

# The PMI scorecard: A tool for successfully balancing the post-merger integration process

Michael Ruess, Sven C. Voelpel

## INTRODUCTION

Mergers and acquisitions are a common phenomenon in the business world, but their failure rate is extremely high. Although numbers vary widely, various studies confirm that 50–80% of all mergers do not achieve their strategic, operational or financial objectives. The consequences of these failed objectives are dramatic declines in customer and employee satisfaction, in operational efficiency as well as in profitability and shareholder value.

Why do most mergers and acquisitions fail to achieve their goals? These failures can largely be attributed to corporate-level executives' incorrect management of the post-merger integration (PMI) process' action fields. These fields have been identified as strategic, structural, personnel, cultural and stakeholder integration.

Numerous case studies and analyses have focused on these action fields, but the integration process is difficult to manage. Although corporate-level executives should ensure that the intended objectives are achieved, they often concentrate on the personnel, cultural, and stakeholder integration or on the strategic and structural integration. This imbalance is one of the reasons for a failed PMI. In contrast, corporate executives who balance these different integration fields succeed. Consequently, the right management of the PMI process is extremely critical.

It is therefore clear that corporate-level executives need a model with which they can balance these different action fields. This article introduces such a model. We start off by presenting PMI from both the actor and content perspectives; thereafter, we address PMI by means of the best practice example of Linde's takeover of BOC (British Oxygen Company). Ultimately, we introduce a PMI scorecard to facilitate the balancing of the action fields.

## THE M&A PROCESS FROM THE ACTOR AND CONTENT PERSPECTIVES

Acquisitions depend on the right timing, the choice of a suitable target company, and a low takeover price. We hold that the right management of the M&A (mergers and acquisitions) process also has a key role in the success or failure of a merger or acquisition. Fig. 1 shows that the M&A process starts with a decision-making process in which management identifies a merger or acquisition as a central vehicle for their company's future strategic direction. Although the decision-making process is important for the acquisition and integration, the PMI is considered critical to the success or failure of any company acquisitions or mergers, which often fail due to the mismanagement of the integration process.

Generally, it is necessary to consider strategic, structural, personnel, cultural, and stakeholder integration during the decision and integration process. This leads to five action fields that must be successfully managed. In this respect, strategic and structural integration form part of the content orientation. The main focus of strategic and structural integration is the elaboration, further definition, and retention of the basic content characteristics for the PMI. Personnel, cultural, and stakeholder integration are subsumed under the actor orientation; the main focus of these is the propagation, negotiation, and acceptance of the company takeover among top management and personnel, as well as other stakeholders.

## CONTENT ORIENTATION'S ACTION FIELDS

Strategic integration has the central role due to its overarching function. The key question is: What is the strategic



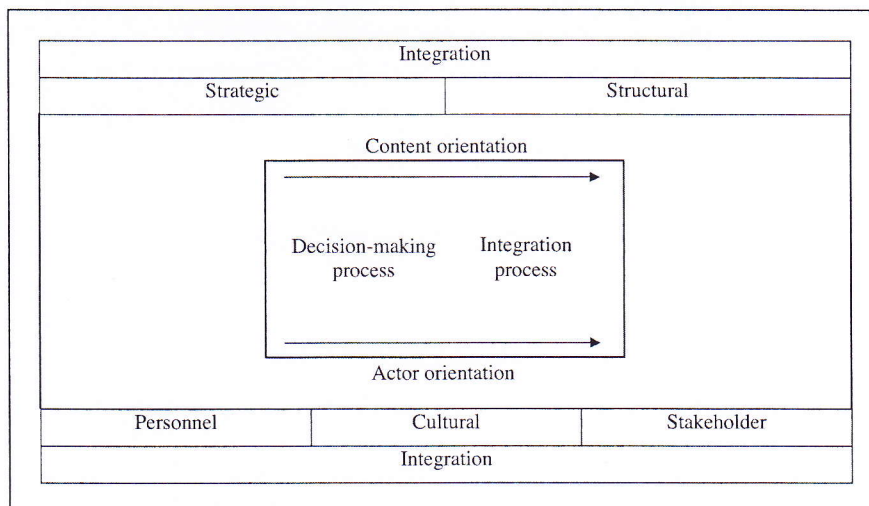


Figure 1 The M&A Process with its Action Fields.

direction for the companies about to be integrated? Based on strategic management instruments (e.g., value chain analysis and portfolio analysis), the key actions here center on developing and formulating a clear strategic direction to be implemented in the course of the PMI process.

Structural integration complements strategic integration and should establish meaningful and strategically adequate organizational structures and processes for the two companies. Ideally, actions are taken during the PMI process that lead to efficient and effective organizational structures and processes. Instruments include diagrams depicting the organizational structure (e.g., organizational diagrams) and process-oriented structure (e.g., process analyses and flow charts).

### ACTOR ORIENTATION'S ACTION FIELDS

Personnel integration, which is primarily an internal action field, centers on the analysis of the personnel structure, personnel qualifications, and personnel costs. This analysis offers the basis for concrete actions with respect to an adequate leadership style, personnel decisions, adequate incentive systems, coherent personnel development instruments as well as an appropriate communication policy.

Cultural integration is considered extremely intransparent and very difficult to systematize. It also overlaps with the other action fields. Nonetheless, it develops a catalytic effect with respect to strategic, structural, personnel, and stakeholder integration. In general, cultural integration centers on actions that allow for the establishment of a suitable new company culture. Possible cultural identification measures include document analyses, employee surveys and workshops to detect the different existing cultures. Based on such identification, concrete actions can be taken to develop a joint culture. In this respect, measures such as the presentation of a new mission statement, the formation of culturally aligned organizational units, a new information policy, personnel selections, personnel development decisions and changes to the incentive system all play important roles.

Finally, there is stakeholder integration. Although stakeholders in the private and public sectors differ, there is a general need to integrate them, as their support is key for

PMI's success. In the private sector, it is very important to gain support for a merger from external stakeholders, such as customers, business partners, or union representatives, as well as internal stakeholders such as employees or work council representatives. Possible actions to achieve this include stakeholder surveys and an adequate information policy.

### LINDE'S TAKEOVER OF BOC

Linde was a conglomerate until 2003. Its business portfolio was characterized by four business fields: gases, engineering, material handling, and refrigeration (see Fig. 2). Linde's top management and its shareholders were unhappy with Linde's financial performance. In particular, they criticized the low profit–turnover ratio and the low market capitalization; the latter became apparent in the conglomerate's large stock discount.

Linde has changed dramatically since professor Wolfgang Reitzle was nominated as a new executive board member in May 2002, and especially since he became Linde's new chief executive officer (CEO) in January 2003. Shortly after his nomination as CEO, different possible scenarios about Linde's future strategic direction were developed under his leadership. The chosen option was "pure gas", i.e., concentrating on the profitable gas business. This option implied enormous investments and the divestment of at least two of the other three business fields (i.e., engineering, material handling, and/or refrigeration). It was also clear that this was linked to the acquisition of another, larger gas company.

In 2004, Linde finally sold its relatively low-profit refrigeration business. However, the big surprise came in 2006, when Linde took over British competitor BOC. This step was connected to a separation of its material handling business in December 2006. The result was a focused gas and plants manufacturer with more than 50,000 employees and a turnover of more than 12.5 billion EUR in 2008. Consequently, Linde became one of the two leading gas companies, in competition for worldwide market leadership with Air Liquide. Fig. 3 shows Linde's business portfolio and company figures for 2008, 2009, and January to June 2010.



	Gases	Engineering	Material handling	Refrigeration
Turnover in billion EUR	3,843	1,270	3,063	0,866
EBITDA in billion EUR	1,014	0,081	0,464	0,038
Employees	17,420	4,202	18,190	6,361
Market position	No. 5 worldwide, No. 2 in Europe	No. 1-3 in the different product areas	No. 2 worldwide, No. 1 in Europe	Market leader in Europe
Main competitors	Air Liquide, BOC, Praxair, Air Products	Air Liquide, Air Products, Technip, ABB Lumus, Lurgi	Toyota/BT, NACCO, Jungheinrich	

Figure 2 Linde's Business Portfolio and Company Figures for 2003.

	Gases 2008	Gases 2009	Gases Jan to June 2010	Engineering 2008	Engineering 2009	Engineering Jan to June 2010
Turnover in billion EUR	9,515	8,932	4,931	3,016	2,311	1,095
EBITDA in billion EUR	2,417	2,378	1,337	0,267	0,210	0,123
Employees	41,109	37,362	37,340	5,951	5,716	5,618
Market position	No. 1-2 worldwide, No. 1 in Europe, No. 1 in four of the five fastest-growing regions (Eastern Europe, Middle East, China, South America, South and East Asia)			No. 1-3 in the different product areas		
Main competitors	Air Liquide, Praxair, Air Products			Air Liquide/Lurgi, Air Products, Technip, Lumus Technology		

Figure 3 Linde's Business Portfolio and Company Figures for 2008, 2009, and January to June 2010.

Fig. 3 shows that the integration was a clear success. Through the swift management of the PMI process, Linde also successfully overcame the biggest crisis since 1929 in 2008–2009. Consequently, at the beginning of 2009, Reitzle was able to announce: *"The integration is finalised. We have achieved the synergies that we sought to achieve at the end of 2008."*

#### ACTOR–CONTENT INTEGRATION AS A KEY SUCCESS FACTOR OF THE LINDE–BOC PMI

Based on various publications about the Linde–BOC merger, interviews were conducted with Linde managers in 2006 and 2007 and between October 2009 and May 2010. These interviews were complemented by statements from Reitzle, who was the responsible top manager for this merger. The gathered data and interviews show that a one-sided focus on either the actor or content perspective is an obstacle to any PMI's success. In contrast, balanced actor–content integration appears to be a pivotal factor for any PMI's success.

Our research showed that Linde's success in integrating BOC could primarily be attributed to successful content–actor orientation, which is linked to various actions on the part of Linde's top management during the PMI process. In respect of content orientation, Linde's top management carefully aligned its business model with its future organizational design. In respect of actor orientation, Linde's top

management involved the relevant external and internal stakeholders and ensured that the new culture was acceptable to both companies.

The ultimate success of BOC's acquisition by Linde and its subsequent integration can only be explained by effectively balancing the intertwined actor and content perspectives during the PMI process. This effect will be described in some detail after describing the various action fields.

#### CONTENT ORIENTATION ACTION FIELDS

##### Strategic Integration

In respect of the strategic integration, Linde's top management had a clear "divest-to-grow" strategy for its gases business "with the drive for continuous improvement, innovation and high performance" – as outlined in its corporate vision. In order to achieve this, the sale of its refrigeration and material handling businesses was imperative. In order to become the market leader in the gases business, Reitzle proclaimed *"that we become 'Leading' in everything that we do: in the production, in the processes, in the personnel development, in the customer satisfaction, in the quality and return on investment."* "Leading", a word coined by Linde's top management, combines the English word "lead" with the German abbreviation for engineer, "Ing". The word represents Linde's new strategic direction. In order to



achieve this goal and to secure future growth in the gases sector, Linde and BOC's market positions complemented one another very well. Linde disposed of leading market positions in Germany, continental Europe, Eastern Europe, and South America, whereas BOC had leading positions in England, Asia, the US, and Africa.

These complementary market positions were the basis for the strategic integration, which followed a *glocal* approach. While the different country divisions had enjoyed a relatively large autonomy at Linde but a relatively strong dependency at BOC, the new Linde Group, which derived from the Linde–BOC merger, combined the two – so that the new Linde Group thought globally but acted locally. This strategy allows Linde to compete and win customers in the following way: The different regional divisions independently work the local markets, while Linde's company headquarters acts to open up attractive markets worldwide. Linde's top management used the first three months after the acquisition to communicate this new company policy and its new business model throughout both companies. Consequently, Linde could efficiently harvest existing markets in which it had a strong position and effectively develop and capture new markets on a global scale.

### Structural Integration

For structural integration, three best practice teams identified the best structures and processes in both companies. According to Reitzle, this led to the *"step-by-step"* identification of *"best-in-class solutions."* In this respect, the connectedness with personnel, cultural, and stakeholder integration was addressed. Subsequently, multiple integration teams were formed for every country and for company-wide functional fields such as IT and accounting. These teams were coordinated from an integration office at the company's headquarters. This office harmonized the different initiatives at country and divisional levels. The job of the integration teams was to implement the *glocal* business model and an effective structural and process reorganization. The integration office coordinated decisions and actions across different teams, provided support if needed, and maintained order if required.

The development of a joint structural and process reorganization was a challenging task for both companies as the two companies differed significantly in this respect. While Linde was more hierarchically organized than BOC, both companies' employees preferred an organizational structure that lay somewhere between the two. Overall, Linde's top management coordinated the structural integration swiftly and tightly. According to Reitzle, they *"implemented a decentralized organizational structure across the group."* Successful structural integration was reflected in successful personnel, cultural, and stakeholder integration.

## ACTOR ORIENTATION ACTION FIELDS

### Personnel Integration

Personnel integration plays a key role in PMI. At Linde, it became clear that the early and close integration of employees in strategic and structural integration proved very successful. Linde's top management ensured that a well-directed and systematic personnel development system was in place,

so as to secure the necessary support for the strategic and structural changes. No a priori personnel decisions were taken. In every case, the best person from both companies was chosen for a specific task, while top management positions were filled first. According to Reitzle: *"We have rasterised BOC and Linde's top managers according to the same evaluation criteria [...]. In doing so, it was not important whether somebody was German, Indian, English, French, or American. The best has won."*

This led to a healthy mixture, and employees of both companies could learn from the best. Unfortunately, comparatively moderate job reductions of about 3% of the total 50,000 positions were also necessary. These reductions were managed as transparently as possible and in close collaboration with the employee representatives. Linde offered compensation packages and made use of natural fluctuation.

### Cultural Integration

According to Reitzle, Linde's top management team was aware of the importance of the *"consideration of cultural differences of the merging companies"* for the strategic and structural integration. Therefore, they approached this topic swiftly and methodically. In a first step, they anonymously identified the cultural differences between the two companies. According to Reitzle, *"the values of our new company were identified in joint teams, which were composed of BOC and Linde employees."* This confirmed the typical preconceptions about the other company: Linde proved to be more organized but also more hierarchical, whereas BOC was more improvising but also more relationship-oriented and team-oriented.

The culture (and, consequently, also the structure) favored by the employees of both companies was a mixture of these two cultures. Therefore, Linde's top management set out *"to filter the best from both worlds and to transform it in a joint culture,"* as Reitzle noted. This new culture, which was reflected in the new Linde Group structure, was made transparent by the top management and a communication team. Consequently, cultural integration was seen as an essential (rather than isolated) part of the success of the strategic, structural, and personnel integration.

### Stakeholder Integration

Linde's top management identified the need to persuade the different interest groups in the new strategic and structural alignment as a key task of the PMI process. Therefore, CEO Reitzle and Linde's other top managers communicated intensively with the internal and external stakeholders and provided the necessary support. In order to manage all this, Reitzle first set up the communication team as part of the integration team, as he was aware how *"exceptionally important"* it was *"to strike the right note in the communication"* with the different interest groups.

The integration team always had the necessary knowledge of the integration process in order to effectively convey the need for strategic, structural, personnel, and cultural integration to the different interest groups. For this purpose, all necessary communication channels (e.g., newsletters, the intranet, and the Internet) were used to provide the content of



the planned organizational and process organization. The internal stakeholders (i.e., employees) were thus swiftly and comprehensively informed of the chosen integration measures and the pending actions. In doing so, Linde's top management combined short-term success reports with the integrated company's long-term vision. Reitzle's goal was *"to ingrate the employees through early and open communication and to sustainably create trust."* In a similar way, the external stakeholders were informed about the merger through a corporate identity campaign, corporate advertising, and interviews with the top management in leading journals. Consequently, they managed to explain the need for the strategic and structural integration to regulatory authorities, politicians, suppliers, distributors, customers, and analysts.

### LINDE'S SUCCESS FACTOR: EFFECTIVE ACTOR–CONTENT BALANCE DURING THE PMI

Our analysis of the Linde–BOC PMI shows that Linde's top management considered the typical fields for action that are also discussed in the M&A and PMI literatures (i.e., strategic, structural, personnel, cultural, and stakeholder integration). The effective management of these action fields certainly contributed to the fact that, already in 2008, Linde realized planned synergy effects to the value of 250 million EUR. The factor that best explains Linde's success in taking over BOC is the balancing of actor and content integration.

Linde pursued a clear "divest-to-grow" strategy with the sale of the material handling division and the acquisition of BOC. The corporate vision was to become "the leading global gases and engineering company that is admired for its people, who provide innovative solutions that make a difference to the world." In this respect, the two companies complemented each other very well as they showed different strengths in different markets. Linde's goal of BOC's strategic integration derived from the fit of the two companies with its corporate vision. In this respect, there was certainly some uncertainty with regard to the best organizational and process structure and how employee, cultural, and stakeholder support could be ensured in the course of the PMI process. The case analysis shows that Linde managed this through effectively balancing the actor and content integration with its different action fields during the PMI process. This balance was identified as the key success factor of the Linde–BOC

PMI. Linde's top management and CEO Reitzle thus constantly identified uncertainties in respect to what should be done to create a common understanding. Consequently, they balanced the actor and content perspectives throughout.

Such a *cyclical evolutionary* and balanced approach, during which significant adaptations are made on the actor and content sides during the PMI process, is usually not taken by managers. This effective mix of analytical and socio-political actions explains effective PMI management. In contrast, one-sided actor integration or content integration is the reason for the more than 50% of failed PMI.

### THE PMI SCORECARD: A TOOL FOR BALANCING THE PMI PROCESS

Our analysis of the key action fields of the PMI process and their balancing over time raises one very important question: how can a balance between the actor orientation and the content orientation within these action fields be achieved and measured? This question is of high practical relevance and must be addressed if a company's corporate management is to successfully manage a merger or acquisition. Naturally, every action field requires specific objectives, measures, and initiatives aimed at achieving certain targets. These are unique and dependent on the organization's particular situation and business. Responsible management and leadership are ultimately needed to define the objectives and to then monitor and assess whether or not they have been met.

The individuality of every enterprise and industry places the specific challenges faced in a planned or ongoing merger or acquisition, as well as detailed measurements for every action field, beyond the scope of this article. However, as illustrated in Fig. 4, our proposed PMI scorecard can facilitate the assessment, monitoring, and – especially – the balancing of the PMI process.

The PMI scorecard is largely based on the framework of the M&A process, with its five action fields. Most important, it incorporates the dynamic and systemic interrelatedness of the identified action fields. All five action fields are represented in the PMI scorecard. Strategic integration appears at the top on the left. It is intuitive that strategic integration plays an important role during the PMI process.

When balancing the PMI process, it seems obvious to start with strategic integration and to continue with the other

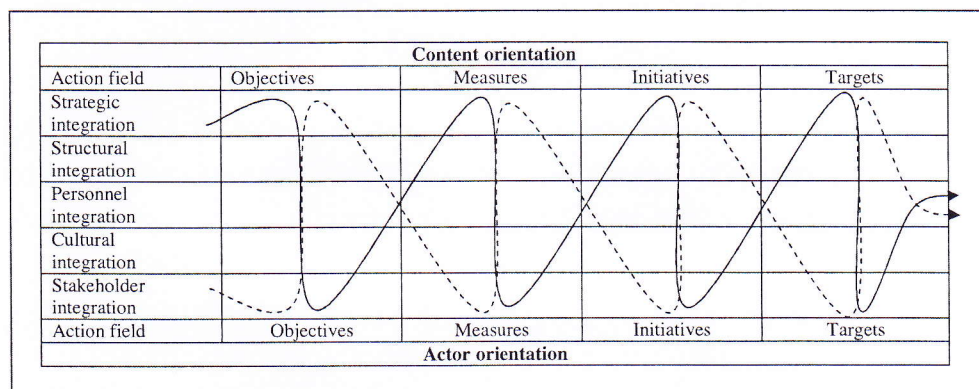


Figure 4 The PMI Scorecard: A Tool for Balancing the Post-Merger Integration Process.



Content orientation				
Action field	Objectives	Measures	Initiatives	Targets
Strategic integration	Focus on the profitable gases business	Divestiture of unrelated business	Sale of two business fields (refrigeration and material handling)	Become the leading gases and engineering company, as defined by its corporate vision
Structural integration	Effective structural and process re-organisation	Identification of best structures and processes	Implementation of the best structures and processes	Best-in-class structures and processes
Personnel integration	Best person for the specific position	Selection of best people through management appraisal	Appoint the best manager for the job	Employees should learn from the best managers
Cultural integration	Have the best from both cultures and transform this into a joint culture	Identification of differences between the two cultures	Communicate and convey the new culture to employees	Filter the best of both cultures and transform this into a joint culture
Stakeholder integration	Gain stakeholder support for the new strategic direction and structure	Formation of a communication team	Communicate new strategic direction (management and communication team)	Convince key stakeholders of the strategic direction and structure
Action field	Objectives	Measures	Initiatives	Targets
Actor orientation				

Figure 5 An Example of the PMI Scorecard Application.

action fields. This more content-oriented approach is most often used in company strategy planning departments. The solid line in Fig. 4 presents this approach and indicates how specific M&A objectives can be transformed in concrete initiatives. This approach starts with the strategic positioning and structural alignment and continues with looking for adequate support. However, there is also the possibility of starting from the actor orientation, with the stakeholder, cultural, and personnel integration, and looking for a suitable strategic and structural integration approach. The dotted line in Fig. 4 presents this actor-oriented approach. Going through the two loops helps balance the content and actor orientations and will lead to more successful PMIs. We recommend that effective managers assign equal weight to the two approaches.

The Linde–BOC merger provides a best practice example of how the corporate management of a very successful company balanced the PMI process.

Fig. 5 exemplifies how Linde's top management balanced the PMI process. In practice, there are numerous types of qualitative (e.g., interviewing and observing) and quantitative (e.g., auditing and surveying) measures to achieve such a balance. By skillfully analyzing, monitoring, steering, and, simultaneously, balancing the PMI's action field, companies can successfully manage the merger or acquisition. The PMI scorecard can be applied to the merger of two companies or two organizational units and help managers balance the content and actor orientations.

## CONCLUSION

The analysis of the best practice Linde–BOC merger allows for various conclusions about the management of PMI processes. One important implication refers to the inextricability of the

content and actor orientations. From the PMI content perspective, it is imperative to find the right strategic and structural direction in order to secure the best strategic competitive position. From the PMI actor perspective, it is important to ensure personnel, cultural, and stakeholder support on behalf of all the actors for the PMI process.

There is a certain tension between the content and actor orientations. Neither on its own leads to an effective PMI process. These two orientations are inextricably intertwined. In successful PMI processes, management apparently effectively balances content and actors over time. As our case example shows, Linde's corporate management and CEO effectively managed this balance after the acquisition of BOC and the subsequent PMI.

Managers should infer the following recommendations from the best practice example of the Linde–BOC merger. These recommendations seem to be justified, as the balancing of the actor and content orientations during the PMI process is considered crucial to the new organization's success, although the content-actor balance depends on the specifics and complexity of every case. Managers should thus be aware that PMI management is a dynamic process that is best done within a framework of constant, cyclical, and reciprocally aligned evolution of the content and actor orientations over time. Consequently, managers must constantly balance the actor and content orientations if they are to contribute to a successful PMI. The presented PMI scorecard is a tool with which to balance the actor and content perspectives. Consequently, it helps manage the PMI effectively.



To order reprints of this article, please  
e-mail [reprints@elsevier.com](mailto:reprints@elsevier.com)





## SELECTED BIBLIOGRAPHY

The genesis of our arguments can be found in D. Lei and J. Slocum's article "Strategic and Organizational Requirements for Competitive Advantage," *Academy of Management Executive*, 2005, 19, 31–45, and their article "The Tipping Points of Business Strategy: The Rise and Decline of Competitiveness," *Organizational Dynamics*, 2009, 38, 131–147. Colin Price (Director, McKinsey & Company UK) also influenced this work with his talk "Reflections on Bringing about Transformational Change" at the Change Management Forum on October 18, 2007 at the University of Bath (UK). For other articles that might be informative, see D. C. Hambrick and J. W. Frederickson, "Are You Sure You Have a Strategy," *Academy of Management Executive*, 2001, 15, 48–59; J. Mathys, "The Aligned Balanced Scorecard – An Improved Tool for Building High Performance Organizations," *Organizational Dynamics*, 2008, 37, 378–393; N. Anand and R. Daft, "What Is the Right Organization Design?" *Organizational Dynamics*, 2007, 36, 329–344; D. B. Jemison

and S. B. Sitkin, "Corporate Acquisition, A Process Perspective," *Academy of Management Review*, 1986, 11, 145–163; M. J. Epstein, "The Drivers of Success in Post-Merger Integration," *Organizational Dynamics*, 2004, 33, 174–189; S. E. Harris, "Lessons Learned from a Successful Merger," *Organizational Dynamics*, 2010, 39, 279–287. Regarding Linde's acquisition of and merger with BOC, this work was particularly influenced by H. L. Dienel, *Linde: History of a Technology Corporation, 1879–2004* (London/New York: Macmillan, 2004); G. Müller-Stewens and M. Brauer, *Corporate Strategy & Governance* (Stuttgart: Schäffer-Poeschel, 2009); J. Roterger and N. Kubis-Fettes, "Merger: How Linde and BOC Became a Company," *Harvard Business Manager* (German edition), 2/2009, 50–61; M. Ruess and S.C. Voelpel, "Balanced Content and Actor Orientation as a Key Success Factor of the Post Merger Integration," *M&A Review* (German edition), 7/2010, 337–343; and secondary data in form of Linde company reports.

**Michael Ruess** is Postdoctoral Fellow at the Jacobs University Bremen (Germany) and was Research Fellow at the University of Bath's School of Management (UK). He investigated the Linde-BOC merger over several years. His research focuses on strategy making, strategic management, mergers and acquisitions, corporate governance, and organizational behavior, which he investigates in different industries as well as in public and listed companies. His educational background includes Master's degrees in Business Administration, Economics and Socioeconomics and a Ph.D. in Business Administration on Strategy Making on the Board Level from the University of St. Gallen (Switzerland). He has held and holds visiting fellowships at some of the leading universities and business schools in Europe. He also consults listed as well as non-listed companies on strategy development and implementation, personnel and stakeholder development, organizational and process development as well as performance management (e-mail: michael.ruess@alumni.unisg.ch).

**Sven C. Voelpel** is Founder and Director of the WISE Group as well as the WISE Demographic Network, Full Professor of Business Administration at Jacobs University Bremen as well as Adjunct Professor at the EBS Business School, Wiesbaden (Germany). His research explores the fields of Wisdom, Innovation, Strategy, and Energy (WISE) as well as sustainability. To these domains, he has contributed more than 150 publications in books and journals, including the *Academy of Management Journal*. In his fields of expertise, he has been consulting various corporations, including Daimler, Deutsche Bahn, Deutsche Bank, Lufthansa, Mars, Otto, and Volkswagen. One of his books, published by Wiley with Thomas Davenport and Marius Leibold, is *Strategic Management in the Innovation Economy*. He has held and holds various (honorary) professorships at the leading universities and business schools on four continents as well as visiting fellowships at Harvard University (e-mail: s.voelpel@jacobs-university.de).