

A Work Project, presented as part of the requirements for the Award of a Master's degree in  
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The Role of Artificial Intelligence in  
Revolutionizing Conversion Rate Optimization

Lukas Wabnegger

Work project carried out under the supervision of:

Elizabete Cardoso

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Abstract: This thesis explores the role of artificial intelligence (AI) in revolutionizing conversion rate optimization (*CRO*) within digital marketing. Using a qualitative methodology combining a literature review and expert interviews, it identifies the benefits of AI-driven personalization and dynamic pricing while addressing challenges such as data privacy, algorithmic bias, and trust. The findings highlight the potential of AI to improve efficiency and customer engagement, particularly for small and medium enterprises (SMEs) that adopt scalable tools. The study also suggests extending the technology acceptance model (TAM) to include constructs of trust and perceived risk to better understand AI adoption in *CRO* contexts.

Keywords: Conversion Rate Optimization, Artificial Intelligence, Digital Marketing, Ethical, Technology Acceptance Model

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# 1 Introduction

## 1.1 Overview of the Research Problem

The world of digital marketing is evolving rapidly, with businesses worldwide investing heavily in optimizing their online presence. In 2023, global spending on digital advertising reached \$679.7 billion, and it is even projected to grow further to \$798.7 billion by the year 2025 (Statista Market Insights, 2024). *CRO* is crucial to these efforts, a process designed to increase the percentage of website visitors who take desired actions - for example making a purchase, subscribing to a service, or engaging with content. For companies who are looking to maximize return on investment and secure their place in competitive markets, *CRO* is no longer optional but essential. Historically, *CRO* has always relied on traditional techniques like A/B testing and multivariate testing to discover insights into user behavior. However, these methods often rely on manual processes, making them less effective in today's fast changing environment, where data volumes and consumer expectations are growing constantly. Customers now demand seamless and personalized online experiences, creating challenges that exceed the capabilities of traditional tools. In this context, AI has emerged as a revolutionary solution. With the power of AI, businesses can process huge datasets, predict customer behavior and create personalized experiences. Unsurprisingly, global spending on AI technologies is also predicted to more than double by 2028, reaching \$632 billion (Shirer, 2024). In addition, the success stories of companies like *Amazon* and *Netflix* demonstrate the potential of AI-driven strategies, with their recommendation engines significantly increasing customer engagement and revenue (Smith & Linden, 2017). However, integrating AI into *CRO* is not without its challenges, particularly regarding data privacy, algorithmic bias and maintaining customer trust. The goal of this thesis is to explore how businesses integrate AI technologies into their *CRO* strategies, addressing critical questions about the opportunities and challenges.

## **1.2 Purpose and Objectives**

The study's primary purpose is to analyze how AI is transforming conversion optimization in digital marketing. The research objectives are as follows:

1. To examine how businesses are leveraging AI to enhance their *CRO* strategies.
2. To explore expert insights into the benefits and limitations of AI-driven *CRO*.
3. To identify and address ethical considerations, such as data privacy and algorithmic transparency, associated with AI adoption in marketing.

Through these objectives, the research seeks to contribute to both academic understanding and practical implementation of AI technologies in *CRO*.

## **1.3 Research Methodology and Scope**

This study employs a qualitative methodology, combining a literature review with semi-structured interviews. The literature review provides a foundation by comparing traditional and AI-driven *CRO* methods, highlighting gaps in current knowledge. In-depth interviews with three marketing experts from leading European companies provide practical insights into how AI is shaping *CRO* strategies in the real world. While the emphasis is on web-based platforms, the findings are expected to have larger applicability across digital channels.

## **1.4 Significance of the Research**

The integration of AI into *CRO* remains an underexplored topic in academic literature, with most studies concentrating on AI's role in advertising or general personalization. This research addresses this gap by examining AI's specific impact on *CRO*, offering both theoretical insights and practical recommendations. For academic research, the study contributes to a deeper understanding of AI's transformative potential in digital marketing.

## **1.5 Structure of the Thesis**

The remainder of this document follows, starting with a detailed review of academic research on traditional and AI-driven conversion optimization in Chapter 2. This chapter identifies key

trends, theoretical frameworks, and gaps in the literature, forming the foundation for the research questions. Chapter 3 outlines the methodology, describing the qualitative approach used in this study, which combines a literature review with semi-structured interviews conducted with industry experts. It also addresses ethical considerations and explains how reliability and validity were ensured in the research design. Chapter 4 presents the results and discussion, analyzing insights gained from the interviews and comparing them with existing literature. This section evaluates the role of AI in transforming conversion optimization while exploring challenges and opportunities identified by the participants. Finally, Chapter 5 concludes the thesis by summarizing the findings, providing actionable recommendations for businesses adopting AI in *CRO*, and highlighting limitations of the research alongside suggestions for future studies.

## **2 Literature Review**

### **2.1 Introduction to Conversion Rate Optimization**

Conversion Rate Optimization refers to the process of increasing the percentage of users who take a desired action on a website, such as purchasing a product or signing up for a service (Miikkulainen et al., 2017). The goal is to refine the customer journey to maximize these outcomes using methods like A/B testing and multivariate testing. A/B testing involves presenting two website versions (A and B) to visitors to determine which performs better, while multivariate testing allows simultaneous testing of multiple elements, such as buttons, headlines, or images (Montgomery et al., 2004). While these methods have been effective, they are constrained by scalability, speed, and reliance on manual decision-making. For example, A/B testing is time-consuming, as it requires high traffic volumes to yield statistically meaningful insights. Multivariate testing, while offering broader experimentation, becomes increasingly complex with multiple elements and segments (Kohavi et al., 2009). As digital environments become more complex, traditional *CRO* methods are losing efficacy,

leading businesses to adopt artificial intelligence and machine learning solutions. These technologies can process large datasets, automate decision-making, and deliver personalized, real-time optimizations (Brynjolfsson & McAfee, 2017). AI's ability to identify patterns and trends allows for more sophisticated and scalable approaches, such as cross-device behavior tracking and predictive analytics (Ransbotham et al., 2017). Therefore, it can be said that compared to traditional methods, AI offers more precise and dynamic tools for improving conversion rates, making it an essential part of modern *CRO* strategies.

## **2.2 Role of Artificial Intelligence in Digital Marketing and *CRO***

AI has transformed digital marketing by enabling deeper insights into customer behavior and preferences. Three key applications of AI in marketing—algorithms, personalization, and segmentation—are directly relevant to *CRO*. AI-based algorithms, particularly machine learning and deep learning, allow systems to process high amounts of data and improve performance over time without explicit programming. For example, machine learning enables predictive analytics to forecast user behavior, while deep learning allows for advanced tasks such as image and speech recognition (LeCun et al., 2015). Natural language processing facilitates applications like chatbots and sentiment analysis, improving customer interactions (Cambria & White, 2014). AI also powers recommendation systems and personalization, tailoring content, product recommendations, and website experiences to individual users based on their behavior. *Netflix*, for example, relies on AI-driven recommendations to improve user engagement and conversion rates (Antonyuk, 2024). Also, AI-driven customer segmentation automates the process of dividing customers into precise groups, enabling marketers to target campaigns more effectively (Wedel & Kannan, 2016). AI-driven *CRO* builds on these advancements, allowing businesses to analyze multiple variations of webpages, predict user behavior, and optimize in real-time. For instance, predictive models can suggest strategies likely to increase conversions without the need for manual testing

(Syam & Sharma, 2018). Dynamic pricing, another AI application, adjusts prices based on demand and customer behavior. Companies like *Amazon* have successfully implemented such models to maximize profits and remain competitive (Chen et al., 2016). By combining predictive analytics, dynamic pricing, and personalization, AI enables businesses to offer tailored experiences, increasing both short-term conversions and long-term customer loyalty (Smith & Linden, 2017). This shift highlights the transformational potential of AI in optimizing digital marketing strategies.

### **2.3 Ethical Considerations and Challenges of AI-driven CRO**

While AI offers unmatched efficiency and personalization, its integration into *CRO* raises significant ethical and practical challenges. Data privacy is a primary concern, as AI-driven personalization relies on extensive user data. Regulations such as the General Data Protection Regulation (GDPR) and the California Consumer Privacy Act force strict requirements on data collection, storage and use, making compliance essential (Voigt & Von Dem Bussche, 2017). Transparency in how data is used is equally critical for maintaining consumer trust. Unauthorized data sharing or breaches can result in reputational damage, underlining the need for robust data security measures (Sanchez-Rola et al., 2019). It can also lead to legal consequences under regulations such as the GDPR. Organizations found to be in breach could face fines of up to 20 million euros or 4% of their global annual turnover, whichever is higher (Intersoft Consulting, 2024). For example, in 2020, British Airways was fined 20 million euros by the UK's Information Commissioners Office for a data breach involving the personal and credit card details of around 400,000 customers (BBC, 2021). Bias in AI algorithms is another significant challenge. If models are trained on biased datasets, they can produce discriminatory outcomes, particularly in customer segmentation or dynamic pricing (Barocas et al., 2023). For instance, biased algorithms could unfairly target or exclude certain user groups, supporting societal inequalities. Businesses must therefore invest in testing and

auditing AI models to identify and prevent bias (Mehrabi et al., 2022). Finally, balancing automation with customer trust is crucial. While AI streamlines processes like A/B testing and personalization, extreme reliance on automation could negatively impact the human touch necessary for long-term relationships. Research shows that while consumers appreciate personalization, they may feel uncomfortable if they perceive algorithms as manipulative (Davenport & Kirby, 2016). Hybrid systems that combine AI with human oversight can offer a more ethical and customer-focused approach (Crawford et al., 2014). Addressing these ethical considerations is critical for businesses seeking to implement AI responsibly, ensuring compliance with regulations, reducing bias, and maintaining customer trust.

## 2.4 Theoretical Models for AI-driven CRO

The Technology Acceptance Model (TAM), developed by Davis in 1989, provides a foundational framework for studying technology adoption by focusing on two key constructs: perceived usefulness and perceived ease of use. Over time, TAM has evolved to include additional constructs, such as social influence and cognitive instrumental processes (TAM2) and factors like computer self-efficacy and perceived enjoyment (TAM3) (Venkatesh & Bala, 2008). However, existing models do not fully address the complexities of AI in digital marketing, particularly trust and perceived risk. Trust in AI systems, which includes transparency and ethical alignment, has emerged as a critical factor influencing adoption (Grewal et al., 2020). Similarly, perceived risk, especially concerning data privacy and

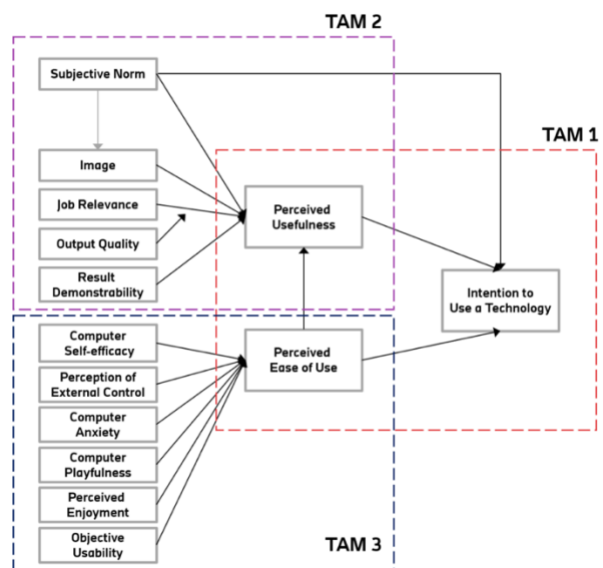


Figure 1: The Technology Acceptance Model (Hochschule für Technik Stuttgart, 2024)

intentional processes (TAM2) and factors like computer self-efficacy and perceived enjoyment (TAM3) (Venkatesh & Bala, 2008). However, existing models do not fully address the complexities of AI in digital marketing, particularly trust and perceived risk. Trust in AI systems, which includes transparency and ethical alignment, has emerged as a critical factor influencing adoption (Grewal et al., 2020). Similarly, perceived risk, especially concerning data privacy and

algorithmic bias, significantly impacts user acceptance. Extending TAM3 to include these constructs might provide a more comprehensive framework for analyzing AI adoption in *CRO*. Such an extension aligns with recent research, which highlights the importance of trust and risk in shaping consumer attitudes toward AI (Venkatesh & Davis, 2000). By including these variables, TAM3 can better address the unique challenges of AI-driven marketing tools, offering valuable insights into how businesses can enhance adoption while maintaining ethical standards.

## **2.5 Gaps and Limitations in Existing Literature**

However, because this is a rather new topic, current research on AI-driven *CRO* has notable gaps. While many studies focus on technical aspects like algorithm performance and personalization methods, there is limited research on user-centric perspectives, such as how customers perceive and engage with AI-driven changes. More empirical studies are needed to understand how trust and perceived risk influence customer behavior in *CRO* contexts. Also, ethical frameworks for AI implementation in *CRO* remain underdeveloped. While privacy and bias are widely acknowledged concerns, there is no consensus on best practices for ensuring compliance or minimizing ethical risks (Barocas et al., 2023). Additionally, most existing studies focus on large corporations like *Amazon* and *Netflix*, with little attention to the unique challenges faced by small and medium-sized enterprises (SMEs) in adopting AI-driven *CRO* (Chen et al., 2016). Theoretical models such as TAM3 also lack constructs addressing trust and risk, which are critical for understanding AI adoption in *CRO*. Expanding these models to include such factors might close the gap and give a more detailed picture of consumer and organizational perspectives. Finally, the rapid evolution of AI technologies, including generative AI and advanced predictive analytics, has outpaced academic research. This underscores the need for dynamic, forward-looking studies that address both current limitations and emerging challenges in AI-driven *CRO*.

Based on these identified gaps, the following research questions are proposed:

1. How do customers attitudes toward AI-driven personalization and dynamic pricing affect their engagement and trust in online platforms?
2. What frameworks can businesses use to ensure ethical AI implementation in *CRO*, specifically addressing privacy and bias concerns?
3. How can small and medium-sized enterprises effectively implement AI-driven *CRO* practices within limited resources, and what adaptations are needed to address their unique challenges?
4. In terms of analyzing AI adoption in digital marketing and *CRO*, should the TAM3 model be extended to include constructs of trust and perceived risk?

### **3 Methodology**

This chapter describes the research methodology applied to address the study's objectives, providing justifications for each methodological choice. The methods discussed include the research philosophy, data collection techniques, sampling approach, data analysis procedures, and ethical considerations, all selected to ensure alignment with the research questions and objectives. This study adopts an interpretivist research philosophy, emphasizing the importance of subjective experiences in understanding phenomena. This approach is particularly suited to exploring how digital marketing and *CRO* professionals in large organizations are integrating AI into their day-to-day practices. By focusing on the participants unique roles and perspectives, the interpretivist philosophy allows for a deeper understanding of their experiences and challenges (Creswell, 2008). This approach aligns with the principles of qualitative research, which prioritize interpretation over quantification. The study employed semi-structured interviews as its primary data collection method, targeting three experts in *CRO* and digital marketing who actively had contact with AI technologies. This approach is well-suited for qualitative research, particularly when analyzing technical

and specialized topics. The semi-structured format provided flexibility, allowing the researcher to adapt questions based on participants' responses while ensuring that key topics were consistently addressed. This flexibility helped to explore the participants' practical experiences, challenges, and strategic perspectives on AI in *CRO* (Saunders et al., 2019). To recruit participants, purposive sampling was used, focusing on professionals with substantial experience in AI-driven digital marketing within large companies (Bell et al., 2022). This method ensured that the selected experts have the specialized knowledge necessary to contribute valuable insights to the study. While the sample size was limited to three participants, this aligns with qualitative research principles that prioritize depth and richness of data over broad generalizability. The detailed perspectives provided by these experts compensate for the small sample size, offering a robust foundation for understanding the research topic. The data collected through the interviews were analyzed using qualitative content analysis, which focuses on identifying recurring themes and patterns. This technique aligns with the interpretivist philosophy, as it helps to analyze subjective experiences without changing their meaning. The analysis followed a structured approach (Braun & Clarke, 2006):

**Data Familiarization:** Each interview was automatically transcribed by AI and reviewed to ensure a thorough understanding of the participants' responses.

**Identifying Key Themes:** Thematic analysis was used to categorize data, identifying recurring ideas related to the application, challenges, and future implications of AI in digital marketing and *CRO*.

**Organizing Themes:** Responses were organized around the research questions, enabling a systematic analysis that provided clear insights into each focus area.

This structured analysis highlighted the diverse applications and challenges of AI in the participants' roles while identifying similarities, offering a comprehensive understanding of the subject. The study followed strict ethical considerations to protect the rights and privacy

of participants. Each expert received an informed consent form explaining the study's purpose, the voluntary nature of participation and the confidentiality measures implemented, which can be found in the appendix. Identifying details about participants and their companies were anonymized to ensure privacy. Interviews were conducted virtually to ensure participants availability and they were informed of their right to withdraw at any time without consequences. To ensure the reliability and validity of the research, experts from different roles and backgrounds were interviewed, which allows cross-verification of findings by capturing diverse perspectives and reducing the risk of bias from any single viewpoint. A predefined interview guide ensured consistency in the topics discussed across all participants, enhancing the dependability and credibility of the data collected. The interviews were structured into six key sections: participants' background and role, current usage of AI, benefits of AI, challenges & limitations, the TAM3 model and closing reflections. This structure ensured comprehensive coverage of the research questions while allowing participants the freedom to talk about their unique insights.

#### **4 Results and Discussion**

This chapter presents the results and discussions based on the expert interviews conducted for this thesis. The objective is to analyze how AI-driven tools, particularly in Conversion Rate Optimization, are currently being implemented across different organizations. By addressing the four main research questions, this chapter aims to provide insights into the practical applications, challenges, and opportunities surrounding AI in *CRO*. The results are discussed in relation to the existing literature and theoretical frameworks, focusing on customer trust and engagement, ethical considerations, resource constraints in small enterprises, and the usage and extension of the theoretical model TAM3.

Three experts were interviewed for this thesis, each bringing a distinct perspective from their respective roles in the digital marketing and *CRO* fields.

Interviewee 1: A professional in digital marketing and *CRO* expert, responsible for landing page optimization within a financial services company. The person has over two years of experience in *CRO* and has overseen multiple successful experiments involving AI-generated content for digital campaigns (Transcript 1).

Interviewee 2: A project manager and analyst in the marketing team of an international financial service provider. The expert has extensive experience in online marketing and has worked with machine learning tools to target and optimize campaigns (Transcript 2).

Interviewee 3: A marketing expert with over 20 years of experience. The person has a deep technical background in automation and analytics and has led teams in implementing AI-based solutions for *CRO* (Transcript 3).

#### **4.1 Research question 1:**

The findings from the expert interviews reveal important insights into the impact of AI-driven personalization and dynamic pricing on customer engagement and trust. Interviewee 1 described a case where AI-generated images on landing pages significantly improved engagement and conversion rates, demonstrating the potential of AI-driven personalization. However, the expert noted that customers acceptance of AI is highly dependent on transparency and security. As Interviewee 2 mentioned, “If you give too much data to AI, it could potentially be misused in some way. Everything has to be guaranteed and secured” (Interview 2). Generational differences also emerged as a key factor. Interviewee 1 explained that older demographics tend to approach AI with more skepticism compared to younger groups. They remarked, “I would assume, in a stereotypical way, that there’s more skepticism among older age groups” (Interview 1). This is consistent with research showing that millennials and Gen Z, who have grown up in a more digitally integrated environment, are significantly more likely to embrace AI technology than baby boomers, who tend to prefer traditional approaches and are more sceptical of algorithmic recommendations. (Tsai, 2023).

Interviewee 2 highlighted the double character of AI personalization. While tailored offers and recommendations can enhance customer satisfaction, excessive personalization risks being perceived as disturbing, especially as AI is a rather new and “these things just take time because the technology often progresses faster than people adapt to it” (Interview 2). Without such communication and adaptation, customers may disengage from platforms, fearing potential privacy violations. Interviewee 3 elaborated on the risks of over-personalization, noting how recommendation systems can restrict users to narrow preferences. They explained, “It’s definitely possible that you get put into a kind of ‘cosmos,’ and then you just stay there, only receiving the same type of content that already exists for you” (Interview 3). This restrictiveness could reduce their overall engagement with the platform. In the interview the recommendations engine was used as an example, but it is the same for dynamic pricing. There is a need for companies to explain the logic behind pricing adjustments to maintain transparency and fairness was highlighted. These findings align with existing literature, which underlines the importance of transparency and control in fostering customer trust in AI-driven systems (Moin et al., 2024). Customers are more likely to engage with platforms that clearly communicate how their data is being used and how AI improves their experiences. The generational differences noted by Interviewee 1 reflect broader consumer behavior patterns, where younger users are often more comfortable with AI-driven personalization, while older users may require additional assurances of fairness and privacy. In conclusion, the data in this study suggests that customer attitudes toward AI-driven personalization and dynamic pricing are shaped by their perceptions of fairness, transparency and privacy. While these technologies offer significant potential for enhancing customer engagement and trust, businesses must ensure their implementation is accompanied by clear communication and ethical practices. By addressing these concerns, platforms can effectively leverage AI to deliver personalized experiences while maintaining customer loyalty and trust.

## **4.2 Research question 2:**

The expert interviews identified significant challenges and opportunities in ensuring ethical AI implementation in Conversion Rate Optimization, particularly in addressing privacy and bias concerns. Interviewee 2 emphasized that the person's organization operates under strict regulatory environments, which dictate how AI tools can be adopted. The expert described a structured approach where pilot projects are tested in controlled environments to evaluate risks, such as data misuse or bias, before full-scale implementation. It was mentioned, "There's an extremely long onboarding process... It can take several years until everything is reviewed and fully checked, going into the tiniest detail" (Interview 2). However, this cautious approach often delays adoption, making it difficult for businesses to keep pace with rapid advancements in AI technology. Interviewee 1 highlighted that large corporations are especially cautious in adopting AI due to potential risks to their brand reputation. The expert noted, "The brand is the company's most valuable asset. Therefore, they try to avoid taking any risks and make every effort to prevent anything new or polarizing" (Interviewee 1). The organization prioritizes the development of policies, risk assessments, and ethical guidelines to mitigate privacy breaches and avoid public backlash. These frameworks are designed to ensure transparency and accountability in AI-driven initiatives. The person also pointed to the need for industry-wide collaboration to establish standardized ethical practices, which could provide consistency and clarity across businesses. Interviewee 3 focused on the practical challenges of bias in AI models. The expert explained that AI tools, while efficient, risk continuing or increasing biases rooted in their training data. "AIs often have biases, and we've seen that often enough. They also don't always produce the truth, that's just how it is" (Interview 3). To address this, the interviewee emphasized the importance of human oversight, explaining, "You always need an expert to review it" (Interview 3). A hybrid approach that integrates AI with rule-based systems also got suggested, allowing human oversight to

counterbalance potential ethical violations and ensure fairness in decision-making processes. These findings are consistent with the literature, which emphasizes the importance of transparency, accountability, and fairness in ethical AI adoption (Floridi, 2021). Transparency ensures that stakeholders understand AI operations, accountability orders responsibility for AI outcomes, and fairness helps prevent discriminatory practices caused by biased data. The perspectives of the interviewees underscore the importance of establishing these principles into the design and deployment of AI systems for *CRO*. The interviews also highlighted the tension between regulatory compliance and innovation. While frameworks like the GDPR protect consumer rights, they apply significant challenges for businesses seeking to adopt AI technologies. This is particularly apparent in industries such as finance, where legal and reputational risks are high. The experts suggested that businesses proactively integrate ethical considerations into their governance processes, invest in employee training, and engage with external stakeholders to stay ahead of regulatory and ethical challenges. In conclusion, ethical AI implementation in *CRO* requires robust frameworks that address privacy and bias concerns while balancing innovation with responsibility. By combining difficult internal governance, industry collaboration, and continuous monitoring, businesses can adopt AI ethically and effectively. Although these measures may require significant resources, they are critical for developing trust with customers and ensuring long-term success in AI-driven *CRO* practices.

#### **4.3 Research question 3:**

The expert interviews revealed practical strategies and adaptations that small and medium-sized enterprises can adopt to effectively implement AI-driven Conversion Rate Optimization practices, even with limited resources. Interviewee 1 argued that SMEs should focus on slow improvements by leveraging affordable third-party AI tools. The interviewee suggested starting with AI applications with customer segmentation or basic A/B testing, which do not require significant infrastructure investments but can deliver measurable results. "AI is an

opportunity to replace a human component, which is often the most expensive factor” (Interview 1). This targeted approach allows SMEs to optimize their resources and achieve meaningful outcomes. However, it was also mentioned that the SME should not be too small, as “*CRO* is primarily suitable for companies or websites that have significant traffic... it doesn’t help if I have a website that gets 5 to 10 visitors a day” (Interview 1). Interviewee 2 emphasized that SMEs should rely on established platforms, such as Google or Adobe, which often include AI functionalities as part of their services. These tools are accessible, scalable, and designed to integrate perfectly with existing workflows, making them well-suited for smaller businesses. It was even stated, that “You have to adapt and learn to work with the technology rather than against it. Otherwise, you’ll be overtaken by competitors” (Interview 2). However, the interviewee also pointed out that the effectiveness of AI depends heavily on the quality of the underlying data, as many advantages of the AI tools are only “provided you have enough traffic” (Interview 2). Therefore, SMEs must prioritize building and maintaining clean datasets to maximize the impact of AI-driven *CRO*. Interviewee 3 highlighted the flexibility of SMEs as a key advantage in adopting AI technologies. Unlike larger organizations controlled by complex regulatory frameworks, SMEs can experiment with and implement tools more quickly. As the expert explained, “large companies like Google or Facebook want to 'democratize' AI and simplify it [...] they really make it very easy for the average user to integrate AI into their work.” (Interview 3). This adaptability allows them to test AI solutions in real-world scenarios and adjust their strategies based on immediate feedback. However, the expert emphasized that successful adoption also requires motivated and knowledgeable staff: “It depends on whether there’s an employee who has a connection to such things and uses them. If there isn’t someone like that, AI won’t be used.” (Interview 3). Without proper training, SMEs risk underutilizing AI’s potential, regardless of the tools accessibility (Jalil et al., 2024). These findings align with existing literature on AI adoption in

SMEs, which underlines the importance of a phased approach starting with specific, high-impact applications (Chudyk et al., 2024; Watney & Auer, 2021). This allows SMEs to slowly build expertise and confidence in AI technologies while avoiding unnecessary risks or investments. In conclusion, SMEs can successfully implement AI-driven *CRO* practices by adopting a targeted approach and leveraging scalable tools. Their flexibility allows them to experiment and adapt quickly, provided they invest in training and maintain high-quality data. By focusing on incremental improvements and collaborating with technology providers, SMEs can overcome resource constraints and enhance their competitive positioning in the digital marketplace.

#### **4.4 Research question 4:**

The expert interviews provided valuable insights into how constructs such as trust and perceived risk can enhance theoretical models like TAM3 when analyzing AI adoption in digital marketing and Conversion Rate Optimization. While TAM3 has traditionally been used to assess technology adoption through constructs such as perceived ease of use and perceived usefulness, the evolving role of AI in marketing highlights the importance of incorporating additional factors that address both user and organizational concerns. All three interviewees agreed that TAM3 is applicable for analyzing AI adoption in the context of digital marketing and *CRO*. They acknowledged the model's strengths in capturing the key elements of user adoption, particularly in its focus on ease of use and usefulness. However, there was a consensus that perceived ease of use is slightly more important than perceived usefulness when it comes to AI. This prioritization was explained with the complexity of AI systems, which require clear interfaces for a smooth adoption, particularly among users with limited technical expertise. Interviewee 3 highlighted that while usefulness remains critical, ease of use is often the deciding factor in whether businesses and users fully engage with AI technologies or not. All experts also agreed on the importance of incorporating trust into

TAM3, particularly for AI adoption in *CRO*. Interviewee 2 illustrated this with an example, saying, “I don’t have TikTok because I don’t trust the company [...] It’s not because I think the platform is not cool; if it were a different company or came from a different country, I would use it.” (Interview 2). It was emphasized that trust issues, such as concerns around data privacy, can act as barriers to adoption, even when functionality and ease of use are high. Interviewee 3 added that trust is particularly critical when AI systems are not operated locally, as users and organizations are less likely to understand and question the transparency and reliability of the technology in this context. On the other hand, “If you use it locally and understand it, then there’s no real trust risk involved. (Interview 3). This suggests that trust is even more important in cases where privacy and ethical considerations are at the heart of the issue. Regarding the inclusion of trust as a variable in TAM3, Interviewee 1 strongly supported its integration. They argued that AI, as a relatively new and complex technology, operates as a “black box” for most users, with regulations and ethical standards still evolving. This lack of clarity highlights the importance of trust in order to build confidence in both the technology and the organizations who use it. Interviewee 2 further agreed, arguing that trust is often more critical than risk. It was noted, “I don’t use TikTok because I don’t want to give them my data. But with other things, I am aware of this—I know very well how much information I am, so to speak, selling off in the end.” (Interview 2). This demonstrates that even when users are aware of potential risks, trust remains a decisive factor influencing AI adoption and engagement. Interviewee 3 added a new perspective by linking perceived risk to perceived usefulness, explaining, “If the tool has a bias—at least one that’s too significant for my purposes—then it becomes useless and unusable for me.” (Interview 3). It was emphasized, that no matter how functional a system may appear, its adoption is unlikely if the perceived risks outweigh the benefits. This perspective strengthens the connection of these constructs and the importance of addressing both trust and risk in TAM3 for AI adoption in

*CRO*. In conclusion, the interviews strongly support extending TAM3 to include trust and perceived risk as critical constructs for analyzing AI adoption in digital marketing and *CRO*. Trust addresses concerns around transparency, data privacy, and ethical implementation, while perceived risk highlights barriers such as data breaches and reputational harm. Together, these constructs provide a more comprehensive framework for understanding the complexities of AI adoption, enabling businesses to better address user concerns and generate confidence in emerging technologies. By integrating these extensions into TAM3, organizations can navigate the challenges of AI adoption more effectively, promoting trust while managing risks to achieve broader acceptance and success.

## **5 Conclusions and Recommendations**

This research explored the integration of AI technologies into *CRO* strategies, addressing their opportunities, challenges, and ethical considerations through four research questions. With global digital ad spending projected to reach \$798.7 billion by 2025, AI adoption in *CRO* has become a strategic necessity for businesses. This research demonstrates that while AI offers unmatched opportunities for personalization and efficiency, its successful integration requires addressing challenges such as trust, transparency, and ethical considerations. These findings emphasize the crucial role AI will continue to play in shaping the future of digital marketing. These insights offer practical recommendations and highlight areas for further research. In relation to Research Question 1 on customer engagement and trust, the findings revealed that AI-driven personalization and dynamic pricing significantly enhance user engagement and conversion rates by delivering tailored experiences. AI's ability to analyze huge datasets and deliver highly specific, real-time recommendations has revolutionized how businesses interact with their customers. However, these benefits are dependent upon transparency, fairness, and clear communication. Customers trust and engage more when they understand how their data is being used and perceive the system as fair and respectful of their privacy. This aligns with

existing literature emphasizing the importance of trust in AI systems (e.g. (Moin et al., 2024)). Especially the interviews highlighted generational differences: younger users are more open to AI, while older users require more transparency and ethical assurances. For example, gamified learning modules and interactive experiences could appeal to Gen Z, who are more used to playful, engaging interactions. Meanwhile, Millennials and Gen X users, who often prefer more visual and informative content, could be reached through well-designed video tutorials that explain how AI-driven personalization works and the safeguards in place to protect user data. Decision-makers should prioritize developing communication strategies for diverse demographic groups, ensuring that all users feel informed and respected. This would not only improve user engagement but also develop long-term trust and loyalty, ultimately benefiting brand reputation and customer retention. Furthermore, businesses should focus on proactive measures to educate users about AI applications and their benefits, reducing fears about manipulation. The integration of trust and transparency is critical not only in *CRO* but also in the broader adoption of AI systems across industries. The generational gap highlighted in this research suggests that trust-building strategies need to be dynamic and adaptable to the concerns of different user groups. Additionally, the ability of AI to provide transparent, ethical, and explainable interactions could set a benchmark for other sectors where trust is equally critical. For example, healthcare and finance also rely heavily on increasing trust to gain user acceptance, making the insights from this research transferable to those fields. The study also addressed Research Question 2, which focused on ethical considerations and biases in AI-driven *CRO*. Here, key findings highlighted challenges such as data privacy concerns, algorithmic bias, and the complexity of complying to regulatory frameworks like the GDPR. The legal landscape surrounding AI adoption adds another layer of complexity for businesses, particularly as consumer data becomes increasingly valuable. While the literature discusses the importance of transparency, accountability, and fairness (e.g. (Floridi, 2021)), the

interviews added a practical dimension by showing how regulatory compliance, even though it is essential, can delay AI adoption. For example, businesses employing risk-assessment frameworks to test AI systems often struggle to keep pace with technological advancements and may find it difficult to achieve a balance between innovation and regulatory compliance. Additionally, the interviews highlighted that bias in AI models requires continuous monitoring and the integration of hybrid approaches, where human oversight supported algorithmic decision-making. For decision-makers, this means investing in robust governance structures, allocating resources for AI audits, and ensuring that ethical guidelines are implemented into AI design and application processes. Collaborating with regulators and industry competitors to establish standardized frameworks and best practices could also simplify compliance efforts. These collaborative entities could include regulatory bodies like the European Data Protection Board, industry coalitions such as the Partnership on AI, and universities leading AI ethics research. By involving these stakeholders, businesses can ensure a harmonized approach to ethical AI implementation, benefiting both users and the industry as a whole. The findings on algorithmic bias and privacy concerns highlight the need for interdisciplinary approaches to ethical AI governance. Sociologists and psychologists could provide insights into how cultural norms and individual biases influence perceptions of fairness in AI systems. For example, societal attitudes toward automation and privacy may vary across regions, requiring localized approaches to governance. Ethical frameworks established in philosophy, such as fairness and inclusion, might influence the development of more inclusive and fair AI systems. Incorporating these perspectives can help businesses and policy-makers anticipate user concerns and design systems that resonate with diverse audiences. Research Question 3, which investigated how small and medium-sized enterprises can adopt AI-driven *CRO*, was addressed by researching that SMEs could use economical third-party tools. The study shows that starting with AI solutions that offer immediate and measurable results, such as customer

segmentation and A/B testing, enables SMEs to achieve improvements without overextending their resources. These findings align with the literature that supports accessible AI adoption for SMEs (e.g. (Chudyk et al., 2024; Watney & Auer, 2021)), but the interviews underlined the importance of maintaining clean datasets and investing in staff training. Additionally, SMEs flexibility was identified as an advantage, enabling them to adapt AI tools quickly and experiment with innovative approaches. Decision-makers in SMEs should focus on prioritizing scalable solutions, such as AI platforms with built-in *CRO* functionalities, while investing in workforce upskilling to maximize the potential of these tools. Policy-makers could also play a role by providing funding or incentives for SMEs to adopt AI, helping them remain competitive in a rapidly evolving digital marketplace. Furthermore, partnerships between technology providers and SMEs could create customized solutions tailored to the unique needs of smaller businesses. To further educate SMEs, specific case studies of successful AI adoption could serve as practical roadmaps. For instance, small e-commerce businesses adopting tools like *Shopify's* AI-driven product recommendations or local marketing agencies using *HubSpot* for automated campaign management demonstrate the potential of accessible technologies (Hubspot, 2024; Shopify, 2024). Such examples offer practical advice for SMEs while highlighting the need for clear, measurable goals during AI adoption. Additionally, these case studies could serve as a foundation for future research, identifying the common practices that enable resource-constrained organizations to maximize AI benefits. Finally, the study explored Research Question 4, which focused on extending the TAM 3 to better analyze AI adoption in digital marketing and *CRO*. The findings strongly supported the integration of constructs like trust and perceived risk into the model, as both, but especially trust, were identified as a critical variable of AI adoption. This resonates with literature emphasizing the role of trust in emerging technologies (e.g. (Grewal et al., 2020)), but the interviews added depth by showing how perceived risk can undermine even highly

functional AI systems. For example, if users perceive AI as a “black box” or have concerns about data security and algorithmic transparency, their resistance to using it might continue despite its shown benefits. Decision-makers should therefore focus on transparency initiatives, such as explaining how AI algorithms work, providing clear explanations of their decision-making processes and ensuring ethical practices are communicated to both users and stakeholders. By addressing trust and perceived risk proactively, businesses can improve the likelihood of successful AI adoption, increasing confidence in their technology. Here, emerging technologies, such as Explainable AI , have the potential to address many of the trust and transparency issues identified in this research (IBM, 2024). Explainable AI tools allow users to understand how algorithms led to a specific output, boosting greater confidence in AI systems. Similarly, federated learning models could improve privacy by allowing data to be processed locally, reducing concerns about data breaches. These improvements highlight the need for future study on their influence on user trust and engagement across diverse industries. The findings have larger implications in academic and practical situations. Academically, they underscore the need for further research that addresses the sociotechnical dimensions of AI adoption, including insights from psychology, ethics, and technology studies to better understand the aspects of trust, demographic variations, and regulatory impacts. Future studies could investigate how trust-building measures affect long-term customer relationships and business outcomes, particularly in industries where AI adoption is just beginning. The study also extends theoretical frameworks like TAM3, recommending new approaches for understanding user and organizational behavior in the context of advanced technologies. These adapted models could serve as a foundation for future studies exploring the dynamics of trust, risk, and user engagement in more complex AI-driven systems. In real-world contexts, the findings highlight that decision-makers in businesses, particularly SMEs, should adopt a strategic approach to AI deployment, beginning with slow resource-efficient

solutions that correspond with their individual requirements and capacities. Large enterprises, on the other hand, must balance the demands of regulatory compliance with the need to innovate by investing in governance frameworks and collaborating with industry competitors to establish ethical standards. For policy-makers, the research highlights the importance of creating balanced regulatory frameworks that safeguard users while boosting innovation. This could include implementing targeted policies to encourage ethical AI use and creating platforms for cross-sector collaboration to solve shared difficulties in AI governance. To further improve the practical usefulness of these findings, businesses should prioritize creating an internal culture that embraces continuous learning and ethical responsibility. By empowering employees with the knowledge necessary to work effectively with AI tools, organizations can ensure that technology adoption aligns with both strategic goals and ethical standards. Furthermore, decision-makers should remain flexible, constantly monitoring the changing technology scene and adapting their strategies to maintain a competitive advantage. Despite its contributions, this research is not without limitations. The small sample size limits the diversity of perspectives captured by the interviews, even for a qualitative study. This limitation means that the findings may not fully capture the range of views and experiences across different industries or organizational contexts. Future studies should aim to include a larger and more diverse group of AI and *CRO* professionals to confirm and extend the findings here and ensure a broader understanding of the topic. In addition, future research could explore cross-cultural differences in AI adoption to uncover how cultural differences influence perceptions of trust, transparency and personalization in AI-driven systems. Long-term studies would also be valuable to provide deeper insights into how businesses adapt to emerging challenges and opportunities over time. Exploring sector-specific challenges in industries such as healthcare, finance or retail could provide particularly valuable insights, as these sectors uniquely combine high trust requirements, strict regulatory environments and significant

potential for AI-driven innovation. As AI technologies advance, the next step for *CRO* will involve using new innovations such as generative AI, adaptive learning systems, and federated learning. These improvements will enhance customization while addressing ethical concerns through transparency. Future research must continue to explore these technologies' potential, ensuring that AI adoption aligns with societal expectations and contributes to a more equal digital economy.

In conclusion, this research highlights the transformative potential of AI in *CRO* while addressing its ethical and practical complexities. By prioritizing transparency and fairness, businesses can enhance user trust and engagement. SMEs can utilize the power of AI through targeted, slow strategies, while policy-makers can support responsible innovation by establishing industry-wide standards. These efforts, supported by further academic research, will ensure that AI continues to drive innovation in *CRO* while aligning with societal expectations and ethical standards.

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## 7 Appendix

### Consent of the interview participants:

The following is the interview consent form provided to all experts who participated in this study. All consent forms were signed and returned by the respective interviewees. However, to ensure anonymity and protect their personal data, the signed versions are not included in this appendix.

**Researcher:** Lukas Wabnegger

**Institution:** Nova School of Business and Economics

**Contact Information:** 58891@novasbe.pt

**Purpose of the Study**

This research aims to explore the use of Artificial Intelligence (AI) in digital marketing, with a particular focus on Conversion Rate Optimization (CRO). The study seeks to gain insights from industry professionals on current applications, challenges, ethical considerations, and customer attitudes toward AI-driven personalization.

**Voluntary Participation**

Participation in this study is entirely voluntary. You are free to decline participation or withdraw at any time without providing a reason.

**Confidentiality**

Your responses will remain strictly confidential. To ensure anonymity:

- Your identity and any data that could identify you or your company will not be disclosed in the final report or any publications.
- Data will be anonymized, and only aggregated results or de-identified quotations may be used.

**Procedure**

If you agree to participate, you will take part in a one-on-one interview lasting approximately 20-30 minutes. The interview will cover topics such as your role in digital marketing, experiences with AI technologies and challenges. The session will be audio-recorded to ensure the accuracy of the data, but only with your permission.

**Questions or Concerns**

If you have any questions about the study or your participation, feel free to contact me at 58891@novasbe.pt.

**Consent Statement**

I have read and understood the purpose and nature of this research. I agree to voluntarily participate in this study, understanding that I can withdraw at any time without penalty.

I understand that my identity and the identity of my company will remain confidential. I consent to the interview being audio-recorded (if applicable).

- **I consent to participate in this study.**
- **I consent to the audio recording of my interview.**

Participant's Name : \_\_\_\_\_

Participant's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **Transcript interview participants:**

### **Expert 1:**

Transcript 1:

*It is important to note that the original interview was conducted in German. It has now been translated into English and the German terms have been adapted to suit the content.*

*At the beginning, there was a personal introduction between Lukas and the Expert, which is not included because of data security.*

Lukas:

But first of all, thanks so much for taking the time today. Just as a rough introduction: this interview is automatically recorded, and everything will be fully anonymized. Anything private will be cut out, and, of course, your employer's name won't appear either. The first part of the interview with your name and personal details will also be anonymized. This is automatically written out by Teams, so I don't need to transcribe anything manually.

Expert:

Great, perfect.

Lukas:

The topic of my thesis is Conversion Rate Optimization (CRO) with the help of AI, and you are one of the experts I'm interviewing to explore this field in more detail. I'll send you a quick consent form after the interview, which includes all the formalities, such as where you can contact me if you have any questions. We just need to sign that in the coming days—I'll send it via email.

Other than that, everything is clear from my side. I've divided the questions into categories: first, we'll get to know a bit about you and your role, then we'll cover the advantages and

challenges of AI. The whole thing should take about half an hour, depending on how things go.

Expert:

Perfect.

Lukas:

Great. Then let's get started.

So, first off: Could you briefly introduce yourself? What do you do, and what's your current role?

Expert:

Yes, so I've been responsible for all of our acquisition landing pages for more than two years now. And the big goal, in the private customer business of a financial services company, is to optimize the acquisition, landing pages, and websites in such a way that the conversion rate increases.

I believe that over the past two years, I've achieved very, very significant successes. These have definitely had a major impact on our PnL (Profit and Loss).

On our acquisition side, I think we've repeatedly conducted tests, and we've managed to achieve a lot. For example, we've actually doubled the conversion rate compared to the control variant. And yes, I think we're definitely on the right track.

I just recently received an evaluation. This year alone, we've implemented 30 to 40 tests, and roughly half of them have been successful—or we evaluate them as successful—because the increase in the conversion rate has reached a level of statistical significance.

But yes, I also have to say that we actually evaluate all of our experiments that we

implement as, well, let's say, meaningful and successful because they all generate useful information in some way or another.

Lukas:

Have you had any experiences in the last few weeks or recent projects where you have also used AI or AI for CRO in particular?

Expert:

Well, I don't really know. I think we need to differentiate this clearly. So, we did use AI in the broadest sense—or rather, we actually just used AI-generated images.

We specifically used these images on an acquisition learning page, or rather, on a landing page where we exclusively used AI-generated images.

And we tested these against another version that used traditionally shot or stock images.

This was very successful.

Whether it's because these images were AI-generated?

I'd be skeptical about that, but it does show, in any case, that they can compete with traditionally shot, purchased images.

Does this now represent AI?

Well, I wouldn't go that far. We didn't use any specific tools or anything based on that, nothing like that. We only used images that, yes, were created using—or that originate somewhere in—some kind of generative AI tool.

Lukas:

So AI doesn't play a major role in your normal, day-to-day business?

Expert:

Well, the background here is probably that I work for a large global company or corporation, which is generally very restrictive because, of course, the brand carries a lot of weight.

All costs need to be protected somehow, or, well, the brand is the company's most valuable asset. Therefore, they try to avoid taking any risks and make every effort to prevent anything new or polarizing.

In terms of public perception, this still needs to be limited or avoided until a solution has been found—some way to handle it. And this solution will probably take the form of some kind of policies, questionnaires, or clearly structured processes. So far, though, this doesn't really exist or is only present in initial stages or pilot projects.

And that's why, at the moment, anything that carries the name 'AI' is largely prevented and, yes, effectively rejected or prohibited, so to speak

Lukas:

Mhm could you imagine, once you've explained it a bit more more mature, that AI could be used well for customer analyses or content recommendations, for example?

For example, if you segment customers and divide them into different groups, an AI could also do that well, that you divide them into different groups and then everything is done by the AI.

Expert:

Yes, absolutely, definitely.

I also don't even know if this is really AI, or where the boundaries are when it comes to the designation—whether this is still Machine Learning AI or just some, well, some kind of

technology or algorithm behind it. So whether it really requires AI, I don't know. But it's certainly very, very useful. We work a lot with data, and we have a vast amount of data. Every day we have thousands of landing page or website visits, and each individual visitor generates data. It's critical for us to use this data properly, to process it, analyze it, and draw the right conclusions.

Of course, without tools, it's impossible for us humans to manage this—so any tool that helps process and analyze large amounts of data is definitely helpful.

In my job and my role, artificial intelligence definitely has its place—100%, without a doubt, even in your areas.

Personalization is a big topic, ensuring that the right customer or customer group gets the right information. I also think this is a massive issue—making sure that the customer feels addressed with the content we provide, or that it helps them in their purchase decision process, wherever they currently are in that process.

We can also see very clearly that our landing pages or websites should actually be set up differently depending on the channel. Because customers, or prospects, depending on the channel they're coming from—when they visit our crisis pages, for example—are already in a different stage of their purchase decision process.

So, for instance, if a customer lands on our landing page via an affiliate partner or publisher, then they are already very well informed. They know our product extremely well—sometimes even better than we do in terms of its advantages, individual benefits, or costs. At that point, it's really just about converting them—avoiding distractions as much as possible and no longer trying to cross-sell other products or switch their focus. Instead, the goal is to guide them smoothly toward completing their purchase decision without unnecessary distractions.

Lukas:

Do you think you can help with what you're just explaining, something like dynamic pricing, where the computer recognizes that you know the AI OK, it already has a lot of prior knowledge or that it's already had a lot of tips to automatically switch better offers compared to a new customer who is on the website for the first time.

Expert:

es, that's definitely also reasonable in that direction.

I would perhaps add another aspect here.

Because in our financial services sector, we also offer the customer something, of course, to a certain extent.

It's very important for us that the customer gets a very, very good rating from us.

We don't accept every customer and reject many customers as well. That depends on how their rating looks, or, yes, how their Schufa score looks and what their monthly or annual income is.

I'm not entirely sure where this is going, but we have a very complex algorithm that categorizes our applicants and then decides whether we accept or reject the customer. And certainly, under this aspect, Dynamic Pricing is also absolutely reasonable so that we can primarily bring in the customers we want.

I also think that targeting correctly here—identifying the right persona or target group—can be very helpful. This applies to both improving the conversion rate and, almost, to D-marketing efforts as well.

Lukas:

Mhm, thank you , this was the first block, now let's move on to the advantages, you've

already mentioned effectiveness as a major advantage, what do you think are the other major advantages that AI could bring for Cro?

Expert:

With various tools, you could simply be in a position to test much, much more, much faster, and generate a lot more content in a very short time, and then test that as well.

If, however, the human component simply isn't needed anymore, then I believe that you can generate a wide variety of options within a very short time.

There may also be aspects that get included which humans wouldn't even think of.

For example, adjusting components of a landing page or website that aren't initially visible to us or to the human eye.

I think creativity will simply increase significantly.

And yes, I also think it's just—yes.

This increased variety, time savings—

And maybe also a combination of various components.

For example, conducting multivariate tests instead of focusing on just 22 variations.

Yes, exactly.

Lukas:

Mhm, I very much agree with you on what you said. Another question that comes to mind is how customers actually react to this. For example, if everything is highly personalized by computers- or maybe, in your example with the pictures on the landing pages, do you think that this might have somehow impacted the customers' trust? I mean, if they know that everything is generated by computers?

Expert:

Yes, I think that's a really, really difficult question. I believe it's absolutely dependent on the individual—most likely completely dependent on the person. It could also be somewhat generational, where there are differences, and I would assume, in a stereotypical way, that there's more skepticism among older age groups.

I think there are actually analyses or studies showing that when it comes to things like chatbots, for example, if people know they're interacting with AI, there are different reactions. There are even quite a few positive aspects or successes where people sometimes prefer to interact with AI rather than a real human service representative.

So, from that perspective, I think it's extremely difficult to answer. It's definitely very person-dependent—that's the biggest difference.

There's probably also something in the target groups, something that people—or potential customers and prospects—first need to get used to. They need to be trained, so to speak, so that it becomes something normal for them.

Yes, but I think at this point it can't be easily answered. Personally, I wouldn't have a problem with it—if I were part of the target group, I'd say, 'Cool, that's a tech-savvy and technologically advanced company.' I'd actually respect that and consider it a good thing—as long as it doesn't feel alienating."

Lukas:

Yes, it has already become a part of our everyday lives for quite some time now. For example, Netflix does this too, with the automated suggestions for movies that are proposed to you based on what you watch most frequently. But I think we've now reached a pretty smooth transition – we had all the positive numbers, and now we're moving to the negative aspects. What do you think could be the biggest challenges when trying to integrate AI for CRO now?

Expert:

So, what I mentioned at the beginning, I think many large corporations are very, very restrictive – or rather... They are currently very skeptical at this point in time. I think, naturally, the question is also: who is it? Who is the provider of the tool, or the artificial intelligence in this sense, and where is the data stored? I think this is certainly a question that needs to be answered to satisfy the company because I believe no company wants to hand over its data somewhere. I think that's an important factor.

On the other hand, of course, the provider or manufacturer of a tool or software naturally wants to have access to this data, as they need it to optimize or further develop their product in some way. That's where I remain skeptical.

When it comes to solutions, I honestly don't even know – I'm not that informed about what tools are currently on the market that can somehow calibrate and be used for Conversion Rate Optimization. There also need to be the right possibilities for this.

Yes. I think, yes – and this is exactly where the problem lies.

At our company, I see very, very big hurdles. When it comes to processes – that is, before we are allowed to use a tool that even just carries the name 'AI' or includes it in its initial description, a lot of people in our company immediately pay attention. They carefully analyze and try to understand in great detail what it is about and attempt to shape the processes in a way that the benefits this new solution could bring are essentially nullified. Because everything that makes it thrive – the flexibility that such a tool needs to fully develop – is completely restricted.

Lukas:

Thank you, you touched on the topic of data protection, do you think that bias, for example, can also play a major role in AI?

What could become an important topic for you in the future?

Expert:

Yes, 100%, I think we are very biased, so who? Who are the leading companies today?

When it comes to AI tools, they are all some kind of American tech companies. Google is investing billions into its products, and OpenAI is incredible. It has extremely high funding. I believe these are the major players that are currently shaping the AI narrative and will continue to do so in the future.

For us, it's about who we associate with AI. It's generally linked to the major players, so we automatically associate AI with these companies.

Going one step further, this data, or rather these companies working on AI, are also the same companies where the topic of data privacy has always been critically tied. For instance, Google – I think there's no need to reintroduce this topic – everyone already knows the dangers or concerns associated with it.

Regarding data privacy, I believe Google and Apple could paint a perfect picture of each one of us. This issue of data privacy is certainly viewed critically, especially from the European side. How these companies handle data privacy is considered very critically in Europe.

And I believe when you combine the two – who is working on AI and how these companies are perceived in public opinion in Europe – then you already have strong prejudices that naturally affect it.

When you then close the circle, I think many people view the use of AI very critically, especially when it comes to being applied to their own behavior. I believe that AI is already seen critically, and it might even be seen more critically as people gain a better understanding of AI.

Lukas:

Mhm very good answer.

Another question, you've already indicated that mostly larger companies can use the whole thing because they simply have more money and more data.

Somehow, how can small companies approach this if they want to implement AI for Cro or how can they overcome this because the data set is much smaller and the budget is much smaller.

Or would you say they should stay away from it?

Expert:

Well, I don't really think so. I actually believe that smaller companies probably have an easier time integrating tools and using them because they don't have to comply with the same processes or restrictions that larger companies face from a management perspective. Instead, they are freer and more flexible when it comes to adopting and using tools.

In that sense, I think this is actually an advantage for them—being freer.

I also can't imagine that AI tools are much, much more expensive than other alternatives. I don't really believe that. I think AI is an opportunity to replace a human component, which is often the most expensive factor. Therefore, I actually assume that AI might even be more cost-effective or at least result in cost savings. Additionally, I believe CRO is primarily suitable for companies or websites that have significant traffic.

So where there's already a certain base population that can be analyzed. I mean, it doesn't help if I have a website that gets, I don't know, 5 to 10 visitors a day. I simply don't have enough data to make a meaningful decision based on that—at least by today's standards.

I think it's possible that AI is also capable of analyzing smaller datasets and deriving decisions from them, because it's not necessarily tied to the two basic options that we often

have with A/B testing. Instead, it could possibly account for multiple components or variables.

So, I wanted to say very briefly that I don't think it's easier for larger companies.

Of course, with a marketing budget you can quickly make various expensive investments that don't necessarily have to be successful and you probably don't have the same pressure to succeed as smaller companies.

But I think there are also advantages to being more of a small company, and in some respects we have a little more freedom to work more flexibly.

Lukas:

Noted, thank you. Now for the last big block of topics that we have, because in the course of my literature analysis I also had to find a big, so a framework, where you can use very well for this topic and for this I picked out the TAM model, so the Technology Acceptance Models tells me that quite by chance.

Expert:

No

Lukas:

I will explain it to you. I've shared a photo with you so that you have a very broad overview and I need your opinion - there's no right or wrong, just the way you see it at first glance, in general terms.

The whole model is a bit older, dating back to the 1980s, and it's more or less about why a person would use a technology or not.

And there are two main variables here, which in your case in the photo are perceived

usefulness and perceived ease of use, which in your case in German simply means user-friendliness, perceived usefulness and perceived ease of use, for example, as you can see on the left with all the sub-variables, if the subject.

Exactly, so the one on the far right simply means that you want to use the technology has 2 sub-variables, the 2 on the left are perceived usefulness and perceived ease of use, i.e. simply the user-friendliness, the perceived and perceived usefulness in general and that has a lot of sub-variables, for example OK.

Many people will now say that the subjective norms, Chat GPT is really good, then an image about Chat GPT is automatically better, which in turn simply increases the Perceived Use Funders, i.e. the perceived usefulness of this technology, i.e. roughly speaking the 2 main variables with several sub-variables.

And now my first question would be do you think that one of the 2, i.e. the perceived usefulness or the perceived ease of Use is more important?

Or do you think they are both equally important at first glance if you want to use a technology?

Expert:

It really depends a lot on the user. Initially, I believe that, in a professional or job-related context, the use of tools must first and foremost make sense—that's extremely important.

So, I would assign a higher level of importance to the upper component.

When it comes to rolling out a technology on a large scale, like implementing or introducing something like the latest Apple Vision Pro technology and selling it to a large audience, I believe it becomes decisive.

Of course, A: the technology needs to be available and offer some added value. But B: it's at least equally important—perhaps even more so—that it is user-friendly. And this is

especially true when competing against substitute products.

Hmmm..

On the other hand, if we're honest with ourselves and think about it for a while, usability—so, the lower component—becomes increasingly important.

Clearly, if you approach this rationally, usability should actually play the more decisive and significant role

Lukas:

Great point. Do you think anything is missing from this model, like barriers or trust factors?

Expert:

First glance, I thought of certain barriers, like what holds someone back from using this technology.

Well, it could be that a product appears incredibly useful to me, takes a lot off my plate, and I can work significantly more efficiently—or it already answers the question in itself—but the barriers are obvious.

The faster one could work with it, the easier it is to use the technology.

So Yes, maybe barriers that prevent the use of technology. Barriers in terms of regulations or costs.

Lukas:

That's a good point.

Otherwise, in the literature part of my thesis, I wrote down two points that I think could have an impact and I would need to ask for your opinion.

One point is trust, because in my opinion trust is crucial, especially in contexts when you share personal data and since AI is somehow still often seen as a black box, I think trust is a big key factor that I don't see included in all the search variables and I wanted what you think about this?

Expert:

Yes, yes, I think trust is a great point

It's always good when it comes to new technology or, in general, new products.

I think you have to...

Well, first you need to have some initial trust or some sort of leap of faith to then start using new technology, right?

Yes, because once you use it, you have to trust it. So, I think that's actually a good point, yes.

Lukas:

And the second point goes in your direction of the barriers, that you are missing the lack of focus on the risk because.

For example, there are no data protection violations, security concerns, ethical problems that are somehow analyzed in detail, and it may be that users, for example, consider the technology to be useful and use it right from the start, but are still unable to use it because they are afraid of the potential consequences.

But I think that goes hand in hand with the barriers in your case, if you've understood that correctly.

Expert:

Well, risk complements that quite well, I think.

When it comes to new technology, I believe that a lot is still possible.

Because, with legislation—well, I currently see legislation as an additional component when we talk about AI.

Right now, it's like the Wild West. You can just use AI—companies are throwing their tools onto the market, and you can use them. You can use AI-generated images.

Are there really clear regulations or something like that? Not really.

There are court rulings going in all sorts of directions; it's somewhat of a gray area.

And now, bit by bit, there are these European AI Acts, certain regulations or guidelines that restrict the use of AI in some way.

And that's, of course, a risk, something you can't really consider when you're still at a very, very early stage of AI development or implementation.

Lukas:

Perfect, that were all my questions. Thank you very much for your time....

*At the end, there was a personal chat between Lukas and the Expert, which is not included because of data security.*

**Expert 2:**

Transcript 2

*It is important to note that the original interview was conducted in German. It has now been translated into English and the German terms have been adapted to suit the content.*

*At the beginning, there was a personal introduction between Lukas and the Expert, which is not included because of data security.*

Lukas:

Perfect. So, to begin, could you share some insights into your role and experiences in CRO or digital marketing? Just so I can get a bit of background about you.

Expert:

OK. Mhm. Well, I studied economics and focused on marketing and IT. While studying, I worked as a student assistant at a marketing consulting agency, which was my first exposure to online marketing. After my bachelor's degree, I joined one of the world's largest marketing agencies and worked in the Ad Operations and Campaign Management team. There, I got deeper experience in everything related to AdTech and marketing. We worked heavily with Google – the entire Google Marketing Platform and its tools. We also used Adobe a bit, but primarily Google because of the contracts and client preferences.

After four and a half years, I moved to my current company, a large financial services corporation. Here, I work in the acquisition and marketing team as a project manager and analyst, and I'm also responsible for many AI-related topics.

Lukas:

Perfect. Did you have your first experiences with AI specifically in digital marketing or CRO during this time?

Expert:

Yes, my first experiences were during my time at the agency, mostly involving machine learning, especially through Google. We used machine learning in Google Analytics, and other teams, like the programmatic team, also relied on AI. For example, they worked with Google's DV360 and MediaMath DSPs, which offered AI targeting. While I wasn't directly involved operationally, you could already see how AI supported people's work. AI made targeting far more intelligent and efficient. That will then be a very strong efficiency gain, as it can already be seen with the customers, that it was possible to buy more cheaply, more quickly and the targeting was also much more specialized.

Lukas:

Do you happen to have an example of where AI has had a special influence on your work in recent weeks or in recent projects?

Expert:

Well, now that I'm working in a large corporation, everything has become a bit more difficult due to regulations.

We can't just use any tool, especially when it involves artificial intelligence. I can say, though, that even if we wanted to use a certain tool from one day to the next, it's much more difficult to make that happen in a professional context.

For example, let's take Google again: if Google uses AI and I use Google, then that's allowed, but only because of the global or centrally negotiated contracts we have with them. So, we are allowed to make use of those features that are part of Google's offering, and they are included automatically.

However, there isn't really anything specific I've directly worked on with AI; it's more like those AI features are 'along for the ride' as part of the broader toolset we use.

Lukas:

OK, so in your day-to-day business, would you say AI doesn't play such a big role for you?

Expert:

At the moment, not yet.

We're pushing for it, we want it, and we'd love to do more and make greater use of it. The opportunities that exist are just so unbelievably vast, and we would love to move faster. But because of regulatory governance and so on, we simply can't do much right now.

There are projects—I'm also aware of projects—where our company is testing and working on this. For example, selected teams are allowed to work specifically with AI, and they are testing it. It is being monitored, and they're checking: Was it successful?

Are there any problems? Do we perhaps need to set new standards or put new regulations in place so that other teams can work with it as well?

But unfortunately, this process takes years—really, years—before new technology reaches all teams and is actually allowed to be used. And then, most of the time, it's not everything that becomes available but only specific tools or specific providers.

And then, as you know, by that point, it's probably already outdated, and there's already new technology that's more up-to-date or has more power.

So, I have to say that, unfortunately, in day-to-day business, I currently apply very little AI. Instead, as I mentioned, it's more as part of other tools, like those from Google or Adobe

Lukas:

great, thanks! so that's the first block.

Now the second big block is called the advantages of AI for digital marketing and for crow.

And that's where I have the first rough question: what do you think are the greatest strengths of AI in the specific area of crow or digital marketing?

Expert:

So, I would say as Point 1,

Efficiency, especially when it comes to costs, because there is simply more intelligence involved, and it can reduce costs, which wouldn't be possible through more manual processes.

Yes, speed—precisely this entire drive for efficiency. I would say that's the biggest advantage.

The main benefit—I'm just considering what else it could be—it could also be recognizing connections that one wouldn't immediately notice as a human.

Something that could maybe even replace a kind of brainstorming. Of course, you still need a human to evaluate it, but I think you can get many ideas that you wouldn't have thought of otherwise, or that you would have reached much more slowly. It broadens your horizons to some extent.

But ultimately, it really is primarily about speed, about relieving processes, or just doing a lot of work much, much faster.

For example, the employee, the human, then has more time for other topics when very specific tasks can be taken over.

For instance, as it is now, if you're talking about creating advertising materials: you say to AI, 'I need the standard banner sizes from this image,' and it can generate them for you within seconds—something that would otherwise take several hours for the employee. Then, of course, the employee can use that saved time for other things and focus on other priorities. Yeah.

Lukas:

Do you have AI can help specifically when it comes to customer targeting, or can you imagine that if you now have such specific groups, AI could help a lot with those customers? Or do you think it would be rather difficult for artificial intelligence to do that?

Expert:

Yes, it's certainly possible. Just these iterations alone—you could practically create an infinite number of iterations and versions of a page, or really any possible digital asset that you can test. But, of course, you have to make sure it's controlled because there's always room for errors. AI isn't perfect yet, it doesn't work entirely error-free. But you could create a very, very large number of assets in a very short amount of time and test all of them—provided you have enough traffic to test them properly.

So this could bring an enormous relief, especially for something like this. And it's sometimes just a matter of millimeters, like if we're talking about a mobile site, for example, and the call-to-action button is placed just a few pixels higher or lower. You could test endlessly, and if you have enough traffic, you would have results.

Of course, it might not make sense to test everything simultaneously, but you could keep optimizing—constantly, permanently testing everything. And I can definitely imagine that, provided you have enough traffic, and assuming the user base supports it, that you could optimize everything down to the smallest detail with a solid data foundation.

Lukas:

Could you imagine, or perhaps you have already experienced, that this is then done to too high a degree, for example, that the trust or commitment of the customers then becomes a little lower, because you realize that everything is just controlled and is no longer really done by people?

Expert:

Yes, certainly. I haven't really experienced it myself in the business context yet—or at least not so much. I'm trying to think about whether I've encountered it before, like when we talk about chatbots, for example. In the end, there isn't a real person answering the questions behind that system.

I can definitely imagine that something like this simply needs time—time for society or the potential customers to develop alongside it, to get used to it, and to also accept it. These things just take time because the technology often progresses faster than people adapt to it.

Some people might be a bit more open or quicker to adapt, while others are more resistant or reluctant. They're simply not as adaptable yet. But I believe that, in the long term, AI will win out. It will become more widely used and increasingly adopted over time.

It will make business processes easier, and ultimately it will be accepted by customers because it also makes their customer experience easier. For example, if we're talking about chatbots: if you, as a potential customer, can find your information much faster and more easily, you'll naturally have a better experience. You'll be more satisfied and happier, and you'll be more likely to make a purchase or complete a process than if you encounter a poorly designed website with a bad user experience.

Lukas:

I completely agree with you and that brings us to the next block of topics.

We now have the positive things, now we can sort of move on to the challenges or limitations that exist and of course the first rough question you have there is about the integration of AI, have you come across anything by chance, but or could you at least imagine where this could become problematic?

Expert:

So, at this point, there are already quite a few regulations and legal aspects, such as the EU AI Act, and as a company, you obviously have to check what exactly needs to be fulfilled and what requirements need to be met.

What do we need to monitor, what do we need to control? What happens if there is an audit—what exactly do we have to provide? What questions do we need to answer?

Everything regarding data protection also becomes extremely important.

What would the AI have access to?

Which data do you need?

Which data would the AI have access to?

What could the AI do with this data?

There is always some fear associated with this—that if you give too much data to AI, it could potentially be misused in some way. Everything has to be guaranteed and secured; it already starts with where the servers hosting the AI are located.

In which country are these servers?

How is the data being transferred?

These are all issues that companies must deal with, and it can represent a huge barrier to implementing AI. If clearing this hurdle already involves so much effort and work, I can imagine that not all companies have the capacity to go through this process.

Either it becomes a question of costs, or it risks being at the customer's expense if something isn't properly secured. This could potentially lead to data leaks, for example, or even worse scenarios. For some companies, this is already so discouraging that they might not even start the process or deal with it at all.

From my perspective, this is currently the biggest issue within companies.

The main problem is simply that establishing AI in a company requires so much effort to review and verify in every respect.

Risks are also a big consideration here. For example, AI is ultimately not controlled by a person, even though it may have initially been created or programmed by humans.

Hopefully, this has clear boundaries that are adhered to.

There are also moral considerations. As a company, you need to question whether you want to engage in this or not, particularly in cases like AI-generated images. Should a company want to use such technology, or is it preferable to maintain some distance from reality? This needs to be a deliberate corporate decision, or at the very least, it should be questioned.

What if there's a potential shitstorm? Companies need to consider their reputation—does using AI align with the company's brand vision? Could it damage the brand if potential customers find out about it? These are valid concerns because there could be many problems associated with using AI.

Finally, it also has an impact on employees. If you want to work operationally with AI, people must also know how to use it effectively. For instance, when working with prompts: If employees don't know how to prompt the AI, it won't be used efficiently, and all the potential benefits of AI will be lost.

This means that companies will also need to invest in training and education. There's a need for awareness-building, as many people still don't understand what AI is—not only employees but also customers. In these cases, companies must deliver information and educate people about AI. But, of course, this requires a lot of effort.

Lukas:

Very good points mentioned, I'll come back to this again later at the next topic.

Regarding this, I actually still have another question: You mentioned that when it comes to data protection, you are very cautious and careful. Do you have any frameworks or something similar for this?

And then there's also another major point to consider: the bias of AIs, where they might head into a particular direction that you don't necessarily want.

How do you deal with that?

Do you have anything in place for this as well?

Expert:

Well, we definitely have enough processes in place. For example, let's assume it's like how we work with Google. We already have contracts with them, where everything concerning

data protection is regulated. We know where the servers are, so everything is effectively secured, and then it's easier when they tell us: 'We're now using a bit more AI.' That makes it simpler for us to accept.

If we're talking about a completely new company, an AI company, and we want to collaborate with them, then there's an extremely long onboarding process. It can take several years until everything is reviewed and fully checked, going into the tiniest detail.

Which types of data are being transferred?

How long are the data kept?

Where is the server located? Who has access to the data?

How long do they have access to the data?

It really goes into the absolute minutiae before a new company can collaborate with us, and this is even more intense when it comes to AI because it is still new to our company.

In such cases, there are surely even more questions that need to be addressed. Everything is scrutinized even further, and it all has to comply with our standards.

It will certainly be reviewed regularly as well, which is of course very time-consuming.

And, yes, AI is ultimately trained too.

If the training already includes, for example, something like a beauty ideal, then naturally the AI will also adopt that bias. This again ties back to ethics: companies must bear in mind that mistakes must be avoided and that humans or teams must monitor the AI's results, ensuring they don't let the AI dictate everything uncritically.

But humans themselves also have biases and prejudices, whether it's during the hiring of new employees or in their everyday work when making decisions. They are always guided—sometimes more, sometimes less—by their unconscious bias.

However, just because artificial intelligence is a piece of technology doesn't mean it doesn't have biases. This must still be monitored and reviewed by a human to ensure those biases are managed as best as possible.

Lukas:

Really good answer!

I have another question, You're at a large company, a big corporation, and there's often criticism—such as from literature—that very little research has been done on how smaller companies are supposed to manage it. Specifically, how can smaller companies implement AI effectively, since they typically have less data and also a smaller budget available?

Now I'd like to ask you whether you have any ideas on how this challenge for small businesses could be addressed.

Do you have any thoughts or suggestions?

Expert:

Yes, so, I'm just thinking—we work with a creative agency, which is a bit smaller.

It's certainly difficult because they have to protect their business, and that's often about manual, operational work performed by people. And the danger could be that artificial intelligence takes away work from these people.

But I think that's not the way forward. You have to adapt and learn to work with the technology rather than against it. Otherwise, you'll be overtaken by competitors. That's why

I would also say that small companies need to engage with these trends and technologies.

You can always take a closer look or engage with them, and then assess: To what extent will we use this or not?

And then, of course, decisions must be made—will we use it or leave it aside? But you also have to be clear about what risks or dangers could arise. However, AI offers so many opportunities and possibilities, whether that's for more efficient work or for further developing the entire company. And I believe that even small companies should try it out and test it.

Of course, there's always the question of costs. If it really comes to that, AI could also help save costs in other areas. I believe that you should carefully assess this beforehand: What are the opportunities, what are the risks, and how much do we need to invest?

What kind of results can we expect, and how many costs might we potentially save?

By using AI, you can build a case and then make decisions. Maybe you'll also have the chance to test it first—to try it out in one area, collect learnings, and understand: How much can we save, or is it ultimately too risky?

But I would still say it's dangerous for companies that don't engage with this—if they just close their eyes and say, 'That doesn't interest us; we don't want to have anything to do with it. Because in that case, others will simply overtake them.

Lukas:

Mhm, I understand, thank you.

Now comes the last big section, I would say, because in the course of my literature research,

I also need to find a framework or something similar that can be specifically adapted to AI and similar technologies. And during that, I came across the TAM model—Technology Acceptance Model. Does that perhaps ring a bell for you by any chance?

Expert:

No

Lukas:

OK, no problem. Do you see the photo I just pinned here? I can quickly explain it to you because at first glance, it might seem a bit more complicated.

In general, it's actually quite simple: it's about, as the name already suggests, the Technology Acceptance Model—how or when people accept technologies. There are essentially two major variables: perceived usefulness and perceived ease of use, and you can see those on the left.

Next to that, you'll always see the various sub-variables and how they connect. For example, at the very top, you have the subjective norm and image. If people in your environment, for instance, say, 'Yeah, ChatGPT is really good,' then you'll automatically rate the perceived usefulness of the technology as higher. These sub-variables act like small influencing factors.

Exactly! And over the course of my thesis, I think this model could be very useful. I'll need to ask you a few questions about it as well. If you take a quick look at it now: Do you think

that any variables are more important than others, or are they all equally significant?

You can dive into smaller details, but you could also say something like, ‘Yes, I think perceived usefulness is far more important than perceived ease of use,’ for example.

Expert:

Mhm, wait a second, I’ll take another look.

So, I also think...

ease of use is really extremely important, because even if it’s relevant to your job,

If it’s not there, and you have to deal with AI—so that there’s a purpose for you to use it—

but then you sit down and deal with it, and the ease of use isn’t there, that’s really not good.

If it’s not easy to use, then you’ll immediately feel negatively about it. And that’s not just

the case when it comes to your work, but also probably in private use. You’ll be put off and

maybe won’t even want to bother with it again.

And if you think about it further: there are different kinds of people. Some are more tech-

savvy, while others are not, or some people struggle to learn new things while it’s easier for

others. And then you can end up excluding a lot of people who simply lose interest and

don’t want to engage anymore because the user-friendliness isn’t there—even if their job

requires it.

Or it might also come down to image. If a friend says, ‘Hey, this is really cool, try it out,’

and then you try it but you can’t figure it out because it’s hard to use, that has a really strong

influence too. I believe that has a really, really strong impact.

Lukas:

Perfect, Would you say that something is missing at first glance, something where you say OK, that also has a big influence on people when they want to use a technology?

Expert:

Yeah, wait, let me take another look.

When it comes to Image, it really doesn't just include the image that you get through, I don't know. Because I can imagine that there's a sort of societal pressure or something like a kind of peer pressure that can also push someone to use it.

That's missing here—other than the fact that it's included in Image. But Image can also really be more of a societal thing, where you pick it up through the news and it's presented somewhat positively.

But I think that the pressure you get in your immediate social circle can be even stronger. For instance, a friend might say to you, 'Hey, what? You're still using that old thing? There's this and that new AI now that I use for this and that!' And then you hear about it again, or your entire group of friends starts using something you're not using yet. I think the pressure becomes extremely high for you to also start using the new technology or AI.

I'd say that this could be a really strong influence as well. You feel pushed to use it, even if you haven't yet seen or recognized the benefit of it.

Lukas:

Sure, so this is a screenshot. The first model is from 1990, where it only had a few sub-variables—the part circled in red. Then the second one came in 2000, which included the purple parts, and finally in 2008, there was the third version with more detailed additions.

That's why I'm currently investigating whether this model can still be applied to new things like AI. I have two additional variables that I personally consider potentially useful, and I wanted to ask for your thoughts on them.

The first one is trust. In my opinion, this hasn't really been accounted for in the model. As you already mentioned, when it comes to sharing personal data, trust can be very important for the user.

Especially with technologies like AI, which are often perceived as a black box, I think trust is a key factor for acceptance.

Do you think this could play a role? Because it doesn't seem to be adequately addressed in the current model.

Expert:

That's true, it is a really important factor. I can also relate to this personally—I don't have TikTok because I don't trust the company. It's not because I think the platform is not cool; if it were a different company or came from a different country, I would use it.

What's missing for me is trust—in the government of that country or in the company itself.

That's why I don't use it. So, I can definitely imagine that many people feel the same way. For example, I have a colleague who says he doesn't use any Google products—no Google Maps, no Google search engine—because he doesn't trust Google.

So, that's really a great point. I think it's good, yes, and it should definitely be included

Lukas:

Perfect, and the second point, which goes very much hand in hand with what you said about TikTok, is the lack of focus on the risks, which I think is ignored.

The model, as we already discussed, doesn't specifically address the perceived risks, such as data privacy violations, security concerns, or even ethical issues.

And then, as you just said, it might be that TikTok is useful and easy to use for you, but you still don't use it because you're afraid of the potential negative consequences, let's say.

Expert:

Yes, so, I think, yes, I think the point about trust is even a bit more relevant.

I mean, I can see that, yes, I believe that many people simply ignore this. They know, of course,

that something is being shown to them that they may not necessarily decide on—partially through their own behavior—but also a lot is being controlled, right?

Or then there's also possibly ethically questionable content being shown to you, etc.?

But I believe that some people—or many people—don't care about this. I mean, there are certainly people who say they don't use something for ethical reasons or also because of data privacy concerns.

They don't use it because, in the end, it's also the case for me—I don't use TikTok because I

don't trust the company, but also because I don't want to give them my data.

With other things, I am aware of this. I know very well how much operation about myself I am, so to speak, selling—or rather selling off in the end.

So, for part of the people, I would say it definitely applies. I believe, though, that unfortunately there are also some people who ignore all this, who just don't care.

Their data isn't important to them, or they aren't aware of the consequences or possible risks, of how this can also be exploited.

But for a portion of people, it is definitely important, yes.

Lukas:

Great, then we're actually done with all the points I had.

I wrote some final questions at the end, so if you would like to add anything or would like to add experiences, or have not said yes or would like to get rid of something, you are welcome to do so now.

Expert:

No, I'm still thinking about it, I've talked a lot.

I read an article not so long ago about artificial intelligence. It was about how—since we often see in sci-fi movies where AI ends up taking over the world or something crazy like that—

and I sometimes find myself thinking about it, too, wondering: 'Whoa, what kind of negative things could this be used for? How could it be exploited or misused?'

But then I also read about all the great things AI can be used for—especially when it comes to predictions and how it can positively impact human health or even something like research in medicine.

And then I find myself torn between those two sides: how do I actually feel about this?

But maybe as a closing thought, I do believe that the opportunities outweigh the risks—or at least I kind of feel that

there has to be some fundamental trust in humanity, hoping that no government or individuals will misuse it.

And that, overall, the positive ways people use AI will outweigh the negatives.

Yes, maybe that's just my hope, or my fundamental trust in humanity.

Lukas:

Really nice ending!

*At the end, there was a personal chat between Lukas and the Expert, which is not included because of data security.*

**Expert 3:**

Transcript 3

*It is important to note that the original interview was conducted in German. It has now been translated into English and the German terms have been adapted to suit the content.*

*At the beginning, there was a personal introduction between Lukas and the Expert, which is not included because of data security.*

Lukas:

OK, then I would like to ask you a few questions, let's start at the beginning, I have divided up a few blocks and the first one is about your background, so that I can then anonymize everything again, but first you can briefly tell me a bit about your role, your experience in the area of conversion returns or digital marketing in general, so that I have a little background on what you do.

Expert:

OK, yes, I've actually been working in the marketing field for over 20 years now.

I already started during my computer science studies, and I began in performance marketing agencies.

I started off relatively technically, working with tools that I programmed myself for people at that time. Everything was still pretty basic back then—Google Ads had just launched, so it was still a very early period. I then worked in various roles within the company.

I've pretty much done everything: from SEO to SEA, search engine marketing, affiliate marketing, and even some display advertising—not as much—but always with a technical background. That means I always automated a lot of things, programmed over APIs, and cobbled together tools myself.

Eventually, I moved up to a management position within this agency as it grew bigger, and I was also responsible for building up the Data Analytics division for the DACH region.

The company at that time was a French-run organization, so I also gained relevant international experience in the data field.

That area grew really fast, and it encompassed everything: analytics, tracking, planning, implementation, tag management, dashboarding, advanced analytics, and eventually cloud computing, which started to emerge. We increasingly collected data and activated it further, and naturally, Conversion Rate Optimization also became a focus during this time.

This topic didn't come right at the beginning; it developed a little later as tools emerged that allowed you to dynamically run A/B tests automatically.

This meant you didn't really need a web developer anymore—you could generate experiments dynamically directly through these tools.

And even the evaluation of the tests happened automatically, which made it much more convenient.

Tools like Google Optimize were launched later. In the beginning, it was still much more cumbersome: in early versions of Google Analytics, you could technically set up experiments, but these were usually redirect-based experiments. That meant you actually had to create two separate page versions, tag them, and then run the whole test that way.

In my current role—well, I switched to this position about five and a half to six years ago. I joined a larger marketing agency that works comprehensively across all aspects of marketing, including the offline sector. This was something we didn't cover in my previous agency, where we only did performance marketing.

The current agency, handles everything in marketing—from TV campaigns to brochures and everything in between. However, they didn't yet have a data analytics division for the DACH region when I joined, so I was responsible for building that area up from scratch. I was also heavily involved in international collaborations, where I successfully ran several cross-projects.

By now, I also have a colleague who has fully specialized in this area. She completed her Master's in UX CRO and she works together with me in this division.

As a result, we're always active and need to stay up to date with the latest developments because things are constantly changing. AI is also a topic that plays a role here.

It's not the main focus, I would say, but it is a topic that certainly plays an important role.

Lukas:

How long have you been involved with AI technologies in this area in particular?

Expert:

AI technology actually came up relatively early—I already had contact with it during my studies. Back then, I had some touchpoints with AI and machine learning.

What was it like at that time?

At that point, I didn't have much interaction with conversion optimization but rather with AI classification and figuring out how to build models.

How can I use neural networks to learn specific functions?

Or, yes, similar things—this has only really picked up in recent years. It's now possible to do a lot more in that area. For instance, personalization and even hyper-personalization to some extent.

This means that information displayed on a website can be automatically adjusted based on the collected user data.

It can potentially be adjusted automatically, and of course, there's the bigger trend of image generators, which I believe became significantly stronger about two years ago. These tools are incredibly helpful nowadays.

In the sense that you can quickly generate beautiful graphics based on given prompts, which really simplifies your work. It means you don't necessarily need a designer anymore.

Graphics can now be created quickly and efficiently in this manner, which of course helps drastically reduce costs.

Lukas:

Do you have any examples that you have used AI recently, such as now with the pictures, that have somehow influenced your projects a lot?

Expert:

Yes, we recently conducted a test for a client where, on landing pages, instead of the usual standard headshot—the large background image in the upper area—AI-generated images were tested. These images actually outperformed the original version.

So, they were successful, though I have to mention it wasn't an extensive test. Only the original page, which previously used a photo taken during a photoshoot, was replaced with an AI-generated image. In this case, the goal was for the image to resonate better with the user.

The new image was also tailored to the target audience, and this first test was genuinely successful, as we were able to significantly improve the conversion rate of the landing page.

Other than this, so far, we've mostly used AI image generation for advertising materials for clients. But I would say it will likely become more common in the future.

It always depends, especially with AI, on whether the client uses the AI tool themselves.

There's often the challenge that we don't usually provide the graphical elements for clients, partly because of copyright issues and other related considerations.

So aside from this recent AB test on the landing page, I don't currently have any other examples where AI-generated images were actively used on landing pages.

Lukas:

Thank you very much, that's the first block for you.

Now we'll move on to the second block.

The current applications where you also use AI and then the first question, of course, where do you mainly use it?

In the Daily Cro Digital Marketing Day, where do you use AI the most?

Expert:

So, I actually find it very practical for research purposes—these tools have really become quite useful for conducting research.

The tool we are using, for example, is called Visual Website. It's part of the toolset, and it has had an analysis feature for a while now.

With this feature, you can literally tell the tool: 'Here's this page—give me some suggestions on what tests, best practices, and experiments I can run,' and the tool provides genuinely useful suggestions.

Now, to be fair, many of these ideas are things that are already considered best practices, or ideas we might have already come up with ourselves. But still, it's very useful because you sometimes get additional suggestions or inspiration that you might not have thought of on your own. It's quite impressive to see how closely the suggestions align with what we have already done or proposed ourselves.

Essentially, the tool's suggestions are based on a database of what has worked for other people—things that have already been tested successfully and proven to work. That makes

the tool really helpful as a kind of expert consultant standing alongside you. It can say things like, ‘Hey, have you ever tried an interactive calculator on this page or landing page?’

This type of suggestion can really help, and I think it’s quite insightful.

*The expert shows me an application which was not transcribed because of data security.*

Another point, actually, when we consider making suggestions—

Back in the day, people would create mock-ups pretty cheaply and quickly on their own using Paint or something similar. You’d cut something out, place a badge or an image on it, and that would be it.

Now, with AI, this has become so much more wonderful. You can simply get suggestions for such screenshots, which you can then show in a presentation. For example, let’s say you want to add an Exit Pop-Up or something like that—you just tell the tool what you want, and it designs the image for you.

It always saves time and looks visually appealing.

Lukas:

Perfect, thank you. Besides the program you just showed me, do you have other tools or platforms, which you use effectively?

Expert:

Yes, that's one we use, yes, yes.

So, we use VWO because it's quite a comprehensive A/B testing tool that also includes UX tracking. It's actually quite practical because there's a free version available. If you have fewer than 30,000 visitors on your website, you can use it for experiments at no cost.

That makes it very practical, and it's also very user-friendly. In that sense, we now primarily use this. Of course, there are other A/B testing tools or similar options, but A/B testing is really our core business. However, some tools are relatively expensive, and we naturally have to consider whether the client is willing to pay for them.

The advanced version of Google Optimize was discontinued. I was actually quite satisfied with it, but VWO can do a little bit more, to be honest, in terms of features.

As for tools specifically for AI, we actually have our own internal chatbot based on Google Gemini, which we are officially allowed to use. Theoretically, we're not allowed to use any other AI tools internally. That's prohibited, particularly for reasons that are understandable.

We're not allowed to use tools where copyright isn't clarified, or where we might enter any sensitive information. For example, AI tools can do amazing things—you could theoretically throw in statistics from 10 A/B tests from Amex, and it could generate a summary for you or derive additional insights from the data. But we're only allowed to do this with our own bot, which is securely contained within our organization's environment.

That said, to be honest, we still use tools like ChatGPT and other similar options for basic tasks or research, but never for anything involving sensitive information in that context.

Otherwise, we also make use of Google Cloud—there are various tools available there. A great example is product feed optimization. These days, you can optimize how the titles of 10,000 products are structured, and you can just let the AI handle it. There are already some fantastic ways to use AI to simply save time and effort on tasks like that.

Lukas:

Thank you for the response.

Do you find, since you've now shared a lot, that having more contact with customers has led to any changes? Has anything changed in the approach to conversion reduction since AI is being used more frequently for customer analyses or content recommendations?

Expert:

Mhm, actually just as a tool – so I wouldn't say there's really been any change in communication.

I wouldn't say that anything has fundamentally changed, and I also don't believe that AI replaces people, maybe designers at most.

If I think back to earlier times and really reflect on it, honestly, I don't believe that AI will replace programmers. I also don't believe AI will replace marketing, because the knowledge involved is something completely different, and you still have to do a bit more than just asking the 'dumb thing' questions, if you know what I mean.

So, from my point of view, I see AI as a tool.

Lukas:

I understand. That's it for this block.

Thank you, now it's more or less about all the advantages of AI in digital marketing or in Cro and there, where I ask you the first question from your point of view, of course, what is it for you?

Expert:

The biggest advantage is actually the time savings when it comes to research and creating things – that's really where the benefits lie.

Yeah, problems or critical issues?

You already mentioned it earlier – AIs often have biases, and we've seen that often enough.

They also don't always produce the truth, that's just how it is. I know this especially from programming. When you want to program something – and I've tested quite a bit because I write a lot of scripts and other things myself – very often, especially with the Google bot early on, it was completely terrible. It would invent things.

It would all look really nice, but it was guaranteed not to work, and the quality of what it produced was, especially in the beginning, completely poor. It's improving, but it's still not at the point where you can really trust it. You always need an expert to review it.

And yeah, I think in my field, biases or tendencies in AI might not be quite as critical. I'm not making decisions where I'd say I use the AI to determine, for example, target groups or something like that. I use it more as a tool.

If you were to use it differently, though, that could definitely occur. Let's say you allow the AI to personalize a website to achieve better conversions. If it then starts showing women only pink flowers or men only blue jeans – or something like that, I don't know – then it could certainly end up in some kind of loop that might not necessarily align with what the marketer or the brand intends.

That being said, I think we're still far from that point. So far, the personalizations we see are still mainly based on statistics from tests that humans originally set up. Ultimately, I don't see a problem there right now.

Lukas:

You've already hinted that, of course, a lot of bias can still be there.

Something similar came up in my research as well – for example, large companies like Netflix. It's similar to what we know, where recommendations are displayed. It's a bit like personalization, for example, recommending movies or similar things.

Have you ever gotten the impression with clients, or in general, that it's relatively difficult to personalize things using AI while simultaneously making the customer feel like it's not all handled by a computer – that they're still receiving a sense of personal care?

Expert:

Yes. In fact, many companies want a lot of personalization, but really, when it comes to live implementation, not that much is truly being done – except in shopping portals where you actually get product recommendations, video recommendations, and similar things. In those cases, it's definitely possible that you get put into a kind of 'cosmos,' and then you just stay there, only receiving the same type of content that already exists for you.

This has actually always been a problem with recommendation engines. You get stuck in a loop – it's no different for networks, really. You remain in a certain thematic cosmos, and that can even be toxic or problematic. So yes, these systems do have that issue.

I don't think there's a really good approach yet to solve this, where you could say, even when offering recommendations, you should also display something fresh or something outside that area. This is especially true for music or movie recommendation systems.

They're already very much like that – you get put into a box, and then you're stuck there, unless you actively do something to change it.

As for recent developments, there's been talk about recommendations or personalization, but in reality, most of it is still rule-based when it comes to personalization. It's not really done fully by machines yet. At least, with our clients, it doesn't exist to that extent.

Lukas:

OK I see, we've already gone in that direction of course, if we get the positive things first, now the negative things, the challenges and the restrictions, what do you think are the biggest challenges with the integration of AI?

Expert:

Well, as I mentioned, bias in the training data or similar issues is definitely a problem.

Copyright is always a problem when there's no guarantee in place.

For example, Google now offers a guarantee with their Germany Cloud AI, ensuring that any generated image material can definitely be used license-free. That is, of course, a huge advantage. Other providers don't offer this, which means you take the risk that someone might come along and say, 'Hey, that's my copyright!' That's definitely an issue.

And I would also say that the excessive AI hype could be a problem. I don't think AI is suitable for everything. I genuinely believe you can waste time with AI – it's definitely possible. And right now, it's already starting to subside a little. We might even have passed the peak because some people have realized that AI is not a panacea.

Not everything needs AI; sometimes, my regular work processes might even work better. It's not as bad with AI as it was with blockchain, though. With blockchain, I said from the beginning, 'What's the point of this nonsense?' Most of the applications back then were actually worse than centralized databases.

With AI, it's different. There are some applications that will definitely stick around and be expanded on beautifully. Take graphic designers, for example. If you look at what tools in Photoshop or similar software allow you to do – tools that simplify your work as a designer – or tools for writing texts, for instance, those will remain.

But a lot of things will also fade away and disappear. AI is not a miracle solution. Especially in online marketing, we're going to have fewer and fewer data points available. That means

if I don't have data, then AI won't work well either. In those cases, perhaps human judgment is actually better.

So, let's see what really comes next.

Lukas:

You are bringing up a very good point because that was actually one of my next questions. It's usually the case that larger companies have more data, more money, and greater capacity to implement all of this. But according to my research, it seems that small businesses in particular are struggling significantly when it comes to adopting and implementing AI. How do you think they can address these challenges so that they can also effectively implement AI?

Expert:

Well, let's put it this way: large companies like Google or Facebook want to 'democratize' AI and simplify it. I would say that, especially with Google, it has already been significantly simplified so that you can use AI for pretty much everything. You don't even need to have theoretical knowledge of how AI works because they provide ready-made models that allow you to directly complete tasks.

So, they really make it very easy for the average user to integrate AI into their work.

Whether or not it makes sense is another matter.

And I'm not sure whether every small business even needs AI. Perhaps personal interaction is still better than having a machine do something. But I think over time, it will become clear what truly makes sense for everyone, and it will become increasingly accessible—like what Google is already doing with its Cloud services. It's also affordable now, because which small company can afford to train a model on high-performance computers? That would be impossible, and a lot has already been done to address this.

I think the main challenge lies in how motivated and how knowledgeable small businesses are about this technology. It depends on whether there's an employee who has a connection to such things and uses them. If there isn't someone like that, AI won't be used. But whether this actually creates a significant competitive disadvantage, I'm not so sure.

In most cases, it probably doesn't. However, it can definitely be an advantage in some situations to achieve better results or outcomes.

It really depends on the individual case, I would say.

Lukas:

Great, very interesting

Then one last challenge that we've already sort of addressed.

The whole issue of prejudice bias and the data protection scene here is how do you deal with the whole thing when you're dealing with AI, or do you have any frameworks or similar that ensure better implementation for this?

Expert:

Well, as I mentioned, our internal data protection guidelines state that we are only allowed to use our internal AI bot—that's what the thing is called. This bot is continuously being developed and is supposed to become more and more capable.

So, from a data protection perspective, as long as we only use this tool, we're actually pretty secure. Going forward, they are currently working on enabling us to completely index documents ourselves. This means I could then ask the AI bot, for example, 'Hey, what were the results from Campaign X one year ago?'—even if the report is just lying around somewhere. The bot would then provide insights on such things.

Of course, this only works if a company has its own AI tool like this. A small company likely won't be able to achieve something like that so easily—unless, for example, Google eventually provides such capabilities while ensuring data protection. This is, of course, assuming that the data is securely managed when using the cloud. If done properly, it's sealed off, and everything trained and learned actually belongs to the company itself.

For other companies, however, it can be very problematic if they use public tools without oversight or if no one takes responsibility for this. If employees simply start inputting data into external chatbots, for example, it can cause significant issues. That's because many providers explicitly reserve the right to use everything entered into their systems to further train their AI models and process it in some way.

Even Google—I don't know if you were aware of this—does this. For instance, do you use Google Photos?

Lukas:

No

Expert:

Well, with Google Photos, for example, the guidelines state that all the images you upload—some of which might automatically be backed up from your smartphone—are pulled into the AI. Even if they are your private photos, they are anonymized. So, while your face might not necessarily be included, it's still being used.

And then there's Twitter—Elon, that crazy guy. The new regulations there state that everything you upload to Twitter will be used for AI training, including all your personal chats with private individuals. So, I would say you really need to be very careful with that.

Google always pretends to be the frontrunner in this area, but ultimately, it's all about who has the most training data. Whoever has more data can build better models—potentially. But even they are starting to hit some limits. Therefore, you have to be cautious.

This is especially important for companies. Their data protection officers really need to stay on top of this to ensure everything is being monitored carefully.

The issue can become quite sensitive. A company could potentially lose sensitive data through tools like these, and this could result in significant risks.

Even in customer-facing business, this could end up costing a lot of money in the worst-case scenario.

So, yes, caution is definitely needed.

Lukas:

That's crazy, I didn't know that!

Very interesting. Now a whole new topic I had to use or identify frameworks or a framework for my master thesis that I can use here for the whole topic. Any chance you are familiar with the TAM model?

Expert:

No

Lukas:

Then wait, I'll give you a brief explanation of what this is in general—a very rough overview. It's basically just a model that explains why people decide to use new technologies or not. The model is based on two main variables: first, the perceived usefulness, How useful will it be for me if I use it, and then?

There's a second factor: the perceived ease of use—how easy the whole thing is to us. I just sent you a photo as an overview. The first model was developed in 1989, and then it was adapted over time. Now for my thesis, I'm using the TAM 3 model, where all these variables were added.

So that was just a brief introduction for you.

If I've explained it to you a bit now—what would you say? Are the major variables equally important to you, or maybe one smaller variable stands out to you where you'd say, okay, that one is extremely important?

Or would you, as an expert, say that perceived usefulness and perceived ease of use are equally important when you evaluate this?

Expert:

I would actually say that for general acceptance, ease of use is probably even more important, and a lot has been done in this area.

Back in the early days of AI, you had to train your own models, and you needed specialists who could understand and manage these things. But thanks to some big players today, you hardly need that anymore. Instead, you have pre-built models that you can apply directly.

Nowadays, anyone can use Google's Gemini, for example. So, this ease of use factor has significantly improved, which I believe has strongly promoted adoption and usage.

I think that's why the second point, ease of use, is even more important for the acceptance of AI among the general public. Because, after all, what company has three AI specialists sitting around somewhere?

Probably very few.

We actually have a few specialists—a relatively large team now—because we've realized how important it is. But a typical mid-sized company won't have anything like that.

And yet, thanks to the simple availability provided by big players like Google, even those companies can use AI. And as a result, I think the acceptance of AI will definitely continue to grow.

Lukas:

Would you say, if you take a rough look at the whole thing now, can you think of anything that might be missing from the model ?

Expert:

Yeah, actually.

The acceptance costs aren't really included in this, right? And they've dropped significantly, primarily because the technology now runs on cloud infrastructure.

That's a huge factor for companies.

You don't have to make big investments anymore to integrate this kind of technology today. Instead, you can start working with it using a minimal budget—literally a 'baby budget'—and still be able to productively implement it somewhere. That wasn't possible in the past, but it became feasible thanks to cloud solutions.

Otherwise, hmm, I think this already covers it quite well.

I mean, ease of use also includes how much time you need to invest in order to get something done with the technology.

How much effort do you need to put into learning it?

That, too, has dropped dramatically, which has definitely led to greater acceptance.

But otherwise, at the moment, I can't think of anything else.

Lukas:

Thank you. During my research I figured out 2 other variables, which might be useful to add here. The first was trust, because we also have this fear of computers, the hesitation to use them because one might not be able to.

But, of course, there's also trust in general, and according to my research, this is very crucial. As we've already discussed, personal data is often shared, and for many people, AI is seen as a 'Black Box,' so in my opinion, trust plays a decisive role here.

That's why I wanted to ask what your opinion is on this?

Expert:

Yes, that's definitely a point; it really depends on whether you are using it locally for yourself, so to speak, or if you are relying on a service provider. If you use it locally and understand it, then there's no real trust risk involved.

Of course, you could still ask yourself: Do I trust the results of my model? That's a different issue. But I think if you are able to train and develop a model yourself, then you know what you are doing, and you can evaluate whether the quality of what it produces, or what you are using it for, is high.

If, on the other hand, you're using a big player, then of course you have to trust them. That's where the Black Box comes into play – you give it something and expect an answer. And especially if you're not an expert in the field, you have to figure out whether you trust what it gives you back, or whether it's complete nonsense.

Lukas:

Amazing! Then, of course, there's the second factor I mentioned, which is the focus on risk. In my opinion, this is not adequately addressed because the model overlooks all the risks we discussed earlier—data protection, security concerns, ethical issues such as bias, and so on.

It could very well be that a technology is perceived as useful and easy to use, yet people still reject it simply because they fear potential negative consequences it might bring. For example, they might be worried about how these risks could impact them personally.

What do you think about this?

Expert:

Well, it actually goes a bit hand in hand with usefulness, because if the tool has a bias—at least one that's too significant for my purposes—then it becomes useless and unusable for me.

So, yeah, I assume a certain level of accuracy in an AI tool as a given, at least to a degree. Only then does it have any usefulness for me. Otherwise, it's worthless. Of course, this also depends on the context—what exactly do I want to achieve with it? For instance, if I want to use AI to help hire new employees, there are some crazy things like that, I certainly wouldn't trust an AI to handle that right now, nor would I use it.

It could perhaps summarize a few things or provide a basic assessment, but the rest would need to be done by a human. We're still far from anything resembling real intelligence. Honestly, I don't even believe that the current AI surge will lead to anything like that. Let's be real—AI has already gone through three or four major waves in history, and every time, people predicted, 'Oh, now it's going to change everything.'

I think we're currently at a limit again. Nothing that resembles real intelligence will emerge—it's just that we now have some tools that can be added to our processes.

Lukas:

Okay, good point, that's noted. Now, as we wrap up, here's a question: are there any experiences you've had or anything else you'd like to add before we finish?

Expert:

Actually, yes. A lot of things are labeled as AI that aren't really AI. Sometimes, I'd say that if I'm just statistically optimizing based on numbers, that has little to do with AI. The language models are nice and all, but nowadays, a lot is called AI when it's really just advanced statistics, so to speak. For example, if I automatically select the best creative, that truly has nothing to do with AI.

Currently, we're still in this hype phase, though I think it's already starting to subside in some cases. You can see it, for instance, in how companies that now include 'AI' in their name are sometimes treated worse than those that don't. There was a period when anyone who mentioned AI was suddenly seen as the king of investment hype or whatever. That has already started to decline.

I also believe that many projects will fail, honestly, because AI doesn't always prove to be financially viable. The amount of money currently being invested in AI is enormous—Google and Microsoft can perhaps absorb those costs, but other companies often can't. Many will likely have to write off substantial losses.

Especially with all the hardware they've purchased from Nvidia to calculate models faster, there's currently no clear business model to recover those investments. Let's say Microsoft offers their CoPilot for €9—how many millions of users would they need to cover their costs? It's the same with many other companies deploying AI: is the investment really worth it? Does it actually bring the promised advantages?

In some cases, yes, but in many others, no. That's why this hype will likely lead to a shakeout

Lukas:

So, what I'm hearing is that you're kind of suggesting it might actually be smarter for smaller companies not to integrate AI at all?

Expert:

Yes and no. For the use of AI, developing your own tools, definitely not—but maybe using tools from major players if it provides an advantage. But to be honest, even some of the big companies might fail with their AI initiatives. Who knows if, in a few years, Chatbots will still be around? Well, I do think Chatbots will play a role, especially for research and so on, but maybe with a completely different business model. A single query to one of these systems uses so much energy, and the costs don't currently align with the returns. So, that's bound to change—perhaps there will only be paid Chatbots in the future. Whether a Chatbot would then be worth the cost of what it delivers is another question entirely. Would you subscribe to one? I think a lot of these things will disappear again, to be honest. I'm even certain of it.

Especially in marketing, things are often overhyped and then fade away again. We'll have to see what the future holds. But I think these are always waves with new technologies, and then the next wave comes, and we'll see what happens.

Though, AI won't turn out to be as pointless as blockchain nonsense or something like that. That was definitely, well...yeah.

Lukas:

I understand. Perfect, thank you for the very detailed answers!

*At the end, there was a personal chat between Lukas and the Expert, which is not included because of data security.*