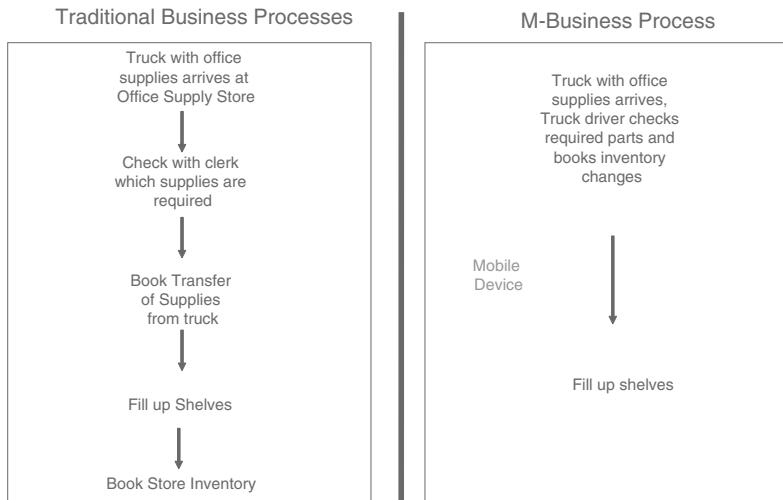


Fig. 4.2 M-business – technology drives business process changes

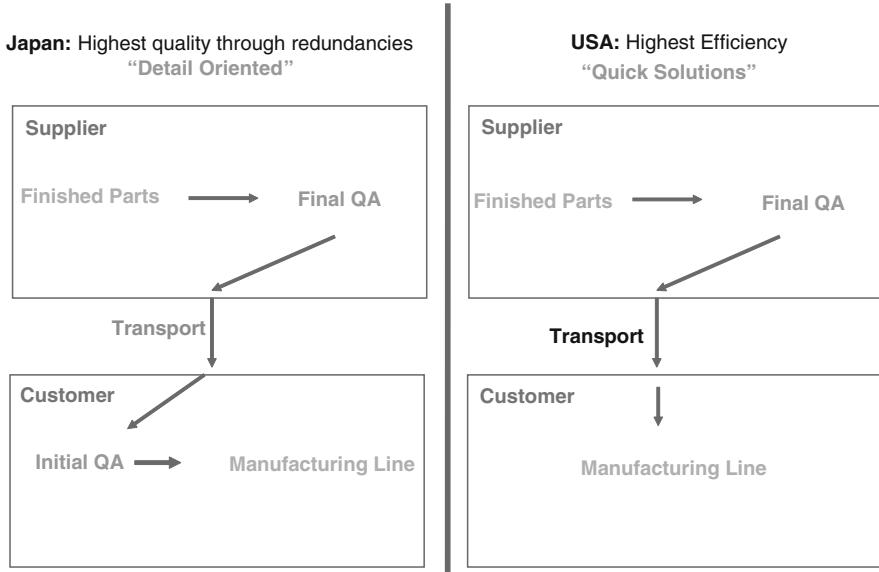


Fig. 4.3 Business processes can reflect cultural differences

- There must be a perceived advantage of the change that can be identified by the people who will have to make the change.
- The change must be compatible with the involved people's thought process.
- The change must be as easy-to-understand as possible.

- The change must be divisible and executable in phases or by different people.
- It must be possible to communicate the change clearly without using a new vocabulary with which people are not familiar.
- The change must be reversible and can be undone if things do not work out as expected.
- The change should be as cost efficient as possible and require as little time as possible from the people involved.
- The change has to treat people with respect; it must not result in embarrassment for the involved people.
- The initiator of the change must have credibility or a reputation of success.
- The change must be realistic and really do what it is supposed to do.
- The consequences of failure must be minimized.

In most business situations, it is not possible to fulfill all those requirements. However, experience has shown that at least seven to eight [3] of the requirements should be met in order to make a change truly successful. Change management then ensures the following conditions to the process change [4]:

- Necessary actions are initiated with an acceptable delay after the external change has occurred.
- Necessary actions are executed in a fast and effective way.
- All reactions and actions are initiated and executed in a controlled manner.

As explained, the effective management of the permanent change is a key success factor for an enterprise and a precondition to move from “good to great” [5]. It is of fundamental importance that the people involved in changing processes are able to understand and accept those changes, and ultimately, make them happen. Therefore, the most appropriate definition of change management includes the combination of the following activities [1, 6]:

- Information
- Communication
- Training

People must be informed of the changes and invited to provide feedback. An intense communication period typically occurs at this point. And finally, people have to be trained to be successful in the new business process environment. Figure 4.4 visualizes this basic definition for business process change management.

The content of the relevant information, communication, and training concerning specific business processes can be structured using the ARIS Architecture previously discussed [7, 8]. The major questions to be addressed in change management activities can be directly deducted from the ARIS information system views, as shown in Fig. 4.5:

- Who (people, departments, different enterprises, etc.) is involved in the change (organization view)?
- What are the new or modified functions and why are they better (function view)?
- What new or modified information is needed or produced and why is it better (data view)?

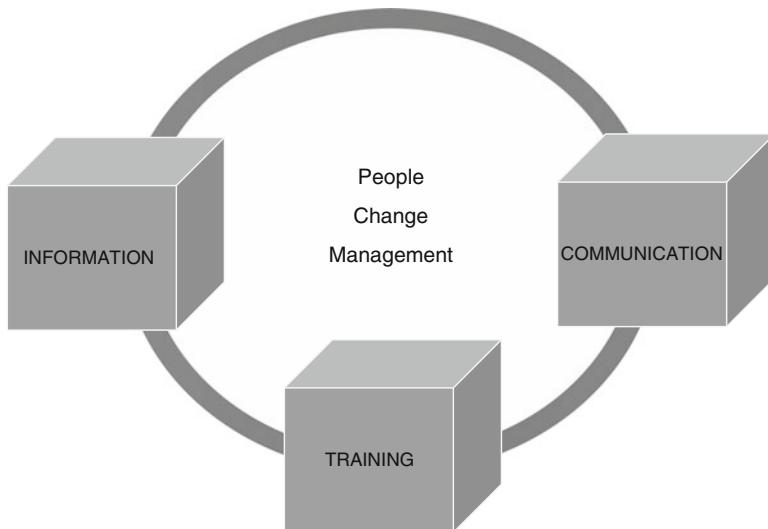


Fig. 4.4 Business process change management – the core activities

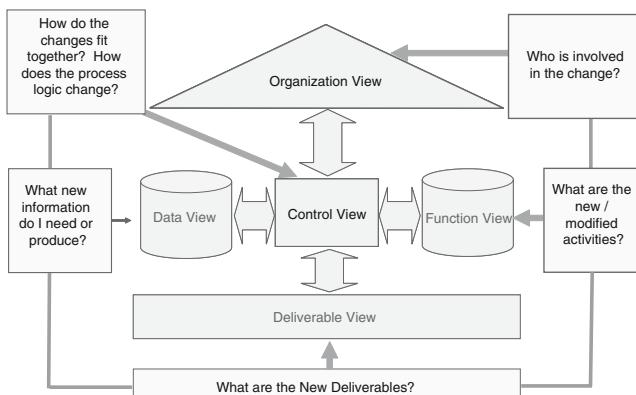


Fig. 4.5 Business process change management based on the ARIS architecture

- Which new or modified deliverables are expected and why (deliverable view)?
- How do the changes fit together and how do they influence and improve the overall process (control view)?

This structure for change management based on ARIS also ensures the overall integration into MPE because MPE also applies the ARIS framework and its principles to describe business processes. This leads to an overall consistent and integrated approach, which is necessary to ensure the required effectiveness of the approach. People-related activities are based on the same business process knowledge assets as IT-related activities.

Business process change management is again a process in and of itself. Information, communication, and training are subprocesses. Therefore, process-oriented methodologies and approaches (e.g., for the design or the implementation) can be applied to manage business process change. The principles of MPE can be used to organize the process change management. BPM software can be utilized to support change management within MPE [9].

We will now examine the elements of change management in more detail, starting with information and communication.

4.2 How Do You Provide Information and Communication?

The starting points of most change management activities are information and communication. Both must be adapted to the cultural environment of the enterprise and its specific situation. For example, you may need to act cautiously in a company that is in a bad economic situation because people may fear for their jobs. In a software enterprise founded only a few years ago, people may be more accustomed to change and accept it easily. In a 100-year-old, traditional manufacturing company, people may be much less accustomed to and less open to change. The situation in the public sector is also different because of numerous legal requirements and policies. Changing political situations?

The following general guidelines are related to the preparation of information and communication activities in an organization [6] starting a business process change management initiative:

- Segment the audience – Different groups of people must be addressed differently, in their “language” and considering their specific situation.
- Use multiple channels – People have personal preferences regarding where they like to get their news – some may prefer e-mail or other kinds of computer-based communication, while others are more open to phone or face-to-face communications.
- Use multiple voices – Switch between various “messengers” who may each address people in a different style that facilitates a high level of acceptance.
- Be clear – Set understandable expectations to avoid later misunderstanding and disappointment.
- Honesty is the only policy – Sooner or later people will find out the truth anyway, so do not hold it back.
- Use emotions, not just logic – you are dealing with human beings who have feelings about situations, which is something you can use to your advantage.
- Encourage – Change is always difficult; nevertheless, people have to feel good about the situation to be successful.
- Make the message tangible – Tell people specifically what will change for them and their work environment and what are the specific expectations?

- Listen, listen, listen – Your people likely know more about their processes and the consequences of change than you.

The basis to apply all these guidelines is the audience segmentation. Once you know exactly who you are addressing, you can optimize your information and communication activities accordingly, applying the presented guidelines. The following questions facilitate audience segmentation [6]:

- Who is in the segment?
- How will people be affected?
- What reaction will they have?
- What behavior will we need from them?
- How can we stimulate this behavior?
- When shall we inform/communicate?
- What medium should we use for each message?
- Who should communicate the message?

Challenges for successful change management activities result from the following aspects:

- Disbelief
- False familiarity
- Fear
- The “rumor mill”
- Incomprehensibility
- Abstraction
- Complexity
- Use of clichés

The business process factory of MPE can deliver the necessary content for the information and communication activities in form of business process models. The models can then be used as a common “language of change.” The language of change facilitates the communication between various groups involved in a process change management initiative, such as business experts and managers, executives, IT experts, software vendors, and consultants. The use of formal methods, such as event-driven process chains (EPCs) helps to support clear, straightforward communication. These methods promote communication across company boundaries or between locations in various countries to avoid misunderstanding. The role of process models is explained in Fig. 4.6.

For example, a well-known beverage manufacturer uses process models widely as a communication basis. The company develops all job descriptions, based on process models. On the one hand, this ensures that the change documented in the models is actually implemented. On the other hand, it ensures that only realistic, achievable change suggestions are defined. Because the same business process models drive the people change management and the IT change, e.g. through an SOA environment, you end up in a holistic business process transformation.

To use those process models effectively for change management, the graphical representation of the models may have to be adjusted to the specific target segment

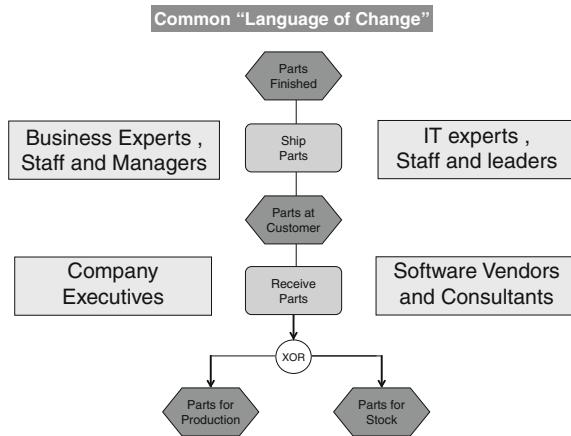


Fig. 4.6 Business process models as common language of change

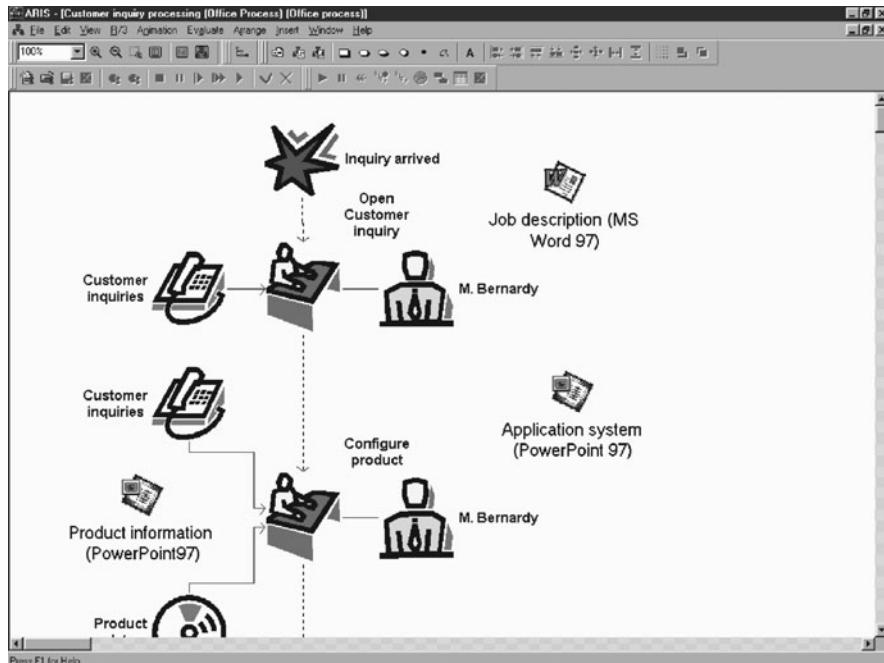


Fig. 4.7 Business process model in a less abstract format (in ARIS Design Platform)

of the information and communication activity. People who work in a warehouse or manufacturing environment may not be accustomed to process models consisting of rectangles, diamonds, ovals, and other abstract objects. They may even get anxious about them. Therefore, those abstract symbols could be replaced by more concrete objects, like a desk for a function or a picture of a person for an organizational unit. BPM tools used to support MPE deliver a transformation from one model

representation to another automatically [10] without changing any semantic content. An example of such process models in a less abstract format using the design functionality of the ARIS Platform is shown in Fig. 4.7.

Because the business process models are in a digital format, they can be distributed via the Internet, again using the process factory modeling environment [10]. This enables fast distribution of information, as required by MPE, and the easy update of information because it is centralized in the process warehouse. This results in increased efficiency in the change management process.

In international company environments, cultural differences between locations in different countries must be taken into account. Therefore, different process model representation may be used in different countries. However, the semantic content of all those models remains the same, just the format changes.

The unique effects of the global business environment and their impacts on MPE will be discussed later.

Now, we will discuss the training activities in a business process change management initiative. Information and communication prepare the way for training regarding the new business processes.

4.3 How Do You Provide Process Training?

Training ensures that people can do their jobs as required by the altered or newly established business process. Training activities must also be organized with a business process-oriented approach and address the relevant changes of the existing as-is processes or the integration of a new process into the overall process landscape. Business process-oriented training can be divided into four major activities [11]:

- Basic training – business background
- Basic training – enabler (e.g., newly implemented application software)
- Business process training
- Kick-off training

In basic business training, the changing business background is explained. This allows people to understand the motivation for the change and ensures that they have the necessary general business knowledge. For example, a manufacturing company that previously executed material requirements planning (MRP) manually implements an ERP solution, including the use of MRP functionality. This means employees who formerly did straightforward calculations of required parts now have to decide how those parts should be ordered (e.g., based on a specific minimum stock or based on demand). They must set the appropriate parameters in the software application. The work requires more developed business skills, which are provided in the basic business training.

The basic “enabler” training is an introduction to new technologies or other enablers to be used in the changed processes. This training phase includes topics such as the handling of application software products or the use of new process

performance tools. This training is less focused on “what to do” and more on “how to do things” in the future, in the changed business environment. In the past, this training phase was often considered very relevant. However, with easier to use IT systems, the importance of this training activity is less applicable.

The most important training phase is clearly business process training. This training empowers people to do their new or modified jobs in the changed process environment. These training activities explain how to apply the business knowledge using the new enablers in a business process to achieve the defined change. It basically involves all aspects concerning the execution of the new business processes, as well as monitoring and controlling this process. This training phase ensures that people have a minimum understanding of the end-to-end business process helping them to realize the impact of their work and the work of others involved in the process, and on the final result for an internal or external customer. This training phase makes the overall training approach a true business process training, a key element of MPE business process change management.

Kick-Off Training ensures that people recall the key aspects of the change, the dry-run for the process to “go-live.” This training chiefly prepares people for the first time phase when the changed business environment may not be 100% stabilized, e.g., due to technical challenges. This includes information such as who to contact with questions or other work-arounds that may be necessary.

The structure of the business process-oriented training is shown in Fig. 4.8.

In many instances, the delivery of the necessary training is the greatest change management challenge for an enterprise. Frequently, thousands of people need training in new business processes and new enablers, such as ERP systems or new SOA-based processes. Therefore, the introduction of computer-based training (CBT) has become more and more important and often replaces face-to-face classroom training [12]. Although it is important to increase the efficiency of MPE, there may also be situations when face-to-face training is more appropriate. For example, it may be important to have spoken with some of the key experts personally to more easily ask questions at a later time. Also, face-to-face discussions are sometimes more

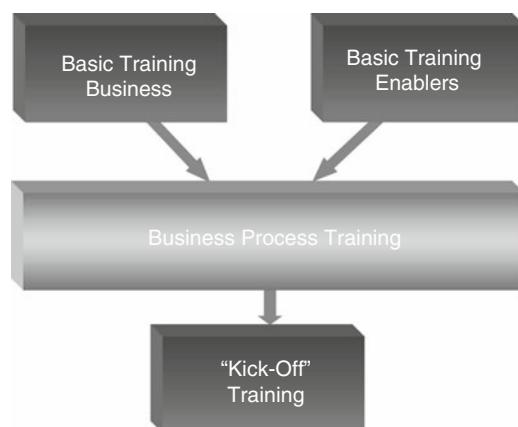


Fig. 4.8 Business process-oriented training

effective. Therefore, a hybrid training approach, combining CBT and face-to-face training, is an excellent solution.

In combination with CBT, concepts of distance learning using the Internet as enabler have also become increasingly more important [12–14]. This approach reduces logistical challenges tremendously and ensures constant and consistent training quality. Therefore, this approach is again very relevant to ensuring the efficiency of MPE. It has to be used in the right overall delivery mix for the various training sessions.

Distance learning via the Internet basically enables people to obtain the best education possible from wherever it is available. Universities in some countries may offer classes about the relevant business topics that are not available in other countries. This is no longer an issue. Enterprises have the choice [15]. They can use education offerings from institutions around the world via distance learning. MPE encourages the consideration and use of such options.

Much of the process training can also be integrated in the enabling technology itself, e.g. the SOA environment. People can view the process models and the process steps on which they are working as well as the next activities to be executed. They can get necessary background information, submit questions, and learn about the process. This results in individualized, on-the-job training focused on relevant business processes.

Such an approach of integrated training also supports the concept of lifetime learning. Continuous change in the business environment, leading to process change, requires continuous training. Training becomes part of day-to-day work. This is an important aspect for MPE because it ensures the continuous integration of strategy and execution, resulting in high performance.

For business process training, the use of virtual worlds could become an increasingly important method for delivery. As discussed, the process models of the MPE process factory could be used to configure a virtual environment where people can learn how to execute future processes. They “live” their future processes, just as pilots are trained using flight simulators [16].

4.4 The Bottom Line

- Business process change management is the combination of information, communication, and training regarding changes in existing business processes or the creation of new processes (Sect. 4.1).
- Change management ensures that the necessary actions are initiated with an acceptable delay, required actions are executed in a fast and effective way, and all reactions and actions are initiated and executed in a controlled manner to enable high performance (Sect. 4.1).
- The content of information, communication, and training concerning specific business processes can be structured using the ARIS Architecture (Sect. 4.1).

- Business process change management is a process in and of itself. Therefore, process-oriented methodologies and approaches can be applied. Business process management software can be used to support change management (Sect. 4.1).
- Information and communication in a business process change management approach should be well prepared, including specifically an audience segmentation (Sect. 4.2).
- The business process models delivered by MPE process design phase can be used as a common “language of change” (Sect. 4.2).
- To use those process models effectively for change management, it may be necessary to adjust the graphical representation of the models to the specific target segment (Sect. 4.2).
- Business process-oriented training can be divided into four major activities: basic training concerning the business background, basic training concerning used enablers, business process training, and kick-off training (Sect. 4.3).
- The most important training phase is the business process training. It explains how to apply the business knowledge using the new enablers in a business process to achieve the defined change (Sect. 4.3).
- A hybrid training approach, combining CBT and face-to-face training, is generally an excellent delivery mode. Also, concepts of distance learning using the Internet as enabler become increasingly important (Sect. 4.3).

References

1. Kirchmer, M, Scheer, A W: Change management – key for business process excellence. In: Scheer, A W, Abolhassan, E, Jost, W, Kirchmer, M (eds.) Business Process Change Management – ARIS in Practice, pp. 1–14. Springer, Berlin (2003)
2. Kalakota, R, Robinson, M: M-Business – The Race to Mobility. McGraw Hill, New York (2002)
3. Oleson, J: Pathways to Agility – Mass Customization in Action. Wiley, New York/Chichester (1998)
4. Spath, D., Baumeister, M., Barrho, T., Dill, C: Change management im Wandel. In: Industrie Management – Zeitschrift fuer industrielle Geschaeftsprozesse, pp. 9–13 (2001)
5. Collins, J: Good to Great – Why Some Companies Make the Leap.. .and Others Don’t. HarperCollins, New York (2001)
6. Hammer, M, Stanton, S: The Reengineering Revolution. HarperCollins, Glasgow (1995)
7. Scheer, A W: ARIS – Business Process Frameworks, 2nd edn. Springer, Berlin (1998)
8. Scheer, A W: ARIS – Business Process Modeling, 2nd edn. Springer, Berlin (1998)
9. Exel, S, Wilms, S: Change management with ARIS. In: Scheer, A W, Abolhassan, E, Jost, W, Kirchmer, M (eds.) Business Process Change Management – ARIS in Practice, pp. 23–18. Springer, Berlin (2003)
10. IDS Scheer, A.G. (ed.): ARIS Platform. Product Brochure. Saarbruecken, (2007)
11. Kirchmer, M: Business Process Oriented Implementation of Standard Software – How to Achieve Competitive Advantage Efficiently and Effectively, 2nd edn. Springer, Berlin (1999)
12. Kraemer, W., Mueller, M.: Virtuelle corporate university – executive education architecture and knowledge management. In: Scheer, A.W. (Ed.): Electronic Business und Knowledge

- Management – Neue Dimensionen fuer den Unternehmenserfolg, pp. 491–525. Heidelberg (1999)
- 13. Kirchmer, M.: e-Business Process Improvement (eBPI): Building and managing collaborative e-business scenarios. In: Callaos, N., Loutfi, M., Justan, M.: Proceedings of the 6th World Multiconference on Systemics, Cybernetics and Informatics, vol. 8, pp. 387–396. Orlando (2002)
 - 14. Kraemer, W., Gallenstein, C., Sprendger, P.: Learning management fuer Fuehrungskraefte. In: Industrie Management – Zeitschrift fuer industrielle Geschaeftsprozesse, pp. 55–59 (2001)
 - 15. Fingar, P: Extreme Competition – Innovation and the Great 21st Century Business Reformation. Meghan-Kiffer, Tampa (2006)
 - 16. Greenbaum, J.: SimEnterprise: the video gamer's guide to SAP's business-process revolution. In: SAP NetWeaver Magazine, vol. 2 (2006)