



THE CAPCO INSTITUTE  
**JOURNAL**  
OF FINANCIAL TRANSFORMATION

**LEADERSHIP**

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Leading in the digital age  
CLAUDIA PEUS | ALEXANDRA HAUSER

**NEW WORKING  
PARADIGMS**

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**DEAR READER,**

Welcome to edition 52 of the Capco Institute Journal of Financial Transformation.

Transformation has been a constant theme in our industry for several decades, but the events of 2020 have accelerated change in employee working patterns, and in the very nature of the workplace itself. This Journal examines three key elements of these new working paradigms – leadership, workforce, and organization.

As we explore in this edition, a key part of any firm's transformation agenda centers around digital leadership and how to tackle the novel challenges created by changes within organizations and society. Leaders need advanced organizational skills to build teams that use digital technologies, as well as to inspire millennial workers who have grown up in a digitally transformed world. They also need deeper technology skills to lead, and a broader understanding of the ethical paradigms introduced by the challenges created through new technologies such as AI. These enhanced skillsets will help today's leaders and their teams fully realize the benefits of new working models.

The topics reviewed in this Journal offer flexibility for employees, increased agility for teams, and a combination of both for organizations. When supported by the right technology, these can create collaborative, outcome-driven environments. Through the resulting remote or hybrid models, organizations can transform their workforce and operations to boost productivity, cost effectiveness and employee engagement, while enhancing resilience and customer experiences.

As always, our contributors to this Capco Journal are distinguished, world-class thinkers. I am confident that you will find the quality of thinking in this latest edition to be a valuable source of information and strategic insight.

Thank you to all our contributors and thank you for reading.

A handwritten signature in black ink, appearing to read 'Lance Levy', with a stylized, flowing script.

Lance Levy, **Capco CEO**

# LEADING IN THE DIGITAL AGE

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## ABSTRACT

Digitization is changing the world of work at a dizzying speed and bringing about new challenges for business leaders. We argue in this article that the key attributes needed for effective leadership under these conditions are technology competence, acknowledgement of basic human needs, and a leader's underlying values. We further discuss the requirements for successful virtual collaboration and teamwork, and give specific recommendations. Finally, we highlight that in order to successfully cope with the demands of the digital age, leaders need to accept leadership development as a task of lifelong learning and present promising approaches in this direction.

## 1. INTRODUCTION

The COVID-19 pandemic has forced many leaders to make tough decisions, which often include layoffs. Have you ever had to lay people off? If so – how did you do it? Did you take the time to talk to your employees in person and explain the situation transparently, maybe even offering them a severance payment? Or did you choose a communication channel that allowed you to reach many people at once to be more efficient?

A bad example of leadership in this kind of situation seems to have taken place in a U.S. e-scooter company in March 2020, as reported by different media [Bergman (2020)]. Former employees describe how over 400 people got laid off at once via a Zoom webinar. During the “webinar”, participants faced a grey screen and heard an anonymous voice telling them that they were all losing their jobs. Participants' cameras and microphones were deactivated so there was no possibility to ask any questions or connect with each other. After the message was delivered, the computer screens of the (former) employees got dark. The employees' computers had been remotely shut down by the company.

The world is changing at a rapid pace and leaders face new challenges in this digital age [Peus and Hauser (2020), Peus (2020)]. As new technologies emerge quickly and challenge traditional business models, production methods, or distribution

channels, leaders have to realign their organizations at an unprecedented speed. In some instances, dismissals might be inevitable, but they can be carried out in very different ways, either signaling fairness and respect or ignorance, even contempt for human dignity; providing a true testimony to the organizations' values. As technological advancements provide greater opportunities than ever before, leaders need values that guide them like a compass – because if you do not stand for something you will fall for anything.

Putting human dignity first is more important – and sometimes more challenging – than ever before. It is imperative from an ethical, as well as a business point of view. To value-oriented leaders, fair treatment of, and good relationships with, their employees has always been important. However, due to digitization and the new possibilities it brings, good relations with employees remain important even after the employment relationship is terminated. Overnight, yesterday's employee can be tomorrow's important customer, supplier, or investor. Investing in good relations and keeping the longterm in mind is, therefore, a requirement for leaders in the digital age.

Treating people well is also required as digitization has not only transformed career paths and relationships but also provided new opportunities for people to share their personal experiences. In the 21st century, people have countless options for expressing their opinion publicly. The story of layoff

scenarios or other leadership misbehaviors can be shared with thousands, even millions of people all over the world – within seconds. Complaining about the company or even taking revenge has never been easier and more powerful as this excerpt from a New York Times blog highlights “you can leak business secrets to competitors, send anonymous reports to OSHA or other regulatory agencies, start rumors, cause flat tires on company vehicles, crash computer networks, etc. Be creative, be careful, and remember they deserve it and you will feel better” [Barling (2014)]. Consequently, leaders in the digital age do well in thinking twice about how they lead and end relationships with their employees.

In this article, we argue that leadership in the digital age not only requires treating people with dignity and respect, but that it also requires leaders to understand and consider basic human needs more generally and to act as rolemodels guided by an inner compass of values. This is truer than ever before as the Covid-19 pandemic has been acting like a magnifying glass, revealing the shortcomings of leaders, organizations, and entire systems. In this article, we highlight some of the most important challenges leaders face in the digital age and discuss how they can be overcome. We also give recommendations on how to lead people virtually, which many leaders have been forced to do since the beginning of the pandemic at the latest.

## **2. GENERAL DEMANDS ON LEADERS IN THE DIGITAL AGE**

Digitization makes a leader’s words and deeds much more visible. The old saying: “the higher the monkey goes, the more of his behind he shows” [Paschek (2020)] is more pertinent than ever. Leaders set examples, whether they like to or not. They are, therefore, challenged to set examples, be it with regard to technological advancements or with regard to treating people.

### **2.1 Technology competence**

New technologies have revolutionized which business models are profitable, how organizations produce goods, or which communications channels are best suited for reaching employees or customers. As failing to embrace a technological trend can have disastrous outcomes for previously successful companies, as we have learned from prominent examples such as Nokia or Kodak, having an overview of the latest technological developments and their implications is crucial for today’s business leaders. Consider, for example, that

additive manufacturing revolutionizes how replacement parts or building materials are produced, bio-engineering presents entirely new methods of developing vaccines or medication, and algorithms fundamentally change – or even abolish – professional services such as tax consulting.

Technology competence required of today’s leaders includes the ability to scout for technological advancements and understand the implications these developments have for the company. How do they impact the organization’s production, distribution, or communication? Do they – in the long run – threaten the business model the company is relying on? Do technological advancements lead to the rise of competitors that had not even been on the radar shortly before (as happened in the automobile industry, for example)? And how can the new technologies be used to the benefit of the organization? What changes are required to leverage the potential these technologies carry?

In line with the requirement of being a role model, leaders have to be examples of the changes they want to implement within their organization. When organizations embark on the journey to digital transformation it is important that leaders know their own digital tools and are open to new experiences and behavioral change to be credible. As real behavioral change requires self-reflection, leaders should ask themselves if they are able to adequately use the tools they envision as necessary and ask their employees to use. Furthermore, approaches such as “reverse mentoring”, where younger employees familiarize managers with the latest technological developments and support them in utilizing those, can be helpful. In short, the old saying “don’t ask of others what you don’t do yourself” is still valid in the digital transformation.

### **2.2 Acknowledgement of basic human needs**

In recent decades, some of the most groundbreaking technological inventions were made, which fundamentally changed how we work and live. The working world is changing at dizzying speed. However, what has not changed for decades, even centuries, is human nature. How humans “work” has only changed marginally over the entire history of mankind. Basic psychological needs stay the same in the digital age: people feel the need to be in control and to experience autonomy. They want to be appreciated and acknowledged for their work. They strive for transparency and fairness, as well as for trust and safety. People also have the need to belong and to be part of a group. Moreover, people are looking for a purpose in their work [Peus and Frey (2009)]. One responsibility for leaders in

the digital age is to be aware of the basic psychological and individual needs of their employees. It is one of the biggest challenges to be able to reconcile these needs with the business needs and the changing work environment.

How can leaders meet the needs of their employees and what constitutes effective leadership? Researchers have been trying to find answers to this question for several decades now. One concept that has received a lot of research attention is **transformational leadership** [Bass (1985)].

Transformational leaders inspire their employees by communicating an appealing vision and expressing optimism that together this vision can be achieved (inspirational motivation). They provide individualized support and coaching to their employees (individualized consideration) and encourage them to think independently and to question the status quo (intellectual stimulation). Finally, these leaders are aware of the daily challenge of becoming a positive role-model for their followers and let their deeds be guided by overarching ethical values (idealized influence).

Can a leadership theory introduced 35 years ago really be of help in the digital age you might wonder? A legitimate question, especially when we consider that in 1985 digitization was in its infancy and the first ever IBM personal computer was only 5-years-old. However, a recent meta-analysis analyzing relations between transformational leadership and relevant outcomes in about 180 studies shows that transformational leadership is in fact associated with higher levels of performance, job satisfaction, trust, identification, engagement, and with lower levels of unethical behavior at work [Hoch et al. (2018)]. Thus, the concept of transformational leadership can still serve as a guiding framework today.

Leaders are increasingly asked to communicate the overall vision or purpose. Concordantly, organizations with a “transformative purpose” have been able to attract top talents to a much higher degree than others. Furthermore, when people understand and embrace the purpose they are willing to accept measures that are annoying or even hurtful to them; however, if they do not understand the purpose or do not believe the reasons that are communicated to be the truly underlying ones, they are likely to rebel (as we have seen during the COVID-19 pandemic).

Trust is a key ingredient of effective leadership in the digital age. The more uncertain the situation, the more ambiguous the information, the more important it is that employees can trust their leaders and look to them for a sense of direction. However, receiving trust from employees usually requires giving trust to them first. How difficult this can be is highlighted by several examples of managers reacting to COVID-19 induced home offices, as described below.

An additional challenge in a work environment full of uncertainty due to rapid changes is employees’ need for “fairness”. This is an especially tricky one, as fairness is a highly subjective construct and a fair distribution of resources (distributive fairness) can often not be achieved. However, the good news is that the negative consequences of a (perceived) lack of “distributive fairness” can often be compensated for by three other types of fairness [see the meta-analysis by Colquitt et al. (2001)]: first, research on “procedural fairness” points to the fact that people are willing to accept decisions that have negative consequences for them – even dismissals – when they perceive the process by which the decision was made as fair. This is likely to be the case when the following five criteria are met: consistency (the same principles are applied consistently across time and different situations), impartiality (the principles are applied to different people in the same fashion), accuracy (the decisions are based on comprehensive information), representativeness (the decisions take into account the views and needs of different stakeholders), and correctability (criticism or disagreement is allowed). A second important component of procedural fairness is the aspect of “voice”. Were employees given the chance to voice their opinions and listened to? The third type of fairness is called “interpersonal fairness”, which is evident when people are treated with dignity and respect and criticisms are communicated at eyelevel. The fourth type of fairness, “informational fairness”, requires leaders to communicate bad news as candidly and openly as good news, for example in change situations. It is self-evident that the dismissal described at the beginning of the article violated these principles, as employees did not receive the information about their dismissal from their managers and did not even know what the “webinar” they had been invited to was going to be about (informational fairness), were not treated with respect, as they only heard an anonymous voice speaking to them from

a grey screen (interpersonal fairness), and did not have an opportunity to ask questions or articulate their point of view (procedural fairness). It would be surprising if employees had not reacted with emotions like anger and contempt for their managers and intended, or actually shown, acts of retaliation.

Finally, in times of change, and especially in times of crisis, people yearn for control. However, as crisis situations often times mean that people actually do not have influence on important developments – as we have all experienced during the COVID 19 pandemic – leaders are challenged to create “second order control” as far as possible. That is, they have to increase “predictability”, i.e., by explaining what the organization is planning for the future, how this will impact the individual employee, etc. Given that even this capacity is often limited in change or crisis situations, at least the lowest degree of control, that is “explainability”, has to be established as far as possible. How important control is for human beings is evidenced by psychological research: the higher the degree of control was that inhabitants of a senior citizens home experienced in a randomized field-experiment the higher their life satisfaction, the lower their level of medication, and the longer their lives [Rodin and Langer (1977)].

In summary, the best and newest digital technology cannot be of any use if a leader does not know about the basic human needs and how to address them – be it by exercising transformational leadership, implementing organizational fairness, or creating a sense of control among employees.

### 3. VALUES AS AN INNER COMPASS

As digitization presents unprecedented opportunities, leaders need values to guide them – but not as a navigation system you can directly follow, but rather as a compass that provides a sense of direction. A stable value system allows a leader to not only clearly articulate what they stand for, but to also quickly make decisions under pressure. Absence of values, on the other hand, challenges leaders to have to decide on the spot, choosing between countless alternatives and stakeholder interests.

A recent example highlighting the lack of a moral compass and its detrimental consequences is the case of Wirecard, a German payment company. This most recent and scandalous disclosure of leadership misconduct (and suspected fraud) was revealed during the pandemic. Several media reported

how in June 2020 Wirecard collapsed after the organization's management could not “find” €1.9 billion, which had been listed in their accounts – because the money seems to have never existed. What followed was insolvency, the arrest of the former CEO, and a worldwide manhunt for a former executive board member who has gone into hiding [McCrum (2020)].

Despite this and similar examples, there are many business leaders who are highly aware of their values and enact them, even under pressure. Examples include countless leaders who have been considering all the possibilities for avoiding layoffs during the crisis and who set examples by substantially cutting their own pay. To highlight this kind of behavior and to give attention to leaders who are in fact guided by a moral compass but hardly ever appear in the press (because of their lack of scandals), a number of business leaders in Germany have founded the “values commission”. Each year they organize public “values dialogues” and survey more than 500 managers, asking them to indicate which of the following values they deem as most important for their actions: responsibility, integrity, respect, sustainability, trust, and courage. For the last three years, the value that was regarded as most important was trust. Interestingly enough, this year's results [Heidbrink et al. (2020)] show that respect was regarded as much more important than in the previous years [Hattendorf et al. (2019)] – maybe because the COVID-19 pandemic caused managers to regard others more as human beings than as employees and to respect them as persons?

Although many leaders and companies seem to be aware that values-oriented leadership is important, it is obviously not always implemented in concrete leadership behavior. Companies that lay off hundreds of people via email or a zoom webinar within minutes certainly show disregard for important values such as respect. A company suspected of fraud in the billions with one of the former top-level executives currently running from the law is also not what you would call a prime example of values-oriented leadership. With regard to what is technically possible in the future, values become even more important. At that point, values set a moral compass that is essential for leadership in the digital age. Values give orientation besides what is technically possible and what is legal – they give leaders orientations of what is right. It should be added that in August 2020, hundreds of Wirecard employees finally got laid off – via email [Reuters (2020), Schlenk and Hunter (2020)].

## 4. REQUIREMENTS FOR VIRTUAL COLLABORATION AND LEADERSHIP

### 4.1 Trust

After a keynote on leading in the digital age at a conference in 2019, one of the participants asked us a question: “How can I control my employees from a distance? How can I keep track if they work at all when I cannot see them?” If we look at the news over the last few months, this seems to be a question that was on many leaders’ minds during the pandemic. According to the media, there were numerous cases where bosses bought spy software so that they could track their employees’ activities in the home office [Mosendz and Melin (2020)]. However, how employees can be controlled from a distance is the wrong question in the first place. The right question would be: what are the conditions I can create as a leader that allow my employees to bring high levels of performance while working from home?

The first answer comes from transformational leadership: employees need to know what the overall purpose of their work is and what the vision is they are working towards. They need to be given direction and guidance. However, there are several arguments against excessive monitoring. Monitoring employees most likely creates a culture of mistrust and is likely to decrease the psychological safety employees perceive. “Psychological safety” is a concept that leaders in the digital age would want to foster. People who experience psychological safety at their workplace are more likely to contribute new ideas, initiate new projects, or make leaders aware of erroneous developments. Psychological safety is also related to information sharing and learning behavior. All of these are important outcomes needed to successfully handle the challenges of our rapidly changing world [for more information about psychological safety, see the meta-analysis by Frazier et al. (2017)].

Furthermore, at least when it comes to knowledge workers, leaders cannot fully control if their employees are productive anyway. They might be able to track if employees are online and (if legal in the respective country) possibly even take screenshots of their open browser windows and programs on a regular basis, but they cannot look inside their heads. And how do we know that an idea that was evaluated as useless today will not be of major importance for tomorrow’s success? Furthermore, a leader that is constantly busy spying on employees in the home office will not have much time left

for important leadership tasks like creating a vision, providing orientation, setting goals, or working on the organizational strategy in the face of new technological developments.

At that point, trust is an important ingredient of leadership, which is not new, but more important than ever. At a time in which so much changes so quickly and incredible degrees of specialization in individual fields are reached, it is no longer possible for leaders to be involved in each work step. Trust and a positive human image are, therefore, basic prerequisites for positive human relations and performance. Results of a meta-analysis by De Jong et al. (2016) show that trust within a team is indeed positively related to team performance – even more than the impact of the team’s trust in the leader.

Of course, trust needs to be developed and cultivated between two parties and in teams. It also requires clear communication about general terms and conditions for collaborating, specific tasks, deadlines, etc. (although these also do not necessarily have to be developed top-down). Employees also need to know to what extent they have the freedom of decision and action, which in turn depends on the task itself and its required speed of decision making. Yet again, autonomy is also an important antecedent of psychological safety [Frazier et al. (2017)].

### 4.2 Adequate use of digital tools for cooperation and communication

Digitization is substantially changing how leaders and teams communicate and collaborate. In their recent article, Larson and DeChurch (2020) give an overview of the implications of digital technology for leading teams and how perspectives on this topic developed over time. According to the authors, the oldest perspective on digital technology (starting in the 1990s) was to consider it merely as the context a team works in. Here, technology is understood as certain tools that help with and support regular teamwork, like email or video-conferencing tools. However, from this perspective technology is considered to be separate from the team, as some teams use technological tools while some others do not. The newest perspective, however, now 30 years later is described as the idea of “digital technology as a teammate”, fully integrated into the team. This is the case in human-robot teams or human-AI (artificial intelligence) teams, where a distinct team role is fulfilled by digital technology. From that perspective, digital technology also contributes to team performance itself. The authors point out that, depending on the perspective teams and organizations have about technologies, different implications



for leadership emerge. However, not every organization has human-robot teams yet. As the pandemic, and the associated issues due to the lockdown, demonstrated, a substantial number of organizations still seem to have the perspective of technology as context, many of them comprehensively using video-communication for the very first time. However, no matter what stage teams and organizations are at, successful virtual collaboration is one of the main aspects people associate with effective leadership in the digital age. There are several things a team, and also leaders, need to consider here.

For virtual collaboration, clear expectations and agreements between leaders and employees are essential. Collaboration can get easier if leaders communicate their expectations, for example how long and when do they expect employees to be online? How quickly are they expected to answer to messages, and what communication channels should be used for which purpose? When it comes to virtual team meetings, it is also important to set common rules, like how to raise your hand virtually, how to take a team vote, etc. Finally, it is helpful for the leader to know what employees expect of him/her. That does not mean that leaders have to fulfill all of these expectations, rather they can clearly communicate how they want to collaborate and what expectations are not realistic.

In addition to clarifying expectations and “rules of the game”, leaders are well advised to mindfully use the different types of media. One aspect to keep in mind is media richness [Daft and Lengel (1983)]. For example, emails or letters are not very rich media, as they provide only written content. Especially when people are new to a team they often do not have the common understanding of expressions and unexplained processes like the other team members, which makes short written messages harder to understand. The lack of mimic and facial expressions, as well as missing cues like the intonation of the spoken word, holds a potential for misunderstandings. In addition, video conferences do not cover the full spectrum as body language and physical signals cannot be transported completely.

Leaders and teams also have to keep another dimension of media in mind that is important for communication: the level of synchronicity [Dennis and Valacich (1999)]. Team members and leaders here also have to deal with differences in available tools and communication channels. Synchronous media interrupt the communication partner, but do make it possible to discuss things, ask questions, and provide immediate feedback (examples are face-to-face communication, telephone, video conference, chats and messengers, etc.).

Asynchronous media do not interrupt the contact person, as they can decide for themselves when to react to messages (examples are mail, letters, email, voicemail, etc.). Which of the channels you use affects the possible degree of immediate interaction. Consequently, team members and leaders need to agree on certain rules regarding how to collaborate virtually to prevent misunderstandings and wrong interpretations. For newly formed groups, or to help new team members, media with higher levels of synchronicity are more helpful [Dennis and Valacich (1999)]. Furthermore, when we think back to the different levels of fairness, interpersonal fairness would rather demand a synchronous media when life-changing messages, like a layoff decision, are delivered. If a leader and a team have been working together for a long time, expectations and rules of the game are clear and there is a common understanding of concepts, wherefore asynchronous media can be the media of choice. However, one must not forget that every relationship needs to be nourished, hence, taking the time to deliver appreciation and respect for the other also lies within the responsibility of a leader.

#### **4.3 Leadership development in the digital age as a task of lifelong learning**

As we find ourselves in rapidly changing times and everything seems to move so quickly, we need to understand that effective leadership in the digital age is a marathon, not a sprint. Along with the disruptive changes of organizations and markets due to digital transformation, leadership development has to change as well. Leadership development can no longer take place for a very select group of people at designated (and comparatively short) times. Consequently, leaders, as well as providers of leadership/HR development programs, need to change their mindsets and approaches in accordance with the idea of continuous transformation: the change does not end – education should not end either just because you have obtained a certain age, position, or status! Leadership development must be seen as a constant companion and, therefore, as a task of lifelong learning.

Both professional and executive education are essential for effective leadership in the digital age. They are likely to be effective if they include a combination of the following

components: theories on effective leadership grounded in empirical evidence (such as transformational leadership), practical tools to apply these theories in daily life, self-reflection, and systematic feedback from others. Furthermore, leadership development programs must be designed in a way that they enhance the continuous application of learned content to daily business life, and the possibility to find answers to challenges from business life in the program. Finally, including elements that enable new experiences (in addition to cognitive understanding and skill building) seem important. Digital technologies offer amazing new potential in this regard. Applications, such as a “digital leadership coach”, enable a leader to set individual goals and be reminded to implement them by their smartphone. The integration of robots into leadership development programs allow leaders to experience first-hand the upsides, as well as the challenges of working with robots. Finally, virtual reality offers the opportunity to experience situations and try out different behaviors (and potentially their consequences) to an extent that was unthinkable until recently. It offers the opportunity for leaders to not only watch different types of leadership in the same situation, but also experience what they feel like not only from an observer but also an employee perspective. Now, for the first time, they can really experience what it is like to be informed about your dismissal either from a manager who candidly and respectfully explains the reasons and gives you room for questions and voicing your views, or from an anonymous voice during a “webinar”. This type of experience is likely to inform how leaders handle this type of situation once faced with it and how they lead in this digital age more generally.

## **5. CONCLUSION**

The world is changing at an ever increasing speed, posing new challenges for leaders. However, what remains constant is human nature. Acknowledging important human needs such as fairness or the quest for purpose, giving trust to employees, and developing a moral compass grounded in ethical values enables leaders to steer their teams and organizations through these challenging times effectively and responsibly. Remaining as such requires lifelong learning.

## REFERENCES

- Bass, B. M., 1985, *Leadership and performance beyond expectations*, Free Press
- Bergman, B., (2020). "It felt like a black mirror episode' the inside account of how bird laid off 406 people in two minutes via a zoom webinar," dot.LA, April 1, <https://bit.ly/2SumVoV>
- Barling, J., 2014, *The science of leadership: lessons from research for organizational leaders*, Oxford University Press
- Colquitt, J. A., D. E. Conlon, M. J. Wesson, C. O. Porter, and K. Y. Ng, 2001, "Justice at the millennium: a meta-analytic review of 25 years of organizational justice research," *Journal of applied psychology* 86:3, 425
- Daft, R. L., and R. H. Lengel, 1983, "Information richness. A new approach to managerial behavior and organization design," *Texas A and M Univ College Station College of Business Administration*
- De Jong, B. A., K. T. Dirks, and N. Gillespie, 2016, "Trust and team performance: a meta-analysis of main effects, moderators, and covariates," *Journal of applied psychology* 101:8, 1134
- Dennis, A. R., and J. S. Valacich, 1999, "Rethinking media richness: towards a theory of media synchronicity," in *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences*. 1999. HICSS-32. Abstracts and CD-ROM of Full Papers (pp. 10-pp). IEEE, January
- Frazier, M. L., S. Fainshmidt, R. L. Klinger, A. Pezeshkan, and V. Vracheva, 2017, "Psychological safety: a meta-analytic review and extension," *Personnel Psychology* 70:1, 113-165
- Hattendorf, K., L. Heidbrink, M. Egorov, C. Peus, and A. Pircher Verdorfer, 2019, "Führungskräftebefragung 2019 [Leader Survey 2019]," Eine Studie der Wertekommission und der TUM School of Management der Technischen Universität München
- Heidbrink, L., M. J. Hartung, U. Steinberg, M. Fladerer, and C. Peus, 2020, "Führungskräftebefragung 2020 [Leader Survey 2020]. Eine Studie der Wertekommission und der TUM School of Management der Technischen Universität München
- Hoch, J. E., W. H. Bommer, J. H. Dulebohn, and D. Wu, 2018, "Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis," *Journal of Management* 44:2, 501-529
- Larson, L., and L. A. DeChurch, 2020, "Leading teams in the digital age: four perspectives on technology and what they mean for leading teams," *The Leadership Quarterly* 31:1, 101377
- McCrum, D., 2020, "Wirecard: the timeline. How the payments group became one of the hottest stocks in Europe while battling persistent allegations of fraud," *Financial Times*, June 25, <https://on.ft.com/3ncCY93>
- Mosendz, P., and A. Melin, 2020, "Spy software to keep tabs on remote workers," *Bloomberg*, March 27, <https://bloom.bg/3d674X1>
- Paschek, P., 2020. "Peter F. Drucker. Erinnerungen an einen konservativ-christlichen Anarchisten [Peter F. Drucker. Memories of a conservative-christian anarchist]," *Nomos*
- Peus, C., 2020, "Grundbedürfnisse als Gradmesser [Basic human needs as benchmark]," *Personalmagazin*, 7/2020, S. 74-76
- Peus, C., and D. Frey, 2009, "Humanism at work: crucial organizational cultures and leadership principles," in Spitzack, H., M. Pirson, W. Amann, S. Khan, and E. von Kimakowitz (eds.), *Humanism in business – perspectives on responsible business in society*, Cambridge University Press
- Peus, C., and A. Hauser, 2020, "Herausforderung Digitalisierung – Acht Thesen für zukunftsorientiertes Führungshandeln [The challenge of digitalization – eight theses for future-oriented leadership]," *Wirtschaftspsychologie aktuell*, 2/2020, S. 21-26
- Reuters, 2020, "Wirecard lays off more than half of remaining staff in Germany," August 25, <https://reut.rs/2HP4YPE>
- Rodin, J., and E. J. Langer, 1977, "Long-term effects of a control-relevant intervention with the institutionalized aged," *Journal of Personality and Social Psychology* 35:12, 897-902
- Schlenk, C., and J. Hunter, 2020) "Wirecard stellt zahlreiche Mitarbeiter frei [Wirecard lays off numerous employees]," *FinanceFWD*, August 24, <https://bit.ly/34bxaze>

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