

EURAM Conference 2002  
May 9-11, 2002  
Stockholm

**DRAFT VERSION**

**ARE WE PRACTICING WHAT WE PREACH? -  
STRATEGIC PERSPECTIVES FOR THE MANAGEMENT EDUCATION INDUSTRY**

**Frank T. Piller  
Kathrin Möslein**

**1 Dr. Frank T. Piller**

Chair of General and Industrial Management  
Technische Universität München  
Leopoldstr. 139  
80804 Munich / Germany  
Tel.: ++49-89-36078-216  
Fax: ++49-89-36078-222  
Email: piller@ws.tum.de  
<http://www.aib.ws.tum.de/piller/>

**2 Dr. Kathrin Möslein**

Chair of General and Industrial Management  
Technische Universität München  
Leopoldstr. 139  
80804 Munich / Germany  
Tel.: ++49-89-36078-231  
Fax: ++49-89-36078-222  
Email: moeslein@ws.tum.de  
<http://www.prof-reichwald.de/moeslein/>

**Track:** Management Education in a Technology Driven Economy

**DRAFT VERSION**

**ARE WE PRACTICING WHAT WE PREACH? -  
STRATEGIC PERSPECTIVES FOR THE MANAGEMENT EDUCATION INDUSTRY**

*The competitive situation of the management education industry has changed dramatically in recent years. Traditional players like universities find themselves in a competitive environment between new emerging sub-sectors such as corporate or virtual universities, executive development firms or management consultants. Despite a changing competitive environment, however, many of this industry's actors seem to lack the competition and efficiency oriented thinking that they are preaching in their programs: Most product and service offerings of the management education industry are still created in the traditional way of costly craft production, without providing any strategic differentiation capabilities. The paper discusses this paradoxical situation and examines how to overcome the efficiency paradox of developing and delivering management education. In particular, hybrid competitive strategies that allow for the efficient production of highly customized management education offerings appear to be a promising option in this field.*

**1 Introduction**

The management education industry has changed dramatically in recent years – “from one dominated by traditional university programs, to one characterized by cooperative and competitive trends between emerging sub-sectors: corporate universities and management consulting firms, and - eventually - distance learning programs” (Grayden 2001; see also Christensen 2000; Ernst / Kieser 2000; Spender 2000a; Van de Ven 2001a). This deconstruction of the traditional management education landscape goes hand in hand with a rapid commercialization of the field driven by demographic changes, technological innovations and the overall globalization of the economy.

Unlike most sectors of our economy, the management education industry today can be seen as an industry where growth is the norm (Van de Ven 2001b). Alongside its growing importance, however, customer expectations and technology opportunities are forcing suppliers to become demand-led, rather than product-driven. Steadily increasing international competition and the entry of a huge number of new competitors lead to a growing market pressure which has transformed the industry from sellers' to buyers' markets. The cost-benefit relation alters, because consumers of management education demand increasingly high standards of quality, service, and fit even when the price is favorable or, vice versa, suppliers have to meet additional requirements in pricing when a product is markedly differentiated. Furthermore, the education market's growth rate is highly susceptible to cost cuttings in the HR budgets of many firms, as seen in the recent recession.

Amongst others, Tapscott (1998) identified the shift “from one-size-fits-all to customized learning” as a major general trend of education in the 21st century. And indeed, the increasing globalization of organizations is creating a market where the suppliers of education have to be able to meet the specific needs of a diverse and often globally distributed customer base (Hämäläinen 1999; Ip 1997; Ruch 2001; Norman 2001). The existing models of delivering education are challenged by the growing skills and knowledge needs. In addition, new technologies provide new opportunities for serving the needs: it is easier to reach the learners at the place of need (access at work, access at home, mobility) and to sell the learning as needed, even on-demand. These general shifts are demanding new competitive strategies for the production and delivery of education from all participants of the education value chain (Hämäläinen 1999):

- The suppliers of education have to find new markets, combined with new methods and channels for distribution. With better information on market needs and appropriate alliances with suppliers of complementary products and services, they would be better equipped to serve the market.
- As the premier customer segment of management education large corporations need high quality tailored services from a combination of sources with a global solution for delivery via the most appropriate set of distribution methods and channels.
- The distributors (intermediaries) need large volumes of high quality, pre-packaged content to be distributed on complementary channels, with guaranteed continuity and consistency.

Today's "production strategies", however, are not yet reflecting the new demands. The players in the market for management education are mainly still acting as if there were no competition, just market growth, no shifting buy-side demands, just evolving sell-side options, no economies of any kind, just fixed image-price-quality relations (e.g. Ruch 2001). The objective of this paper is to provide an insight into this problem, to identify common structures and to discuss possible solutions.

The organization of the remainder of the paper is as follows: In the next paragraph we will compare delivery processes of management education. This leads to the identification of a paradoxical situation, the efficiency paradox of management education. In order to solve this situation, we identify four situations. Building on production theory and competitive strategy, we discuss how the concept of mass customization opens up new means of reaching competitive advantage in the management education industry. The paper concludes with perspectives for further research.

## **2 The Efficiency Paradox of Management Education**

Today, most management education is still created in the form of traditional craft production: An educator (trainer, consultant, coach ...) defines the teaching goals, compounds a framework of the material, selects and edits the teaching material, and finally teaches face to face in front of the class. He might be able to repeat the same course for many subsequent classes, but the model is pre-industrial, as today's production of most management education follows a model with

- low scalability,
- unstable processes,
- low degree of pre-fabrication,
- need for high flexibility,
- low use of automation technologies (despite the move towards e-learning and virtualization) and
- high labor intensity.

Paradoxically, this inefficient, costly form of production provides, only in very rare cases, its main business benefit: differentiation. While courses, teaching materials and textbooks are developed and delivered in highly "individualized" processes, the output is usually far from being unique. All over the world the products and services of business schools, management education firms and even corporate universities seem to be quite interchangeable (admittedly at quite different price and quality levels that are, for instance, reflected in MBA and business school rankings; see also: Mintzberg / Gosling 2000; Spender 2000b). Ongoing interview-based research with heads of corporate human resource departments and consultancy firms clearly showed that there are neither distinctive criteria for the selection of management education providers nor clear preferences for specific courses or programs (Möslein 2002).

Framing this paradox with the findings of production theory and competitive strategy in mind, we would expect to see a fairly different situation (Porter 1980, 1996; Lampel/Mintzberg 1996):

- Either, one should find highly standardized, stable and efficient processes of delivering standardized products for management education without a differentiation advantage following the cost leadership paradigm,
- or we would anticipate finding highly flexible, unstable and labor intensive processes for individualized and customized education products with a high differentiation advantage.

This observation can be summarized metaphorically as the *efficiency paradox of developing and delivering management education*: Traditionally, the objective of delivering differentiated, customized goods and services is to attain an increased revenue by the ability to charge premium prices derived from the added value of a solution meeting the specific needs of a customer (Porter 1980). Nevertheless, while charging premium prices most suppliers of management education deliver relatively standardized, interchangeable products that are developed and delivered in more or less flexible, unstable and labor intensive processes. Even the many players now offering “customized programs” at the executive level are not really deploying the differentiation advantage. Thus, there is an efficiency paradox between the use of “tailor-like” production methods and the fairly standardized, undifferentiated result (this is even more astonishing as most management education providers are offering classes in “competitive strategy”).

### 3 Overcoming the Paradox: Learning from Mass Customization

The situation can be summarized as shown in Fig. 1 which structures patterns of developing and delivering management education for the industry. Management education products can either be standardized products with slow, evolutionary, predictable changes or customized solutions fitting the needs and desires of each single customer resulting in a different product every time one is produced. Similarly, process change — how an organization goes about delivering the service — can either be stable or dynamic (this argumentation transfers a general model by Boynton / Victor / Pine 1993 and Victor / Boynton 1998 to the management education industry). Thus, four general patterns of developing and delivering management education emerge: one inefficient model (field 1), and three efficient models (fields 2, 3, and 4 of Fig. 1). Today’s actors in the market for management education can mainly be defined according to fields 1, 2, and 3. Paradoxically, due to a lack of knowledge when it comes to matching their products’ strategic position to their delivery processes, they find themselves in an inefficient position of producing standardized, undifferentiated products with unstable delivery processes. Having not been forced to act competitively until now, many providers seem to be trapped within the *efficiency paradox of field 1* as described in the previous section.

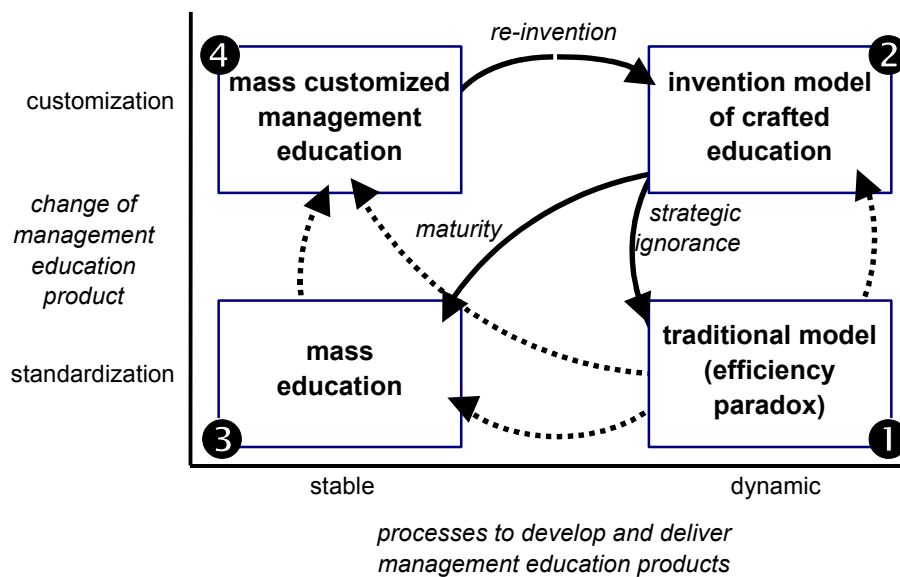


Fig. 1: Product-process matrix of supplying management education (adapted from: Boynton / Victor / Pine 1993)

*Field 2 – invention model of crafted education*: More and more actors are offering company specific programs of management education within development and delivery processes comparable to craft manufacturing. These organizations constantly create new products as well as the processes by which they are produced: both product and process change is very dynamic. When individual education needs are met by these premium products offered at high prices and customers are satisfied in the long run, this costly approach proves to be competitive. Today, this seems to be the case for just a few top brands in the industry.

*Field 3 – mass education:* With a growing demand for management education, mass production methods have emerged in this industry. New information technologies provide new methods of highly standardized content delivery. In this production model, everything is stable: these organizations find the one best way of producing a given education product and then move down the learning curve as fast as possible to do it. Today's "e-learning" and virtual education providers are moving towards this model. However, this model is only suitable for content intensive management foundation courses – and thus not for the core components of executive education.

*Field 4 – mass customized management education:* The concept of mass customization may provide a solution to overcome the deficiencies of the described models and shows an alternative escape from the paradox. It moves one's thinking beyond costly customization on the one hand and pure standardization of education on the other towards the concept of hybrid competitive strategies. The objective of mass customization is to produce goods and services which meet each individual customer's needs with near mass production efficiency (Tseng / Jiao 1996). While Toffler (1971) anticipated the concept three decades ago, Davis coined the term mass customization in 1987. The idea attained wide popularity with Pine's (1993) book. Since its beginning, mass customization has been closely connected with the capabilities offered by new manufacturing technologies (CIM, flexible manufacturing systems) which reduce the trade-off between variety and productivity (Ahlström / Westbrook 1999; Kotha 1995; Pine 1993; Victor / Boynton 1998; Zipkin 2001). However, while mass customization has already been discussed in the literature to some extent (see Da Silveira / Borenstein / Fogliatto 2001; Piller 2001 for an overview), increased practical implementation of this strategy has only been seen in business during the last few years. An explanation for that time lag may be found in the fact that information technologies capable of handling the information flows connected with mass customization have only existed for a few years (Reichwald / Piller / Moeslein 2000).

The competitive advantage of mass customization is based on combining the efficiency of mass production with the differentiation possibilities of customization. Companies pursuing mass customization have to address three dimensions (Fig. 2). *Differentiation* means the production of goods and services for a (relatively) large market which exactly meet the needs of every individual customer with regard to certain product characteristics. The *cost dimension* demands that this can be done at total costs roughly corresponding to those of standard mass-produced goods. The information collected in the course of individualization serves to build up a lasting individual relationship with each customer (*relationship dimension*). Mass customization is thus a hybrid competitive strategy combining differentiation and relationship building with cost focus.

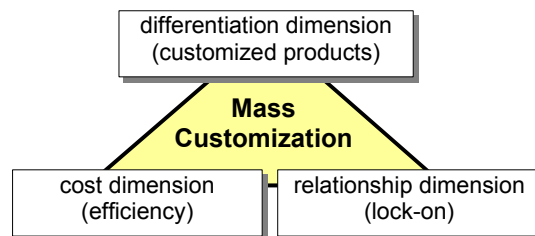


Fig. 2: Three dimensions of mass customization

Mass Customizers start out from both the cost as well as the differentiation position at the same time. This is in conflict with the traditional generic competitive strategies according to Porter (1980). In his conception, Porter follows the fundamental postulate of the incompatibility of differentiation and cost leadership. A company must clearly decide on one type of strategy, otherwise it runs the risk of getting "stuck in the middle" (Porter, 1980:16). Like the growing discussion of the insufficiency of alternative strategic choices between standardization (cost leadership) or customization (differentiation) in the traditional marketing domain, the management education efficiency paradox results from this alternative view. However, empirical studies (e.g. Kekre / Srinivasan 1990; Miller / Dess 1993; Reitsperger et al. 1993) and a detailed theoretical argumentation (e.g. Faulkner / Bowman 1992; Hill 1988; Miller / Dess 1993; Murray 1988) demonstrate that competitive strategy does not necessitate choosing between cost leadership or differentiation. Rather the simultaneous attainment of both strategic positions should be pursued within the context of a hybrid competitive strategy. Especially new information technologies can reduce the trade-off between a wide range of variants (flexibility) and production costs (productivity) (Wigand / Picot / Reichwald 1998).

#### 4 Implications for the Management Education Industry

Behind the levels of mass customization stands a fulfillment system based on some distinctive principles of mass customization (Anderson 1997; Da Silveira / Borenstein / Fogliatto 2001; Kotha 1995; Piller 2001; Pine 1993; Sahin 2000; Tseng / Jiao 1996; Zipkin 2001). These principles build the hybrid competitive position (Lee / Barua / Whinston 2000). Mass customization of management education requires a "customer-centered" system design underpinned by organizational, technological, and process innovation. Some principles of mass customization in the industry are explained in the following (note that these principles have to be evaluated both from the perspective of providing additional differentiation possibilities for the mass educator as well as providing higher efficiency for an educator with a craft/invention delivery process):

- *Modularization of education programs:* Most mass customization systems are based on a strongly modular approach. Modular program architectures and the use of program platforms could follow the concept of reusability (commonality) allowing economies of scale in the delivery and development (program family design) of customized programs. In addition, there is a tremendous potential benefit to be gained from the organized reuse of course material elements and course presentations. When designed appropriately, it is possible to mass customize material based on the same content. This is a practice which some professional management trainers have already adopted to a large extent. One technical pre-requisite for this is the separation of content from functionality of the delivery. The "virtual apparatus framework" described by Ip (1997) explicitly separates content and functionality and hence enables a partial solution to deliver different material to each student based on his/her individual characteristics.
- *Modularization of stable development and delivery processes:* The major difference of mass customizers to craft manufacturers according to the invention model in Fig. 1 are the stable delivery infrastructures and processes. This is the foundation of scalability. Educational scalability addresses issues such as whether the courseware can be delivered to a large number of students without significant impact on the quality, and whether the courseware can be continually improved in order to meet the changing need of the customers (Ip 1997). Management education products are only to some degree digitizable products. However, the offerings of e-learning providers and virtual universities can be seen as the first steps towards making use of this principle: Stable information infrastructure guarantees reaching even a broad range of globally distributed individual learners at constant quality levels -- without re-inventing the delivery process for each of them.
- *Build-to-order approach of mass customized education:* In a mass customization system, value creating activities are performed to a specific extent only after the customer's order has been placed. This leads to the reduction or elimination of inventory in the distribution chain and a reduction of planning complexity and adaptation costs. While the costs of storage of education is not comparable with that of material goods at first glance, there are inventory costs of produced but not required education as well: The growing need for management education is to a large extent the result of the growing pace of technological change. Furthermore, trends, fashions and market requirements change rapidly. Experts estimate that more than half of all books in the USA and 40% of all books in Europe are shredded after production – and never reached the hands of a customer. This asks for a steady up-date of educational material. Here, an educate-to-order approach has advantages over the mass education model.
- *Use of dedicated education configurators:* The modular, standardized (program) modules are combined at the so called decoupling or postponement point according to a specific customer's demand. At this point, the learner is integrated into the value creation of the supplier. This is one of the most important factors of mass customized education. Zipkin (2001) calls this process the elicitation of mass customization systems, the mechanism for interacting with the customer (learner) and obtaining specific information in order to define and translate the customer's needs and desires into a concrete learning product specification. Elicitation is the major cost driver of mass customization. Costs are accounted for by the investigation and specification of the learners' wishes, the configuration of learning programs, the transfer of the specifications to the provider, and coordination with external suppliers. Elicitation is also a problem from the point of view of the person being educated. The choice between modules and options can be difficult, and the perceived risks of choosing or selecting the wrong modules can be large (this is especially true when one considers that the "use" of a learning product demands a much higher degree of involvement than the use of many other products). Here, special education configuration systems are needed.

However, mass customization is not ultimate. To fully leverage mass customization capabilities, education providers must reassess themselves, in order to realize when they cannot satisfy a particular customer or cannot

pursue a particular market opportunity with their current customization approach. This causes them to "go back" and re-invent a new education module, a new process, or to cooperate with organizations inside or outside the firm to provide the new capability required. And at times, firms may have to overthrow their entire product or process architecture — before their competitors do — and re-invent one that will once again provide a distinct competitive advantage. This requires a systematic approach to develop new educational products which are not covered in most educator's course lists or text books about management education.

## 5 Conclusion and demand for further research

The management education industry is an industry under deconstruction. However, while the whole industry is confronted with ever growing competition, its structures and production functions have not been evaluated in great detail yet. To contribute to the growing field of research, we have identified four patterns of developing and delivering management education. Paradoxically, most actors are following the inefficient model of delivering standard, non differentiated products by using costly, craft production methods. Learning from the idea of mass customization and transferring this concept to the domain of management education may open a new strategic possibility for many actors of the industry.

However, there are still some open questions for research: First, the structures presented need further empirical evaluation. Empirical research in the field is dominated by case studies and small samples, or very broad approaches including all kinds of new education forms. Secondly, research on the nature of capabilities connected with mass customized education is needed. Mass customization requires a dynamic organization or perhaps network composed of flexibly operating units. Process modules (specific processes or tasks) have to interact with each other or come together in a different sequence for every product or service required by the learners. Finally, research has to overcome deficits in the field of learning behavior in value systems based on mass customization. There is still only little understanding about the perception of choice and the joy or burden of configuration by learners within the management area. The same is true about the evaluation of different customization options for particular management education product categories.

## REFERENCES

- Ahlström, P. / Westbrook, R. (1999), Implications of mass customization for operations management: an exploratory survey, *International Journal of Operations & Production Management*, 19 (March 1999), pp. 262-274.
- Anderson, D.M. (1997), *Agile product development for mass customization*, Chicago: Irwin, 1997.
- Behrman, J.N. / Levin, R.I. (1984), Are business schools doing their job?, *Harvard Business Review*, January / February 1984, pp. 140-147.
- Boynton, A.C. / Victor, B./ Pine, B.J. (1993), New competitive strategies: Challenges to organizations and information technology, *IBM Systems Journal*, 32 (No. 1/1993), pp. 40-64.
- Christensen, C.M. (2000), Entrepreneurial mind set and innovation: bringing them together in the new economy, Plenary Session, 20<sup>th</sup> Annual International Conference, Strategic Management Society, Vancouver, British Columbia, Canada, October 15-18, 2000.
- Da Silveira, G. / Borenstein, D. / Fogliatto, F.S. (2001), Mass customization: Literature review and research directions, *Int. Journal of Production Economics*, 72 (No. 1/2001), pp. 1-13.
- Davis, S. (1987), *Future Perfect*, Reading: Addison-Wesley, 1987.
- Ernst, B. / Kieser, A. (2000), How consultants outcompete management scientists on the market of management knowledge, Workshop of the Kommission für Organisation, Zurich, March 3-4, 2000.
- Faulkner, D. / C. Bowman (1992), Generic strategies and congruent organizational structures, *European Management Journal*, 10 (No. 4, 1992), pp. 494-499.
- Grayden, E.D. (2001), The diffusion of management education: an examination of the drivers and implications of the growth of sub-sectors within the management education industry, Plan B Paper, University of Minnesota, Human Resources and Industrial Relations, Minnesota 2001.

- Hämäläinen, M. (1999), Enabling electronic markets for education and training, white paper of the Espoo-Vantaa Institute of Technology, Espoo, Finland 1999, available online at <http://www.enable.evitech.fi/enable99/papers/hamalainen/hamalainen.html> [Jan 14, 2002].
- Hill, C.W. (1988), Differentiation vs. low cost or differentiation and low cost, *Academy of Management Review*, 13 (No. 3, 1988), pp. 401-412.
- Ip, A. (1997), Higher education & web-based learning: five challengers and a proposed solution, *Education Object Economy*, Multimedia Education Unit, The University of Melbourne, 1997.
- Kekre, S. / Srinivasan, K. (1990), Broader product line, *Management Science*, 36 (No. 10, 1990), pp. 1216-1231.
- Kotha, S. (1995), Mass customization: implementing the emerging paradigm for competitive advantage, *Strategic Management Journal*, 16 (special issue 'Technological transformation and the new competitive landscape', 1995), pp. 21-42.
- Lampel, J. / Mintzberg, H. (1996), Customizing customization, *Sloan Management Review*, 37 (Spring 1996), pp. 21-30.
- Lee, C.-H. / Barua, A. / Whinston, A. (2000), The complementarity of mass customization and electronic commerce, in: *Economics of Innovation and New Technology*, 9 (No. 2/2000), pp. 81-110.
- Miller, A. / Dess, G.G. (1993), Assessing Porter's model in terms of its generalizability, accuracy and simplicity, *Journal of Management Studies*, 30 (No. 4, 1993), pp. 553-585.
- Mintzberg, H. / Gosling, J. (2000), The education of practicing managers, ASAC-IFSAM 2000 Conference, Montreal, Quebec, Canada, July 8-11, 2000.
- Möslein, K. (2002), Management Education Excellence, internal project report, Technische Universität München, Munich 2002.
- Murray, A. (1988), A contingency view of Porter's 'generic strategies', *Academy of Management Review*, 13 (No. 3, 1988), pp. 390-400.
- Norman, D.A. (2001), Technology and the Rise of the For-Profit University or: Technology begets Change begets Crisis begets Opportunity, The Nielsen Norman Group, available online at [http://www.jnd.org/dn.mss/For-Profit\\_Universities.html](http://www.jnd.org/dn.mss/For-Profit_Universities.html) [Jan 14, 2002].
- Piller, F. (2001), *Mass Customization*, 2nd edition, Wiesbaden: Gabler 2001.
- Pine, B.J. (1993), *Mass Customization*, Boston: Harvard Business School Press, 1993.
- Porter, M.E. (1980), *Competitive Strategy*, New York: The Free Press, 1980.
- Porter, M.E. (1996), What is strategy?, *Harvard Business Review*, 75 (November-December 1996), pp. 61-78.
- Reichwald, R., / Piller, F. / Möslein, K. (2000), Information as a critical success factor for mass customization, *Proceedings of the ASAC-IFSAM 2000 Conference*, Montreal, 2000.
- Reitsperger, W. et al. (1993), Product quality and cost leadership: compatible strategies, *Management International Review*, 33 (extra issue No.1, 1993), pp. 7-21.
- Ruch, R.S. (2001), *Higher Ed, Inc. – The Rise of the For-Profit University*, Johns Hopkins University Press 2001.
- Sahin, F. (2000), Manufacturing competitiveness: Different systems to achieve the same results, *Production and Inventory Management Journal*, Vol. 42 (First Quarter 2000), pp. 56-65.
- Spender, J.-C. (2000a), *Underlying Antinomies and Perpetuated Problems: An Historical View of the Challenges Confronting Business Schools Today*, New York Institute of Technology, Old Westbury, NY 11568, February 2000.
- Spender, J.-C. (2000b), Ivory into Gold? Academic's relevance to business success, Keynote presentation, Workshop of the Kommission für Organisation, Zürich, March 3-4, 2000.
- Tapscott, D. (1998), *Growing up digital: the rise of the net generation*. New York: McGraw-Hill 1998.
- Toffler, A. (1970), *Future shock*, Cologne, Geneva; Orbit Publ., 1970.
- Tseng, M. / Jiao, J. (1996), Design for mass customization, *CIRP-Annals*, 45 (No. 1/1996), pp. 153-156.
- Van de Ven, A.H. (2001a), Why Do We Need to Learn About Corporate Universities?, Annual Meeting of the Academy of Management, Washington D.C., August 7, 2001.
- Van de Ven, A.H. (2001b), Plenary Speech at the Presidential Luncheon, Annual Meeting of the Academy of Management, Washington D.C., Washington D.C., August 7, 2001.
- Victor, B. / Boynton, A.C. (1998), *Invented Here*, Boston: Harvard Business School Press 1998.

Wigand, R. / Picot, A. / Reichwald, R. (1998), *Information, organization and management*, Chichester, New York: Wiley, 1998.

Zipkin, P. (2001), The limits of mass customization, *Sloan Management Review*, 42 (Spring 2001), pp. 81-87.