The Symbiosis of Humans and Machines: An Examination of the Acceptance and Impact of Artificial Intelligence on Key Account Management in the context of Germany, Austria, and Switzerland (DACH region)

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This study explores the integration of Artificial Intelligence (AI) into Key Account Management (KAM) in the business-to-business context of the DACH region. Digitalization and AI are profoundly reshaping sales, offering opportunities to automate routine tasks, accelerate data analysis, and enhance decision-making. Yet, essential KAM competencies – such as empathy, trust, and strategic judgment – remain inherently human. The research seeks to identify factors influencing the acceptance and use of AI by key account managers, examine changes in their roles and competencies, and assess the perceived impact of AI on customer relationships. Qualitative research design combines an exploratory literature review, expert interviews, and case studies of firms with early AI adoption in sales. Research data will be analyzed using the content analysis method. Findings are expected to show that AI acts less as a substitute for human abilities and more as a "co-pilot," enabling managers to focus on relationship-building and strategic consulting while machines handle repetitive tasks. The study advances theory on human-AI collaboration in complex B2B relationships and offers actionable guidance for KAM leaders in digital transformation.

Keywords: Key Account Management, Artificial Intelligence, Human-AI Collaboration, Qualitative Case Study, DACH Region, AI-Adoption

1. Introduction

KAM refers to a concept through which companies integrate the principles of relationship marketing into their customer policies, thereby fostering closer ties with their clients (Ivens & Pardo, 2007). The objective is to provide special treatment to key accounts – the most strategically important customers within the portfolio – in the areas of marketing, sales, and service (Barrett, 1986). Accordingly, key accounts are managed in a specific, tailored manner characterized by dedicated actors, activities, and resources (Homburg, Workman & Jensen, 2002).

AI has long been the subject of intensive scientific debate. In economic contexts, AI is used to equip machines with cognitive abilities that resemble human learning, problem-solving, and rational thinking (Rainsberger, 2021). Although the term "intelligence" itself is not clearly defined, AI has been conceptualized and continuously developed since the 1950s to technologically replicate and partially automate human thought and behavior (Wirtz, 2024). Originally, research pursued the goal of designing computers capable of solving complex problems independently and approximating human intelligence as closely as possible (Harwardt & Haberich, 2024).

In the literature, a distinction is made between two categories of AI: weak and strong AI. Weak AI is limited to fulfilling specific tasks. A typical example is voice assistant systems that are trained for narrowly defined application areas (Rainsberger, 2021). Strong AI, or Artificial General Intelligence (AGI), on the other hand, aims to comprehensively replicate human thought processes. It is intended to be able to transfer knowledge flexibly from one context to another and to demonstrate higher-order abilities such as creativity, empathy, and problemsolving under uncertainty (Harwardt & Haberich, 2024).

Problem Statement and Objectives

The current business landscape is being fundamentally reshaped by the unstoppable megatrends of digitalization and AI (Wengler et al., 2021). This development does not represent a mere incremental adjustment but rather a profound transformation that is particularly altering the very core of business-to-business (B2B) sales. In the economically significant DACH region (Germany, Austria, Switzerland), the adoption of these technologies is increasingly regarded as a critical factor for future business success (Handelsblatt, 2025). However, studies indicate that the implementation of digital strategies often remains unstructured and without a clear strategic roadmap, leading to a considerable need for catching up (Ecoplan, 2025). The evolution of sales from a product-centered approach (Sales 1.0) toward a data-driven, digitally networked, and customer-oriented paradigm (Sales 4.0) illustrates the urgency of this transformation (Evalanche, 2025).

Within B2B sales, KAM holds a special position. In contrast to transactional selling, KAM focuses on building, maintaining, and strategically developing long-term, partnership-based relationships with a company's most valuable and important customers. These strategic partnerships, which are based on deep trust, mutual value creation, and strategic consulting, form the foundation for sustainable growth and competitive advantage (Krah & Leitherer, 2024).

At this intersection emerges the central problem of this research. On the one hand, the use of AI in KAM promises enormous gains in efficiency and effectiveness. AI systems can automate administrative tasks, deliver data-driven insights in real time, and conduct complex analyses that exceed human capabilities (Thilak, 2025). On the other hand, critics and practitioners argue that the core competencies of a successful key account manager – empathy, strategic judgment in ambiguous situations, building trust, and navigating complex social and political dynamics within the customer organization – are inherently human and cannot be replicated by algorithms (Norris, 2025). This dichotomy leads to significant uncertainty and potential acceptance barriers regarding the introduction of AI technologies in KAM.

From this problem statement, the following central research questions are derived:

1. Which factors influence the acceptance and actual use of AI technologies by key account managers in the DACH region?
2. How does the use of AI change the role, tasks, and competence profile of key account managers, particularly in the tension between efficiency gains and personal relationship management?
3. What perceived impact does the use of AI have on the quality of customer relationships and the strategic value of KAM from the perspective of KAM executives?

This study aims to close the gap between technological capabilities and human competencies in sales. Theoretically, it contributes to the literature on sales digitalization by developing a framework for human-AI symbiosis in complex B2B settings. From a managerial perspective, the research provides actionable guidelines for KAM leaders on how to orchestrate AI adoption to enhance, rather than replace, the strategic role of key account managers.

2. Methodological Approach

To comprehensively answer the research questions, a qualitative research design is applied, structured into three phases:

Phase 1: Exploratory literature review and expert interviews

A systematic literature review is first conducted to deepen the understanding of the current state of research. In addition, guided interviews will be held with approximately 15–20 experts from practice (experienced key account managers, sales directors, digitalization officers) and academia. The goal is to gain in-depth insights into current challenges and the real application possibilities of AI.

Phase 2: Case study analysis

In the second step, 3-4 selected companies that already have initial experience with AI in sales will be examined in qualitative case studies. Methods such as document analysis (e.g., process descriptions, strategy papers) and semi-structured interviews with the involved actors will be used. This enables a detailed analysis of implementation processes, concrete application cases, and perceived effects.

Phase 3: Synthesis and framework development

The results from the expert interviews and case studies will be combined and evaluated using content analysis. On this basis, a framework will be developed that identifies success factors for the use of AI in practice.

Samples and Data Collection

The target group of this study consists of key account managers, strategic account managers, and sales directors with direct responsibility for KAM in the DACH region. The industry focuses on the technology and service sectors. These industries were selected because they demonstrate a high or rapidly growing adoption rate of AI, play a central role in the B2B context, and thus have high relevance for the research questions. Participant recruitment is carried out through professional networks such as LinkedIn, targeted outreach via industry associations (e.g., Bitkom), as well as potential collaboration with specialized panel providers.

3. Expected Results and Implications

This research is expected to make several significant contributions:

For academia: The study will contribute to a deeper theoretical understanding of the role of AI in complex B2B relationships. It extends the resource-based perspective and provides an empirically grounded basis for future quantitative studies.

For business practice: The framework to be developed will offer managers concrete guidance for the strategic planning and operational implementation of projects in the digital transformation of KAM. It will demonstrate how companies can achieve competitive advantages through AI by managing their most important customer relationships more effectively and efficiently.

Managerial Implications

The aim of this study is to derive practical recommendations for the following areas:

- For AI implementation
- For change management
- For human resource development

In summary, this research will make an important contribution to understanding the symbiosis between humans and AI technologies in the demanding context of KAM. It will not only highlight how digitalization is transforming the role of the key account manager but also demonstrate how this transformation can be shaped proactively and profitably.

The detailed findings will be presented and discussed at the conference.

4. Conclusion, Limitations, and Outlook

In summary, this study examines the acceptance and impact of AI in KAM in the DACH region. Based on a qualitative research design, it is argued that the greatest value of AI does not lie in substituting human capabilities but in creating a symbiosis: the automation of routine tasks by machines enables humans to focus more on their unique strengths in strategic consulting and relationship management. The acceptance of the technology critically depends on whether it is perceived as a trustworthy "co-pilot" that strengthens these core competencies rather than threatening them.

This study is subject to certain limitations. The focus on the DACH region restricts the generalizability of the results to other cultural contexts. The chosen cross-sectional design allows for the identification of correlations but does not permit causal conclusions in the strict sense. In addition, industry-specific differences may exist that could not be fully captured within the scope of this work.

However, these limitations open up promising avenues for future research. Longitudinal studies could track the development of AI acceptance and usage in KAM over time and provide stronger insights into causal relationships. Quantitative ROI analyses would be valuable to measure the actual financial impact of AI investments in KAM. Cross-cultural studies (e.g., DACH vs. USA vs. Asia) could examine the influence of cultural factors on human–AI interaction in sales. An especially interesting field for future research would also be the customer perspective: How the key accounts and their decision-makers perceive interactions with AI-supported key account managers, and how this affects their trust and loyalty.

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