PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming [1]

By Daniel F. Oriesek and Jan Oliver Schwarz

1. Introduction

> "The only constant is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be."

This quote by science fiction author Isaac Asimov (Hartung 2004) precisely captures the challenge decision makers are increasingly facing, namely having to take decisions in ever more complex and unstable environments, while the magnitude of the consequences triggered by their decisions are for the most part, ever increasing. Some of the decisions made today are literally "bet your company" types of decisions; the decision to opt for a particular technology, which may generate significant revenue or may be obsolete before you have even completed its implementation.

Today, we still firmly believe that in situations too complex for conventional (i.e. mostly linear) forms of analysis, wargaming - a methodology originally developed in the military context - offers top decision makers a way, if not to eliminate then at least to significantly reduce the uncertainty they face when taking decisions.

Augieg et al. (2018) argued in the Journal *Long Range Planning* that wargaming is among the oldest tools aiding strategy formulation and planning, has been in use for almost 200 years and has enjoyed an increase of interest also in academia over the last decade. From our own experience, working on wargames during the last 10 years, we find that the willingness to engage leadership teams by employing more dynamic and innovative formats such as wargaming has increased, in part based on the common perception that the world has become more uncertain, complex and that the environment changes more quickly.

2. The challenge of uncertainty

For quite some time, the *Dynamic Capability Theory* (Schwarz, Rohrbeck, and Wach 2019) has argued that sensing, sizing and transforming are central for organizations to stay on top of their

---

[1] How to cite this paper: Oriesek, D.F., Schwarz, J.O. (2021). Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming, *PM World Journal,* Vol. X, Issue VIII, August.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

game in changing environments. In recent years, the acronym VUCA (= Volatility, Uncertainty, Complexity and Ambiguity) has been used to frame the myriad of challenges organizations are facing. Ramirez and Wilkinson (2016) have framed the term TUNA (=Turbulence, Uncertainty, Novelty and Ambiguity), suggesting that we have already moved beyond VUCA in terms of increasing uncertainty and dynamics in the business environment.

While being confronted with the frictions of war and the "fog of war", Military leader Carl von Clausewitz (1780 – 1831) is credited with rejecting the postulate of general calculability (von Hilgers 2012). Although von Clausewitz's insight is some 200 years old, it appears that only in the past decade a majority of business leaders have finally accepted that they are surrounded by constant uncertainty, which cannot simply be "managed" (i.e. by elaborate calculations) and that the trend of uncertainty is to increase without any reversal of this trend in sight. Therefore, dealing with uncertainty in its various forms is a key challenge and core competency for any leader going forward.

Although uncertainty is not only about risks, but also about opportunities (Schoemaker 2012), we advocate that organizations, unless they already have, need to better understand and begin to play the uncertainty game and look for ways how to win it. This will require a change of mindset (e.g. embracing rather than fearing uncertainty), a change of how an organization thinks about strategy, strategy planning and most importantly strategy execution. The latter requires adaptive ways on how to work in parallel to existing hierarchical structures to address the organizations most pressing challenges. While we do not claim that wargaming per se is the "magic bullet" that will solve all these challenges, we see it as the essential tool, which in combination with other approaches, will enable organizations to deal with and triumph in a VUCA, TUNA or simply a more uncertain world.

3. What is business wargaming?

The term wargame is the translation of the German *Kriegsspiel*. Since many people in the military feel uncomfortable with using the term *game* (because of the gravity of war) wargames have been called many things, including map manoeuvres, field manoeuvres, exercises, or increasingly, modelling and simulations. So, when we published our book on business wargaming in 2008, we were not only careful in using the term *war* but also the term *game*.

However, concerning the term *game* much has changed in the past decade. Not only has the gaming industry grown dramatically, games are being applied for many different purposes, outside entertainment, being labelled as *games for personal change*, *positive impact games*, *social reality games*, *serious games* or *leveraging the play of the planet* (McGonigal 2012). As in the business environment some discomfort exists with the term *war* and (still) *game* alike, wargames

PM World *Journal* *(ISSN: 2330-4480)*
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

therefore have also been described as dynamic strategic simulations or simply strategy simulations.

A *Business Wargame* is a role-playing simulation of a dynamic business situation (Kurtz 2003). It involves several teams, each assigned to play a different stakeholder (competitor, customer, governing bodies) in a particular business situation. Typically, a *Business Wargame* evolves over several moves. Each move represents a defined period of time and/or a scenario. A *Business Wargame* should always be prefaced by extensive research and include a review of trends and hypotheses for the particular industry in which the wargame is taking place. In contrast to "red team" approaches, where one team assumes the position of one competitor or other relevant stakeholder to better understand interests, intentions and capabilities (Zenko 2015), a *Business Wargame* is much more complex in nature which also suggests that *Business Wargames* are suitable for more complex and networked challenges.

4. Wargaming and strategy

In a 2010 study conducted by A.T. Kearney examining the state of strategic planning processes in large corporations in Switzerland (A.T. Kearney 2010), 17 % of the respondents claimed to be working with advanced tools, such as business wargaming although only occasionally. This said, even for those companies using business wargaming, the method is not an integral part of their strategic planning process. We think that organizations, which do not wargame strategic plans or at least major decisions, miss a great opportunity for two main reasons:

Firstly, because organizations do not fully reflect on and validate the underlying assumptions and associated consequences of their decisions and strategic planning respectively. In extreme cases, major investment decisions are made on purely financial considerations and under the assumption that the concepts can be executed as envisioned on paper. In reality however, there are many stakeholders involved and internal and external barriers that need to be understood, accounted for and overcome in order for a successful implementation of the strategic intent.

Secondly and closely related to the first point, organizations do miss the opportunity to educate and synchronize the strategic, operational and tactical levels within their organization. This synchronization may go beyond the organizational boundaries and include existing and/or potential future business partners and suppliers. Beyond just education and synchronization, organizations miss the opportunity to energize key people across hierarchical silos and give them a clear sense of purpose in order to collaborate effectively towards vital objectives for the firm.

*Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz*

Within this context, we need to rethink the way we look at strategy and especially strategic planning. Traditional strategy processes typically assume a "quasi time stop" at the time they are conducted, include a full assessment of an organization's environment, identify currently visible changes in the environment and formulate necessary adjustments for the organization going forward. Most of the time such adjustments are not radical, and the result of the strategy process are usually minor to medium changes in the way an organization goes about doing its business as usual. In past years and based on the specific industry, organizations could fare quite well with such an approach as the environment stayed relatively stable, barrier for new entrants were generally high, or major changes unfolded within a considerable timeframe.

However, in today's, fast changing environment with strategic decision cycles of months, weeks, or even shorter, depending on the industry, the traditional approach will no longer work. To wait for the next evolution of the strategic planning process, which may be a year from now, in order to address all changes that happened in the meantime will only assure one thing: you will be too late and in the worst case you will be obsolete before the next planning cycle. This calls for fundamentally changing the way of strategy development.

Going forward – and increasingly happening – strategy development / refinement has to turn into a continuous effort, triggering necessary organizational adjustments almost the instant a relevant development has been identified. This requires augmented sensing capabilities, highly efficient analytics and the capability to identify the necessary consequences and set in motion the organization to implement the necessary adjustments. Harvard Business School professor emeritus John P. Kotter argues: "Number crunching will continue to be important, but in a rapidly changing and turbulent world numerical data become more fluid and ambiguous. More eyes and ears and hearts need to be in the strategy game, not just a limited number of senior managers" (Kotter 2014: 178).

Being able to recognize opportunities and disruptions, analyse and act quickly is the ability to mobilize a flexible network out of the existing hierarchy. Kotter (2014) refers to this as a dual operating system and the military, special operations forces (SOF) in particular, employ such an approach when they create tailor made task units (TUs) coming out of a standard organization for training and readiness to fulfil highly specialized missions. For the mission, the chain of command and support relationships may change, but once completed the TUs are dissolved and go back to their place in the organizational hierarchy they came out from. For this approach to work, every member of the SOF needs to understand the existence of these two organizational forms and be flexible to collaborate in any way necessary toward the accomplishment of the mission.

Transferred into a business context, this means that employees still have their place within the organizational hierarchy, which is designed for efficiency, control and management. But

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

at the same time they must be flexible in their thinking and understanding of their role, in the sense that it can mean that they will become part of a networked organization, which is flexible and thinks holistically across organizational silos to recognize, analyse and address major issues on behalf of the entire organization. Although the latter can be supported by consultants, it can never be entirely done by consultants or other external experts. It is the double-hatted exponents from within the organization that can move about both operating systems, obtain access to resources from the hierarchy etc. From this point of view, business wargaming can be a key asset in establishing and supporting the work of such a dual operating system.

5. Introducing a typology of wargaming

The umbrella term "wargaming" can be broken down by application into *Military Wargaming* and business wargaming. To keep things simple, we enlarge the meaning of business wargaming to include all non-military applications and thus subsume not only wargaming for public and private corporations, but also for non-government and other non-military organizations. Both, *Military Wargaming* and business wargaming can be conducted at the strategic-, operational- and tactical leadership level and address questions within a specific context such as strategy testing, foresight, crisis management or training just to name a few.

While we find other applications described (e.g. Watman 2003; Vanderveer and Heasley II 2005), we have found the following cluster of applications useful:

- Strategy testing, developing foresight, change management;
- Crisis response preparation;
- Education and recruiting.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming
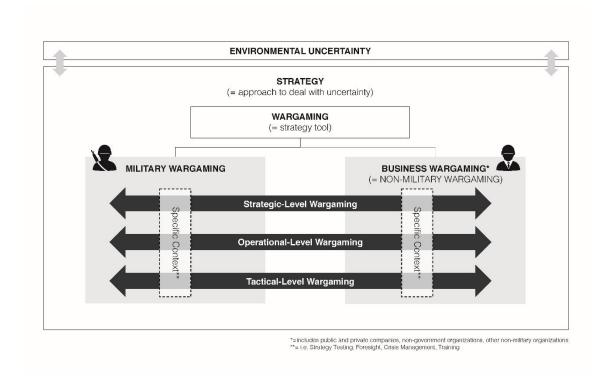by Daniel F. Oriesek and
Jan Oliver Schwarz

Figure 1: Our perspective on wargaming

Strategy testing has been described as the primary application of business wargaming, allowing leaders to test a strategy prior to its implementation, in particular in assessing how it works in the competitive landscape (Schwarz 2011). Alongside the pure strategy, testing comes the exploration of future industry developments and therefore the development of foresight. Furthermore, wargaming allows a group of managers to experience future dynamics of an industry and thus will lead to the creation of a sense of urgency for action, which is absolutely critical for any change effort (Kotter 2012).

A second common application of wargaming is crisis response preparation. In particular, in post 9/11 times, wargaming was applied in the context of US government agencies to anticipate and simulate how to best react to crises such as attacks with biological weapons and others, all in light of how to improve the collaboration among several agencies and other key actors.

A third application is to use wargames in the context of education and training, which can range anywhere from introducing students at different levels to strategy, over familiarizing newly hired managers with a company and an industry to brainstorming future developments in an educational setting.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

*Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming*
by Daniel F. Oriesek and
Jan Oliver Schwarz

6. So how to win the Uncertainty Game?

As previously mentioned, uncertainty is not only about risks, but also about opportunities (Schoemaker 2012). By acknowledging this and changing our mind, we move ourselves into the pole position for winning the *Uncertainty Game*.

This will require new, broader approaches about how we sense our environment and how we create relevant and actionable insight from what we have detected. Furthermore, we need to rethink the approach to how we take such insights and process them in our planning efforts and, more importantly, adopt a flexible and timely approach in order to keep our efforts on track to reach our desired end state (ultimate strategic objective). Last, but not least, any such approach will depend on adopting a "joint" more integrative approach when it comes to mobilizing the people in and around our organization to turn insight, quickly into coherent and timely action and thus gain a competitive advantage.

The erosion of advantage today occurs routinely as a result of dynamic and interactive rivalry (Sirmon et al. 2010). New competitors either might find the industry interesting to enter (low entry barriers) or might already be part of the value chain (expansion of value chain). However, what appears missing in the debate on competitive strategy is the time perspective. Future changes within the industry can in many cases have the power to fundamentally alter the competitive landscape, for example, through the convergence of industries, creation of new business models or technological disruptions that enable a new type of firm to enter the industry (Gassmann 2006).

While the value of strategic planning in times of virtually on-the-spot decision making, can be debated (Caligiuri 2018; Caret 2011; Wells 2019; O'Donovan and Rimland Flower 2013), we should not go as far as some proponents of abandoning strategic planning all together. Key aspects of strategic planning, such as envisioning and formulating a *Desired End State* as well as the need to operationalize how to reach it, will remain unchanged. However, other aspects of strategic planning, such as the approach to sensing, analysing, drawing the right consequences and turning insights into action need to change. This said, organizations need to rethink how they scan the environment for potential changes effectively, the tools for assessing the consequences of such changes on their ability to reach the *Desired End State,* as well as the way how they can address the potential threat or opportunity by setting the relevant parts of the organization in motion quickly. Figure 2 illustrates the key elements of such an approach.
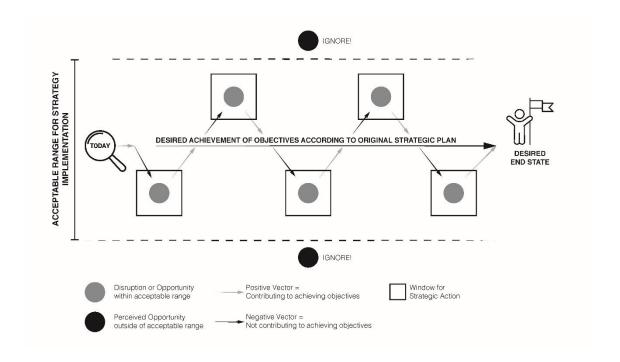
Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

Figure 2: Reaching the *Desired End State* in a VUCA environment

The "today" icon symbolizes where the organization stands today and on the far right is the *Desired End State,* which lies in the future. The *Desired End State* is defined following a comprehensive analysis of the environment, assumed long-term developments and the organization's capabilities today. The arrow between today and the *Desired End State* symbolizes the original strategic plan, which ceteris paribus would allow to achieve the end state in a linear fashion, because all parameters are known and do not change over time.

However, as opposed to the common practice of past decades, the original strategic plan may only serve as the "read thread", the "baseline" or the "guidance tool" (Kenny 2016). In reality, the journey towards the *Desired End State* is never linear but resembles a squiggle of twist and turns ultimately leading to the *Desired End State*. With this in mind, organizations should start thinking about the journey not as a line but rather as a highway within an *Acceptable Relevant Range for Strategy Implementation*.

As time progresses from today towards the date when the organization wants to have reached the *Desired End State*, events and developments will take place that are either disruptions or opportunities from the point of view of how the organization will be able to reach the defined *Desired End State*.

The black circles symbolize perceived opportunities that lie outside the *Acceptable Relevant Range for Strategy Implementation*. They represent what may seem to be an opportunity,

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

but do not contribute to reaching the *Desired End State*. Such perceived opportunities are mere distractions and as they are not related to reaching the *Desired End State* do not pose a direct threat for execution of the strategic plan either. An example for such a black circle, could be an emerging business opportunity in an unrelated industry that is tempting because of its promise of large potential profits. This could for example be a company aspiring to become a leader in the real estate industry, which requires substantial funds to get there. If that company were all of a sudden to engage in electro mobility solutions, in which it could eventually become successful and make money, the opportunity cost would be a lack of funds needed to reach the *Desired End State* in real estate. We are not saying that such a scenario is impossible, but unless the opportunity is already an integral part of the *Desired End State*, such opportunities should be consciously ignored. If not, then the organization should have to ask itself whether it still wants to be in and execute a real estate strategy or whether it wants to switch into the electro mobility industry or a combination of both real estate and electro mobility. In either case, this would require a change in the formulation of the *Desired End State* and thus the strategy as a whole.

The grey circles stand for opportunities or disruptions within the *Acceptable Relevant Range for Strategy Implementation*. As opposed to the black circles, these should not be ignored. Grey opportunities or threats develop vectors that will be either positive or negative and thus distract from or contribute to the original plan on how to reach the *Desired End State.*

In order to capitalize on grey opportunities or fend of grey potential disruptions, the organization needs to recognize such events, analyse them holistically and draw the necessary consequences for its strategy execution. This is what we refer to as *Window for Strategic Action*. For example, an automotive manufacturer striving for leadership in the conventional drive train, large body, luxury segment (*Desired End State*) is all of a sudden confronted with a major shift in consumer preferences towards smaller vehicles with electrical or ecological drive trains. The company must recognize this shift in time, assess the implications quickly and draw the conclusions for what this means for their strategy. It would probably reach the conclusion that it has to do something in relation to future model development, market positioning and technology investments. Having said this the company may still aim for market leadership in the broadest sense of the *Desired End State* but has to pivot with respect on how to get there. Failure to recognize this development and act swiftly may eventually render the company obsolete. This will not happen from one day to the next, but could happen within a few years. Prominent examples of such missed grey circles are companies like Polaroid or Kodak missing the implications of digital photography. They half-heartedly addressed the emerging technology, but in essence continued to conduct business as usual until their solution for instant photography and chemical development of pictures was no longer needed in the broad market.

PM World *Journal* (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic
Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

Successfully recognizing, analysing and addressing such relevant opportunities and threats, requires organizations to find a form of collaboration that transcends the boundaries of functions and hierarchies. One proven way to foster cross-hierarchical and cross-functional collaboration is to adopt a "*Joint Approach"* and wargaming, in our view, remains a formidable tool to bring it all together and mobilize people in and around the organization for success.

REFERENCES

A.T. Kearney. (2010). "Strategic Planning Benchmark." Zurich.

Augier, Mie, Nicholas Dew, Thorbjørn Knudsen, and Nils Stieglitz. (2018). "Organizational Persistence in the Use of War Gaming and Scenario Planning." *Long Range Planning* 51 (4): 511–25. https://doi.org/https://doi.org/10.1016/j.lrp.2017.12.005.

Caligiuri, Ryan. (2018). "Why so Many Strategic Plans Are Useless." The Globe and Mail. https://www.theglobeandmail.com/report-on-business/small-business/sb-managing/why-so-many-strategic-plans-are-useless/article26984006/ .

Caret, Robert L. (2011). "Useless? Hardly. Strategic Plans Are Essential." The Chronicle of Higher Education. https://www.chronicle.com/article/Useless-Hardly-Strategic/128871.

Gassmann, Oliver. (2006). "Opening up the Innovation Process: Towards an Agenda." *R&D Management* 36: 223–28.

Hartung, A. (2004). "Quotes: Pithy Sayings for the New World of Work." 2004.

Hilgers, P von. (2012). *War Games: A History of War on Paper*. Cambridge: MIT Press.

Kenny, Graham. (2016). "Strategic Plans Are Less Important than Strategic Planning." *Harvard Business Review*, June.

Kotter, J P. (2012). *Leading Change*. Harvard Business Publishing. Boston: Harvard Business Review Press.

Kotter, J. P. . (2014). *Accelerate: Building Strategic Agility for a Faster-Moving World*. Boston: Harvard Business Review Press.

Kurtz, J. (2003). "Business Wargaming: Simulations Guide Crucial Strategy Decisions." *Strategy and Leadership* 31 (6): 12–21.

McGonigal, J. (2012). *Reality Is Broken: Why Games Make Us Better and How They Can*

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

Change the World. London: Vintage Books.

O'Donovan, Dana, and Noah Rimland Flower. (2013). "The Strategic Plan Is Dead. Long Live Strategy." Stanford Social Innovation Review. 2013. https://ssir.org/articles/entry/the_strategic_plan_is_dead._long_live_strategy.

Ramirez, Rafael, and Angela Wilkinson. (2016). *Strategic Reframing: The Oxford Scenario Planning Approach*. Oxford: Oxford Publishing.

Sirmon, David G., Michael A. Hitt, Jean-Luc Arregle, and Joanna Tochman Campbell. (2010). "The Dynamic Interplay of Capability Strengths and Weaknesses: Investigating the Bases of Temporary Competitive Advantage." *Strategic Management Journal* 31 (13): 1386–1409. https://doi.org/10.1002/smj.893.

Schoemaker, P. (2012). *Profiting From Uncertainty: Strategies for Succeeding No Matter What the Future Brings*. New York: Free Press.

Schwarz, Jan Oliver. (2011). "Ex-Ante Strategy Evaluation: The Case for Business Wargaming." *Business Strategy Series* 12 (3): 122–35.

Schwarz, Jan Oliver, René Rohrbeck, and Bernhard Wach. (2019). "Corporate Foresight as a Microfoundation of Dynamic Capabilities." *FUTURES & FORESIGHT SCIENCE* n/a (n/a): e28. https://doi.org/10.1002/ffo2.28.

Vanderveer, R, and J Heasley II. (2005). "War Gaming: Exercises in Defending Brand Territory." *MM&M*, no. May: 68–72.

Watman, K. (2003). "War Gaming and Its Role in Examining the Future." *Brown Journal of World Affairs* 10 (1): 51–61.

Wells, Wyatt. (2019). "Why 'Strategic Plans' Are Rarely Strategic—or Effective." The Wallstreet Journal. 2019. https://www.wsj.com/articles/why-strategic-plans-are-rarely-strategicor-effective-11572040618.

Zenko, M. (2015). *Red Team: How to Succeed By Thinking Like the Enemy*. New York: Basic Books.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VIII – August 2021
www.pmworldjournal.com
Series Article

Winning the Uncertainty Game: Turning Strategic Intent into Results with Wargaming
by Daniel F. Oriesek and
Jan Oliver Schwarz

About the Authors

Daniel F. Oriesek

Switzerland

Daniel F. Oriesek is a Swiss general staff officer, civil servant and entrepreneur. After many years in banking and strategy consulting, while pursuing his career as a reserve officer, he served two tours in the Balkans and in 2014 became a full-time employee of the Swiss Department of Defense. He serves on the board of a real estate company co-founded by him and has participated, designed and conducted numerous business and military wargames. He may be contacted at daniel@oriesek.com.

Jan Oliver Schwarz

Munich, Germany

Jan Oliver Schwarz is a professor of strategic management and leadership at the ESB Business School, Reutlingen University, Germany and a senior advisor at the Institute for Innovation and Change Methodologies (IICM), Munich, Germany. His academic and consulting work specializes in future-oriented strategy development which includes implementing corporate foresight processes and applying approaches such as scenario planning and business wargaming. He may be contacted at schwarz.janoliver@me.com