

DIGITAL SOVEREIGNTY AS A LEADERSHIP RESPONSIBILITY: LEADERSHIP STRATEGY FOR SMES

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Abstract: *This article analyzes the possibilities that Kotter's eight-step model offers for change management processes in the context of the European Union's (EU) efforts toward digital sovereignty for small and medium-sized enterprises (SMEs), as well as the arising leadership requirements. Methodologically, the article follows a conceptual approach based on a structured review of academic literature on leadership, change management, and digital transformation. The results show that Kotter's model is particularly well-suited due to its concrete approach, yet it also encounters limitations in SMEs when it comes to operationalization. The limited resources of SMEs prove to be a constraint when it comes to carrying out transformation processes in parallel with day-to-day business operations. The scientific contribution lies in the application of Kotter's model to the context of digital sovereignty, as well as in the identification of new leadership requirements that go beyond traditional change management competencies. This contribution remains conceptual and points to the need for a more in-depth empirical analysis.*

Keywords: digital sovereignty; leadership; leadership strategy; Kotter's eight-step-model; SME

INTRODUCTION

Leadership has undergone a fundamental transformation (Kruse, Schomburg, 2016, p. 4). Moving away from traditional leadership models that relied primarily on directives and control (Lippold, 2019, p. 1), leadership is now increasingly shifting toward a more complex and digital world (Lippold, 2019, p. 24; Petry, 2024, pp. 13–14). Digital transformations are most often driven by market changes and technological advancements (Henderikx, Stoffers, 2022, p. 1; Klein, 2020, p. 884).

The shift from a bipolar to a multipolar world order, with new competing systems and markets, creates uncertainties that have a direct impact on global and European economic life (Hotz-Hart et al., 2023, p. 4). This gives rise to a new driver for corporate digital transformation: the need for digital sovereignty. For companies within the European Union (EU), there are potential risks arising when digital infrastructure is not subject to European law, and a threat exists of possible restrictions, extraterritorial access, and government-mandated data sharing. In February 2025, the U.S. government sanctioned, among others, the Chief Prosecutor of the International Criminal Court (ICC), which led the U.S. company Microsoft to block the prosecutor's digital access. As a result, the ICC switched to a European solution (Kerkmann, 2025). This example demonstrates that digital dependencies can impact digital transformations and give rise to new demands on leaders and leadership.

Small and medium-sized enterprises (SMEs) in the EU are particularly affected by these developments. Recent studies in Germany show that SMEs are less likely

to have adequate protection and sovereignty strategies in place (BSI, 2025, p. 2; Richter, 2025, p. 419).

The European Commission defines SMEs as companies with fewer than 250 employees and an annual turnover of up to 50 million euros or a balance sheet total of no more than 43 million euros (European Commission, 2025, p. 11). They have only limited resources to implement strategic decisions on this scale alongside their existing day-to-day operations.

Kotter's eight-step model provides an established framework that offers structured guidance for complex transformation processes (Kotter, 2011). The aim of this article is to examine how this model can be applied to the specific context of sovereignty transformation in SMEs and what new leadership requirements emerge in this context.

RESEARCH METHODOLOGY

The findings of this paper are based on a purely theoretical research approach and draw upon relevant academic literature on the topics of leadership, change management, and digital transformation. Since the aim of the article is to conceptually apply an established model to a new context, this research approach is methodologically appropriate. In addition to these sources, the study drew on articles identified through searches using relevant keywords (including "Digital Sovereignty," "Digital Transformation," "Change Management," "Eight-step Model," and "SMEs in Europe") in relevant databases. As a whole, the literature review relied primarily on articles from academic journals, conferences, and anthologies. Reports from government or European institutions were also incorporated.

RESULTS

One of the key tasks of leadership is to guide people or subordinates in a specific direction (Paschen, Dihmsmaier, 2014, p. 7) and in this context, it represents a process of mutual influence (Yukl, 2013, p. 7). Leadership is particularly challenging in complex change situations because the emotions and fears of employees must be taken into account to a significant degree. It is therefore not surprising that Firican concludes that transformations rarely fail because of technology, but more often because of leadership and culture (Firican, 2023, p. 793).

The EU declared digital sovereignty as a goal in order to become less dependent on non-European companies. This weakens economic competitiveness and jeopardizes European values (Kagermann, Wilhelm, 2020, p. 7). The urgent need for action has been recognized at both the national and European levels (Kagermann, Wilhelm, 2020, p. 7). In its 2025 status report, the German Federal Office for Information Security explicitly recommends reducing dependencies on non-European providers (BSI, 2025). This political will has led to a reassessment and replacement of existing solutions, which can only be carried out through a transformation process.

The literature describes several leadership concepts for transformation process-

es. Lewin’s three-step approach can be considered one of the best-known theoretical frameworks for change management (Burnes, 2019). It serves as the basis for many subsequent models. The models proposed by Jick and by Mento, Jones and Dirndofer offer additional frameworks for structuring change processes (Pryor et al., 2008, p. 8). Another approach was developed by Kotter (2011).

A concrete approach is particularly advisable for change processes in SMEs, as they have only limited resources available for technical migrations and cultural change. Kotter refined his eight-step model by analyzing the failures of real-world transformation processes to facilitate operational implementation in SMEs (Fig. 1).

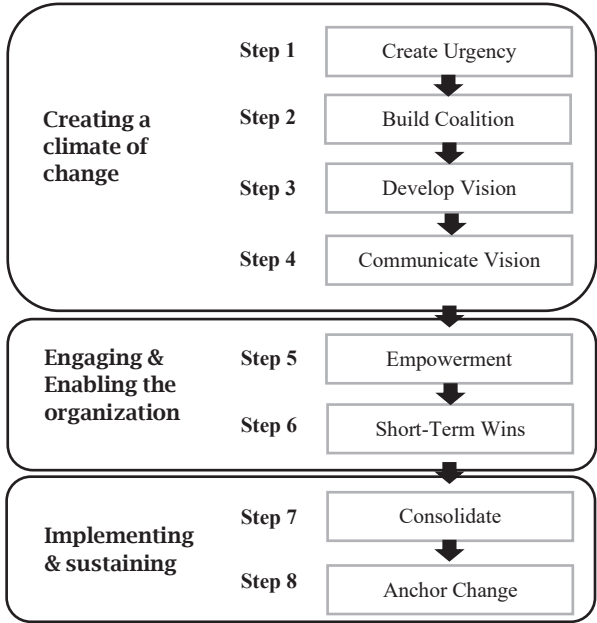


Fig. 1. Kotter’s eight-step-Model

Figure 1 illustrates the different steps of the model and, following Lewin’s approach, divides them into three phases. The eight steps are explained below in the context of digital sovereignty.

Step 1

Kotter assumes that complacency must be overcome at the start of any change process. Therefore, the first step focuses on creating a sense of urgency (Kotter, 2011, p. 31). A sense of distress must be present in order to allow for change (Gergs, 2016, p. 195). The EU’s political will toward digital sovereignty is increasingly reflected in regulatory requirements and guidelines, as demonstrated by the Data Act (European Parliament and Council, 2023) and the AI Act (European Parliament and Council, 2024). Organizations must address these and the associated changes in a timely manner. A “sense of urgency” can thus be derived from this dimension.

Step 2

In this step, Kotter emphasizes the need to establish a committed and energetic group to drive the change process forward. This leadership coalition takes charge of steering the processes and identifying key figures (Kotter, 2011, p. 45). Change processes follow a clear principle when it is necessary to bring about change in organizations: “Processes depend on people” (Doppler, Lauterburg, 2019, p. 202). Four “*essential characteristics*” are of great importance here. In terms of hierarchical significance, there must be a sufficient number of key players in the team. The expertise of the members is also crucial to success. Furthermore, the team members must have a good reputation in order to project credibility. Last but not least, there must be “*sufficient leadership*” within the group driving the change process (Kotter, 2011 p. 50).

For SMEs, this step means that it is not solely the responsibility of the IT department to implement this shift in sovereignty. The author’s practical experience with change management processes shows that, in addition to senior management – which plays a central role in transformation processes – It is also necessary to select members from all departments affected by the change who appear suitably qualified based on their expertise, credibility, and connections within the organization.

Step 3

Developing a vision and a strategy derived from it are central components of effective leadership in change processes. This instills motivation and conviction in the employees involved in the transformation process (Kraus et al., 2004, p. 131). Particularly in the context of digital transformation, a vision provides guidance and gives employees the necessary direction for change (Kotter, 2011, p. 68). According to Stolzenberg and Heberle, a vision must be clearly defined in order to be successfully implemented and to derive effective measures from it (Stolzenberg, Heberle, 2009, p. 49).

For SMEs undergoing the transformation toward digital sovereignty, a vision can be created that points to the organization’s future ability to act independently. Additionally, communicating a European pathway can complement the vision and provide employees with overarching guidance for the upcoming transformation.

Step 4

One of the key tasks of leadership – and therefore also of leadership in a transformation process – is communication. Communication is a critical success factor (Lauer, 2019, p. 125). It is only through communication that a vision can reveal its “*true power*,” as it lays the foundation for a shared understanding of the vision and its goals (Kotter, 2011, p. 73). It plays a central role, particularly in the context of digital transformation, where changes happen rapidly and uncertainty is often high.

For SMEs as well, this step is a major success factor in transformation. Communication should be adapted to existing and familiar communication channels and supplemented with elements that demonstrate the value of each phase of the transformation process. Especially suitable are a town hall meeting as a kick-off event – where both the vision and the rationale for the transformation are communicated – and regular updates in the form of digital messages.

Step 5

Transformation processes in organizations succeed only when as many employees as possible actively participate in them. To achieve this, employees must be empowered (Kotter, 2011, p. 87). When a large number of employees participate in the change process, acceptance and motivation increase, while resistance and the potential for conflict are reduced (Lauer, 2019, p. 153). Ensuring appropriate employee involvement in the development of new structures and processes is also a major task at this stage. To drive the change process forward, training can strengthen the necessary competencies; at the same time, initiative and a willingness to take risks should be consciously encouraged among all participants (Kotter, 2011, pp. 95–98).

For SMEs, this means striving for genuine participation. It requires clarity regarding the structure of participation opportunities (Lauer, 2019, p. 156). The leadership coalition can specifically plan for the involvement of key employees in a manner tailored to the target group, in order to account for the additional workload resulting from ongoing day-to-day business. The author finds that internal and external training sessions, seminars, or so-called peer-learning formats – in which an experienced employee shares their knowledge – are suitable measures for closing competency gaps.

Step 6

According to Kotter, achieving quick and, above all, visible results is a core part of transformation that fulfills several important functions (Kotter, 2011, p. 103). These results serve as proof that the efforts in the change process are paying off, while also acting as a reward for those involved. Quick results also provide the leadership coalition with rapid feedback regarding the feasibility of the vision and the strategy. When those people who remain skeptical or resistant witness these quick wins, they may abandon their resistance and embrace the transformation (Kotter, 2011, p. 103).

For SMEs, a quick win could be celebrated with the first successful migration of a subsystem, such as moving to a GDPR-compliant cloud that meets regulatory requirements or the completion of an initial training module. These milestones are clearly measurable and can therefore be communicated with credibility.

Step 7

In the second-to-last step, individual achievements and what has been accomplished so far are consolidated. The growing confidence in the results can now be leveraged to initiate changes in other systems that are not yet aligned with the desired vision (Kraus et al., 2004, p. 136). According to Kotter, only those individuals who can contribute to the realization of the vision should be promoted and trained for key positions, as this is the only way to generate new momentum within the change process (Kotter, 2011, p. 121). This step is especially relevant in the context of digital transformation, because technological transformation continuously creates new requirements and opportunities. The successful consolidation of initial results allows organizations to build on the progress achieved and target further ar-

eas, such as the migration of additional systems to European infrastructure or the expansion of sovereignty-conscious procurement strategies.

Kotter's call for targeted training and development of employees heavily involved in the transformation process means, specifically for SMEs, that existing positions may be filled by new hires or that other employees may be overlooked. This step can generate dissatisfaction and create a winner-loser dynamic. These risks can only be mitigated through clear communication and one-on-one conversations. A remaining risk of losing key employees cannot be completely ruled out at this stage. This makes it all the more essential for the leadership coalition to manage the entire process with respect and particular care.

Step 8

According to Kotter, the eighth and final step in the change process aims at anchoring and consolidating new processes and behaviors through a cultural transformation within the company. Furthermore, these successes serve as proof that the path to change was the right one. The task now is to permanently embed the changes achieved in the corporate culture. This cannot simply be reshaped or forced into existing forms (Kotter, 2011, p. 132). Instead, this requires the conscious integration of the new values, processes, and behaviors into all levels of the organization (Kotter, 2011, p. 132).

With regard to digital sovereignty, this final step for SMEs means that awareness of digital dependencies and the commitment to making technology decisions with sovereignty in mind must be firmly anchored in the corporate culture.

DISCUSSION

Digital sovereignty is not a traditional IT project, but rather a critical leadership issue. It is a policy priority and is becoming increasingly relevant for SMEs, meaning that organizations, their leaders, and thus leadership itself are also affected by it. Kotter's eight-step model serves as a suitable framework for a transformation process in the context of digital sovereignty, but reveals three additional implications for SMEs:

In the context of digitalization and digital sovereignty, additional specific leadership competencies are required that go beyond traditional change management skills (Henderikx, Stoffers, 2022, pp. 1–3; Petry, 2024, pp. 13–14). In addition to an understanding of digitalization and new regulatory requirements, a basic knowledge of geopolitics is also helpful for contextualizing and weighing decisions. The ability to translate abstract risks (digital sovereignty, Data Act, AI Act) into a sense of urgency also requires new skills. These additional leadership competencies must be developed before or during the transformation process, following the measures proposed by Lauer (2019) or comparable human resources development initiatives.

Given its concrete steps, Kotter's model appears to be an approach well-suited for SMEs. However, SMEs are not a homogeneous group: the EU definition alone covers micro-enterprises right up to medium-sized enterprises with up to 250 employees, which differ considerably in terms of sector and available resources. Kot-

ter's model follows a largely linear logic, and Pryor et al. (2008) emphasize in this context that such step-by-step models cannot be applied uniformly. Their effectiveness also depends heavily on the pace and complexity of the specific change context. It can be particularly difficult for resource-constrained SMEs to maintain a strictly sequential process alongside their day-to-day business operations.

This is all the more true given that this approach to change management also requires enormous human and time resources (Lauer, 2019, p. 201), which must be made available alongside day-to-day business. This can lead to resource bottlenecks, a lack of structure and a double workload. From personal experience, the author can confirm that an organization can reach the limits of its capacity when day-to-day business and the transformation process overlap.

Step eight of the model shows that digital sovereignty is not a one-time migration but an ongoing process. Changes in the digital environment are constant due to the dynamics and drivers of digitalization. As a result, decisions must be regularly reevaluated and adjusted. Once the project is completed, this can – or must – evolve into an ongoing management process (Petry, 2024, p. 25).

The aim of this article was to examine whether Kotter's model for change management processes is suitable in the context of digital sovereignty in SMEs and what new leadership requirements arise in this process. The model proves its applicability, however, the three dimensions described above must be considered. Future studies could use empirical research to provide further insights and deepen this strictly literature-based foundation.

For managers in SMEs, concrete priorities can be derived from these findings: the transformation is not only the responsibility of the IT department, but is relevant across the entire organization, as decisions regarding data sovereignty affect all departments equally (Step 2). Furthermore, early and visible quick wins, such as migrating a subsystem to a GDPR-compliant European cloud, can make the abstract goal more tangible (Step 6). Finally, targeted approaches such as peer learning or external coaching are realistic ways of closing skills gaps, as SMEs rarely have large HR departments (Step 5).

CONCLUSION

This article examined the extent to which Kotter's eight-step model can be successfully applied in the specific context of a transformation related to digital sovereignty in SMEs. The analysis revealed that this model generally meets the requirements of such a change management process. The model offers a clear structure and a concrete, practical framework that provides understandable guidance for SMEs. The analysis further shows that digital sovereignty poses new requirements to leaders that go beyond traditional change management competencies. The additional requirements for leaders include digital competencies, an understanding of regulations, geopolitical judgment, as well as the ability to translate highly abstract concepts into organizational urgency and communication.

The results confirm that also Kotter's model, among others, cannot solve a

fundamental problem for SMEs in terms of transformation processes: namely that structural, temporal, and human resources must be allocated in parallel with day-to-day operations, which shows the practical limitations of this and other change management models. Furthermore, digital sovereignty should not be viewed as a one-time project, but rather as an ongoing process that must be anchored in corporate values.

If SMEs are able to view transformation not as a necessary evil but as an opportunity for new possibilities and growth, then digital sovereignty becomes an expression of modern leadership responsibility that goes far beyond technological migration.

This paper is based on a literature review without empirical validation. Future research should test the assumptions developed here through qualitative or quantitative studies in SMEs and, if necessary, further develop the model.

REFERENCES

- Bundesamt für Sicherheit in der Informationstechnik. (2025). Die Lage der IT-Sicherheit in Deutschland 2025 [The state of IT security in Germany 2025]. <https://medien.bsi.bund.de/lagebericht/de/index.html>
- Burnes, B. (2019). *The origins of Lewin's three-step model of change*. The Journal of Applied Behavioral Science, 56(1), 32–59. <https://doi.org/10.1177/0021886319892685>
- Doppler, K., Lauterburg, C. (2019). *Change Management: Den Unternehmenswandel gestalten* [Change management: Shaping organizational change] (Vol. 14). Campus Verlag.
- European Commission. (2025). *Annual report on European SMEs 2024/2025*. <https://doi.org/10.2760/7714438>
- European Parliament and Council. (2023). *Regulation (EU) 2023/2854 on harmonised rules for fair data access and use (Data Act)*. Official Journal of the European Union. <http://data.europa.eu/eli/reg/2023/2854/oj>
- European Parliament and Council. (2024). *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024*. Official Journal of the European Union. <http://data.europa.eu/eli/reg/2024/1689/oj>
- Firican, D. A. (2023). Digital transformation and digital culture: A literature review of the digital cultural attributes to enable digital transformation. *Proceedings of the International Conference on Business Excellence*, 17(1), 791–799. <https://doi.org/10.2478/picbe-2023-0073>
- Gergs, H.-J. (2016). Neue Herausforderungen an das Change Management [New challenges for change management]. In O. Geramanis & K. Hermann (Eds.), *Führen in ungewissen Zeiten* [Leading in uncertain times] (pp. 189–203). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-11227-1_12
- Henderikx, M., Stoffers, J. (2022). An exploratory literature study into digital transformation and leadership: Toward future-proof middle managers. *Sustainability*, 14(2), 687. <https://doi.org/10.3390/su14020687>
- Hotz-Hart, B., Bucher, J., Werder, H. (2023). Über Systemwettbewerb zu einer neuen

- Weltordnung? [On system competition toward a new world order?] *Springer Fachmedien Wiesbaden*. <https://doi.org/10.1007/978-3-658-42016-1>
- Kagermann, H., Wilhelm, U. (2020). European public sphere. Towards digital sovereignty for Europe (acatech IMPULS). Acatech – Deutsche Akademie der Technikwissenschaften. <https://www.acatech.de/publikation/european-public-sphere/>
- Kerkmann, C. (2025, October 30). Software: Strafgerichtshof ersetzt Microsoft durch deutsche Lösung [Software: Criminal court replaces Microsoft with German solution]. *Handelsblatt*. <https://www.handelsblatt.com/technik/it-internet/software-straengerichtshof-ersetzt-microsoft-durch-deutsche-loesung/100166382.html>
- Klein, M. (2020). Leadership characteristics in the era of digital transformation. *Business & Management Studies: An International Journal*, 8(1), 883–902. <https://doi.org/10.15295/bmij.v8i1.1441>
- Kotter, J. P. (2011). Leading change (Vol. 1). *Vahlen*. <https://doi.org/10.15358/9783800646159>
- Kraus, G., Kolle-Becker, C., Fischer, T. (2004). Handbuch Change-Management [Change management handbook]. *Cornelsen*.
- Kruse, P., Schomburg, F. (2016). Führung im Wandel: Ohne Paradigmenwechsel wird es nicht gehen [Leadership in transition: There is no way around a paradigm shift]. In O. Geramanis, K. Hermann (Eds.), *Führen in ungewissen Zeiten* [Leading in uncertain times] (pp. 3-15). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-11227-1_1
- Lauer, T. (2019). Change Management (3rd ed.). *Springer Berlin Heidelberg*. <https://doi.org/10.1007/978-3-662-59102-4>
- Lippold, D. (2019). Führungskultur im Wandel [Leadership culture in transition]. *Springer Fachmedien Wiesbaden*. <https://doi.org/10.1007/978-3-658-25855-9>
- Paschen, M., Dihsmäier, E. (2014). Psychologie der Menschenführung [The psychology of leadership]. *Springer Berlin Heidelberg*. <https://doi.org/10.1007/978-3-642-41052-9>
- Petry, T. (2024). Digital leadership mastery (1st ed.). *Haufe*.
- Pryor, M. G., Taneja, S., Humphreys, J., Anderson, D., Singleton, L. (2008). Challenges facing change management theories and research. *Delhi Business Review*, 9(1), 1–20.
- Richter, B. (2025). Cybersicherheit für KMU [Cybersecurity for SMEs]. In A. Kohne, D. Bauer (Eds.), *Die Mittelstandstransformation* [The transformation of the German Mittelstand] (pp. 419–439). Springer Fachmedien Wiesbaden.
- Stolzenberg, K., Heberle, K. (2009). Change Management: Veränderungsprozesse erfolgreich gestalten – Mitarbeiter mobilisieren [Change management: Successfully shaping change processes – mobilizing employees]. *Springer*. <https://doi.org/10.1007/978-3-662-61895-0>
- Yukl, G. A. (2013). *Leadership in organizations*. Pearson.

ДИГИТАЛНИЯТ СУВЕРЕНИТЕТ КАТО ЛИДЕРСКА ОТГОВОРНОСТ: ЛИДЕРСКА СТРАТЕГИЯ В МАЛКИТЕ И СРЕДНИТЕ ПРЕДПРИЯТИЯ

Резюме: В тази статия се разглеждат възможностите, които осемстепенният модел на Котър предлага за процесите на управление на промяната в контекста на стремежите на Европейския съюз (ЕС) към дигитален суверенитет за малките и средните предприятия (МСП), както и конкретните изисквания към лидерството, които произтичат от това. От методологична гледна точка статията следва концептуален подход, основан на структуриран преглед на академичната литература в областта на лидерството, управлението на промените и цифровата трансформация. Резултатите показват, че моделът на Котър е особено подходящ и поради своя ориентиран към действие и конкретен подход, но при операционализирането си се сблъсква с типичните ограничения на МСП. Ограничените ресурси на МСП, особено по отношение на времевите, кадровите и структурните капацитети, се оказват основна пречка при едновременното провеждане на трансформационни процеси и оперативната ежедневна дейност. Научният принос се състои в концептуалното пренасяне на модела на Котър в контекста на цифровата суверенност, както и в идентифицирането на нови изисквания към лидерството, които надхвърлят класическите компетенции за управление на промяната и изрично засягат геополитическите и регулаторните измерения на лидерството. Този принос остава концептуален и посочва необходимостта от задълбочен емпиричен анализ.

Ключови думи: цифров суверенитет; лидерство; стратегия за лидерство; осемстепенен модел на Котър; МСП

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