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**Examining Technology Acceptance of Conversational Agents: User-, Agent-, and
Organization-related Factors of Facilitating Conditions**

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Abstract

Technology acceptance plays a crucial role in encouraging people to use a technology and it determines the technology's success. Many organizations are facing the dramatic problem of a shortage of skilled workers. Technologies can support these organizations by taking over employees' tasks. Conversational agents (CA), described as technological artifacts that interact with users through natural language, present such a technology. Even if conversational agents are more widely applied and raise the attention of both scientists and practitioners, their usage remains low. To explore the technology acceptance of conversational agents, most of the authors of prior studies only add a number of factors to the constructs of theories from technology acceptance literature instead of using the concept of facilitating conditions. In addition, existing theories cannot fully explain the technology acceptance of conversational agents. Following this, the study aims to examine the technology acceptance of conversational agents by integrating user-, agent-, and organization-related factors into the concept of facilitating conditions. The Unified Theory of Acceptance and Use of Technologies 2 (UTAUT2) builds the theoretical basis of this study. The author of the study uses a qualitative research approach and conducts semi-structured interviews with 12 participants. The study participants are students at a university that deploys a conversational agent for its students at the university website. The results show that besides most of the factors from UTAUT2, the factors trust in technology and visual and social attractiveness as part of facilitating conditions are significant for the technology acceptance of conversational agents. In contrast, data privacy is only a relevant factor if conversational agents store and process personal user data. With this study, the author contributes to a better understanding of the technology acceptance of conversational agents. In addition, it offers a more detailed view of the concept of facilitating conditions in the context of CAs. Practitioners can benefit from the results of this study by gaining insights into how facilitating conditions can support technology acceptance and therefore how to develop conversational agents successfully. In sum, the study provides further evidence for the successful application of UTAUT2 and extends the findings from prior research in the context of conversational agents.

Keywords: Technology Acceptance, Conversational Agents, UTAUT2, Facilitating Conditions, Trust in Technology, Visual and Social Attractiveness

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List of Abbreviations

AI	Artificial Intelligence
CA	Conversational Agent
IS	Information Systems
IT	Information Technology
NLP	Natural Language Processing

1 Introduction

Technology acceptance is defined as the verified willingness to use technology for the task it is intended to support (Davis 1989). It is a prerequisite for the intention to use and the actual use of information systems (IS) (e.g., Davis (1989)). Understanding the individual's acceptance and use of information technology (IT) is one of the most established and developed areas in the field of IS (Venkatesh et al. 2016). The acceptance and use of technology is a precondition for achieving desired outcomes, e.g., improvement of productivity and performance in organizations (Venkatesh et al. 2016). Furthermore, the acceptance of different users (i.e., consumers, employees, citizens, groups, and organizations) plays an important role in technology's success (Anckar 2003; Brown et al. 2010; Trang et al. 2014; Wu and Chong 2021). A user is defined as someone who uses information technology to perform or facilitate tasks (Alter 2000; Kim et al. 2007). Accordingly, technology acceptance fosters the worldwide distribution and use of different technologies, enabling a wide range of application contexts, e.g., e-commerce (Lee et al. 2001), e-government (Rana et al. 2012), e-banking (Bärsch et al. 2020), healthcare (Laumer et al. 2019), or education (Chen et al. 2008). The strength of this level of maturity in IS research results from the availability of well-developed models derived from theories in psychology and sociology to explain technology acceptance and use (Brown et al. 2010; Venkatesh et al. 2012).

In addition to the importance of technology acceptance in theory, the acceptance of technologies is also of great relevance in practice. Shortage of skilled workers remains a major and dramatic problem for an increasing number of organizations (Langley 2023). One idea to solve this problem lies in the use of technologies that take over parts of skilled employees' tasks or even replace them (Chiu et al. 2016). When organizations use technologies, for example, to automatize processes, they can relieve their skilled employees or even decrease the necessary number of employees (Chiu et al. 2016). Conversational agents (CA) present such a technology. Conversational agents are defined as technological artifacts that interact with users through natural language mimicking conversations between humans (Diederich et al. 2022). They increasingly fulfill the role of employees and substitute tasks historically performed by humans, for example in the field of customer service (Larivière et al. 2017; Marinova et al. 2017; Verhagen et al. 2014) or healthcare (Laumer et al. 2019; Mesbah and Pumplun 2020). Advances in artificial intelligence (AI) such as machine learning and natural language processing enable conversational agents to be intelligent and communicate naturally with humans (Brynjolfsson and McAfee 2014). Furthermore, conversational agents have gained enormous popularity in research and practice in recent years (Diederich et al. 2022). Practitioners see the market of conversational agents growing from \$7.01 billion in 2024 to \$20.81 billion in 2029, indicating the high relevance of the field (Mordor Intelligence Research & Advisory 2023). The increase in scientific publications on conversational agents also reflects this process (Zierau et al. 2020). But even if researchers and practitioners detect a high potential in conversational agents, for example, to decrease the number of their skilled employees, consumer adoption remains low (Gartner Inc. 2023). A study from Gartner Inc. (2023), a provider of market research results and analyses in the field of IT, shows, that only 8% of customers used a conversational agent in their last interaction with customer service (Gartner Inc. 2023).

Technology acceptance plays a crucial role in encouraging people to use technologies (Venkatesh et al. 2003) which is reflected in a high number of diverse studies. The theoretical basis for most of the studies about technology acceptance is the Technology Acceptance Model (TAM) (Davis 1989) and its subsequent modifications, such as the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) (Venkatesh et al. 2012). These theories explain the relationship between different antecedents of technology acceptance and the intention to use as well as the actual use of the technology. The

higher the intention to use a technology, the higher the probability of the actual use (e.g., Davis (1989); Venkatesh et al. (2012)). Literature on technology acceptance deals with the effects as well as antecedents of technology acceptance. Regarding the effects, the literature comes up with the following results. If users accept and adopt the technology, the task or job performance in organizations as well as employee productivity increase (Benslimane et al. 2004; Venkatesh et al. 2016). The technology use becomes routine and usually leads to effective goal- and purpose-oriented use (Sorgenfrei et al. 2014; Westmattmann et al. 2021). Regarding the antecedents, UTAUT2 comes up with seven main constructs: performance expectancy, effort expectancy, social influence, facilitating conditions (i.e., resources and support to perform a behavior), hedonic motivation (i.e., pleasure or joy of using technology), price value, and habit (i.e., automatically perform behaviors based on learning) (Venkatesh et al. 2012). Venkatesh et al. (2012) tailor UTAUT2 to a consumer use context. A high number of studies identify the constructs of UTAUT2 as important for technology acceptance and use (Blut et al. 2022; Venkatesh et al. 2016). The construct of facilitating conditions is one of the main predictors of technology acceptance and a lot of researchers emphasize its relevance (Blut et al. 2022; Venkatesh et al. 2012; Williams et al. 2011). Facilitating conditions are defined as consumers' perceptions of the resources and support (i.e., organizational and technical infrastructure) to support the use of the system (Venkatesh et al. 2003; Venkatesh et al. 2012). The organizational infrastructure is defined as "the internal configurations and arrangements involving organizational structure, business processes, work design, training and education that intend to support the firm's business strategy" (Croteau et al. 2001, p. 4). The technical infrastructure is defined "as the configuration of technologies, IT work processes, and shared services that build and sustain present and future business applications" (Croteau et al. 2001, p. 4). In UTAUT2, facilitating conditions are hypothesized to influence behavioral intention as well as technology use (Venkatesh et al. 2012). Facilitating conditions show mixed results in the literature (Brown et al. 2010). They show positive results in studies about the technological acceptance of e-government or accounting information systems in organizations (Alamin et al. 2015; Chan et al. 2010) and with user groups of different ages, especially for underage pupils (Laumer et al. 2010). Studies in the field of sustainability (Moors and Schäfer 2023) show non-significant effects of facilitating conditions on the intention and use of technology. Authors explore the effect of facilitating conditions on the intention and use of different technologies, e.g., smartphones (Choudrie et al. 2014), e-banking (Gorbacheva et al. 2011), green IS (Brauer et al. 2016), collaboration technologies (Brown et al. 2010), or mixed-reality applications (Westmattmann et al. 2021). In the context of conversational agents, facilitating conditions positively influence the intention and use of the technology, for example in studies on healthcare CAs (Laumer et al. 2019; Mesbah and Pumplun 2020). Many aspects of facilitating conditions, such as training and provided support, are freely available within an organization and consistent across users (Venkatesh et al. 2012). In contrast, the facilitating conditions in the environment that are available to each user can vary significantly depending on the technology provider and the technology itself (Venkatesh et al. 2012). Specifically, a user who has access to a favorable set of facilitating conditions is more likely to have a higher intention to use a technology (Venkatesh et al. 2012). Few authors divide the construct of facilitating conditions into smaller components such as resource facilitating conditions (e.g., money, infrastructure) and technology facilitating conditions (e.g., technical compatibility) (Brown et al. 2010; Taylor and Todd 1995) or organizational facilitating conditions and individual facilitating conditions (Park et al. 2011).

Besides the factors described in UTAUT2, the literature presents further factors influencing technology acceptance, such as user- and organization-related factors. An organization is defined as a social system that "consists of patterned activities from a number of individuals and that these activities are complementary or independent with respect to some common outcome" (Dwyer 2005, p. 1233). Relevant user-related factors are trust, perceived risk, or access to the system, in studies about the acceptance

of healthcare systems (Laumer et al. 2019; Mesbah and Pumplun 2020), e-government applications (Hofmann et al. 2012), or e-banking (Kim and Prabhakar 2000). Organization-related factors are security and privacy (Diederich et al. 2022; Wu and Chong 2021), organizational culture, and leadership (Brown et al. 2010; Venkatesh et al. 2016) or management support (Janssen et al. 2021). Literature about the acceptance of conversational agents brings out further factors that extend the findings from prior studies about technology acceptance. These agent-related factors mainly focus on the design and use of conversational agents (Diederich et al. 2022; Ling et al. 2021). An agent is defined as a computer program that performs an autonomous and purposeful activity to achieve the goal of a specific task on behalf of an organization (Nwana 1996). Regarding the design, a high number of authors point out the importance and advantages of anthropomorphism and human-like design of conversational agents (Gnewuch et al. 2018; Riquel et al. 2021; Seeger et al. 2018). Anthropomorphism is defined as a general human tendency “to imbue the real or imagined behavior of nonhuman agents with humanlike characteristics, motivations, intentions, or emotions” (Epley et al. 2007, p. 864). When confronted with human-like features by a technology (e.g., language, interactivity, fulfillment of social roles), individuals automatically apply social rules to their interaction with the system (Nass and Moon 2000). Besides the anthropomorphic design, conversational agents with human communication skills are perceived as more natural and engaging (Derrick et al. 2011; Elkins et al. 2012). The visual and social attractiveness, i.e., the appearance and ability to interact socially, of a conversational agent is an important factor for the use of CAs (Ling et al. 2021). In comparison, few studies contradict these findings. For instance, participants perceive greater anonymity and share more sensitive information if there is no human interface (Wambsganss et al. 2020). Further studies investigate the application and usage of CAs in practice (Janssen et al. 2021; Ling et al. 2021; Zierau et al. 2020). Janssen et al. (2021) identify critical success factors for conversational agents, e.g., chatbot promotion and trust (i.e., trust in the CA, the operating company, and privacy concerns). Other authors also identify user trust and privacy concerns as reasons for the success or failure of CAs (Følstad et al. 2018; Mozafari et al. 2022; Rodríguez Cardona et al. 2021).

However, although there exists extensive research on technology acceptance and the antecedents of the acceptance and use of different technologies, research about the acceptance of conversational agents shows no clear results and is still scarce. First, there are inconsistent findings regarding the impact of facilitating conditions on technology acceptance as mentioned above. Facilitating conditions do not always have a significant effect on the intention to use and the use behavior. Furthermore, authors usually only add a number of factors to the main constructs instead of using the concept of facilitating conditions (e.g., Chan et al. (2010); Choudrie et al. (2014); Laumer et al. (2019); Moors and Schäfer (2023)). The concept of facilitating conditions is a collecting basin that can contain a lot but is handled differently in prior literature as described above. Most of the studies adopt the original approach based on Venkatesh et al. (2012) but some authors see facilitating conditions as a concept with multiple components (e.g., Brown et al. (2010)). Second, regarding the scarcity of studies, existing studies about the research on conversational agents mainly focus on the design (Diederich et al. 2022; Janssen et al. 2020) and usage (Ling et al. 2021) of CAs as mentioned above. Although this results in relevant factors for the acceptance of conversational agents, these are not entirely considered in the literature on technology acceptance (e.g., human-like design or visual and social attractiveness) (Diederich et al. 2022; Janssen et al. 2021; Ling et al. 2021). Additionally, only a few studies on conversational agents are tackling the concept of facilitating conditions such as the study by Laumer et al. (2019) that deals with the adoption of conversational agents for disease diagnosis. Prior studies bring out a wide range of different results but the acceptance of conversational agents cannot be fully explained with the remaining models and theories (Janssen et al. 2021). This applies in particular to the areas of conversational design elements such as human-like attributes, which are not included in current theories of technology acceptance (Janssen et al. 2021). Therefore, I propose to integrate the categories user-, agent-, and

organization-related factors in the concept of facilitating conditions to provide a more coherent framework to investigate the technology acceptance of conversational agents. Thus, the research question of this study is:

RQ: How are user-, agent-, and organization-related factors of facilitating conditions related to technology acceptance of conversational agents?

To answer the research question, this paper uses the qualitative research approach of semi-structured interviews. With this method, I explore a phenomenon within the complexity of a real-life context through communication with participants (Recker 2013). I investigate the technology acceptance of conversational agents through a conversation with its (potential) users. The theoretical basis for the research methodology is UTAUT2 by Venkatesh et al. (2012). I extend the original model for this study by integrating different user-, agent-, and organization-related factors derived from prior literature in the concept of facilitating conditions (see Figure 1). This theoretical concept presents the foundation for the interviews and forms the interview guideline. With the semi-structured interviews, I collect data directly from the study participants about their experiences with a conversational agent. As a result of the analysis of the interviews, I identify relevant factors that influence the acceptance of conversational agents.

The scope of this paper is to investigate the relationship between user-, agent-, and organization-related factors of facilitating conditions and the technology acceptance of conversational agents to answer the research question. The subject of the study, whose technology acceptance I am investigating, is the conversational agent at Kempten University of Applied Sciences. The participants involved in the study are students from Kempten University of Applied Sciences because the university's students are one of the two core target groups of the university's conversational agent. The participating students have diverse characteristics, e.g., different user experiences with the university's conversational agent, study backgrounds, and demographics. In general, I don't exclude certain students because of their study programs or characteristics, but I only focus on German-speaking students. Out of the scope of this paper is to investigate the technology acceptance of prospective students which are the other core target group of the university's conversational agent. In addition, I don't consider other user groups of the conversational agent of the university. Furthermore, this study does not investigate why some students at Kempten University of Applied Sciences don't know the conversational agent. The same applies to the communication processes at the university. I don't explore the communication between students and the university in general and how to improve it. To answer the research question, I conduct empirical research with the qualitative method approach of semi-structured interviews.

This paper proceeds as follows. In the next chapter, I present the underlying theoretical background including relevant results from prior technology acceptance literature and the research model for this study as well as the derived hypotheses. In chapter three, I describe the methodological approach for answering the research question. This involves the research method, the research context, and the applied data collection and data analysis techniques as well as aspects of considered quality criteria. The fourth chapter represents and describes the results of this study. In chapter five, I answer the research question "How are user-, agent-, and organization-related factors of facilitating conditions related to technology acceptance of conversational agents?" and interpret the findings in a discussion. The discussion involves the formulation of the theoretical and practical implications, potential topics for future research as well as the limitations of my study. In the last chapter, I conclude the thesis and provide a summary of the whole study.

2 Theoretical Background

This chapter presents the theoretical background for the study and includes the relevant literature on the topic of technology acceptance and an overview of the research model to provide the basis for understanding the research process and my results. First, I introduce and synthesize the relevant theory of technology acceptance I rely on in this study. Second, I present the developed research model for this study and the derived hypotheses. The research model is based on UTAUT2 (Venkatesh et al. 2012), which I modify by integrating user-, agent-, and organization-related factors into the concept of facilitating conditions. These new factors and their relevance for this study as well as their relationships in the research model I also describe in the sub-chapter on the research model. The chapter closes with a presentation of the final research model including the associated hypotheses.

2.1 Technology Acceptance

To address the described challenge of the acceptance of conversational agents and the identified gaps in the literature, this study builds on the technology acceptance research. Several models explain an individual's acceptance of technologies. The theoretical basis for most of the studies about technology acceptance is the Technology Acceptance Model (TAM) (Davis 1989) and its subsequent modifications, such as the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) and its extension UTAUT2 (Venkatesh et al. 2012). These theories explain the relationship between different antecedents and the intention to use and the actual use of technology. The higher the intention to use a technology, the higher the probability of the actual use (e.g., Davis (1989); Venkatesh et al. (2003); Venkatesh et al. (2012)). With TAM, Davis (1989) adapts social psychology theories to the field of IS for the first time and TAM becomes the leading model for explaining an individual's intention to use and the use of technology (Sorgenfrei et al. 2014). Venkatesh et al. (2003) develop UTAUT based on TAM and other models to synthesize the factors into four core determinants of IT acceptance and use primarily in organizational contexts. The key relationships in the model are moderated by age, gender, experience, and voluntariness of use, i.e., the characteristics of users. Venkatesh et al. (2012) develop UTAUT2 from UTAUT to adapt the model to a consumer use context and add three more constructs to the model. This results in the seven main constructs: performance expectancy, effort expectancy, social influence, facilitating conditions (i.e., resources and support to perform a behavior), hedonic motivation (i.e., pleasure or joy of using technology), price value, and habit (i.e., automatically perform behaviors based on learning) (Venkatesh et al. 2012). They are described in more detail in the sections below. Furthermore, UTAUT2 removes the moderator voluntariness of use, given that all consumer decisions are voluntary, and retains the three moderators age, gender, and experience of the key relationships in the model. A high number of studies apply UTAUT and UTAUT2 for their research on different technologies such as accounting information systems (Alamin et al. 2015), e-government technologies (Chan et al. 2010), smartphones (Choudrie et al. 2014), virtual reality (VR) glasses (Hartl and Berger 2017), smart energy apps (Moors and Schäfer 2023), or conversational agents (Laumer et al. 2019).

The technology acceptance literature deals with effects as well as antecedents. Regarding the effects of technology acceptance, the literature comes up with the following results. First, if individuals accept and adopt the technology, their task or job performance in organizations as well as their productivity increase (Benslimane et al. 2004; Venkatesh et al. 2016). Employees who are encouraged to use systems that support their tasks and processes can improve their performance on the job (Benslimane et al. 2004). The technology use becomes routine and usually leads to effective goal- and purpose-oriented use (Sorgenfrei et al. 2014; Westmattmann et al. 2021). Employees standardize and exploit the technologies in their work to make it a routine for improving efficiency and performance (Sorgenfrei et al.

2014). Through the acceptance and use of technologies, individuals are able to achieve personal performance goals as well as purpose-oriented outcomes, e.g., increasing their social networks (Westmattmann et al. 2021). Besides the effects on individuals, prior research explores the effect of technology acceptance on organizations, e.g., profit performance or cost reduction (DeLone and McLean 1992). The effect of the usage of information technologies on firm performance is not clear. The results show positive as well as some negative effects on the firm's performance. When companies for example use the Internet as a communication channel and form alliances with IT companies, technology acceptance positively influences their performance (Lee and Grewal 2004). In the field of retail, the acceptance and use of industry 4.0 technologies also positively affect firms' performance (Sakrabani and Teoh 2021). "Industry 4.0 defines a methodology to generate a transformation from machine dominant manufacturing to digital manufacturing" (Oztemel and Gursev 2020). In contrast, the use of new technologies such as blockchain, which enables cryptocurrency payment shows a significant decrease in sales (Gao et al. 2022). The effects of technology acceptance on an individual level present positive results and increase for example people's performance, the effect on a firm's performance seems to depend on the technology.

Regarding the antecedents, UTAUT2 (Venkatesh et al. 2012) comes up with seven main constructs as mentioned above: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit. A high number of studies identify the constructs as important determinants for technology acceptance and use (Blut et al. 2022; Venkatesh et al. 2016). They are defined as follows:

- **Performance expectancy (PE)** is defined as "the degree to which using a technology will provide benefits to consumers in performing certain activities" (Venkatesh et al. 2012, p. 159).
- **Effort expectancy (EE)** is defined as "the degree of ease associated with consumers' use of technology" (Venkatesh et al. 2012, p. 159).
- **Social influence (SI)** is defined as "the extent to which consumers perceive that important others (e.g., family and friends) believe they should use a particular technology" (Venkatesh et al. 2012, p. 159).
- **Facilitating conditions (FC)** are defined as consumers' perceptions of the resources and support (i.e., organizational and technical infrastructure) to support the use of the system (Venkatesh et al. 2003; Venkatesh et al. 2012).
- **Hedonic motivation (HM)** "is defined as the fun or pleasure derived from using a technology" (Venkatesh et al. 2012, p. 159).
- **Habit (HB)** is defined as "the extent to which the beliefs and behavior of a consumer is described as automatic, since they have become a routine over time" (Mesbah and Pumplun 2020, p. 3).
- **Price value (PV)** is defined as "consumers' cognitive trade-off between the perceived benefits of the applications and the monetary cost for using them" (Venkatesh et al. 2012, p. 159).

Results from research that applies the constructs from UTAUT2 in different contexts or user groups, bring out no consistent findings for each of the constructs. The most applied construct is performance expectancy which mainly shows a significant positive effect on the behavioral intention to use a technology (Brauer et al. 2016; Godefroid and Plattfaut 2022; Hartl and Berger 2017; Laumer et al. 2019; Westmattmann et al. 2021). Only a few studies find no evidence for the relationship between performance expectancy and intention (Alamin et al. 2015; Karimzadeh et al. 2017). Studies that consider effort expectancy also show mixed results. Effort expectancy positively influences behavioral intention in the field of accounting information systems (Alamin et al. 2015), smartphones (Choudrie et al. 2014) or conversational agents (Laumer et al. 2019; Mesbah and Pumplun 2020). On the other side, it does not affect the acceptance of Green IS (Brauer et al. 2016) or e-banking (Gorbacheva et al. 2011). "Green

IS describes the utilization of technologies and systems to both enable and foster ecological sustainability” (Brauer et al. 2016, p. 2). Research that involves social influence as an antecedent of behavioral intention presents similar findings. Similar to performance expectancy, the construct social influence mainly shows positive effects. The intention to use technologies such as smartphones, interactive whiteboards in schools, conversational agents, or Green IS systems is positively affected by social influence (Brauer et al. 2016; Choudrie et al. 2014; Karimzadeh et al. 2017; Laumer et al. 2019). In a few studies, social influence shows no significant effect on the intention of users, e.g., for mobile learning environments at educational institutions (Cruz et al. 2014).

As one of the main predictors of technology acceptance, facilitating conditions have a significant effect on the intention and use of technology and are tested in a high number of studies (Blut et al. 2022; Venkatesh et al. 2003; Venkatesh et al. 2012; Williams et al. 2011). In UTAUT2, they are hypothesized to influence behavioral intention as well as technology use (Venkatesh et al. 2012). Facilitating conditions as an antecedent of the intention to use and the use behavior show different effects on technology acceptance (Brown et al. 2010). They show positive results in studies about technology acceptance in organizations with accounting information or collaboration systems (Alamin et al. 2015; Brown et al. 2010), in healthcare research in the context of conversational agents or mobile apps (Mesbah and Pumplun 2020; Purkayastha et al. 2023), or with user groups of different ages who use internet banking, e-recruiting systems, or smartphones (Choudrie et al. 2014; Gorbacheva et al. 2011; Laumer et al. 2010). Studies in the field of Green IS (Brauer et al. 2016) or e-government (Rana et al. 2012) show non-significant effects of facilitating conditions on the intention and use of technology. Many aspects of facilitating conditions, such as training and provided support, are freely available within an organization and pretty consistent across users (Venkatesh et al. 2012). In contrast, the facilitating conditions in the environment that are available to each user can vary significantly depending on the technology provider and the technology itself (Venkatesh et al. 2012). Specifically, a user who has access to a favorable set of facilitating conditions is more likely to have a higher intention to use a technology (Venkatesh et al. 2012). Only a few studies take a closer look at the concept of facilitating conditions. For example, Brown et al. (2010) divide the construct into resource and technology facilitating conditions. The resource facilitating conditions are the availability of money and infrastructure. The technology facilitating conditions refer to technical compatibility issues (Taylor and Todd 1995). Other authors split the construct into organizational facilitating conditions and individual facilitating conditions to show different levels of facilitating conditions and their influence on technology acceptance on groups and individuals (Park et al. 2011).

Further constructs of UTAUT2 are hedonic motivation, price value, and habit. Hedonic motivation is an important antecedent of behavioral intention to use Green IS (Brauer et al. 2016) or mixed-reality sports platforms (Westmattelmann et al. 2021). In comparison, it plays no crucial role in the acceptance of healthcare systems such as conversational agents (Laumer et al. 2019; Mesbah and Pumplun 2020). Looking at the construct price value, it significantly influences the acceptance of healthcare technologies (Laumer et al. 2019; Mesbah and Pumplun 2020) and mixed-reality sports platforms (Westmattelmann et al. 2021). Authors often exclude the construct price value from their studies because the explored technologies are free of charge (e.g., Moors and Schäfer (2023)). Similar to findings about the construct price value, habit positively affects the acceptance and use of conversational agents in healthcare (Laumer et al. 2019; Mesbah and Pumplun 2020) and mixed-reality sports platforms (Westmattelmann et al. 2021). In addition, it supports the use of interactive whiteboards in educational institutions (Karimzadeh et al. 2017). The construct habit is not considered in all studies that use UTAUT2 as a theoretical basis, as some studies examine technologies that are not yet in use or have not been in use for a certain period of time which is necessary to form habits (Moors and Schäfer 2023; Segura and Thiesse 2015).

In addition to the described constructs, age, gender, and experience as user characteristics moderate the key relationships in UTAUT and UTAUT2. According to UTAUT, age interacts with all constructs which are antecedents of behavioral intention (Venkatesh et al. 2003). While gender moderates the relationship between performance expectancy, effort expectancy, and social influence with behavioral intention, experience does not interact with performance expectancy but with facilitating conditions (Venkatesh et al. 2003). In UTAUT2, all new relationships between the seven constructs and behavioral intention as well as use behavior are moderated by age and gender (Venkatesh et al. 2012). The user characteristic experience interacts similarly, it doesn't consider the relationship between price value and intention but the relation between intention and use behavior (Venkatesh et al. 2012). Findings from Venkatesh et al. (2003) show that the moderators have different effects on the relationships between the constructs. For example, the strength of the relationship between performance expectancy and behavioral intention varies by age and gender (Venkatesh et al. 2003). In addition, this relationship is stronger for men and younger users (Venkatesh et al. 2003). The relationship between effort expectancy and intention shows stronger effects for women, old users, and more experienced users (Venkatesh et al. 2003). Despite these moderators being key elements of UTAUT and UTAUT2, researchers who use the theories often ignore the moderating effects (Venkatesh et al. 2016). Only a few studies test the moderating effects of individual user characteristics (Venkatesh et al. 2016). For example, Al-Shafi et al. (2009) explore the effects of all three moderators and Gupta et al. (2008) examine the effect of the moderator gender in their study. One reason why only a few studies consider the effects of the moderators is, that they may show no significant effect in the specific contexts of the studies (Blut et al. 2022). Most studies that involve UTAUT or UTAUT 2 report the average user age and gender of their participants and a large number of studies can thus be compared (Blut et al. 2022).

Even if the two models and their constructs are the theoretical basis for a high number of studies (Blut et al. 2022), researchers note some critical aspects. Venkatesh et al. (2012) conceptualize the constructs independently from each other without specifying an inter-relationship between them (Lee and Lin 2008). Compared to the theories UTAUT and UTAUT2 are built on, several constructs influence each other in these models. For example, TAM confirms the effect of perceived ease of use (i.e., effort expectancy) on perceived usefulness (i.e., performance expectancy) (Davis et al. 1989). In addition, the theory of planned behavior (TPB) (Ajzen 1991) shows a relationship between subjective norm (i.e., social influence) and perceived behavior control (i.e., facilitating conditions). In UTAUT2 these specific inter-relationships between certain constructs are no longer present. More recent studies resume some of these conceptions. In the study by Alalwan et al. (2017), the authors confirm the influence of effort expectancy on performance expectancy. Furthermore, Stefi (2015) demonstrates the effect of facilitating conditions on effort expectancy. Apart from these mentioned shortcomings of the UTAUT2, I nevertheless use it as the theoretical basis for my study, as it has high validity and robustness, which many other researchers confirm.

Besides this overview of findings from technology acceptance literature, the next chapter presents the research model for this study.

2.2 Research Model

The theoretical foundation for the research model is UTAUT2 which is one of the most promising models for technology acceptance and use in the consumer context (Venkatesh et al. 2012). In the context of conversational agents, UTAUT2 is applied in some studies about healthcare (Laumer et al. 2019; Mesbah and Pumplun 2020). In other contexts of CAs, it is not overly explored, and further investigations would be valuable which I will conduct in this study. As mentioned in the prior chapter, UTAUT2 includes

the antecedent constructs performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit. All seven constructs influence the behavioral intention and in the case of habit and facilitating conditions also the use behavior (Venkatesh et al. 2012). Furthermore, the behavioral intention is a key predictor of the use behavior. User characteristics, i.e., age, gender, and experience, moderate various of these relationships in UTAUT2 (Venkatesh et al. 2012). I exclude the construct price value for the research model of this study because the conversational agent I explore is free of charge for its users. In contrast to the original UTAUT2, this study examines the concept of facilitating conditions in more detail to provide a more comprehensive explanation of the construct and its effect on behavioral intention and use behavior. I modify the concept of facilitating conditions by integrating user-, agent-, and organization-related factors. I describe these factors in more detail in the following sub-chapters. The research model of this study is displayed in Figure 1.

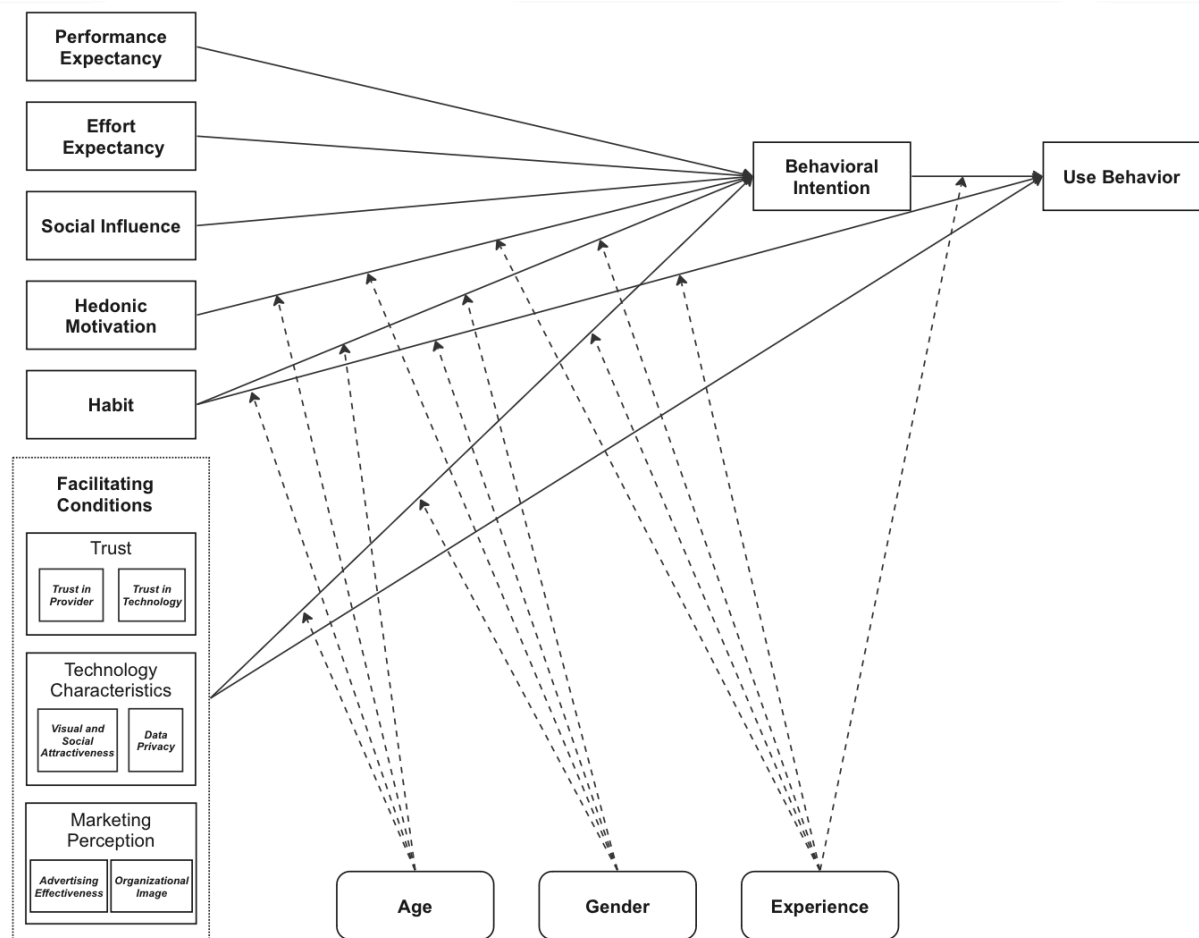


Figure 1: Research Model (based on: Venkatesh et al., 2012, p. 160)

2.2.1 Hypotheses of UTAUT2 known from Literature

The following hypotheses are based on the constructs of UTAUT2 and are well-known in technology acceptance literature. I list these hypotheses for the completeness of the model and to examine how these factors affect the behavioral intention and use behavior in my research context of conversational agents.

First, I turn to the relation between performance expectancy and behavioral intention. Performance expectancy is defined “as the degree to which using a technology will provide benefits to consumers in performing certain activities” (Venkatesh et al. 2012, p. 159). Behavioral intention (BI) is defined as the degree to which a user intends to use the system (Venkatesh et al. 2003). Performance expectancy is

an antecedent of behavioral intention (Venkatesh et al. 2012). It is explained in a similar way as perceived usefulness (i.e., using a system would enhance job performance) from TAM (Davis 1989), relative advantage (i.e., innovation is better than its precursor) from the Innovation Diffusion Theory (IDT) (Rogers 1995), or outcome expectations (i.e., consequences of behavior) from Social Cognitive Theory (Bandura 1986). According to the Social Cognitive Theory, people tend to perform a behavior if they expect beneficial outcomes (Bandura 1986). The expected outcomes highly depend on individuals' judgment of the performance (Bandura 1982). When people decide whether a technology is useful, they evaluate the fit between what they have to do (e.g., for their job) and the consequences of using a system. Research suggests that individual's actions are guided by a mental picture that connects their main goals with the specific steps they need to take to reach those goals. Individuals judge on this basis the possibility of using the technology (Venkatesh and Davis 2000). The use of a system is seen as useful by individuals if they believe it will lead to positive performance results. If users recognize the potential benefits of using conversational agents (e.g., time-saving, fast, and easy access to information), then they are likely to adopt and use the technology (Laumer et al. 2019; Mesbah and Pumplun 2020). Therefore, I propose the following hypothesis:

H1: Performance expectancy is positively related to behavioral intention.

Second, I address the relation between effort expectancy and behavioral intention. Effort expectancy is defined as “the degree of ease associated with consumers’ use of technology” (Venkatesh et al. 2012, p. 159). Consistent with UTAUT2, it affects the behavioral intention (Venkatesh et al. 2012). Effort expectancy is comparable with perceived ease of use (i.e., using a system would be free of effort) from TAM (Davis 1989), ease of use (i.e., innovation is difficult to use) from IDT (Rogers 1995), and complexity (i.e., innovation is relatively difficult to understand and use) from the Model of PC Utilization (MPCU) (Thompson et al. 1991). The underlying considerations are also derived from self-efficacy theory, which states that people avoid behaviors that exceed their ability to cope (Bandura 1982). Ajzen (1991) supports this aspect with his TPB. The perceived ease of difficulty to perform a behavior affects actual behavior, which results in a direct positive effect of perceived ease of use on the intention to use technology (Ajzen 1991). It explains the user's perceived difficulties associated with using a technology. If using a CA is seen as a demanding and difficult task, fewer individuals will accept and use it. They are more willing to use it if it requires a low degree of effort (Laumer et al. 2019; Mesbah and Pumplun 2020). Thus, I posit the following hypothesis:

H2: Effort expectancy is positively related to behavioral intention.

Third, I look at the relation between social influence and behavioral intention. Social influence is defined as “the extent to which consumers perceive that important others (e.g., family and friends) believe they should use a particular technology” (Venkatesh et al. 2012, p. 159). Social influence integrates aspects of subjective norm (i.e., people who are important think the behavior should not be performed) among others from the Theory of Reasoned Actions (TRA) (Fishbein and Ajzen 1975), social factors (i.e., individual's internalization of the subjective culture of a reference group and interpersonal agreements individuals made with others in social situations) in MPCU (Thompson et al. 1991) and image (i.e., use of innovation enhance one's image or status) in IDT (Rogers 1995). “While they have different labels, each of these constructs contains the explicit or implicit notion that individual's behavior is influenced by the way in which they believe others will view them as a result of having used the technology” (Venkatesh et al. 2003, p. 451). The mechanisms of compliance, internalization, and identification play an important role when social influence operates in a context of voluntary use and influences the individual's perception of the technology (Venkatesh and Davis 2000). Internalization and identification refer to the change in a person's belief structure and/or to the fact that a person reacts to potential social status gains. The

mechanism of compliance causes individuals to simply change their intention in response to social pressure, i.e., they intend to comply with the social influence (Venkatesh et al. 2003). In the context of conversational agents, individuals perceive social pressure towards using the CA due to societal demand, and a positive attitude of friends, family, or close peers. If those important others have a positive view on using a conversational agent, the individuals perceive a higher social pressure and are more likely to accept and adopt the technology (Laumer et al. 2019; Mesbah and Pumplun 2020). In line with existing literature on technology acceptance, behavioral intention depends on the social influence on its users (Venkatesh et al. 2003). Thus, the third hypothesis is derived:

H3: Social influence is positively related to behavioral intention.

Next, this study explores the relation between hedonic motivation and behavioral intention. Hedonic motivation is defined as “the fun or pleasure derived from using a technology” (Venkatesh et al. 2012, p. 159). It is adapted from UTAUT2 as a subjective measure of the positive experience (i.e., perceived enjoyment or playfulness) individuals connect with the usage of technology (Venkatesh et al. 2012). It describes the fun derived from using a system in itself apart from performance consequences and has a significant effect on the intention to use the system (Davis et al. 1992). Technologies can be divided into productivity-oriented (utilitarian) and pleasure-oriented (hedonic) systems (Heijden 2004). With the construct performance expectancy, the productivity-oriented part of a technology is covered (Venkatesh et al. 2012). The pleasure-oriented aspect as intrinsic or hedonic motivation compels this perspective from motivation theory (Vallerand 1997). Intrinsic or hedonic motivation “refers to the performance of an activity for no apparent reinforcement other than the process of performing the activity per se” (Davis et al. 1992, p. 1112). It is a key predictor in consumer behavior research (Holbrook and Hirschman 1982) and in IS research in the consumer technology use context (Brown and Venkatesh 2005). Even if hedonic motivation is not relevant in the context of healthcare based on results from prior research about the acceptance of conversational agents (Laumer et al. 2019; Mesbah and Pumplun 2020), general literature on technology acceptance identifies it as a significant factor for behavioral intention (Venkatesh et al. 2012). Conversational agents can be seen both as utilitarian and hedonic systems. Both performance expectancy and hedonic motivation seem to be relevant factors for the intention to use CAs. Deriving pleasure and joy from using a conversational agent therefore increases the user’s behavioral intention towards the technology. Accordingly, I formulate the following hypothesis:

H4: Hedonic motivation is positively related to behavioral intention.

Now, I turn on the relation between habit and behavioral intention as well as use behavior. Habit is defined as “the extent to which the beliefs and behavior of a consumer are described as automatic since they have become routine over time” (Mesbah and Pumplun 2020, p. 3). Use behavior (UB) is defined as the degree to which individuals actually use a technology (Venkatesh et al. 2003). Based on UTAUT2, habit is associated with the behavioral intention to use technology and the actual use behavior (Venkatesh et al. 2012). Habits are automatic actions that are performed without consciously choosing to do so. These actions become routine due to previous experiences (Venkatesh et al. 2012). The concept of habit reflects two main perspectives from theory (Ouellette and Wood 1998). On the one side, habit is a stored intention based on TPB (Ajzen 1991). On the other side, habit is an automatic activation as a direct connection between a stimulus and the behavior (Limayem et al. 2007). These two views function together to determine consumer use of technology. Repeated performance of using a technology can result in a well-established and automatic intention to use it. The intention is stored in the mind of the user and can lead to automatically performing the behavior. The stronger the habit is, the stronger the intention and in the end the behavior (Venkatesh et al. 2012). Earlier studies show that habit is a strong predictor of individuals’ behavior (Karimzadeh et al. 2017). Research about technology

acceptance of conversational agents shows no common opinion about the effect of habit on behavioral intention (Mesbah and Pumplun 2020). Other literature on technology acceptance considers it a relevant factor. Individuals use conversational agents in their daily lives, the use goes unnoticed into routine, and they don't even have to think about it. By making the use of a conversational agent a habit, it not only affects behavioral intention but also the actual use of the technology. Therefore, my next two hypotheses are as follows:

H5a: Habit is positively related to behavioral intention.

H5b: Habit is positively related to use behavior.

2.2.2 Concept of Facilitating Conditions

In the following sub-chapter, I present the concept of facilitating conditions in detail this study focuses on. First, I describe facilitating conditions and their relation to behavioral intention and use behavior based on UTAUT2. Second, I explain the user-, agent-, and organization-related factors that I integrate into the construct facilitating conditions. Following this, the last part of the sub-chapter presents the hypotheses of facilitating conditions.

2.2.2.1 User-, Agent-, and Organization-related Factors of Facilitating Conditions

After building hypotheses based on the relationships of the UTAUT2 constructs, I describe the concept of facilitating conditions in more detail. Facilitating conditions are defined as consumers' perceptions of the resources and support (i.e., organizational and technical infrastructure) to support the use of the system (Venkatesh et al. 2003; Venkatesh et al. 2012). They influence behavior intention and the actual use of technology (Venkatesh et al. 2003; Venkatesh et al. 2012). The construct facilitating conditions results from the concepts of three constructs: perceived behavioral control (i.e., ease or difficulty of performing a behavior) from TPB (Ajzen 1991), facilitating conditions (i.e., environmental factor to make an act easy to accomplish) from MPCU (Thompson et al. 1991), and compatibility (i.e., innovation is consistent with existing values, needs, and past experiences) from IDT (Rogers 1995). These constructs include aspects of the technological and/or organizational environment to overcome barriers to the use of technology (Venkatesh et al. 2003). They are the necessary resources such as expertise, knowledge, or money individuals need to accept and use technology (Venkatesh et al. 2003). The results from empirical research indicate that facilitating conditions are significant in predicting intention and have a direct influence on usage (Venkatesh et al. 2003). Prior studies about technology acceptance of conversational agents also show the relevance of this factor. Individuals with sufficient resources (e.g., time, money, knowledge, and support from others) accept and use conversational agents (Laumer et al. 2019; Mesbah and Pumplun 2020). The concept of facilitating conditions provides an opportunity to leverage a variety of different resources and support elements to foster technology acceptance by CAs.

This study focuses on the concretization of facilitating conditions and examines the relationship between user-, agent-, and organization-related factors of facilitating conditions and the technology acceptance of conversational agents. I integrate these three categories of factors into the concept of facilitating conditions. The following sections describe the new factors in depth and their importance for this study as part of facilitating conditions.

User-related Factors

The first category "user-related factors" is presented as the construct "Trust" in the research model. Trust is a well-researched and significant factor in the acceptance and use of technologies (Söllner et al. 2016). Trust is defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al. 1998, p. 395). It is

an important user-related factor for example in studies about the acceptance of healthcare systems (Laumer et al. 2019; Mesbah and Pumplun 2020), e-government applications (Chan et al. 2010; Hofmann et al. 2012; Wu and Chong 2021), or e-banking (Bärsch et al. 2020; Gorbacheva et al. 2011; Kim and Prabhakar 2000). To overcome concerns about the electronic transmission of information, risk avoidance due to high consequences (e.g., misuse or loss of data), or reversion to traditional ways of procuring information and services, technologies that process data need a high level of trust to be accepted (Bélanger and Carter 2008; Kim and Prabhakar 2000; Teo et al. 2008). Moreover, user trust is one of the main reasons for the success or failure of conversational agents (Følstad et al. 2018; Janssen et al. 2021; Mozafari et al. 2022; Rodríguez Cardona et al. 2021). Consistent with these findings from prior literature, I consider trust as an important factor for the technology acceptance for this study. But it's not just the factor trust in technology that plays an important role in technology acceptance; the factor trust in provider should not be neglected either (Laumer et al. 2019; Söllner et al. 2016). **Trust in technology (TT)** is defined as the user's belief that the technology has the attributes, i.e., a set of skills, competencies, and characteristics, required to meet the user's expectations in performing their tasks (Lankton et al. 2015). **Trust in provider (TP)** is defined as users' trust in the integrity and ability of the provider to ensure that its technology delivers the expected service (Bélanger and Carter 2008). Studies about technology acceptance of conversational agents also divide trust into trust in provider and trust in technology (Laumer et al. 2019). Both are critical success factors for the use of conversational agents (Janssen et al. 2021). Trust in technology specifically appears to be similar or even more important than the mere design of the technical system (Lankton et al. 2015; Zierau et al. 2020). Only a few studies indicate trust in technology as non-significant for the intention to use a technology (Teo et al. 2008). For this study, I also distinguish trust in the two factors trust in provider and trust in technology as in the mentioned studies. Based on its definition, I regard trust in provider as a factor in the concept of facilitating conditions. To build and increase trust, the organization that provides the CA offers support for using the system. By offering for example training courses, the provider gives users the opportunity to get to know the system and ask questions which displays transparency and increases trust in the organization. The factor trust in provider thus becomes part of the organizational infrastructure that supports the individual in using the system. In addition, trust in technology is also a part of facilitating conditions in this study because it presents parts of the technical infrastructure to support the use of the conversational agent. The system of the conversational agent is a business application and part of the organization's IT structure. Its smooth technical performance to support users fulfill their task builds and increases trust in the technology to foster behavioral intention and use behavior. By splitting trust into the two factors and integrating them into the concept of facilitating conditions, I propose to get a more detailed picture of trust. Furthermore, compared to previous studies on technology acceptance of CAs (e.g., (Laumer et al. 2019)), I see trust in provider and trust in technology as part of the facilitating conditions that support and facilitate the use of the technology and have a direct impact on behavioral intention and usage behavior, rather than only indirectly, e.g., via performance expectancy.

Agent-related Factors

The second category "agent-related factors" is displayed with the construct "Technology Characteristics" in the research model and consists of two factors. The first factor is visual and social attractiveness. **Visual and social attractiveness (VSA)** is defined as users' tendency or predisposition to evaluate the conversational agent's appearance and degree of sociality (i.e., ability in social interactions) in a positive way (Berscheid et al. 1989; Berscheid and Walter 1978). Literature about conversational agents mainly focuses on the design of CAs to attract users (Diederich et al. 2022; Janssen et al. 2020). To present an attractive visual and social design, CAs offer different communication modes (i.e., text or speech), representations or embodiments (e.g., digital avatars or virtual interactive representations), and different design dimensions (i.e., verbal, or non-verbal communication, and (human) identity) (Diederich et al.

2022). Other ways to attract users are displayed in “the designed appearance, movement, likability, and social behavior” of the conversational agent (Ling et al. 2021, p. 1043). A high number of researchers point out the importance and advantages of anthropomorphism, i.e., the human-like design and communication skills to attract users (Derrick et al. 2011; Elkins et al. 2012; Gnewuch et al. 2018; Riquel et al. 2021; Seeger et al. 2018). Anthropomorphic elements of a conversational agent range from the visual appearance to the language ability (Nguyen et al. 2023). To implement a human-like design, designers can choose from a variety of social cues for the CA. Social cues are “capable of sensing and expressing several multimodal verbal and nonverbal characteristics usually associated with humans” (Feine et al. 2019, p. 1). They can be visual (e.g., name, avatar, gender, emoticons), verbal (e.g., small talk, word variability), or invisible (e.g., dynamic response delays) (Feine et al. 2019). A high number of social cues to imitate a high level of human behavior does not necessarily increase users’ perception and satisfaction (Seeger et al. 2018). The application of more social cues does not result in a more attractive CA. Literature also deals with other undesirable effects of anthropomorphism, such as unrealistic expectations of the abilities of the CA (Robert 2017). Furthermore, if a CA presents no human interface, users perceive greater anonymity and share more sensitive information (Wambsganss et al. 2020). In sum, developers and designers face many opportunities but also some challenges when implementing a conversational agent that is visually and socially attractive for users. This study considers the factor of visual and social attractiveness as part of the technology characteristics and aims to explore which visual and social characteristics of CAs attract users and influence their technology acceptance. The visual and social appearance of conversational agents that attract individuals belongs to the technical and organizational infrastructure. The implementation of the design of a CA is included in the technical system of the technology. In addition, the design of a CA is determined by the organization’s employees and design guidelines that contribute to the organization’s strategy. These aspects make the factor visual and social attractiveness a further part of the concept of facilitating conditions to support technology acceptance.

The second factor of the construct technology characteristics is data privacy. **Data privacy (DP)** is defined as a high degree of transparency in order to give users the opportunity to control and determine the use of their data and the transfer of sensible, personal data to third parties (Reinken and Greiff 2021; Stephanidis et al. 2019). Users have to be ensured that “personal data in particular, but also other types of data, are adequately protected against unauthorized access by third parties” (Reinken and Greiff 2021, p. 7). In the literature, authors explore data privacy for technology acceptance in different contexts (Diederich et al. 2022; Wu and Chong 2021). In the context of e-government or e-banking, it is an important technology-related factor (Reith et al. 2019; Wu and Chong 2021). People are concerned about their privacy and are cautious about the collection and use of their personal data (Reith et al. 2019). For the acceptance of conversational agents, data privacy also plays a significant role, and privacy concerns of users are critical for the CAs’ success (Følstad et al. 2018; Janssen et al. 2021; Mozafari et al. 2022; Rodríguez Cardona et al. 2021; Sohn et al. 2019). In healthcare applications, ensuring data privacy and security is important for the users due to the involvement of much more sensitive data than, for instance, online shopping (Laumer et al. 2019). Not all users consider the protection of data as necessary for the acceptance and use of the technology (Mesbah and Pumplun 2020). If organizations ensure a sufficient level of security and privacy it increases user’s willingness to disclose personal information and the intention to use the technology (Sohn et al. 2019). Based on these prior results from other studies, data privacy plays an important role in most conversational agents, especially in applications for processing sensible data. Conversational agents are more widely applied than only in sensible contexts and not all users need a high privacy level, which makes the factor data privacy interesting for further investigation. Therefore, I consider the factor data privacy for this study to explore the level of data privacy necessary for the conversational agent this study takes a closer look at. In addition, these findings provide further

knowledge to the existing literature on the topic. I involve data privacy in the concept of facilitating conditions as part of the technical infrastructure of the system to support individuals using it. To ensure a sufficient level of data protection, certain precautions must be implemented in the technical system of the conversational agent and the environment in which it is integrated (e.g., a website).

To summarize these sections about the factors of the construct technology characteristics, prior research points out the importance of data privacy (Mesbah and Pumplun 2020) as well as an attractive design for technology acceptance of conversational agents (Diederich et al. 2022; Ling et al. 2021; Zierau et al. 2020). Furthermore, it is crucial to equip conversational agents with visual and social aspects to increase their acceptance (Nguyen et al. 2023). Based on these and the above-mentioned results from the literature, I consider the factors visual and social attractiveness and data privacy as part of the concept of facilitating conditions to be important for the technology acceptance of conversational agents.

Organization-related Factors

The third category “organization-related factors” appears in the research model as the construct “Marketing Perception”. Marketing perception is defined as the process by which people identify, organize, and interpret marketing material to create meaning (Belk 1988). The construct also consists of two factors. The first factor is advertising effectiveness. **Advertising effectiveness (AE)** is defined as the degree to which the company’s advertising encourages individuals to like the brand, improve its image, buy a product, or use the offered system by communicating relevant information (Ghose et al. 2017; Okazaki et al. 2006). It is an important factor in measuring whether and how an advertisement about a product, e.g., a conversational agent, influences people’s intention and usage. Literature in the field of marketing and advertising preliminary deals with advertising effectiveness in the field of product purchase decisions of consumers, for example, influenced by conversational agents that provide product recommendations (Hostler et al. 2011), and the effect on firm performance (Conchar et al. 2005; Okazaki et al. 2006). Research on the acceptance of conversational agents with a focus on advertisements for conversational agents and their effectiveness remains low and receives a higher priority from practice (Janssen et al. 2021). In addition, Janssen et al. (2021) point out the importance of advertising conversational agents for the acceptance and use of the technology. Users need to be aware of the existence of the conversational agent and become familiar with it (Janssen et al. 2021). To raise the awareness and interest of potential users, organizations and providers of CAs should communicate the fact that they deploy a CA through advertisements (Janssen et al. 2021). In addition, advertisement is a cost-effective way to increase user awareness of a conversational agent (Aoki 2020). Literature on advertising conversational agents is rare, Janssen et al. (2021) identify only one study that focuses on this topic. In practice, the emphasis is much higher (Janssen et al. 2021). Experts from practices point out the importance of actively advertising CAs. Establishing clear communication on the integration of a conversational agent is crucial (Janssen et al. 2021). Even if organizations and technology providers know the relevance and advertise their conversational agents, the effectiveness of the advertisements should be considered to avoid unnecessary waste of resources for advertising, e.g., employees' time, money, etc. Therefore, I integrate the factor advertising effectiveness in the research model of my study to measure the effectiveness of the advertisement and provide clear results to avoid potential waste of the organization’s resources. Furthermore, advertising effectiveness is part of the facilitating condition in this study. Typically, employees in the marketing or communication department prepare and execute advertisements as well as measure their effectiveness. These employees and business processes are part of the organizational infrastructure that contributes to the organization’s strategy and the achieve-

ment of its goals. Therefore, I integrate the factor advertising effectiveness as part of the construct marketing perception in the concept of facilitating conditions in my research model to investigate its influence on behavioral intention and use behavior.

The second factor of the construct marketing perception is organizational image. **Organizational image (OI)** is defined as the perception of the members of an organization on how outsiders perceive the organization (Dutton and Dukerich 1991; Dutton et al. 1994). Organizational image is the subject of many different conceptualizations and debates about definitions in literature including various forms of image such as constructed external image (i.e., organization members' perceptions of how outsiders perceive the organization) (Dutton and Dukerich 1991; Dutton et al. 1994), external transient impress (i.e., short-term impression made by outsiders either through direct observation or interpretation of actions or events performed by an organization) (Berg 1985) or reputation (i.e., stable and long-term assessments of an organization's actions and performance by externals) (Fombrun 1996). They differ in how the image is perceived from various points of view (Dhir and Shukla 2019). The definition of the organizational image in this study focuses on the definition of the constructed external image based on Dutton and Dukerich (1991) and Dutton et al. (1994) because the study analyses the organizational image from the view of its member and how they perceive the opinion of outsiders about the organization. Literature that deals with the factor organizational image shows that it positively affects employee engagement and performance in an organization (Dhir and Shukla 2019). Employees are connected positively with the organization, they are "convinced by the values, assumptions, and philosophy of the organization; therefore, they try to perform well in their respective roles" (Dhir and Shukla 2019, p. 974). The organizational image is perceived by individuals as attractive and comfortable when the organizations' actions and events seem familiar to them (Zajonc 1968) and they share common or similar values (Schwartz 1992). If organizations have a positive image it gives them a competitive advantage in acquiring and retaining customers (Dhir and Shukla 2019). To create a positive organizational image, various organizational aspects must be combined, such as appropriate long-term strategic moves and effective market policies (Dhir and Shukla 2019). The image of an organization influences individuals to increase the level of engagement and performance which often involves the use of technologies provided by the organization. Following this, the opinion of outsiders influences the members of an organization to use technology such as a conversational agent. The organizational image is part of the organizational infrastructure of facilitating conditions due to the fact, that the organization itself, e.g., management and employees, has the power to control and influence their image in certain aspects which is also part of the organization's strategy. Therefore, I consider the organizational image as an important factor for the technology acceptance of conversational agents as part of the concept of facilitating conditions in my study.

The next sub-chapter presents the hypotheses on the described user-, agent-, and organization-related factors of facilitating conditions and their relation to behavioral intention and use behavior.

2.2.2.2 Hypotheses of Facilitating Conditions

First, I turn to the relation between trust in provider and behavioral intention. Trust in the provider is the expectation of individuals that the provider provides a technology that performs a particular action important to the potential user, regardless of the ability to monitor or control the provider (Mayer et al. 1995). A trustworthy relationship between the technology provider (i.e., trustee) and the potential user (i.e., trustor) involves different trust types that develop over time (Mcknight et al. 2011). The initial trust is based on the judgment of the trustor before they experience the trustee (Mcknight et al. 2011). In the case of the acceptance of a conversational agent, initial trust in the provider develops before individuals use the conversational agent, i.e., initial trust in the provider influences behavioral intention. Furthermore, prior research points out the importance of trust in provider and seems to be equally important as

trust in the technology itself for the behavioral intention (Bélanger and Carter 2008; Söllner et al. 2016). Studies on trust in the providing organizations show that without the perception of risks or the expectation of vulnerabilities, there is no need for trust (Mayer et al. 1995). In the context of conversational agents, the literature identifies loss of sensible and personal information (e.g., health data) and lack of knowledge about data security as important risk factors (Laumer et al. 2019). In social or economic interactions, trust is an important factor for the reduction of these uncertainties (Gefen 2003) when individuals assess the costs and benefits of an increase in trust (Mcknight et al. 2011). Krasnova et al. (2010) identify that trust in the provider of technology reduces the perceived privacy risk of users. Following this, the reduction of the perceived risks through trust in the provider of the CA influences the user's intention towards the technology. Studies about technology acceptance of conversational agents also identify trust in provider as a key antecedent for behavioral intention (Laumer et al. 2019; Mesbah and Pumplun 2020). Therefore, I propose for this study that trust in provider is related to behavioral intention. This leads me to the following hypothesis:

H6a: Trust in provider is positively related to behavioral intention.

Then I move to the relation between trust in provider and use behavior. As mentioned above, trust in the provider depends on the perceived risk and uncertainties of individuals towards using the technology. In addition, the trust relationship between the trustee (i.e., provider) and the trustor (i.e., user) has different forms of trust (Mayer et al. 1995; Mcknight et al. 2011). When individuals have some experience with the technology, the perceived risk changes from a more abstract level to a more concrete level which affects the use behavior (Sohn et al. 2019). In addition, the trust relationship also changes between intention and use (Mcknight et al. 2011). Once individuals are familiar with the provider of the CA, they develop a knowledge-based or experiential trust which means that the user knows the provider well enough to predict its behavior and is familiar with its characteristics (Lewicki and Bunker 1996). User's perceived trust in the technology provider influences the use of conversational agents (Janssen et al. 2021). This indicates that the actual use behavior is related to trust in provider. Therefore, my next hypothesis reads as follows:

H6b: Trust in provider is positively related to use behavior.

Third, I focus on the relation between trust in technology and behavioral intention. Trust in technology is another important aspect of the construct of trust that helps to overcome perceived risks from users that prevent them from accepting the technology (Mcknight et al. 2011). It is the user's belief that the technology has the attributes that are required to meet the user's expectations in performing their tasks (Lankton et al. 2015). Users with a lack of trust in the conversational agents feel a deficit of control and are insecure about the system's ability and morale to achieve the desired results (Mcknight et al. 2011). Researchers show that trust in technology significantly influences the acceptance of different technologies (Lankton et al. 2015), including the acceptance of conversational agents (Laumer et al. 2019; Wang and Benbasat 2005). Furthermore, users have to trust in the ability of the conversational agent to fulfill the task that is demanded in a similar way to the previously used alternative (Laumer et al. 2019). Individuals should perceive the conversational agents for example as privacy-friendly or able to perform what is expected (Mesbah and Pumplun 2020). The conversational agent at least has to be as trustworthy as alternatives, e.g., talk to a human, to influence an individual's intention to use it. Similar to trust in provider, the user first forms an initial trust in the technology in the prephase of usage (Mcknight et al. 2011). Therefore, trust in the technology is important for the behavioral intention to use a conversational agent. Thus, I posit the following hypothesis:

H7a: Trust in technology is positively related to behavioral intention.

Afterward, this study explores the relation between trust in technology and use behavior. As stated above, a CA needs to execute an individual's tasks better in order to appear more trustworthy than alternatives (Laumer et al. 2019; Mesbah and Pumplun 2020). The confidence of the user in the use of a conversational agent, i.e., trusting that it will work as expected, is crucial for the technology's success and use (Janssen et al. 2021). The trust relationship between the user as trustor and the conversational agent as trustee develops further after the intention to use is established towards a higher level of trust (Lewicki and Bunker 1996). This knowledge- and experience-based trust results from the user's experience with the CA and influences use behavior. Therefore, I formulate the following hypothesis:

H7b: Trust in technology is positively related to use behavior.

I now turn to the relation between visual and social attractiveness and behavioral intention as well as use behavior. Visual and social attractiveness is the users' evaluation of the conversational agent's appearance and degree of sociality (i.e., ability in social interactions) in a positive way (Berscheid et al. 1989; Berscheid and Walter 1978). In the psychology literature, the attraction between two parties is facilitated by either similarity, complementarity, or both (Levinger 1964). Similarity Attraction Theory presents a positive association between personality similarity and attraction (Byrne et al. 1967). Additionally, it demonstrates the unexpected sensitivity of individuals to cues of similarity from strangers (Byrne et al. 1967). Assigning conversational agents with human-like features and behavior (e.g., use of social cues in visual or verbal forms such as natural language) and allowing them to resemble humans more closely, induces anthropomorphism (Diederich et al. 2022; Seeger et al. 2018). The more a technology is perceived as a human being, the higher the probability that a human will interact with the system (Epley et al. 2007). The human-like design and communication of a conversational agent influences users' perception of its sociality and the intention to use the CA (Qiu and Benbasat 2009). Another well-known psychological principle in this context is the Social Response Theory (Nass and Moon 2000). When people are confronted with human-like features by a technology (e.g., language, interactivity, fulfillment of social roles), they automatically apply social rules to their interaction with the system (Nass and Moon 2000) which has a positive impact on the technology acceptance and user satisfaction (Rietz et al. 2019; Riquel et al. 2021). In literature about technology acceptance of conversational agents, the visual attractiveness of user interfaces positively influences the intention to use, for example in the context of virtual personal assistant devices (Yang and Lee 2019). Furthermore, potential usage benefits that are associated with the design, have direct effects on behavioral intention and the actual use of a conversational agent (Ling et al. 2021). They are influenced by the CA's characteristics such as its' appearance and social and conversational ability, i.e., its visual and social attractiveness (Ling et al. 2021). This indicates that conversational agents with an attractive visual and social appearance affect an individual's behavioral intention and use behavior. Thus, I hypothesize:

H8a: Visual and social attractiveness is positively related to behavioral intention.

H8b: Visual and social attractiveness is positively related to use behavior.

This section concentrates on the relation between data privacy and behavioral intention as well as use behavior. Data privacy is crucial for the acceptance and use of new technologies (Reinken and Greiff 2021; Reith et al. 2019). It allows users to control and determine the use of their data and the transfer of sensible, personal data to third parties through transparency (Reinken and Greiff 2021; Stephanidis et al. 2019). People expect a high level of data privacy in the technologies they use and see a lack of data privacy as one of the most important barriers (Reinken and Greiff 2021). Personal data in particular, but also other types of user data, must be appropriately protected against unauthorized access by third parties (Reinken and Greiff 2021). In addition, users need a sufficient degree of transparency to be able to control and determine the use of as well as the transfer of their sensible, personal data (Reinken and

Greiff 2021; Stephanidis et al. 2019). Users show the same psychological, emotional, and relational effects for submitting personal information to conversational agents as providing this information to a human (Ho et al. 2018). For example, if users feel that they have no choice over what type of data is shared with the technology provider, the handling of the data is not secure or does not meet the requirements then they are not willing to disclose personal information to a CA (Przegalinska et al. 2019). Individuals' decision to accept and use a conversational agent depends on their individual privacy experiences, the perceived benefits they associate with the use, and how the data is used and protected (Watson and Nations 2019). Few studies don't support the effect of data privacy on the intention to use a CA (Rodríguez Cardona et al. 2021). In comparison, most of the prior research about technology acceptance of conversational agents shows the factor is important for the acceptance and use of the technology (Janssen et al. 2021; Laumer et al. 2019; Sohn et al. 2019). There is a direct relationship between data privacy and the intention to use and the actual usage of a conversational agent due to the privacy concerns of users about their data. Furthermore, privacy concerns are correlated with privacy behavior (Dinev and Hart 2006; Smith et al. 2011). Privacy concerns as individuals' characteristics influence beliefs and attitudes towards technologies based on the TRA (Fishbein and Ajzen 1975). Results from previous research observe that higher privacy concerns lead to lower technology acceptance, for example in studies about digital services or mobile applications (Li et al. 2011; Wang et al. 2016). This is the reason why I propose, that it is also applicable to conversational agents and a high degree of data privacy leads to a high degree of behavioral intention and use behavior towards a CA why I formulate the following hypotheses:

H9a: Data privacy is positively related to behavioral intention.

H9b: Data privacy is positively related to use behavior.

Next, I focus on the relation between advertising effectiveness and behavioral intention as well as use behavior. Advertising effectiveness refers to the effectiveness of a company's advertisements to induce individuals to like a product and purchase or use it by communicating relevant information to potential users (Ghose et al. 2017; Okazaki et al. 2006). People have to be aware of the existence of a conversational agent and become familiar with it in order to use it (Janssen et al. 2021). Organizations that provide a conversational agent use advertisements to raise awareness and communicate relevant information to influence individuals' intention for the technology as well as support the usage (Ghose et al. 2017; Janssen et al. 2021; Okazaki et al. 2006). The Hierarchy of Effects Model by Lavidge and Steiner (1961) states that "consumers normally do not go from disinterested individuals to convinced purchasers in one instantaneous step" (Lavidge and Steiner 1961, p. 59). For conversational agents, this means that people do not naturally go from being uninformed to being interested and becoming a CA user. The authors of the model formulate several steps between the first awareness of a product and the final purchase: awareness, knowledge, liking, preference, conviction, and purchase (Lavidge and Steiner 1961). In addition, results from the mere exposure effect indicate that people are generally more attracted to products and feel comfortable with them when they are presented to them more frequently (Zajonc 1968). Advertisements are used for each phase and the final goal is to achieve a product sale (Lavidge and Steiner 1961). In the case of products that are free of charge such as most conversational agents, the purchase phase is comparable with the use of the technology. The advertisement results in an action, i.e., the usage. The intention to use a conversational agent can be compared to the steps between the awareness and conviction phase. Meaning potential users who develop a positive attitude toward using a CA and a set of beliefs that the use is beneficial to them are more likely to use it (Lavidge and Steiner 1961). Therefore, I explore the influence of advertising effectiveness on the intention and the use of a conversational agent in my study which leads me to the following hypotheses:

H10a: Advertising effectiveness is positively related to behavioral intention.

H10b: Advertising effectiveness is positively related to use behavior.

Now I move to the relation between organizational image and behavioral intention as well as use behavior. The image of an organization is how its members perceive the opinion or judgment of outsiders on the organization (Dutton and Dukerich 1991; Dutton et al. 1994). Literature about organizational image and individual behavior mainly deals with the relationship between employees and their organization and how insiders and outsiders perceive the organization's actions and evaluate them. As described in the prior section on organizational image, employees' engagement and performance in an organization increase through a positive organizational image (Dhir and Shukla 2019). These effects result from the employees' perception of and their psychological experiences with the organization which create the necessary psychological conditions to support the processes of engagement (Kahn 1990). If employees identify with the values, beliefs, and assumptions of the organization, which are reflected in the organizational image, this in turn leads to higher performance (Dutton et al. 1994; O'Reilly and Chatman 1986). The Social Identity Theory (Ashforth and Mael 1989) delivers a further explanation. It highlights the importance of a person's self-concept for social affiliations and membership in organizations (Ashforth and Mael 1989). Individuals choose groups (e.g., at work) that have a positive image and whose personalities, values, or other characteristics match their own in order to develop a positive self-concept (Ashforth and Mael 1989). In conclusion, the attitude (i.e., the behavioral intention) as well as the behavior of employees is directly affected by the organizational image (Dutton et al. 1994). Therefore, I transfer the above-mentioned relationship, i.e., an increase in engagement and performance of employees based on a positive organizational image, to the context of technology acceptance of conversational agents and propose that the image of the organization providing a conversational agent positively affects the behavioral intention and use behavior of the organization's members. Hence, my next hypotheses are:

H11a: Organizational image is positively related to behavioral intention.

H11b: Organizational image is positively related to use behavior.

After all, I address the relation between behavioral intention and use behavior. In line with UTAUT2, behavioral intention influences the use behavior (Venkatesh et al. 2012). The higher the intention to use a conversational agent the higher the probability that individuals use it. The actual use behavior is the target construct in this research model. Thus, I hypothesize:

H12: Behavioral intention is positively related to use behavior.

Data from the moderators age, gender, and experience as part of UTAUT2 (Venkatesh et al. 2012) are collected during the research but are not further considered as hypotheses due to the small number of participants.

The following figure shows the research model based on Figure 1 which I extend to include the hypotheses I put forward to illustrate the application of all factors and their relationships (see Figure 2).

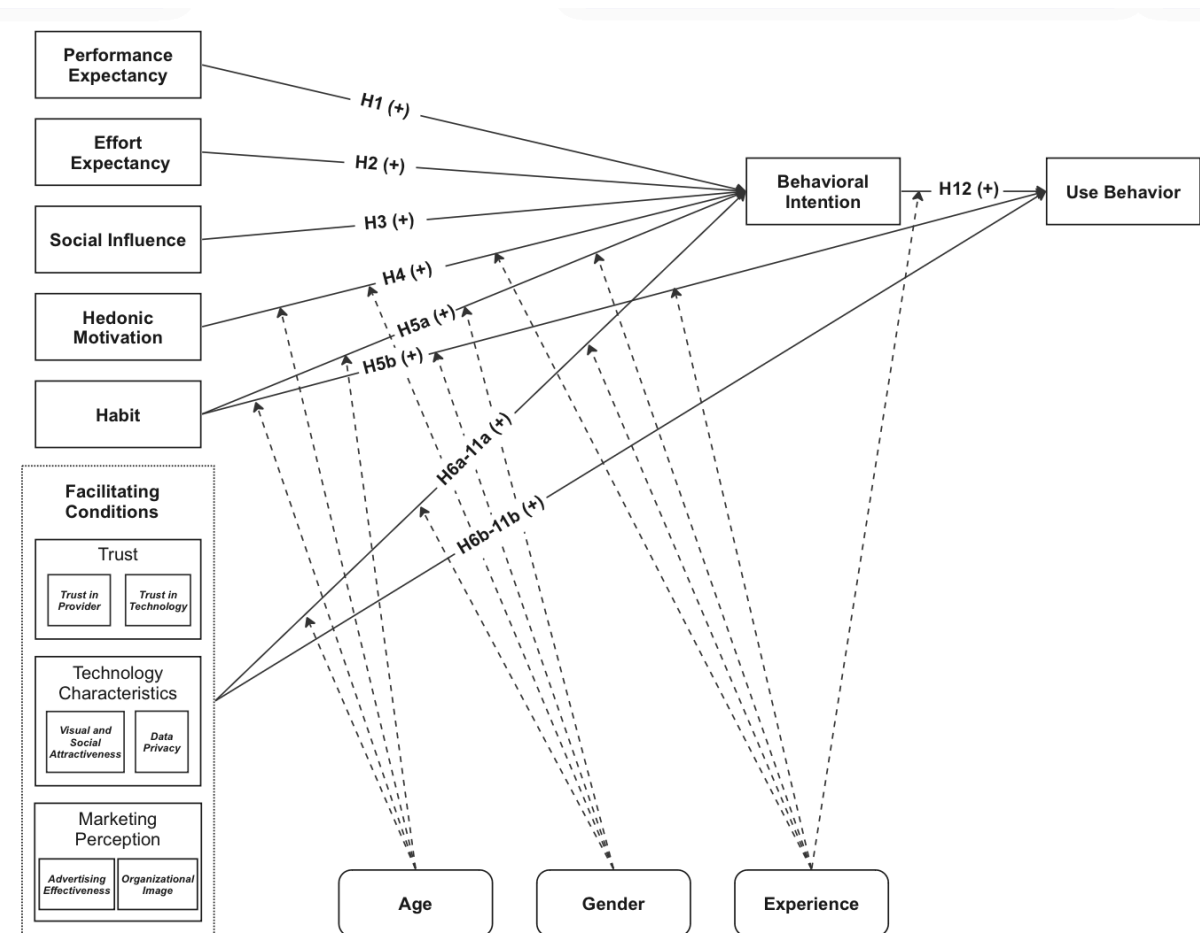


Figure 2: Research Model including Hypotheses (based on: Venkatesh et al., 2012, p. 160)

3 Research Methodology

This chapter provides the first part of the solution of my study by describing the relevant research context and explaining how I conduct the research. The first part of the chapter addresses a detailed explanation of the research method this study applies. The second part deals with the research context of the study. It describes the context of conversational agents in general and the conversational agent at Kempten University of Applied Sciences in particular, which is the research subject of this study. The last part of the chapter consists of three sub-chapters that describe the data collection and data analysis technique I use in my research as well as the importance of quality criteria.

3.1 Research Method

To answer the research question, this paper uses a qualitative research approach. Through this, I aim to understand a phenomenon within the complexity of a real-life context through communication with participants (Recker 2013). Applied to the research of this study the explored phenomenon represents the technology acceptance of conversational agents in the context of an educational institution (i.e., Kempten University of Applied Sciences) and the participants are its students. It contributes to a full understanding of the phenomenon and adds knowledge to the existing research (Recker 2013). Furthermore, the qualitative approach helps to understand the phenomenon from the point of view of the participants and their particular social and institutional context (Kaplan and Maxwell 2005). It serves to understand human decisions and actions in certain contexts and explain, why people act as they do

(Myers 2020). Positivist research allows me to test the underlying hypotheses derived from theory to attempt to increase the predictive understanding of the phenomenon (Myers 2020). Furthermore, positivist research is the most applied form of research in business, management, and IS research (Myers 2020). Therefore, I apply it to this research to explore the constructs in my research model and their relationships.

The qualitative research method of this study is case study research to explore and test existing theories (Myers 2020). Case study research is the most common qualitative method used in information systems (Alavi and Carlson 1992; Orlikowski and Baroudi 1991). Yin (2009, p. 18) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. It draws on a specific case to generate conclusions about the phenomenon in general (Myers 2020). It creates “empirical evidence from real people in real organizations to make an original contribution to knowledge” (Myers 2020, p. 90). I use it in this study to discover relevant factors for the technology acceptance of conversational agents based on one specific case in the context of a university, its students, and existing theory (i.e., UTAUT2). “The case study inquiry benefits from the prior development of theoretical propositions to guide data collection and analysis” (Yin 2009, p. 18).

One of the most widely applied data collection techniques in qualitative research and well-established in IS research is conducting interviews (Clark et al. 2021; Myers 2020; Schultze and Avital 2011). The interviews allow me to gather rich data directly from people in different roles and situations (e.g., students from different study programs and with different study experiences). The interview uses language to explore, describe, and explain the phenomenon from the view of the participants (Myers 2020). My research topic, the chosen research method, and the availability of study participants make the data collection with interviews an appropriate choice. I use semi-structured interviews which involve the advantages of structured and unstructured interviews, i.e., the use of some pre-formulated questions, but no strict adherence to them that allows the emergence of new questions during the conversation (Myers 2020). On the one side consistency across interviews is a major advantage of structured interviews, but on the other side, it forces the interviewer to follow the prepared set of questions (Myers 2020). The data collection technique of semi-structured interviews supports me in pursuing new lines of inquiry that might come up during the interviews and enables me to gain new insights from the interviewees. One major advantage and at the same time disadvantage of unstructured interviews is that the interviewees are free to talk about everything they consider as important (Myers 2020). This works very well if the interviewee likes to talk and feels comfortable in the interview situation (Myers 2020). If the interviewee talks too much the interview takes hours and results in a lot of data which are not relevant to the topic (Myers 2020). The structure of the interviews provides some starting points for a conversation and delivers a structure to guide the conversation based on the research topic. “The semi-structured interview is thus the type of interview that tries to take the best of both approaches while minimizing the risk” (Myers 2020, p. 149).

Social desirability bias can be a problem in the research method of conducting personal interviews, which I take into account in the interviews in this study.

“Social desirability bias refers to the tendency of research subjects to choose responses they believe are more socially desirable or acceptable rather than choosing responses that are reflective of their true thoughts or feelings. This tendency results in over-reporting of responses that are socially desirable and under-reporting of those responses that are deemed to be socially undesirable/less desirable.”

–Grimm (2010, p. 258)

When scientific studies collect data on personal or socially sensitive topics, the social desirability bias becomes relevant. Furthermore, in research methods where the interviewee can be easily identified and there is another person involved, e.g., in personal interviews, this bias is most noticeable (Grimm 2010). In this research, the study participants have to answer questions about their personal experiences and usage behavior with a conversational agent. They could be biased towards overemphasizing their usage and tend to speak about aspects they think the interviewer wants to hear or exclude negative experiences. To minimize the social desirability bias of the participants in this study and obtain high-quality data, I use different strategies. First, the interview guideline consists of a combination of mainly open and some closed questions to provide space for personal perspectives as well as to gather specific information in order to capture different aspects of the participants' experiences. Second, I conduct a pilot interview with one student to identify and address potential issues in the interview process. The feedback from this pilot interview helps me to refine the interview guideline and procedure. Third, I ensure anonymity to the participants. In the recruitment phase and at the beginning of the interview I point out that their responses remain anonymous and cannot be tracked back to the individual participant. This encourages them to speak more openly about their opinions and experiences. Next, to emphasize my position as a researcher and create distance, I explain that the study is not about considering specific responses but rather about capturing everyone's honest opinions. I don't judge the students' responses because I keep a neutral position as a researcher. This helps to create a safe environment for the interviews without any expectations from the interviewer. Fifth, the location of the interview supports this safe and trusting environment. I prepare a separate room where the participants feel comfortable and secure in sharing their experiences. Last, I encourage the interviewees to reflect on their own experiences and share their perspectives to receive more authentic responses. These are the strategies I use to minimize social desirability bias in my study to achieve high-quality data.

The interview participants in this study are students from Kempten University of Applied Sciences. As mentioned earlier, the university already deploys a conversational agent to answer students' questions about studying. This makes their students applicable as participants of this study. Furthermore, the students are one of the CA's two core target groups. In addition, I have easy access to them because I am a student assistant at the university. Other potential users of the conversation agent, which is available for free on the university's website, are not the core target group of the CA, and in particular access to external users is almost impossible as I cannot track who is using it. Additionally, for ethical reasons and due to strict legal requirements for the inclusion of vulnerable groups (e.g., under-age pupils) into scientific studies (Bayerisches Staatsministerium für Unterricht und Kultus n.n.), I exclude prospective students, who are the second main target group of the university's CA. The participating students have different levels of user experience with the conversational agent, different ages, genders, study programs, and study experiences which provide a high dispersion of study participants. I only take German-speaking students into account because of the easier access to them and to go not beyond the scope of this study due to a bilingual procedure. In addition, the English version of the conversational agent is only recently available which makes it impossible to gain comparable results. Furthermore, the students' usage rate of the CA remains below the expectations of the project team at the university that deploys the conversational agent, and the reasons why the students use it or not are unclear. Thus, the university's students are suitable participants to investigate the factors for technology acceptance.

The theoretical basis for the research is UTAUT2 by Venkatesh et al. (2012) which I extend for this study by integrating different user-, agent-, and organization-related factors in the construct facilitating conditions (see Figure 1). This study explores the antecedents of technology acceptance of conversational agents and their relationships. Findings from the interviews support the testing of the hypotheses derived from the research model and provide insights about the relevant user-, agent-, and organization-related factors of facilitating conditions for the acceptance of conversational agents.

The following sup-chapter provides a more detailed view of the research context of conversational agents in general and the CA at Kempten University of Applied Sciences as the research subject of this study.

3.2 Research Context Conversational Agents

In recent years, there has been a significant increase in interest from academics and practitioners in conversational agents (e.g., Feine et al. (2019); Pfeuffer et al. (2019)). They are used to automate redundant processes in a wide application field, such as education, healthcare, or customer support, to ensure for example 24/7 availability, increase efficiency, and minimize personnel expenses (Janssen et al. 2020). Conversational agents are deployed in apps, social networks, or websites (Janssen et al. 2020). They are referred to in different ways in literature such as digital assistants, chatbots, interactive agents, smart assistants, intelligent assistants, virtual agents, etc. (Maedche et al. 2019; Stieglitz et al. 2018; Zierau et al. 2020). The concept of conversational agents is based on the idea that people interact with the systems using natural language, just like in a conversation with another person (McTear et al. 2016). CAs originate from Joseph Weizenbaum's invention ELIZA from 1966. ELIZA was a computer program that was able to communicate with humans via a text-based interface (Weizenbaum 1966). It was developed to imitate a therapist in the healthcare sector (Weizenbaum 1966). In the 1980s these text-based interfaces were followed by voice-based dialogue systems and embodied conversational agents (McTear et al. 2016). Although text-based conversational agents only respond to text input from users based on a predefined rule-based system, their capabilities have improved enormously in recent years due to advances in artificial intelligence (Gnewuch et al. 2017). The application of natural language processing (NLP), machine learning, and deep neural networks enable the development of more sophisticated and flexible conversational agents which leads to a renewed increase of research and practice in CAs (Seeger and Heinzl 2021; Seeger et al. 2018). Conversational agents can be divided into text-based or speech-based, based on their communication type and interface. Well-known examples of speech-based CAs are Amazon's Alexa and Apple's Siri which mainly rely on spoken input (Burton and Gaskin 2019; Gnewuch et al. 2017). They can be found on many mobile devices and they are typically used in the private sector (Maedche et al. 2016). People use CAs like Alexa or Siri primarily for general purposes and everyday tasks (e.g., entering appointments in the calendar). They are not developed for specific tasks (Gnewuch et al. 2017). In comparison, text-based conversational agents imitate human chat conversations which makes the interaction human-like for users (Seeger et al. 2018). Most of the text-based conversational agents are domain-specific, perform specific tasks, and are increasingly available in various contexts (Gnewuch et al. 2017). Studies focus for example on CAs in healthcare (e.g., Minutolo et al. (2017), Miner et al. (2016), Laumer et al. (2019)), e-commerce (e.g., Ben Mimoun et al. (2012)), customer service (e.g., Qiu and Benbasat (2009), Gnewuch et al. (2017)), financial advisory (e.g., Morana et al. (2020)), education (e.g., (Wambsganss et al. 2020)) or museums (e.g., Kopp et al. (2005)). This study focuses on a text-based conversational agent. It is the CA from Kempten University of Applied Sciences which the university deploys for its students. In the following section, I describe the context of this conversational agent in more detail.

Conversational Agent of Kempten University of Applied Sciences

Since February 2022, Kempten University of Applied Sciences has implemented its conversational agent called "Wissl" on its university website. The conversational agent answers questions from students about the university and studying in order to reduce the workload of the university staff. Although the conversational agent offers a wide range of content for the university's students and it is available at any time, usage remains low and below the expectations of the responsible project team. This makes the university's conversational agent and its (potential) users applicable for my study to investigate what

influences its technology acceptance. Like many other organizations, Kempten University of Applied Sciences is increasingly confronted with the shortage of skilled workers on the one hand and a high number of inquiries from customers (e.g., prospective and current students) and responses to these on the other hand. The educational institution and its service departments, especially study-related service offices (e.g., student advisory office or academic registry) receive many inquiries from prospective and current students on a daily basis. The employees have to answer these inquiries in a timely manner and correctly. Often the requests are complex and employees from different offices have to gather their knowledge to be able to answer correctly. This work is difficult to coordinate and time-consuming. In addition, students often send messages with requests to several people. Many of these requests are generally easy to answer because they contain standard information about the university and studying there. Another related problem is that there is no central point of information employees have access to for standardized answers. This often leads to different answers from different people or wrong, outdated information. The university's employees wish for a reduction of the working time on repetitive, simple, and standardized requests to have more capacity for complex issues. Kempten University of Applied Sciences identified these problems and solved them with the implementation of a text-based conversational agent for answering standardized and easy questions from mainly prospective and current students. The CA is available every day around the clock independent of office times or availability of employees. For prospective students, the conversational agent answers questions for example about finding a suitable study program, or how to apply, and gives information about starting a study program. For the current students, the CA for example gives advice on questions on the course of study and information about all important topics related to advisory and service offices of the university, e.g., the academic registry, library, or international office. The student advisory service of Kempten University of Applied Sciences is responsible for the development and further improvement of the CA. I work for this department as a student assistant, which is another reason why the university's conversational agent is the subject of this study.

3.3 Data Collection and Analysis

This chapter describes in detail how I collect and analyze the data. First, I guide through the process of data collection using semi-structured interviews. Secondly, I explain how I analyze the interview data based on qualitative content analysis.

3.3.1 Data Collection

As mentioned before, I apply the data collection technique of semi-structured interviews. The first step consists of developing an interview guideline with questions based on the research model as the theoretical foundation of the study. The interview guideline consists of some pre-formulated questions to give structure and focus but also allows improvisation, i.e., the emergence of new questions during the interview and allowing the interviewees to talk freely about the topics that they consider important (Myers 2020). I write the interview guideline in German because the interview participants are only German-speaking students. The focus of the interview lies on the interviewee's interests and experiences regarding the CA and how they think or feel about it. This provides a deeper dive into the issue of technology acceptance I intend to explore (Clark et al. 2021). The semi-structuring of the interviews allows me as the interviewer to react to the interviewee's statements, and change questions or wordings to adapt to the current interview situation. In addition, I can ask follow-up questions and keep track of the prepared questions in the guideline which contribute to answering the research question of the study (Clark et al. 2021). The interview guideline consists of the following parts: First, I ask for the demographics of the interviewees (e.g., age, study program) and how long they have known the university. Second, I raise questions about their general experience with conversational agents (e.g., "Do you use

CA in general?" and "What are your experiences?"). Third, I enquire about the experience of the interviewees with the CA of Kempten University of Applied Sciences which involves questions like "Can you tell me about your experience with the university's CA?", "Can you tell me how you used it?" or "Can you give me examples?". If there are study participants with no previous usage experience with the conversational agent, the guideline also contains questions to explore the reasons why they don't use it. Furthermore, the guideline involves specific questions about the individual constructs of the research model. Example questions are "Can you please describe what the conversational agent is supposed to perform?" for the construct performance expectancy or "Can you please describe how you found out about the conversational agent?" for the construct advertising effectiveness. The next section of the guideline contains a set of follow-up questions to gain more insights about the interviewees' experiences with the university's conversational agent (e.g., "Can you tell me more about it?", "What do you mean by that?" or "Can you give some examples?"). The last part of the guideline involves some general questions to round up the interview, sums up important aspects by the interviewees, and supports getting further information for the development of the conversational agent. Example questions are "Can you summarize again what the most important points are for you to use the conversational agent or why not?" or "What can convince you to use the conversational agent (even more)?". The question "Did you wish you had a conversational agent when you were a prospective student?" is also part this last section of the guideline to get an initial indication of if the CA would be attractive to prospective students. This provides insights for the practical development of the conversational agent at the university as well as a starting point for future research. The entire interview guideline is presented in Appendix A.

The recruitment of the interview participants and the execution of the individual interviews follow the preparation of the interview guideline. I recruit the interview participants through personal contact, e-mail, or contacts of third parties. Through my employment as a student assistant at Kempten University of Applied Sciences, I have direct access to the students, e.g., on campus or at different student events, and their contact information. In addition, I can draw on a network of colleagues from different departments and professors who support me in finding students as study participants. I offer the students a present as an expense allowance for their participation to achieve a sufficient number of participants. The communication with the study participants takes place via a mobile messenger or e-mail. I arrange the appointments for the interviews with all participants via an online scheduling tool. To ensure that the interview takes place I regularly send reminders to all participants and direct messages one day before the interviews.

Before the initial interviews start, I want to facilitate the participant's unconscious entry into communication with me as the interviewer. We chat a little and I ask some ice-breaker questions, e.g., "Did you find your way here safely?" or "Have you just come from a lecture?". Afterwards, I introduce myself as the researcher of this study and describe the research project and its relevance as well as the interview procedure. The description of the interview procedure involves the recording of the interview with an audio recorder, the declaration of consent to the storage and processing of the interview data which the interviewees have to sign before the interviews start, and the process of scientific interviews in order to point out the difference from a journalistic interview (e.g., frequent use of similar questions).

The interview process itself consists of four phases based on the prepared guideline (see Appendix A). The first phase includes general questions about demographics (i.e., age, gender, study program, current semester) that allow me to allocate the interview to each interviewee afterward and for the statistics about the participants. During the second phase, I ask the participants to share their previous experiences with conversational agents in general. I encourage them to tell me which conversational agents they use apart from the CA of the university and their experiences with these CAs. These answers

provide information about the participants' experiences with the technology which moderates the relationships between several constructs in my research model. The second phase of the interview is the most important. It concentrates on the interviewees' experiences with the university's conversational agent. I start with an open question and ask the interviewees to tell me about their previous handling and usage of the CA. The open question aims to find answers to hidden questions on how the students use the CA, for which tasks or problems, which functions they use, or which aspects are important to support their CA use as well as what the participants like or dislike about the CA. To get more insights, I invite them to tell me more and special positive or negative experiences or to give examples. The interview guideline contains a section with follow-up questions which I can draw on during the interviews to ask the interview participants to provide more details. The third phase involves questions about the factors from the research model if not mentioned before by the interviewees themselves in the second phase. There may be some important aspects for the acceptance and use of the CA the interviewees don't consider, aren't aware of, or think it is not important. With specific questions about the constructs from the research model, I cover all relevant aspects to answer the research question of this study. I also ask open questions, to give the participants sufficient freedom to answer them and describe their view about the specific constructs and the level of importance to them. Through the concept of the semi-structured interviews and asking open questions, I am able to go into more detail on the aspects the interviewees mention and gain relevant insights on the acceptance of the conversational agent. The last phase of the interviews concentrates on aspects the interviewees want to add about the conversational agent. Furthermore, this part of the interview invites the interviewees to sum up the most important aspects of using or not using the conversational agent. In addition, I ask the interviewees to describe and explain their general wishes for the communication between the university and the students as well as if the CA would have been desirable to have as prospective students. This provides a more general view of the students' study life which can bring out further relevant aspects for answering the research question. At the end of the interviews, the interviewees can express any thoughts that may have arisen.

Before the interviews take place, I perform a pilot interview with a Master's student from Kempten University of Applied Sciences. This pilot interview allows me to check my interview guideline, e.g. whether the interviewee understands the questions well and whether the results are suitable for answering the research questions of this study. I also use the pilot interview to check that the room is comfortable and that the planned maximum time for an interview of one hour can be adhered to. For the pilot interview, I invite a Master's student because, due to his or her age and qualifications the student gained more life experience and experience in scientific work and thus he or she can provide valuable feedback. In addition, I practice the interview with a close friend to gain more self-confidence in interviewing and to get used to the questions from the interview guideline. Another advantage of the pilot interviews is that I can familiarize myself with the analysis software QCAmap, carry out initial coding tests, and check whether the participants' answers relate to the constructs from the research model and contribute to answering my research question.

The interviews take place at Kempten University of Applied Sciences to give the participating students a feeling of comfort in a location that is familiar to them. I choose a private room with appropriate furniture and equipment (seats, table, daylight, heating, high-quality audio recorder, etc.) in order to avoid disturbance or external influences and a comfortable atmosphere for the interviews. The department I work for as a student assistant provides me with a suitable meeting room for conducting the interviews. I carry out two of the interviews online via the online videoconference software Zoom because the students are studying abroad at the time the interviews take place.

Before the interviews start, all participants sign a declaration of consent about taking part in the interviews voluntarily. In addition, I inform them that they don't receive any payment and assure them of their

anonymity. The interviews take place in mid-December 2023 and include a total of twelve interviews with students. The students are of different genders, and ages, and are enrolled in different semesters in various study programs at Kempten University of Applied Sciences. The participating students are between 18 and 34 years old. The average age of the participants amounts to 25.75 years. There are nine female and three male students resulting in a ratio of 75% female and 25% male participants. Concerning their study programs, one participant studies in the Master's program, while the other eleven study in their Bachelor's programs. Six participants, i.e., 50%, have low experience with conversational agents in general (i.e., almost never and rarely used), three have medium experience (i.e., sometimes and often used) and three have high experience with CAs (i.e., regularly, very often, and active use). Five of the twelve students had negative experiences with these conversational agents, one had positive experiences, five had both positive and negative experiences, and one participant did not specify whether the experience was positive or negative. Nine of twelve students (i.e., 75%) use the conversational agent of the university on a low level (i.e., almost never or rarely), two on a medium (i.e., sometimes and often), and one on a high level (i.e., very often). These participants allow me to present various voices and perspectives as well as different experience levels with the CA. I present an overview of all study participants in Table 1. The table involves the following columns: the participant number, the age and gender of the participants as well as their experience with conversational agents in general, divided according to the experience level and type. Furthermore, the table contains the participants' type of degree, their study programs, and their current semester. In addition, the table displays the student's level of use of the university's conversational agent as well as the length of each interview and where I conduct it (i.e., on site at the university or online via video conference). I record the interviews with an audio recorder to collect the data from all interviews without the fear of missing some important information like only making notes during the interview. The interviews last between 24:29 minutes and 37:40 minutes. The average interview length is 31:21 minutes.

The next step in the research process is to transcribe the audio files, i.e. to convert them into text in order to analyze them. These steps I describe in detail in the following subchapter.

Participant	Age	Gender	Experience Level	Type of Experience	Type of Degree	Study Program	Current semester	Use Level University's CA	Length of Interview (min)	Interview Location
P1	21	Female	Low	Negative	Bachelor	Tourism Management	3	Low	31:49	On site
P2	25	Male	Low	Negative	Bachelor	Computer Science – Game Engineering	11	Low	27:26	On site
P3	20	Female	High	Negative & Positive	Bachelor	Future Tourism: Innovation, Transformation and Sustainable Development	3	Low	28:05	On site
P4	25	Female	Medium	Negative & Positive	Bachelor	Energy and Environmental Engineering	5	Low	24:29	On site
P5	18	Female	Low	Negative	Bachelor	Electrical Engineering and Information Technology	1	Low	35:44	On site
P6	25	Female	Medium	Negative	Bachelor	Industrial Engineering for Technology and Sustainability	7	Medium	31:00	Online
P7	22	Female	Low	Negative & Positive	Bachelor	Tourism Management	5	Low	30:24	Online
P8	23	Female	High	Positive	Bachelor	International Management	6	High	36:32	On site
P9	34	Female	Low	n.n.	Bachelor	Social Service Management	7	Low	30:32	On site
P10	22	Female	Low	Negative	Bachelor	Business Administration	1	Medium	33:52	On site
P11	24	Male	High	Negative & Positive	Master	Computer Science	1	Low	37:40	On site
P12	25	Male	Medium	Negative & Positive	Bachelor	Industrial Engineering – Mechanical Engineering	6	Low	28:42	On site

Table 1: Study Participants

3.3.2 Data Analysis

After the execution of all interviews, I complete the research methodology by transcribing, coding, and analyzing the interviews drawing on the method of qualitative content analysis based on Mayring (2022). This approach enables theory and hypotheses testing and is applicable to the analysis of small samples (Mayring 2022). It allows me to identify relevant factors of the technology acceptance of conversational agents, which confirm the factors in the research model or bring out new factors. To get the interviews in text form for the below-described analysis, I transcribe the audio files with the support of software. Therefore, I use Adobe Premiere Pro, which originally is a video editing and cutting software. Due to its ability to recognize spoken words and transcribe them and its good results (e.g., for sub-titles in videos), I repurpose the software for the transcription of my interviews. After I get the transcribed audio files from the software, I go through the text several times while listening to the interviews and correct false transcribed text from unclear pronunciations or other transcription faults (e.g., grammar, capitalization, or punctuation). The transcription follows the following transcription rule of selective protocol:

“This is an economic procedure for transcription. The researcher defines those parts of the (audio recorded) interview, which are relevant for the research question. Interviews often contain extensive introductory parts, motivating the person or explaining the research question, excurses which are important for maintaining a good climate and the compliance of the interviewee. But those parts sometimes are not necessary for the text interpretation. Or the interview has an open, narrative character and the researcher is only interested in specific topics.”

–Mayring (2014, p. 45)

I only consider those parts of the interviews for the transcription, which are important to answer the research question and are associated with the constructs from the research model and their relationships. Therefore, in the transcribed text, I do not take into account the introduction or the characteristics of the participants, nor parts of the interviews where the interviewees stray from the topic. In addition, I exclude all utterances like “uhms” or “ahs”, decorating words like, “right”, “you know”, or “yeah” from the text as well as transferring shortcut articulation and dialect into the standard language. This follows the principle of “clean read or smooth verbatim transcript” (Mayring 2014, p. 45). These two steps, i.e., the correction of transcription errors and the application of specific transcription rules, result in comprehensive transcripts for the next analysis step. As the interviews are in German, the transcribed text is also in German. The digital attachment of this study contains the transcripts of all interviews.

After the transcription of all interviews, the next step is to analyze them. Therefore I use the software QCMap which is an open-source software for qualitative content analysis (Mayring 2022). Mayring himself developed this software together with partners from universities and the economy to provide a software program that is specially designed and tailored for his qualitative content analysis and supports researchers in the digital analysis of their content. The program is iteratively structured to guide researchers step by step through the required process of qualitative content analysis. Mayring and his team ensure that the software is always up to date and includes sufficient privacy standards (Mayring 2022).

For the analysis of the interview transcripts, this study follows the analysis technique of structuring/deductive category assignment to extract a specific structure from the material by using a category system to systematically identify and extract text components related to those categories (Mayring 2014). This structure is transferred to the material in the form of a category system and all text components addressed by the categories are then systematically extracted from the material (Mayring 2014). The categories for the analysis of this study are based on the research model and its determined constructs,

i.e., the factors and their definitions. Additionally, I create anchor examples for each category and if necessary, coding rules. The anchor examples typically present parts of the text which illustrate the character of the category. With coding rules, I formulate rules to differentiate between categories when there are problems with a clear assignment to a specific category. The categories, their definitions, anchor examples, and coding rules represent the coding guideline for the analysis. Appendix C at the end of the study contains the applied coding guideline. I complete and improve the anchor examples and coding rules at the material run-through. After about 50% of the material run-through I revise the coding guideline, i.e., the categories and coding scheme, to see if it is still appropriate for answering the research question of the study. When the categories and coding rules are complete, I finally work through the material. As a result, I get the distribution of the interview content into the categories. Furthermore, I receive the statistical frequencies of the assigned categories across all recording units (i.e., the interviews).

As a central element of the qualitative content analysis, I divide the text into segments and assign them to the categories of the coding guideline in advance of its interpretation. These text segments, the so-called units of analysis, enable other researchers to reach similar results. With these units, I decide how sensitive I analyze the data, the amount of material I consider, and the alignment of text portions with the category system. Qualitative content analysis works with three different units. The coding unit specifies the smallest part of the text that I analyze and how much text should I group under a single category. The context unit defines the largest section of text that I categorize together. The recording unit decides which parts of the material I associate with a specific set of categories (Mayring 2014). These three elements are essential in content analysis to structure and make sense of the data. The coding units for this research are clauses, i.e., “parts of sentences with syntactic (grammatical) connection and verbs” (Mayring 2014, p. 32). The context unit is the whole interview, and the recording unit involves all twelve interviews.

If important aspects mentioned by the participants as important emerge during the analysis of the interviews and that are not covered by the defined deductive categories, then this research also offers an approach for analyzing these new factors by using the concept of inductive category formation (Mayring 2022).

3.3.3 *Quality Criteria*

Quality criteria are important in qualitative content analysis to ensure that the research is valid, reliable, and comprehensible. They help to standardize the research method and determine that the results are verifiable and meaningful. Social science methodology divides quality criteria into measures of reliability and validity (Mayring 2022). Reliability means the stability and precision of the measurement as well as the constancy of the measurement conditions, i.e., traceability of the research (Friedrichs 2006). Measures of validity relate to whether what is measured is also what is intended to be measured (Friedrichs 2006), i.e., I measure what I want to measure.

According to Krippendorff (1980), there are specific quality criteria for reliability and validity for conducting a content analysis. A study reaches high reliability through stability, reproducibility (i.e., “the extent to which the analysis leads under different circumstances to the same results” (Mayring 2014, p. 111)), and accuracy (i.e., “the extent to which the analysis conforms to a particular functional standard” (Mayring 2014, p. 112)). I ensure stability in this study by applying the instrument of analysis, i.e., the coding guideline, again on the material. After finishing the first coding, I start coding again at least for parts of the material without looking at the previous coding and comparing the two results. This gives me insights if the application of the rules of the guideline is stable during the analysis. There are only small differences between the two results, which I identify as a sign of the reliability of my research. I

enable reproducibility with detailed and transparent documentation and description of my research procedure as presented in the sub-chapters above. It allows for example other researchers to achieve the same results and additionally provides “objectivity in the sense of independence of the results from the analyzing person” (Mayring 2014, pp. 111-112). Accuracy requires stability and reproducibility (Mayring 2022), which is given in my research process. Furthermore, my research relies on clear definitions of coding categories based on previous scientific studies to avoid inconsistencies between categories during the coding process which ensures accuracy and high reliability.

Krippendorff (1980) also offers different concepts to achieve validity. This study provides high validity by taking into account semantic validity (i.e., “the correctness of the manner in which the meaning of the material is reconstructed” (Mayring 2014, p. 110)), sampling validity, and construct validity. I ensure high semantic validity by reflecting the appropriateness of the category definitions, i.e., definitions based on prior literature, anchor samples, and encoding rules to differentiate between categories. Based on Krippendorff (1980), I conduct two easy checks. First, I collect all coded text passages of a category, compare them with the defined constructs in the coding guideline, and check their homogeneity. Second, I formulate hypothetical statements that clearly fit the defined categories and compare them with the already coded passages to check if they conform. The sampling validity I aim to achieve with the following aspects. As described in a prior sub-chapter, the participants of the study are students at Kempten University of Applied Sciences with different experience levels with conversational agents and different demographic characteristics (i.e., age, gender). In addition, they study in different study programs in different semesters. This allows me to present a wide range and a high degree of diverse participants which should represent all students at the university. At the same time, I can define the participating group and determine the basic population of my research. The sample follows the model of random selection. To ensure construct validity, I base my research on existing models and theories like UTAUT2 and the validity of their constructs which is proven in several prior studies.

4 Results

This chapter presents the findings from the interviews based on the research model and research methodology of this study. With the analysis, I identify how user-, agent-, and organization-related factors of facilitating conditions are related to the technology acceptance of conversational agents. The participating students mention all factors from UTAUT2 and the user-, agent-, and organization-related factors integrated into the concept of facilitating conditions multiple times during the interviews. Nevertheless, both the number of mentions varies depending on the factor and interviewee as well as their significance for the technology acceptance of the conversational agent to support or reject the hypotheses I put forward. The factors that are positively related to behavioral intention and use behavior are mostly the original factors of UTAUT2 (except for habit) and the factors trust in technology and visual and social attractiveness of the concept of facilitating conditions. As the interviews and the transcribed text are in German, I translate the quotes from the interviews I use in the following sections into English accordingly. I use the online AI translator DeepL for the translation of the quotes. This study presents an overview of the used quotes with the original German quotes and the translated English quotes in Appendix B. At the end of the chapter, I show a summary of all results of this study in Table 2. In the following sections, I present the findings in more detail.

4.1 Factors of UTAUT2

This sub-chapter presents the findings from the factors of the original UTAUT2 and their effect on behavioral intention and use behavior regarding the conversational agent. As mentioned earlier, I involve them in my study for the completeness of the research model and their high validity from prior research.

Performance Expectancy and Behavioral Intention

First, I present the findings from the relation between performance expectancy and behavioral intention (i.e., hypothesis H1). All twelve study participants mention the factor performance expectancy in the interviews as relevant for their intention to use the conversational agent. The moderators age, gender, and experience have no significant influence on the relationship. In total, the interviewees speak about performance expectancy 98 times in all interviews which makes performance expectancy the most mentioned factor.

The interviewees report various benefits that they expect from using the conversational agent. First, the conversational agent should take over the students' search on the university's website, ensuring less effort in the search for information, and it should help them to navigate easily on the website. The CA would provide benefits for the students if it supports their search process on the university's website and if it can do it better than the users themselves. The students mention for example: *"It should be so good that I find my way around the conversational agent better than navigating the surface on the website"* (P2). Compared to an extensive search on the university's website, which is the current situation, where students have to click through various pages and read everything on their own, the conversational agent should be able to give the right information on demand as an example from the participant 7 displays: *"You don't have to search everywhere yourself, you don't have to deal with it yourself ..."* (P7). Furthermore, the CA should support the students and simplify their search, for example getting contact details from the university's staff and professors. As an example, participant 12 states: *"For me, it would help me to find information and contacts. I think it should support you and make the search easier"* (P12). In addition, the students would benefit from the conversational agent, if they don't need to search on their own on the website. This means that they intend to use it, *"... when [they] get the answer straight away without having to look at the page [themselves]"* (P1), and *"... it directs [them] to the desired or searched page"* (P2).

Another important aspect occurring during the interviews is, that the conversational agent should decrease their search efforts for finding information as an indicator for their behavioral intention. The students expect *"... that there is not much to search for ..."* (P1) or they *"... have the feeling that [they] have no search effort"* (P10). They would use the CA if it could substitute the existing search bar on the university's website as the statement from participant 8 shows: *"I think it would be cool if it replaces the search bar. The search bar is definitely very bad and if it were to be completely replaced, so that instead of entering 'I want information about this study program' in the search bar, I could just enter it in the conversational agent. Or 'When are the exam dates?' or 'When are the semester holidays?' so that it just comes up there and I no longer have to use the search bar and type in dates. Instead, I get all the questions that the search bar answers covered by the conversational agent in any case"* (P8). The students expect that they can type in their questions and the conversational agent will give them the right answer or the right webpage straight away. With the existing search bar, the students receive a high number of recommended pages as a search result. The students have to explore each of the results to figure out which of the recommended pages they are scrolling contain the desired information. They want to feel, that they have no search effort if they use the conversational agent.

Other students report, that the conversational agent should give an orientation on the website for them. It should guide them through the website to the right information they are looking for as the statements

from participants 3 and 7 show: *“That I am pretty well guided through the website ...”* (P3) and *“It navigates you more easily through”* (P7). They further expect to easily write with the CA, and it should guide them through the website: *“... I'd be happy if I could write to it briefly and then it would simply guide me through”* (P11). Another example of this issue arises in the interviews. If the students don't know who to contact when they have questions or need help for solving a problem. In addition, they complain that the website contains a lot of information which can be confusing, and they think the conversational agent gives better support: *“For me, the conversational agent should provide guidance. For example, providing contact details if you don't know where to go or who to ask about this problem. What do I do or who do I write to for which problems? What I think would be cool is a bit of orientation on the website, because I found it a bit confusing at first”* (P5). The student's intention to use the CA increases if it guides and easily navigates them through the website.

The second often-mentioned issue of the factor performance expectancy the students report during the interviews is, that they expect the conversational agent to help them to find the desired information faster than looking on their own for information and more efficiently to save time. For example, participants 1, 10, and 11 report these aspects as a requirement for their intention to use it: *„To get answers to its questions as quickly as possible”* (P1), *“That my search behavior becomes more efficient, that everything happens faster”* (P10), and *“I would use it if it saved me an honest amount of time”* (P11). They perceive it as faster and more efficient if they just type in something and the conversational agent immediately gives out the information they need, for example for finding the e-mail address of a professor as mentioned by participant 10: *“... if I need an e-mail from the professor, I enter an e-mail and the professor, and it spits it out for me. It's more efficient and faster in a way. If I don't feel like searching for everything, I just type it in. It spits out the page I'm looking for”* (P10). In the interviews, the students further mention, that if the conversational agents guide them directly to the demanded website, they can save time by not having to search the website on their own. They think, *“... that [they] could save time if [they] were guided directly to the thing [they] were looking for and didn't waste time clicking through the entire university website”* (P3). One student describes an illustrative example: *“I looked at exam topics and exam dates because you always have to go to 20 websites, and I don't always know exactly where they are by heart. I think it's quite useful if you can find them quickly”* (P9). In addition, if it would save time finding the information with the conversational agent, the same student could imagine substituting a personal conversation with an employee of the university: *“... I can find information more quickly, which saves me time and means I don't have to deal with this personal contact”* (P9). The participating students intend to use the conversational agent, to get answers to their questions as quickly as possible.

The students report further benefits from using the conversational agent. They intend to use it if they perceive getting the correct information and direct and precise answers to their questions from the conversational agent: *“It is my expectation that when I talk to it, I want an answer”* (P11) and to *“... get good, correct information”* (P1). If the students have specific questions, they expect the conversational agent to provide specific answers to their questions as the statement from participant 10 makes clear: *“For me, it's important that if I have a specific question, I also get a specific answer”* (P10). Another example comes from participant 2: *“This means that I ask a question and quickly receive an answer that is also tailored to my enquiry”* (P2). Furthermore, they don't want to be guided to a webpage where they have to search on their own because this does not answer their questions in the eyes of the interviewees. They prefer that the conversational agent should issue the right reply directly in the CA instead of offering a link: *“In principle, you could go to the link and see what it says, but that wasn't the answer to my question”* (P9). The students expect that the CA should not only give out links to pages from the university's website because this output is too low from the view of some interviewees. Instead, it should provide quantitative, right, and concrete answers, i.e., *“... concrete answers, concrete data, concrete values, concrete figures”* (P11). The students would be glad, *“... if it gives really quantitative or really*

correct answers: "yes" or "no", 80% or 100%, 25 students, 50 students, NC of 2.7" (P11). Another example is the reply from the conversational agent to the information about a service department's contact details. If they enter the department's name in the conversational agent, they want to get all relevant contact information as participant 7 states: *"You get direct answers to a question. If I now just enter 'Academic Registry' in this search field, it spits out the Academic Registry and where I have to call, where I theoretically have to go when the opening hours are"* (P7). A further example is to get the exact date of the exams from the conversational agent. The CA should be able to provide precise dates instead of only the link to a webpage where the users can find it: *"It would be cool if the exact date was written, the start of the exam is then and then"* (P4). The students expect the conversational agent, to provide correct and precise information directly to increase their intention to use it.

The next benefit the students perceive from using the conversational agent is to get more specific, individual, and personalized information. First, the students' wish is a conversational agent that is able to provide a personalized answer and an individual solution to a question the students need. It should be personally tailored to the student's question: *"It gives me a personalized answer and the solution to my question that I need. I think that would be my dream conversational agent. In other words, customized to my personal question"* (P2). At the time of the interviews, the conversational agent is not able to share personal details for each student. To increase the students' intention to use it, the CA should be able to tailor its answer personally to the students. It should not only provide website links, but individual answers to questions as the statement from participant 3 makes clear: The CA should *"... not just provide links, but an individual answer to my question"* (P3). The students see further benefits in personal answers because it would decrease their effort of writing an e-mail to a service office or even visiting the office in person: *"It would be very individual questions, but it would be really cool because then you wouldn't always have to bother the secretary's office or write e-mails"* (P3). Second, besides the personalized information, the interview participants would benefit from the conversational agent, if it offers more specific information to make it more comfortable instead of clicking through the website. For example, when finding specific information like a module handbook from a specific study course, *"... to quickly find something where I have to click ten times"* (P6). The CA is not specific enough to find the module handbook the student needs for his or her course. Another example is if a student needs to find a specific professor, the conversational agent should give out the right one and not provide ten suggestions in which the students have to search for the right one. Participant 12 describes the expectations as follows: *"What you don't want is for me to look for something and then it makes ten suggestions, but instead, I need the professor and then it gives me the professor ..."* (P12). The students intend to use the conversational agent if they get personalized answers to their personal questions and more specific information.

The last and least mentioned benefit is that the conversational agent should provide summaries of individual pages from the university's website and the information, from which the CA outputs links. The students complain that the conversational agent provides a link to a topic on a webpage with a lot of text where they have to invest too much time to find the desired information. If it would give a short summary of the webpage where the students can find a detailed answer, they could decide whether it is even necessary to visit the website. Participant 1, for example, is one of the students who mentions this aspect: *"What was often the case was that it always linked to some pages. For example, if you only had a small question, such as whether there was university sport. Then suddenly the whole program came up. Maybe that one sentence before it answered the question"* (P1). The conversational agent should provide summarised information to give the students the opportunity to decide if they need to visit the offered website to have a closer look at detailed information to answer their questions. The CA should *"... briefly summarise what is described in detail on the website. Like a brief summary of what it is, so that [the students] already know whether it's going in the right direction or not and then guide [them] to*

more information" (P6). The students intend to use the conversational agent if it provides summaries of the content on the offered web pages. This is another benefit that students expect from using the conversational agent, in addition to the aspects already mentioned above.

As a result of the findings on the relation between performance expectancy and behavioral intention, hypothesis 1 is supported.

Effort Expectancy and Behavioral Intention

Second, I formulate the results from the relation between effort expectancy and behavioral intention (i.e., hypothesis H2). Effort expectancy is another factor from UTAUT2 that all twelve interview participants mention as important for their intention to use the CA. Overall, the interviewees mention the factor 32 times. The moderators age, gender, and experience have no significant effect on the relation between effort expectancy and behavioral intention.

The participating students mention effort expectancy as an influence on their behavioral intention toward the conversational agent for several reasons. First, the CA is expected to be easy to use. The students perceive it as easy to use because it explains what it is, how it works, and what it provides. Participant 1 says, that he or she likes *"... that it is quite simple, that it says straight away what it is, what it wants, that you can then simply write it in"* (P1). Furthermore, it is easy to use because if the students access the website, they see it and the conversational agent tells them what it is and what it is for. They can immediately type their question in without wasting time figuring out how it works: *"It's simple, because as soon as you find it, it tells you who it is, what it does and what it can do. Then there's the field where you can write something"* (P1). Participant 11 formulates a similar view of why the CA is perceived as easy to use: *"Just click on it and enter something"* (P11). Other participants link the self-explanatory of the conversational agent to the ease of use of the technology. They see it as important that they want to make no effort to figure out how the CA works and how they can use it. An example statement from participant 1 provides an indication: *"It's all self-explanatory how to do it and that's important to me"* (P1). The intention to use the CA increases due to the students' perception of its easy usage.

The second aspect that often comes up during the interviews is, that the study participants associate an easy usage that they can short and easily write something in the chat of the conversational agent or ask questions that increase their intention to use it. The students don't want to write full sentences if they have a question. They expect that writing only key points is sufficient. They speak about, how they *"can briefly and concisely describe what the problem is in a sentence or two, or just in bullet points, and that it then spits out the solution"* (P12) and they *"...don't have to write a complete novel. [They] don't need to write the entire question in detail, it's enough to write small sequences ..."* (P6). If the students perceive no or low effort in entering questions in the CA, they are more willing to use it.

Furthermore, the study participants want to easily enter their questions by text or speech in the input field and get the answer. They associated this kind of process with having the lowest effort: *"It's always best if there's the least effort when entering something and then something comes out"* (P10). They enter the question they want to ask and get the right answer without great effort. Participant 2 describes it in the following words: *"I have an input mask, I click on it and enter my text. That's pretty simple. There's now a small extension that allows me to enter the search query by voice command. I wouldn't expect it to be much easier right now. I have an input field for either voice or keyboard and I get my answers in there"* (P2). Another student gives more details about how easy it should be to type the question in. The student wants *"... that you can describe the problem briefly and concisely in one or two sentences or just with bullet points and that it then spits out the solution"* (P12). Regarding voice-based input in the conversational agent, some students find this way of asking their questions easier and more comfortable. Especially if they have longer questions that require more effort when typing in as text, they

prefer to use entering it by speech. Participant 7 is one of these students and reports the following statement: *"I sometimes find it easier, especially when you're searching a lot. If you have a longer question, it's usually quicker to speak"* (P7). Similar to entering questions by speech, another student prefers getting the answers read out from the CA. The conversational agent should be able to read out the answer because the participant perceives it as more comfortable: *"It's more convenient for me that I don't have to read, and it tells me what the answer is"* (P2). Allowing students to easily enter their questions text- or voice-based and output them in the same way, increases their behavioral intention.

Last, the students expect to have easy access to the CA and perceive no effort until they can use it. They want it to be easily found on the university's website. For example, participant 9 thinks *"... it's quite good that it's easy to find on the university's website. You can see it anyway and you can click on it yourself"* (P9). The students link their feeling of having no effort to get access to the CA with different aspects. One student report, that access to the conversational agent should not involve reading a complicated instruction before: *"No complicated instructions, so it's easy to open, which it already is, you just have to click on it"* (P3). Participant 9 prefers *"[that] it is accessible at all times [which] would also be a reason to use it"* (P9). The easy way to get to the conversational agent is a further aspect of effort expectancy to increase the intention to use it.

Finally, after looking at these results from the relation between effort expectancy and behavioral intention, hypothesis 2 is supported.

Social Influence and Behavioral Intention

Looking at the findings of the relation between social influence and behavioral intention (i.e., hypothesis H3), all twelve participants mention that social influence is significant for their intention to use the conversational agent. In sum, the factor social influence occurs 17 times during the interviews. The moderators age, gender, and experience don't affect the relation between social influence and behavioral intention significantly.

The students report several reasons, why important others (e.g., fellow students) influence them towards using the conversational agent. One aspect is the recommendation from others or if others talk about the conversational agent. For example, one student mentions that he or she gets a recommendation from others to use the conversational agent to get faster answers. The student describes the situation as follows: *"One of them said, 'Come on, just enter it quickly, it's usually quicker'. And that was the case. If you get a tip like that, then it's usually the case that you use it more often once it's worked"* (P10). Therefore, if other students recommend the conversational agent and talk about how well it works, the study participants could imagine using it. Participant 5 reports, that *"... there was never a suggestion to 'ask the conversational agent. Personally, I wouldn't have thought of it"* (P5). Participant 6 makes it clearer and formulates a direct relation between the influence of other students and the effect on the behavioral intention: *"But I do think that if someone were to advertise and say that it's really good or that they're basically happy with it, that could have an impact"* (P6). The recommendation from other students significantly influences the student to use the conversational agent. Other participants report similar aspects. They don't talk with other students or other important persons about the CA and therefore these important others don't influence the students. An example statement derives from participant 12: *"I didn't talk to anyone about it ..."* (P12). Other participants describe it as *"... [to] be honest, we've never discussed it before"* (P1), *"... [that's] not really an issue for us"* (P4), or *"... [the CA] doesn't really come up at all"* (P8). These statements indicate that it influences the participants to use the CA when other students would talk about the conversational agent. The social influence from other students talking about it is a strong predictor of behavioral intention.

In addition, participant 1 reports that the professors don't talk about the conversational agent which seems to surprise the student. As important others for the students, the professors at the university can influence the students to raise their intention to use the conversational agent as the following statement shows: *"What I've noticed is that no lecturer has ever really mentioned this conversational agent. For example, we co-organized the first semester event this year and nobody mentioned this conversational agent in any way"* (P1). The impact of professors is another aspect of the factor social influence for the study participant to increase their behavioral intention.

Furthermore, if other students would use the conversational agent, it would influence the study participants' behavioral intention. The participating students don't intend to use the CA, because they don't observe other students using it as participant 3 reports: *"They don't influence me at all because they don't use it"* (P3). A similar view comes from participant 7, that there is no social influence from other students because *"... the others don't really use it either and then it doesn't happen"* (P7). These statements imply that the participating students can imagine using the conversational agent if they observe that others use it.

In comparison, one of the participating students tells me, that the influence from important others is not strong enough in comparison to habit to affect the student's behavioral intention on a high level as the following statement displays: *"I would say they have no influence on whether I use the conversational agent or not."* (P2). Participant 2 talks about how the learned knowledge of using websites to find required information leads to a habit that is stronger than social influence for using the CA. Social influence is not strong enough to beat this habit. In this case, social influence has less influence on the intention to use the CA than for the participants mentioned above.

After presenting these results from the relation between social influence and behavioral intention, hypothesis 3 is supported.

Hedonic Motivation and Behavioral Intention

According to the relation between hedonic motivation and behavioral intention (i.e., hypothesis H4), all twelve interview participants associate hedonic motivation positively with the intention to use the conversational agent. Seven interviewees speak about a lower level of hedonic motivation that results in a lower effect on the intention to use the conversational agent (P4, P5, P7, P8, P9, P11, P12). Some of these seven students name other reasons that have a stronger influence on behavioral intention as I describe in the following sections. In total, they mention the factor hedonic motivation 28 times. I cannot identify a significant role of the moderators age, gender, and experience in the relationship between hedonic motivation and behavioral intention.

The interviewees associate different aspects of hedonic motivation with using the conversational agent. Some of the students mention hedonic motivation with a link to entertainment and try out a few things or test some questions to overcome boredom. Participant 1 talks about these aspects and would use the CA, *"... when you're bored, and then ask it any questions. It's a bit of entertainment"* (P1). The student names some examples like *"What you can do now in your free time, which is perhaps the highest mountain in the Allgäu"* (P1). Other interviewees associate fun with just trying out what the conversational agent is able to answer. Participant 2 would ask questions, that the student normally does not ask a machine, such as *"How old are you?" or "Who actually built you?", i.e. private questions"* (P2). Furthermore, the interviewees describe it as fun to ask the conversational agent questions they cannot or would not enter into the search bar of the website because they get no real answers by doing that. In addition, they associate it with fun if they just write a message to the CA and see what its answer is as the statement from participant 6 represents: *"That you can just ask it anything. Something you can't type into the search bar. You can rather write it a text. You can't do that in the search bar. I find it exciting to*

see *what it then says and what it returns*" (P6). The easy way of writing a message to the conversational agent and testing some questions to counteract boredom creates hedonic motivation which influences the students' intention to use it.

Another aspect that the participating students also mention more often with a connection to hedonic motivation is, that the conversational agents should work well, i.e., give fast information and shorten the time for search. The students perceive getting fast answers as a benefit they associate with fun which shows for example a statement from participant 3: *"I think it's funny that a message pops out straight away. So it really works within seconds and you can access everything directly"* (P3). Participant 12 offers a similar view. Finding information fast with the support of the conversational agent to shorten the time would provide fun: *"... if it worked, I would certainly have enjoyed it more than searching for information. Just that it should shorten the time, that would be fun for me"* (P12). To increase their intention to use the conversational agent, the study participants see hedonic motivation in association with fast answers.

Furthermore, some students experience fun in getting personalized answers from the CA. Participant 8 reports, that the conversational agent should be able to process personal student data and offer personalized answers. This would make studying more comfortable and would provide less effort instead of finding information on their own. The student for example talks about the CA's recommendations on how the examination phase should be organized: *"What I might enjoy is that it would be even more personal if he knew my data and could work with it. If it knows, for example, how many exams I've already failed and I then ask "How should the next exam phase go?". That would be funny. Then I would use it often, just to get even more information about myself that I don't want to look up myself"* (P8). The student connects the provision of personalized answers with hedonic motivation to influence their intention to use the conversational agent.

Last, participant 10 mentions that he or she associates the nice appearance of the conversational agent with hedonic motivation: *"If it looks nice and I can click on it, it's more fun"* (P10). The student thinks the appearance and visual design of the conversational agent contribute to having fun while using the CA.

As mentioned above, some of the students show a low hedonic motivation towards using the conversational agent. This results in the fact that their intention to use is also low. Furthermore, they tell me other reasons that have a stronger effect on their behavioral intention to use the CA. For example, participants 5 and 9 report a lower level of hedonic motivation in connection with using the conversational agent because they expect to get fast information: *"... it's a quick use. You don't necessarily have to have fun"* (P5) and *"[the] main thing is to find what you are looking for"* (P9). A similar opinion comes from participant 11. The student complains about the issue that the CA cannot fulfill the expectations and provide sufficient answers: *"I don't like it because I'm unhappy with the expenditure. Because it doesn't meet my expectations, because in the end it was a waste of time, because I was annoyed. That's why it's not fun"* (P11). This indicates that the students can imagine having fun and perceive a higher hedonic motivation if the conversational agent provides the answers, they expect resulting in a higher intention to use it.

As a result, by looking at the relation between hedonic motivation and behavioral intention, hypothesis 4 is supported.

Habit and Behavioral Intention

According to the findings on the relation between habit and behavioral intention (i.e., hypothesis H5a), six students mention in the interviews that habit is an important factor in affecting their intention to use the conversational agent (P2, P3, P6, P7, P9, P12). The other half of the interviewees only speak about their level of use but without a relation to the intention to use the CA (P1, P4, P5, P8, P10, P11). Overall,

the interviewees talk about aspects that I code with the factor habit 31 times. The moderators age, gender, and experience have no significant influence on the relationship.

As already mentioned, half of the students can imagine using the conversational agent as a habit. For example, they talk about how a more frequent use of the CA can lead to replacing the habitual use of the search bar on the website with the conversational agent. Participant 7 mentions this aspect: *"I think if I used it more often, it would replace the search function for me"* (P7). A similar view shows participant 3. The student speaks about how he or she is willing to try to integrate the conversational agent into everyday life at the university and formulate, *"... that I could imagine trying it out more in the future and seeing if I could integrate it well into my everyday university life"* (P3). This indicates that the increase in habitual use leads to an increase in behavioral intention.

Some of the students speak about how they could imagine changing their current habits towards using the conversational agent. They mention different aspects that are relevant to change the habit. One aspect is sticking to old habits. Participant 2 reports the habitual use of search bars on websites and search engines to find the necessary information. The student exercises these skills for many years and can do it on a high level. In addition, the student thinks, that most people do things as a habit and don't try new ways because they have done it in that way before. To use the conversational agent, the student tells me: *"... I need a new kind of skill-set to use conversational agents. I have to learn how to make my entries so well that I get the answer I need so that I can use it automatically for the search. I haven't learned that yet"* (P2). Other students support this view that people stay comfortable and proceed as they always have. In addition, the students mention during the interviews aspects of how to overcome these old habits and make the use of the conversational agent to a new habit. They require positive experiences in a first testing phase to overcome existing habits. When the students think about how they can change their current habits in terms of using the CA, this leads to a greater intention to use it. Similar to these findings, participant 9 believes that a higher degree of habit in using the conversational agent leads to a higher degree of behavioral intention: *"I think I would just have to start trying it more and then I would use it more"* (P9). The student thinks he or she has too little experience, i.e., habit, with the conversational agent to use it more. The current experience and CA use of the student remain too low but with higher experience, that builds a habit, the student can more imagine using it.

Another view of the factor habit and its relation to behavioral intention presents participant 6. The participating student mentions that the habitual use of the conversation agent depends on which phase of their studies the students are currently in, which affects their intention to use it. The student believes, that *"... at the beginning of your studies, you generally use it more and especially before you start studying. The further you get into the program, the less you use it. Then maybe again at the end, because then it's also more retrospective. Then you're suddenly interested in what's new because you're no longer there"* (P6). These phases of the study program increase the students' intention to use the CA habitually because they require a higher level of information which is seen as easy to find with the conversational agent.

As a result of these findings on the relation between habit and behavioral intention, hypothesis H5a is partially supported.

Habit and Use Behavior

Now, I turn to the results of the relation between habit and use behavior. Three interviewees mention habit as significant for using the conversational agent due to their frequently use behavior (P6, P8, P10). The other nine participants use the conversational agent on a low level where I cannot speak of habit and make no clear statement on the relation between habit and use behavior (P1, P2, P3, P4, P5, P7, P9, P11, P12). The moderators age, gender, and experience show no effect on this relationship.

The participating students who use the conversational agent and where I can speak of habit, are participants 6, 8, and 10. They use the CA frequently and regularly and in their everyday lives. Participant 8 uses the conversational agent for work at the university. The student works there two or three times a week and uses the conversational agent very often to find information about study programs, which I identify as a habitual use. If the student needs information that is not available right now from memories, the student uses the CA. Participant 8 formulates the following statement: *"I use it a lot when I'm working. I work about two or three times a week ..."* (P8). Participants 6 and 10 describe the habitual usage of the CA for quick searches for specific information and depending on the current time of the study program. For example, participant 10 mentions that he or she uses the CA *"... once every two weeks, when [the student] was looking for something specific"* (P10). In addition, for information, the students know that they are available on the university website but not easy to find, they habitual use the conversational agent. Participant 6 mentions an example about getting the contact details of a professor: *"[if] I need a contact, I put it in there that I need information about a professor. I use it for things like that because I know that the pages are there and that I don't have to click through ten times, but that I can get through them more quickly"* (P6). Special periods in the study program are the exam phase or when the students write their final thesis. In these periods, participant 6 always uses the conversational agent instead of searching the website on his or her own: *"... I think it always depends on the phase. It depends, I can't say for sure, but especially for the Bachelor's thesis you have to spend more time on the homepage. Less so in normal semesters. It depends and then I use the homepage the most, especially for dates, just to know when exams are due, when the grades are due, when the exam period is. I always use [the CA] first ..."* (P6). These statements indicate that the students build a habit that affects their use of the conversational agent.

In comparison, the other nine students use the conversational agent on a low level. This leads to the result that I cannot speak clearly of habit. The students' statements on their use behavior show no frequent, regular, or automatic use behavior that indicates habit. The extent of their use ranges from seldom to not very frequent or sometimes. They describe it as *"[as] good as never"* (P11), *"... never used [... only] to try it out, to know how it works ..."* (P1), and to *"... asked a few questions and tried it out"* (P5). Furthermore, some students speak about the reasons why they use the conversational agent on such a low level. They mainly state that they meanwhile know how to find relevant information on the university website. The students only use the conversational agent in situations if they cannot find what they are searching for on the website which occurs *"... actually not very often"* (P4) and *"... to replace the search function"* (P7). The use of the conversational agent is on a low level through the knowledge of the students about finding the required information on the website. This presents no clear statement on the influence of habit on their use behaviors.

To sum up these findings from the relation between habit and use behavior, hypothesis H5b is partially supported.

4.2 User-, Agent-, and Organization-related Factors or Facilitating Conditions

This sub-chapter presents the results from the relation between the user-, agent-, and organization-related factors of facilitating conditions and the technology acceptance of the conversational agent.

4.2.1 User-related Factors

In the following sections, I describe the findings from the user-related factors of the concept of facilitating conditions and their influence on behavioral intention and use behavior. The user-related factors consist of the factors trust in provider and trust in technology.

Trust in Provider and Behavioral Intention

The following sections deal with findings on the relation between trust in provider and behavioral intention (i.e., hypothesis H6a). The responses show that four out of the twelve participants talk about their trust in the university as the provider of the conversational agent in a positive relation to their intention to use the CA (P1, P4, P11, P12). The other eight interviewees speak about trust in provider but not clearly linked to their behavioral intention (P2, P3, P5, P6, P7, P8, P9, P10). This leads to the fact, that I cannot make a clear statement on the relation between the factors trust in provider and behavioral intention from these eight interviews. During all interviews, the factor trust in provider occurs 36 times. The moderators age, gender, and experience show no significant influence on the relationship between trust in provider and behavioral intention.

Four of the participating students show trust in the provider of the conversational agent, i.e., their university, which influences their intention towards the CA. The students mention their general trust in the provider for example based on prior experiences. Participant 12 talks about how university staff help with problems during their studies. The student reports that they are very helpful and that's the reason why a positive attitude towards the conversational agent comes up as the following statement shows: *"I have only had good experiences so far and they have always been able to help me or have been very obliging. When I missed my deadline for transferring the semester fee or re-registering, it wasn't a problem. They helped me straight away and it always went very quickly. That's why I have a very positive attitude towards the whole thing"* (P12). Participant 11 shares this point of view based on the knowledge about the university the student gathers: *"The university is a reputable institute or a reputable university that does a lot of things right, that does a lot of things well. That's why I can well imagine that it can improve and that my wishes will be taken into account and that they can turn things around. I trust the university to deliver a good product and a good service"* (P11). Furthermore, participant 1 shows a positive attitude toward the conversational agent and the student sees the CA as trustworthy *"...because you know who made it and where it all came from"* (P1). The participating students experience the university as a trustworthy organization which results in a general trust in the provider that affects the students' behavioral intention.

Besides participant 11, participant 4 also reports positive feelings towards the conversational agent due to the fact that the university deploys the conversational agent which increases their trust in the CA provider. The students think it is innovative, modern, and a *"... pioneer project"* (P11) to offer a CA as a university. The statement from participant 4 emphasizes this: *"I was surprised that our university had something like this because I always had the feeling that Kempten University of Applied Sciences wasn't that innovative. [...] Then we come around the corner with something modern like this. At the time it was launched, it didn't exist on many other sites"* (P4). Their positive surprise about the provision of the conversational agent by the university leads to a higher trust in the provider and a higher intention to use the CA.

As a result of the findings on the relation between trust in provider and behavioral intention, hypothesis H6a is partially supported.

Trust in Provider and Use Behavior

Now, I proceed to the relation between trust in provider and use behavior (i.e., hypothesis H6b). All twelve interviewees talk about their different experiences with the university in general which results in different levels of trust in the provider of the CA. These levels of trust do not always match the corresponding levels of the students' use behaviors. In addition, the moderators age, gender, and experience show no significant influence on the relationship between trust in provider and use behavior.

The participants mention different aspects during the interviews about trust in the provider of the conversational agent and their use behavior. Some students display a lower level of trust in the university as the provider of the conversational agent and a lower level of use. They are concerned that the conversational agent is not important enough for the university to provide the expected services and improvements because they perceive it as “... *typical university that this does not work*” (P4). They believe that the university does not really take care of the conversational agent which indicates a low trust level in influencing the use behavior. Participant 5 holds a similar opinion. The student uses the conversational agent even if it does not fulfill all expected services: “*I don't necessarily have confidence in it. I just see the conversational agent as it is and if it works well, then it's good. But if it works badly, then it's bad. [...] I just take it as it is and then I work with it*” (P5). The low level of trust in the provider leads to low use of the conversational agent.

Two of the twelve students show a high level of trust in the provider because of their positive experiences with the university (P6, P10). The students speak about how they trust the university to provide the desired services. They describe that if they have a personal concern, they get fast help, the contact persons are polite and if one of the university's employees can't help, they direct the students to a suitable contact person who is able to answer their questions. The statements from participants 10 and 6 provide examples: “*If I have a personal request, it always works quite well. Everyone is polite*” (P10) and “*I never had any problems. I have always been helped. I rarely or never have to wait long*” (P6). These two students show a higher level of trust in the provider which is linked to their medium use level of the conversational agent.

Furthermore, eight of the twelve participating students report a medium level of trust in the university because some restrictions lower their trust (P1, P2, P4, P5, P7, P8, P9, P12). The students tell me that they trust the university in general, but some requests often take time to be answered by the university's staff as a statement from participant 1 displays: “*So I trust them to do it well, but with a bit of time*” (P1). Other students report similar experiences. They tell me that the university helps them with their problems, but it often takes “... *two to three days for a reply*” (P2) and the students prefer a “... *shorter processing time ...*” (P2). Other students report positive experiences when they directly talk to a person personally or via phone, but when they write an e-mail, they perceive the response time as too long. An example statement from participant 8 presents these difficulties: “*If I contact a person directly or make a phone call, I am always reliably forwarded or receive the information directly. I haven't had any negative experiences so far. I have always been helped perfectly. Sometimes, of course, the waiting time is a bit of a bummer, for example when sending e-mails*” (P8). Participant 9 reports similar experiences and difficulties because of limited opening times for a personal conversation and the low telephone availability of the service employees. The following statement emphasizes this impression: “*I would say that I have more confidence in the university. What bothers me a bit are the opening hours. You can't always go there at any time. If you write an e-mail, it takes a long time and you can't get through on the phone either*” (P9). These circumstances force the students to write an e-mail and waste time while waiting for an answer which lowers their trust in the university. In addition, finding the right person the students need to talk to often proves difficult which also lowers the students' trust. For example, participant 2 reports he or she feels more comfortable sending an e-mail to several service departments to increase the possibility of reaching the person who can answer the question. The interviewee describes the student's experiences with the following words: “*In my experience, when I had problems and contacted a department, I usually wrote to several departments at once because I didn't assume that the problem would be solved*” (P2). Other students also mention the difficulties in finding the right person or even the right department who can provide the required information. Participant 12 speaks about how the responses come fast and also politely and the problems are solved, but the process of finding and reaching the necessary contact person at the university is not easy: “*As soon as you have found out*

who the person is or got in touch with the right person where you want to be, I always found it perfect and friendly and I got an e-mail back straight away. My concerns were always clarified straight away (P12). Other students report that it depends on the department or person they turn to. Some of the service departments send a very fast answer and others are not. They see the same picture when writing a message to their professors, *"... [it] depends entirely on who you have on the line"* (P4). In general, the students think *"... on the whole, they were always very helpful..."* (P7) and *"... [that] someone at the university can solve the problem, sure. But finding the right place is difficult"* (P2). Besides the described difficulties, these eight students show in general trust in the university with some restrictions which I consider as a medium level of trust. Out of these students with a medium trust level in the university as the provider of the conversational agent, only participant 8 reports a high level of use of the CA. The other seven students use the CA on a low level. This displays that even if the students show a medium level of trust in the provider it doesn't increase their use behavior.

In comparison to the students with a high and medium level of trust, two of the participating students speak about their negative experiences with the university (P3, P11). They report their experiences based on examples of their study time which displays their low level of trust in the university and its inability to provide certain required services. For example, participant 3 describes it as chaotic and the university fails in the context of organization and communication: *"I notice that the university does not manage many things well in terms of organization and clarity of information"* (P3). The student would prefer more structure and clarity. Participant 3 explains further that the low level of trust in the university is based on huge changes in their study program which involves relevant factors some students had chosen this program. In addition, the students receive their exam dates very shortly before the exams. These difficulties present a breach of trust. Participant 11 mentions similar experiences because of a change in the study program during his or her Bachelor's degree. The student reports having *"... an unusual number of bad experiences"* within the study life of one student (P11). These two students show based on their negative experiences a low level of trust in the university as the provider of the conversational agent which also reflects their low use behavior.

These described findings on the relationship between trust in provider and use behavior lead to the fact, that hypothesis H6b is rejected.

Trust in Technology and Behavioral Intention

The following sections deal with the findings on the relation between trust in technology and behavioral intention (i.e., hypothesis H7a). All twelve interviewees formulate that trust in technology is an important factor to influence their behavioral intention. In total, the students speak about the factor trust in technology 67 times. The moderators age, gender, and experience play no central role.

The interview participants show trust in the technology of the conversational agent due to several reasons that influence their intention to use it. The interviewees speak about how the CA should help and give direct, correct, and more specified answers. They think the conversational agent can support the students, give direct answers or a helpful link to a website with the required information as a statement from participant 1 shows: *"I think it can help with questions because it either gives me an answer directly or because it at least links to the pages where you could find the answer, so the question could be answered"* (P1). Another example participant 12 speaks about, is the belief in the conversational agent to support in finding little-known information or a suitable contact person for a topic. The participant thinks that the CA *"... could be a good help"* (P12) in these situations. A similar point of view emerges from participant 5. The student feels confident when entering the university's website and cannot find the required information. If he or she experiences the feeling of being overwhelmed with the content of the website, the student thinks it is helpful to have the CA because, *"... I know in advance that if I go in and still can't find it, there's a conversational agent that could help me"* (P5). Another important point

why the participating students show trust in the technology is that the conversational agent offers correct and specified answers to students' questions. They mention in the interviews if they know the conversational agent provides more correct information and answers to their questions as well as answering the questions more specified, they can imagine using it. Their statements often start with *"If I would know..."* (e.g., P5). They formulate expectations for future use, where they will use it if they know that the CA *"... can answer more than just giving me a few contact details here, which I can already find on the website anyway"* (P5). The statement from participant 10 sums up these aspects of trust in the technology: *"The more I realize that it produces the result I want, the more I tend to use it"* (P10). These examples display the students' trust in the technology to provide the expected functions that influence their intention to use it.

Another important aspect of why the students' intention is influenced by their trust in the technology is because they believe the conversational agent can be a good or even better alternative in comparison to existing systems for getting the required information. Instead of searching on their own on the website, ask someone from the service staff of the university or other students, the interviewees can imagine using the conversational agent. According to finding general information about studying and the related processes, the students trust the conversational agent to have the skills to support them, as a statement from participant 3 shows. The student trusts the CA to help because *"...it's a bit more professional than me in some areas"* (P3). In the interview, the student describes the difficulty in finding one's way in a great number of organizational challenges for studying like when to do which exam. The student speaks about how helpful it is to know the conversational agent can help: *"It's kind of cool to try and find or know that there's a 'person' you can fall back on who can tell you a bit more in a collected way because there's already an abundance of information in some cases"* (P3). The student further speaks about how the conversational agent can provide information on what's important to know for studying and how certain things work and highlights with the conversational agent *"[that] you have a point of contact where you know you'll get an answer that you can continue to work with"* (P3). The participating students feel comfortable with the idea of the conversational agent which is available and provides the expected skills to answer their questions. The statement from participant 7 emphasizes this perception: *"But if I get stuck, I have someone there 24/7 who I could ask questions ..."* (P7). Furthermore, the participating students perceive the conversational agent as a better alternative to the university website for answering specific questions. Participant 2 mentions questions like *"Would you rather recommend computer science or game engineering?"* (P2). The student is more likely to trust the conversational agent to answer these types of questions than to search for them on the website: *"These are the kinds of questions that I don't usually expect to find on the university website, but I can well imagine that the conversational agent will be able to answer them for me"* (P2). Participant 9 supports these statements. The student believes that the conversational agent is able to answer specific questions, for example, dates or information about the university or study abroad. Furthermore, the participants see the conversational agent as faster in finding the required information than they can do it on their own. The students associate these beliefs with the positive characteristics of the conversational agent which increases their intention to use it as the following statement presents: *"Then I don't have to search so quickly myself and look for information about studying abroad, for example, but I can make a selection straight away and get a result very quickly. I think that's quite good. I would probably use that too"* (P9). The interviewees perceive the conversational agent as a good alternative to existing systems for finding information which displays trust in the technology and leads to a higher intention to use the CA.

In comparison to the above-mentioned findings where the students show a high level of trust in the technology, some of the interviewees mention aspects that present a lower trust level. They speak about the issue that they are unsure, of what the conversational agent is able to do or what it knows. This indicates a low level of trust in the technology and the conversational agents' attributes to fulfill their

expectations. At the same time, these students tell me, that if they would know that the CA could provide what they require from it, they intend to use it as the following statement from participant 4 shows: *"I don't know whether it might still be able to do that"* (P4). The statement from another participating student displays a similar perception of the abilities of the conversational agent. The student prefers to search for information on his or her own because there is no clear evidence that the CA can help: *"Because I don't know if it can help me, if he can't help me, I prefer to look it up myself first"* (P5). This uncertainty as an indicator of low trust in the technology causes the students to tend to not use the conversational agent. On the other side, if the trust in the CA increases due to overcoming the mentioned uncertainty, the students' behavioral intention increases.

Therefore, based on the findings on the relation between trust in technology and behavioral intention, hypothesis H7a is supported.

Trust in Technology and Use Behavior

According to the relation between trust in technology and use behavior (i.e., hypothesis H7b), all study participants mention that trust in technology is important for the use of the conversational agent. I find no relevant influence on the relationship between trust in technology and use behavior by the moderators age, gender, and experience.

The interviews with the students present different aspects of how trust in the technology of the conversational agent influences the students' use behavior. First, some students perceive trust in the CA through positive use experiences where they see evidence that it works. These experiences affect their use behavior. They report that they are doing some trials and typing something in to see what it can do and whether it is helpful in answering their questions. After they use the conversational agent, they know it works well and what it can provide, this results in an increase in their trust in the CA to use it again or more often. An example statement comes from participant 2: *"I usually think about what questions I currently have about my studies and enter them into the conversational agent. That's how it worked. It often worked quite well ..."* (P2). Participant 10 shows a similar view: *"... when I was really looking for something, it was really concise"* (P10). Furthermore, the students believe that the conversational agent in general helps them. The CA is always available to answer their questions like a real contact person: *"There is always someone there to contact"* (P7). The students build their trust in the technology of the conversational agent through positive experiences and beliefs that influence their use behavior.

As a second important point, the students trust the conversational agent because they believe it can help them to find different information, which increases their CA use. The interviewees report that they need information about studying, for example, opening hours of the university, where a certain university building is located, elective modules, or general information about a study program. An example statement from participant 7 about the difficulties finding information on elective modules presents these results in detail: *"... if I can't find some information, such as "When do I have to choose my compulsory elective modules?", then it screens everywhere and then shows that it's here on the page. This means that even if I know my way around relatively well, sometimes you're still looking for things and can't find them. Then it's quite good if you have something that you can scan through and then analyze"* (P7). A similar view shows the statement from participant 11 who describes how the conversational agent helps to find information about the location of a university building: *"Then I would have asked it "Where is building D?". Then it says it doesn't have a digital floor plan, but "Here's the link to the floor plan". In this respect, it helped me because I found it via the link, which I could then analyze"* (P11). The belief in the ability of the CA to help the students results in trust in the CA and affects their use behavior.

Similar to the findings from trust in technology and behavioral intention, the study participants use the conversational agent because it gives correct and specified answers to their questions. The students

have the feeling that the CA delivers the correct and sufficient answers to the questions they ask. They report that they just enter what they are searching for and get the right and required answer. Participant 10 describes it with an example. The student knows that the conversational agent delivers the necessary e-mail address and not the phone number from someone else when the e-mail address from a certain person is required: *"This suggests that if I search for something, I get an answer or it spits something out for me. If I'm looking for e-mail addresses, it doesn't give me a phone number for xy, it's explicitly designed to give me the right one. That's why you get the feeling that it knows exactly what you want"* (P10). In addition, the students named the precise output of the information they were looking for as another important feature of the CA. When they ask their questions in the conversational agent, they experience that it is able to provide sufficient information as the statement from participant 3 shows: *"I found that it was pretty precise when you wanted something, that it was the right direction pretty quickly"* (P3). In comparison, participant 11 reports negative experiences with the conversational agent *"...because I know that it does not respond well enough to my questions and because I know that it does not have enough information"* (P11). This displays disappointment on the student's side as well as a decrease in trust in the CA which leads to a lower usage. On the other side, similar to the other presented results above, if the students have positive experiences their trust in the conversational agent increases and leads to a higher use behavior.

The interview participants also report that the use of the conversational agent results from the experience with the CA which they see as a good or even better opportunity to find information and ask questions about studying. The students prefer the conversational agent to search on the website or ask another person. They know its skills in providing only the necessary information directly in the conversational agent or via links and prevent the students from an extensive search on the website. The participants use the CA because *"... it captures it briefly so that [they] don't have to scroll through the whole website and read through it to know whether this is the right place ..."* (P6) and if they *"... enter this into the conversational agent, [they] get better results and the right links"* (P8). Some of the students are more likely to use the conversational agent instead of talking to another person, e.g., university staff, to answer their questions. For example, participant 7 mentions this aspect. The student has a higher level of trust in the CA because of the knowledge that there is no person who might see what is written: *"You know there's nobody really behind it and you can look at it, it gives you answers, you can search through it"* (P7). These results show a high level of trust in the technology within all interviews which results in different levels of use behavior. For some students trust in technology presents a strong influence on their use behavior, while others display a lower impact on their CA use.

In comparison to the above findings, the uncertainty about the CA's skills and features is a reason for lowering trust in the technology. They are unsure what the CA is able to do and what information it can provide which influences their use behavior. Participant 5 reports it in the following words: *"I don't know if the conversational agent is even designed to find orientation on the website or simply to call up the quick links"* (P5). In addition, the students are unsure how they have to formulate their questions so that the CA finds the right answer. They criticize that the conversational agent is not able to provide feedback as to why it cannot answer the question. As a result, they don't know if the conversational agent just cannot give an answer to their questions or if they ask their questions in the wrong way. The statement from participant 10 describes this uncertainty: *"Sometimes I wonder whether it's because of the keyword that it can't find anything or whether it's because of my choice of words. Would I have to change anything? It's a bit time-consuming because you don't have any feedback. Is it just that you can't find anything or is it me? It's not easy to find out"* (P10). Furthermore, the interviewees' uncertainty results from the students' prior experiences with the CA. They want to prevent themselves from situations *"... if [they] ask it, [they] again run the risk of not getting an answer"* (P8). Participant 8 describes the self-reported effect of getting no answer from the conversational agent, the student doesn't use it anymore and goes

back to using the search bar on the website even if it's not sufficient: *"I noticed the same thing with me. Then I didn't get an answer once and I started using only the search bar again, even though it's worse overall. But before I ask the conversational agent, which can't help me, I type it into the search bar"* (P8). This describes situations in which the students' negative experiences lower their trust in the CA and its usage. Furthermore, the students don't trust the conversational agent to answer *"... in-depth things ..."* (P6). From the experience that the conversational agent cannot provide an answer to questions like who the best professor is or what its recommendations for leisure activities are, they are unsure about what it really knows and what specific questions it is able to answer. Participant 1 comments on this as follows: *"It's not like it knew that either, it just said there were lots of possibilities, but didn't answer the question"* (P1). The described uncertainty and negative experiences decrease the trust in the CA and the use behavior. But in line with the above-mentioned findings, if the conversational agent gives certainty by providing positive experiences for the students by offering the right information their trust in it increases which results in a higher level of usage.

Therefore, after looking at the results on the relation between trust in technology and use behavior, hypothesis H7b is supported.

4.2.2 Agent-related Factors

The following sections present the results from the agent-related factors of the concept of facilitating conditions and their effect on the intention to use and the actual use of the conversational agent. The agent-related factors involve the factors visual and social attractiveness and data privacy.

Visual and Social Attractiveness and Behavioral Intention

The following sections deal with the results from the relation between visual and social attractiveness and behavioral intention (i.e., hypothesis H8a). All interview participants mention visual and social attractiveness as an important factor for the intention to use the conversational agent. The factor visual and social attractiveness appears 87 times during the interviews. The moderators age, gender, and experience show no significant effect on the relationship between visual and social attractiveness and behavioral intention.

The interview participants name several reasons why the visual and social attractiveness of the conversational agent affects their intention to use it. First, according to the visual appearance, the participating students mention that more attention should be drawn to its appearance on the university's website to make it more noticeable when they enter the website. This point is one of the most frequently mentioned for the factor visual and social attractiveness. The students talk about how the conversational agent is difficult to find and it is not noticeable on the university website as a statement from participant 1 presents: *"What I didn't like so much, if you don't know now, is that this smiley there in the margin. That I can't find it easily"* (P1). They report that if they don't know what the CA icon on the website is for and it's easy to overlook the CA. Participant 4 reports on the current situation at the time the interviews took place, that *"... there's just an icon and if you don't click on it, you won't even realize that there's a conversational agent there"* (P4). Participant 4 and others name the opportunity that the conversational agent can be overlooked as an important issue of its visual appearance to influence their behavioral intention. They emphasize their statements by naming it and intending to use the CA when it is more present, attracting their attention and reminding them of the possibility of using it. The statement from participant 11 is one of these: *"I think it's basically good that it's available directly on the homepage and it's already noticeable because it's at the bottom right"* (P11). These statements indicate that a higher visual attractiveness of the conversational agent on the university website leads to a higher intention to use it.

Furthermore, the students talk in the interviews about recommendations on the visual appearance of the conversational agent which would raise its attraction and higher the students' intention to use it. The interviewees mention two aspects in particular in this context, namely the blue color of the CA icon, which is also the basic color of the university website, and a preferred movement of the CA when entering the website. The students wish, "... *that it should be a bit more visible*" (P3). As participant 3 further formulates: "*I can now think of bright colors that you are directly made aware of, there is something that could help you if you want it. Not that blue color that's already all over the university website*" (P3). Other participants with similar opinions on the blue color of the icon suggest using "... *maybe a more striking color*" or "... *[more] color ...*" (P5). The students expect that the change in the color of the CA icon can draw more attention to it and increase the possibility of its use. Another recommendation from the interviewees lays in adding a movement to the icon of the conversational agent to draw attention to it when the students enter the website. Participant 4 suggests that the icon pops up when they enter the website. The student describes the process as with the words: "... *that it pops up briefly at the beginning, 'Hello, I'm here' and then becomes small again. I think that would be really cool*" (P4). Other students share this opinion, but the implementation of the movement should be discrete. For example, participant 10 thinks out of experience from other CAs "... *on some websites, it is too intrusive*" (P10) but the student also believes "... *it is quite helpful at the beginning*" (P10) to draw attention to the CA. The students imagine that these presented changes in the visual appearance of the conversational agent can draw a higher attention to it which results in a higher attraction and higher behavioral intention towards using it.

To raise their intention to use the conversational agent, the participating students mention some further aspects of the visual appearance of the CA apart from the icon on the website. Some of the students think a more colorful design in general would look more inviting to use the conversational agent. In addition, the application of pictures within the chat is perceived as attractive. Participant 3 mentions some of these aspects: "*It was okay that it was blue, but it wasn't that inviting. I like it when it's a bit more colorful...*" (P3). Due to popular developments in the field of AI conversational agents like ChatGPT, participant 8 speaks about a change in perceiving the visual appearance of a CA as attractive. The student thinks a specific picture to give the conversational agent a face is not necessary and no more required from the users. New systems like ChatGPT seem to look more modern or more professional without a picture presenting the character of the CA. In addition, the student perceives conversational agents with a picture showing a certain face as a design from earlier times as the following statement shows: "*In the past, it was very normal to want to give it a face in order to chat with it so that it was simply more acceptable. But now that there are modern programs like ChatGPT, you don't have to think that you're talking to a 'Wissl' or an imaginary something. This makes it much more acceptable, and you wouldn't need a picture behind it. It is also fully accepted if there is simply nothing behind it, but that it is more professional*" (P8). This student also speaks about the name of the conversational agent of the university "Wissl". The name of the CA is connected to its visual appearance and following the view of participant 8, another name, a "... *neutral name*" (P8) would be better like ChatGPT. This shows that the visual appearance of the university's conversational agent is an important aspect for the study participants that influences their behavioral intention.

In addition to the described aspects, some of the interviewees talk about the size and position of the CA on the university website. They think it is helpful to move the chat window around on the website or change the size. For example, participant 10 reports that the window for the chat is very small and wishes, "... *that it could be enlarged*" (P10). With their recommendations and requirements to improve the visual appearance of the conversational agent, the study participants show that they want to improve the visual attractiveness of the CA to increase their intention to use it.

Besides the visual attractiveness, the students also report aspects of the social attractiveness of the conversational agent during the interviews which influences their behavioral intention. First, they mention a personal and social relationship as important as well as the expectations that the conversational agent should act like a human. The students associate their communication with the conversational agent with talking to "... a friendly person ..." (P5), "... a direct contact person" (P1), or "... a buddy ..." (P2). They speak about the wish that the CA should act like a human and have the knowledge of someone who already studies at the university to answer questions and give more personal advice. Other students mention the expectation of the CA to write in normal sentences like in human communication and being polite. Participant 6 mentions these as important aspects to get a feeling of being taken seriously and the student's questions are important as the following statement shows: *"Chatting to a machine is a bit crazy, but the fact that he still replies with normal sentences and politely. I don't know why that's important to me. I think it makes you feel a bit protected and that you are taken seriously. I appreciate that his questions are important"* (P6). In addition, participant 5 speaks about the relevance of emojis in communication with the CA. The student connects emotions with emojis which display how the text should be perceived by the users: *"It's different when there's just a text or when the text is followed by a thumbs-up or a smiley. You know that's how it should come across to me"* (P5). These statements indicate the importance of a social relationship between the users and the conversational agent which is a result of the social attractiveness and influences the student's behavioral intention.

A second point of social attractiveness is the interactive way of chatting with the CA which should provide guidance and structure for the students. Participant 10 describes it as an interactive communication that involves the provision of selection options to get the required answer or guidance to other related topics where the user easily can click through. The student describes an interactive process between him or her and the conversational agent in which the CA acts like an advisor: *"For me, interactive means that I have several selection options and I click on them and get the desired result. Or afterward it redirects me somewhere else or I can simply click through"* (P10). Giving guidance and advice to questions from the students is part of a social relationship between the conversational agent and the students. The social attractiveness of the CA invites the students to build a social relationship which affects their intention to use it.

As a result of the findings on the relation between visual and social attractiveness and behavioral intention, hypothesis H8a is supported.

Visual and Social Attractiveness and Use Behavior

According to the relation of visual and social attractiveness and use behavior (i.e., hypothesis H8b), all study participants mention visual and social attractiveness as significant for their CA use. Again, the moderators age, gender, and experience show no effect on the relation of these factors.

Similar to the findings on visual and social attractiveness and behavioral intention, the relationship between the factor and the use behavior of the students brings out several important aspects. Starting with visual attractiveness, the students report the importance of the CA's presence and presentation on the website. They generally like the design, i.e., the visual appearance, of the CA which indicates a high visual attractiveness. They describe it as *"... I think the design is good"* (P2) and the *"... design is kept simple and minimalist. I like that..."* (P11). Another relevant part of the visual attractiveness of the conversational agent reports for example participant 6. It involves the movement of the CA when the students enter the website which is significant for using it like the statement shows: *"... then it always came and wanted something and asked me what. Then I tried it out and thought it was actually quite cool"* (P6). This and other students mention in the interviews that this design aspect of the CA influences him or her to use it if it is not too intrusive. They think it is important to prevent the conversational agent from being overlooked as participant 1 points out: *"If it doesn't open up again now, it's a bit inconspicuous in*

the corner" (P1). The general design of the conversational agent and the aspect of its movement, when the students enter the website, are important aspects of the CA's visual attractiveness to influence them towards using it.

Other aspects of the visual appearance that the study participants name in the interviews include the design of the conversation and the chat window or the use of emojis. They like the different colors of the design of the conversational agent and that it suits very well to the corporate design of the university. They mention that *"[the] color scheme also matches the website"* (P10), *"... it is in color and with pictures [...] and with the colored background"* (P9), and *"... it has the overall design of the university [which] is the classic university blue that we know from Kempten"* (P7). Furthermore, the students speak about the emojis that are used in the communication of the CA. They associate a positive expression with the emojis and like it if they appear in the text the conversational agent writes. Participant 4 describes it in the following words: *"I think there used to be an emoji and that's enough for me. Because then it's not so cold, it's a bit positive"* (P4). The use of emojis and colors in the design affects the students to use the CA.

There is another aspect of the visual appearance of the conversational agent the students report in the interviews as favorable. They speak in particular about the selection options the CA provides during their conversation which gives them a kind of guidance. Participant 9 describes it as follows: *"There are these functions that you can select, for prospective students and for students. For example, I entered 'for students' and there were different options. I thought that was quite good"* (P9). In addition, other students speak about how the conversational agent prevents them from wasting time searching on a website or in a long article within the CA. Instead, the conversational agent offers nicely designed selection options for example for information on the practical semester or general courses. Statements from participants 3 and 10 present this aspect: *"What I also liked were the different options that you could click on"* (P3) and *"... if it's really nicely designed and I click on it, it's more fun."* (P10). These statements show that the design and structure of the conversation itself are also important aspects of the visual attractiveness of the CA as an influence for using it.

Furthermore, the size of the chat window is another aspect of the visual appearance of the conversational agent which attracts the students to use it. Some of the students like participants 4 and 5 mention the size of the chat window as appropriate for the use *"... because the window is really big, so you can write to it in a relaxed way"* (P4) and *"... that you don't cover everything so that you still have the page itself"* (P5). In comparison, other participating students prefer to have a bigger chat window. The small size bothers them because some parts of the content are too small, and it is perceived as unwieldy. Participant 2 is one of the students with this opinion who describes its problems with the small size of the window in more detail: *"I don't like the fact that it's quite small on the website. It's more like a mobile phone chat. I have to say, I like my search query to be big. I have a big screen, I want the whole screen to be used. Otherwise, you have a lot of answers from the conversational agent, but you have to scroll. That's a bit unwieldy. Also, sometimes answers come when contacts are shown, then I have to click on small dots, which then scroll from right to left. That was also super awkward. That wasn't so good"* (P2). These described characteristics of the visual appearance of the conversational agent make it more attractive to the students and influence their use behavior.

Looking at the aspects of social attractiveness the students mention in the interviews, the personal characteristics of communication and the perception of human-like behavior are important and attract the students to use it. They like it if the conversational agent answers personally. For example, participant 10 compares the use of the CA with visiting a website and searching for information, which is perceived as objective and impersonal: *"When you click through a website, it's structured and impersonally written most of the time, just objective"* (P10). Furthermore, participant 7 associates the dialog

with the CA with a personal relationship. The student likes to have a conversation partner who acts and reacts in the communication on the student's questions. It is "... *a bit more personal, as if [they] were only looking for [themselves]*" (P7). The perception of acting personally is a reason for the socially attractive behavior of the CA the students favor. Another important aspect of the social attractiveness of the conversational agent is its similarity with human behavior. The interviewees talk about how they associate certain features of the conversational agent with human-like behavior, which encourages them to use it. They mention the interaction in the conversation, and how the CA provides the answers and addresses them with an informal "you". Furthermore, the participating students report that they are attracted by the writing style of the conversational agent as a statement from participant 8 displays: "*The writing style doesn't put me off, quite the opposite. I think I'll get a sensible answer. It's not that it just sends in links, I'd find that daft. I think it's good that it writes a bit with you*" (P8). Other students associate that the CA holds a conversation with the students as interactive and user-friendly. They perceive it as communicating with another person. For example, participant 7 represents this view: "... *you have this interaction that you also have with real people in theory, which I think is good*" (P7). Furthermore, other students tell me it feels more human-like if the conversational agent speaks to them directly in the style of the informal "you" as the statement from participant 11 shows: "*Because you address it as [informal] 'you' yourself because it feels human*" (P11). The mentioned aspects, for example perceiving humanness while using the conversational agent or a personal relationship, indicate a high social attractiveness which influences the use behavior.

Another part of the social attractiveness of the conversational agent the students mention in the interviews is the politeness and helpfulness of the CA. The students tell me that they find it "... *pretty sweet*" (P10) and "... *quite polite*" (P10). They report that the conversational agent gives nice and polite answers in case it cannot offer an answer to their question. In addition, the CA not only tells them in short where they can find help to get the required information but also delivers an introduction and explanation. An example statement from participant 5 describes it as "... *so that you feel understood ...*" (P5) and it "... *simply came across as friendlier*" (P5). This provides evidence that the characteristics of the conversational agent are perceived positively by the students to influence the CA's social attractiveness and the students' use behavior.

After summarizing the findings on the relation between visual and social attractiveness and use behavior, hypothesis H8b is supported.

Data Privacy and Behavioral Intention

Now, I turn to the results of the relation between data privacy and behavioral intention (i.e., hypothesis H9a). Out of the twelve interviewees, seven students mention data privacy with regard to their intention to use the conversational agent (P1, P3, P5, P8, P9, P11, P12). The other five participating students speak about data privacy but without a recognizable relation to behavioral intention (P2, P4, P6, P7, P10). Two students don't require a higher level of data privacy, i.e., they prefer a lower level of data privacy, to increase their intention to use the CA (P8, P12). The moderators age, gender, and experience show no significant effect on the relationship between data privacy and behavioral intention. The interviewees mention the factor data privacy 27 times during all interviews.

The study participants report that they feel safe and have no concerns about their general data if they use the conversational agent. This displays that the students perceive a sufficient level of data privacy. The students tell me that they would not enter private data into the conversational agent when they ask questions or for help. They only ask the conversational agent general questions about studying, e.g., studying abroad. In addition, they cannot imagine asking questions that require personal information from the students. They would not ask too specific or personal questions which demands the need for personal data. The statement from participant 9 emphasizes these aspects: "*I wouldn't put any specific*

dates in there. I don't know if I would even ask such questions where I have concerns. They would be more general questions and I wouldn't ask anything personal" (P9). In contrast to the required low level of data privacy for the non-personal and general data, the students speak about having concerns about data privacy if they enter personal data: *"It would only bother me if they were to disclose data about me that is private, which I haven't given them"* (P1). A similar point of view shows participant 11. On the one hand, the student thinks the chance, that people enter personal data into the conversational agent is very low. Therefore, the student also has little concern about data privacy regarding general data. On the other hand, if he or she enters personal data, the student expresses concerns about the storage and procession which requires a higher level of data privacy to increase the behavioral intention. The interviewee's statement shows the uncertainty and the lack of knowledge about the process of data storage and processing. The student raises questions like *"Are they stored temporarily? Are they not stored temporarily?"* (P11). In addition, participant 11 expects that the personal data is not stored, used to train the CA, or processed further for PR but they must not be published. The student's statement presents this point of view: *"... personal data should not or must not be used to improve the training of the model. In any case, this must not be the case. Personal data must be excluded if it could improve itself. I would expect that the data I enter would not be processed further for PR, for training, at the very most for internal statistics that are not published"* (P11). The students need a higher level of data privacy for the procession of private data which influences their intention to use the conversational agent. In addition, the current level of data privacy is sufficient for the students regarding non-personal data to affect their behavioral intention.

In comparison to the above-mentioned aspects of data privacy, some students report no or little worries due to other reasons. For example, participant 3 reports that he or she has slightly fewer worries about using the CA due to prior experiences with how the university proceeds with the data and the perceived high level of data privacy: *"Because it is the university and I know that the university already has a lot of data about me from my studies. I've also found that this data is handled well. That's why I would actually be a little less worried about the university's conversational agent"* (P3). The student intends to use the CA if the worries get less or even disappear. This indicates that a high perceived level of data privacy based on prior positive experiences with the provider leads to a higher intention to use the CA. Participant 5 reports a further opinion on the factor of data privacy and its relation to the intention to use the conversational agent. The student has in general no concerns about using the CA because of the use of systems from other companies like Google or Meta. These companies are known for storing and processing a high number of personal data from their users. In comparison to the systems of these companies, the student doesn't think *"... that the conversational agent could be much more dangerous ..."* (P5). These findings show that data privacy does not necessarily influence the student's intention to use the CA.

In contrast, some of the students see advantages in making more data and even personal data available in the conversational agent. The students think the university can easily analyze the questions the students ask the conversational agent to improve it. Participant 12 describes it in the following words: *"I would actually find it very helpful because it would make it much easier for the university to evaluate data and it would of course be cool if they could see much more easily that there are problems with students, who are often looking for something or are frequently asked to optimize things"* (P12). Similar to this point of view, participant 8 prefers a personalized conversational agent to give personal advice for studying as the student's statement points out: *"It would also be more personal if I knew he could give me personal advice because he knows me"* (P8). These students don't require a higher level of data privacy to increase their intention to use the conversational agent.

In conclusion, after looking at the findings on the relation between data privacy and behavioral intention, hypothesis 9a is rejected.

Data Privacy and Use Behavior

According to the findings from the relation between data privacy and use behavior (i.e., hypothesis H9b), nine of the twelve participating students mention data privacy in association with their CA usage (P1, P2, P3, P4, P5, P6, P7, P10, P12). Three students mention data privacy in the interviews but not as an influence on their use behavior (P8, P9, P11). Again, I cannot find a significant effect of the moderators age, gender, and experience on the relation between data privacy and use behavior.

In the context of data privacy regarding the conversational agent, the students report no or little concerns about the handling of their data. Some students tell me they have “[not] at all” (P6) concerns when they use it. For example, participant 2 explains it with the experience that the university is very keen on the subject of data privacy: *“I don't have any concerns about the university conversational agent, to be honest. Everything is so well regulated here with data protection regulations and you also get a direct contact person. I have no concerns about that”* (P2). Participant 3 shares this opinion based on prior experiences on how the university handles the student's data only for study purposes. The student describes it as *“... a feeling that I know the data is really only being used for my study purposes”* (P3). Other students speak about how they have little concerns when using the CA. For example, participant 3 does not have many concerns about the university's conversational agent compared with ChatGPT. Participant 5 says, in general, there are no concerns, and the student *“... doesn't see any danger in asking the conversational agent questions”* (P5), but the student is not sure about how the data is stored. This emphasizes the little concern about data privacy in the conversational agent. Similar to the view of this student, other participating students mention uncertainty about the data storage and procession. They are unsure if their data is used for internal analysis. In addition, they believe that data is not passed on to third parties: *“The data will certainly be used or can be used for internal evaluation, but I don't believe that my data will be passed on to third-party companies who then call or e-mail me at home or that identity theft will take place with it. I don't know whether the data is used internally. It could well be. But I don't see what the problem is with the non-personal data”* (P12). These findings present, that the students show no or little concern about data privacy in the conversational agent which indicates that the CA already involves a sufficient and high level of data privacy. Nevertheless, the level of use of the CA remains low.

As the statement from participant 12 implies, the interviewees often mention their little or no concerns in connection with entering only non-personal data in the conversational agent. Most of the students see no or only a little fear in the storage and procession of their data in the CA because they don't enter personal data. An example statement from participant 1 provides evidence for this aspect: *“I've never actually revealed anything private about myself. When it comes to general things about the university, I don't care whether something is revealed or not. I don't have any major concerns about revealing anything private about myself”* (P1). The students share the opinion that the questions they ask the conversational agent are not personalized (e.g., name, birth date or place of residence), and broadly formulated which are more general questions for example about dates or deadlines for studying. The statement from participant 12 emphasizes this: *“I don't know what personal data I would want to enter on the university website. [...] I wouldn't say that's questionable because I can't imagine what personal or private information I would enter there that would require confidential handling of any data records ...”* (P12). In addition, the interviewees believe that the university handles their data trustfully which also leads to low concerns. Participant 4 extends these thoughts due to the fact that other technology providers already have the students' personal data which lowers the concerns about data privacy in the conversational agent of the university: *“With the conversational agent, I only ask questions that are really*

important and it doesn't forward them. I don't disclose that much personal data. Even if I did, everyone else already has it anyway. That's why I honestly don't really care" (P4). The procession and storage of non-personal data are no reasons for serious concerns about data privacy in the conversational agent for the participating students. In contrast to these findings, if the students enter personal data, they need a higher level of data privacy to increase their use of the CA.

Besides the described aspects, the students are aware of the fact that they enter their data into the conversational agent which entails a certain risk as the statement from participant 7 shows: *"A conversational agent doesn't work without being able to use the data. It has to process it. There's always a certain amount of risk involved. But because it's not dramatic data from me, it's okay. It doesn't bother me"* (P7). In addition, the students mention that they are aware of the data protection regulations when they enter the website and use the conversational agent. Similar to the risk of entering data into the CA, this doesn't influence their concerns about data privacy and their use behavior remains low.

These findings on the relation between data privacy and use behavior result in the fact, that hypothesis H9b is rejected.

4.2.3 Organization-related Factors

In the following sections, I describe the findings from the organization-related factors of the concept of facilitating conditions and their influence on the intention to use and the actual use of the conversational agent. The organization-related factors consist of the factors advertising effectiveness and organizational image.

Advertising Effectiveness and Behavioral Intention

Looking at the findings of the relation between advertising effectiveness and behavioral intention (i.e., hypothesis H10a), nine of the participating students see advertising effectiveness as a relevant factor to influence their intention to use the conversational agent (P1, P3, P5, P7, P8, P9, P10, P11, P12). The other three participants speak about advertising effectiveness but give no clear statement that allows me to build a relationship between the two factors (P2, P4, P6). In total, the factor advertising effectiveness occurs 49 times during the interviews. The moderators age, gender, and experience show no effect on the relationship of these factors.

During the interviews, the participating students often mention, that more advertisement is necessary, and the advertisement effectiveness is too low which results in a low behavior intention. On the one side, the students report that the conversational agent is not well-known by the students. They describe it as *"I'm not so familiar with it ..."* (P1), *"... many people simply don't know that it exists"* (P11), or *"... that it's not very present in my head"* (P8). This represents a low advertising effectiveness. As a result, the students mention that these aspects and the missing or less effective advertisements are the reasons why they don't think about using the conversational agent. On the other side, they are calling for making the CA more public and demanding a higher level of advertisement that reaches them more and influence them towards using it. For example, participant 8 shares this opinion. The student thinks they would use the CA *"... if much more attention would be drawn to it"* (P8). Other participants report that if they know more about the conversational agent, they think more about using it. Participant 3 describes this aspect in more detail. The student thinks the advertisement should even target new students in the first semester to raise their behavioral intention as the following statement shows: *"It should definitely be better known. That more people know about it, that you tell the first-semester students about it straight away, because I would certainly have been able to use it more effectively in the first semester or make more use of it if I had known about it"* (P3). A higher knowledge about the conversational agent, i.e., higher advertisement effectiveness, increases the student's intention to use it.

In addition to the above-mentioned aspects, the interviewees make suggestions on how the advertisement can be more effective which signals their interest towards using the CA. The students mainly talk about four types of advertising that they consider effective. First, they see advertising the conversational agent on the social media channels of the university as an effective way to spread information on the CA. For example, participant 3 reports his or her positive experiences with social media advertisements. The student believes the postings on social media have high effectiveness because they reach a lot of students and are well accepted: *"What always works well, which I notice in my study program, is that many people are also on Instagram. That such posts always reach a lot of people and are well received [...]. The Instagram post is displayed much more quickly"* (P3). Besides the suggestions to use social media to achieve higher advertising effectiveness and a higher behavioral intention, the students also recommend presenting and talking about the conversational agent at different events, e.g., lectures, or introduction events. The most mentioned events are the introduction events when new students start to study at the university. The interviewees believe that the introduction and explanation of the conversational agent at these introduction events which take place every semester anyway are a good way of an effective advertisement of the CA. The students mention some possibilities of how the introduction of the conversational agent can be integrated into these events: *"...show and explain how it works, how to deal with it"* (P8) or *"... that you inform the students that it is there and let them use it briefly"* (P8) and *"if a lecture had been given about it at the introduction, it can do that and you can use it for that, so you can integrate it into your everyday life"* (P12). More concretely, the students recommend involving the information on the conversational agent in the part of the introduction event when the students are taught about all the software systems they have to use for studying or how to find their way around the website of the university. They think a short introduction to the CA is helpful in this context as the statement from participant 1 shows: *"We had a first-semester event and they gave us insider tips or told us about the university's IT system and also showed us the website and then said: 'This is Wissl [the conversational agent], if you have any questions or need an overview, you can just write to it'"* (P1). Participant 8 suggests other university events to inform students about the conversational agent to raise their intention to use it. The student speaks about the university exhibition or a similar big evening event at the university. The responsible service department of the CA should be there and inform about the conversational agent and give out some printed advertisement products, e.g., flyers, to raise attention. Other students share this opinion and recommend providing printed advertisement products to the students to remind them of the possibility of asking the CA if there are questions about studying. For example, participant 11 suggests: *"You could put up posters on the canteen doors drawing attention to the conversational agent"* (P11). A last and less-mentioned recommendation for higher advertisement effectiveness comes for example from participant 8. The student suggests writing e-mails to the students with information about the CA, especially to those who already have questions about studying. The participating students believe that these recommendations from their interviews lead to higher advertising effectiveness and indicate their higher intention to use the conversational agent.

Besides the aspects that the CA is too little known and the mentioned recommendations for higher effectiveness of the advertisements, the study participants would like to be reminded more about the possibility of using the conversational agent. They think a higher frequency of being made aware of the CA through advertisement leads to a higher effectiveness and behavioral intention. Participant 9 shares this point of view and tends to think more about using the CA if *"... people keep telling me that it exists ..."* (P9). These results display that higher advertisement effectiveness can be reached with a higher frequency of advertising which influences the students' intention to use the conversational agent.

Following from these findings on the relation between advertising effectiveness and behavioral intention, hypothesis H10a is partially supported.

Advertising Effectiveness and Use Behavior

Next, I focus on the findings on the relation between advertising effectiveness and use behavior (i.e., hypothesis H10b). Ten of the interviewees see advertising effectiveness as a significant influence on their use behavior towards the CA (P1, P2, P3, P4, P6, P7, P8, P10, P11, P12). Two students mention advertising effectiveness but not regarding their use behavior which results in no clear statement on the relation between the two factors (P5, P9). Here, too, the moderators age, gender, and experience do not play a significant role.

Similar to the impact of advertising effectiveness on behavioral intention, the students report that the effectiveness of advertising for the CA is low, resulting in low usage. The conversational agent is too little known by the students to influence their use behavior. Participant 3 describes this aspect in the following statement: *“At the moment I'm not using it, it's quite clear that it's not so well known here”* (P3). Other participants show similar views. They report that they are not really aware of the conversational agent. The students mention that they would use it more often if more advertisements would reach them. Using the CA is not always present due to little advertising effectiveness. The statement from participant 8 represents this issue: *„It's not in my head to use it all the time. If it were advertised more, I would use it more often. It's because it's not very present in my head”* (P8). Participant 1 shares this view: *“... I never realized that this conversational agent existed, otherwise I might have used it more”* (P1). These statements show, that if the students perceive a higher awareness of the conversational agent resulting from a higher effectiveness of advertising leads to higher use behavior.

During the interviews, I ask the students to report if they can remember if there were advertisements for the conversational agent. Most of the students are not sure if there was something. They report that they may have seen something on social media or can remember an e-mail. They describe these situations as follows: *“I think there was once an e-mail ...”* (P6) or *“I would now say that there were adverts”* (P7). Even if they can remember that they get an advertisement about the CA they don't really notice it. The statement from participant 8 emphasizes this impression: *“Maybe it was mentioned there, but I don't remember it. Maybe there was also an e-mail, but I don't remember it”* (P8). These statements display a low advertisement effectiveness. Furthermore, the students mention that even if they may have seen the advertisement, their usage behavior remains low as participant 12 reports: *“I have to be honest when it was introduced about two years ago, I didn't actually use it at all”* (P12). These findings represent that low advertisement effectiveness leads to low usage behavior.

To summarize the above-described findings on the relation between advertising effectiveness and use behavior, hypothesis H10b is partially supported.

Organizational Image and Behavioral Intention

Now, I turn to the findings on the relation between organizational image and behavioral intention (i.e., hypothesis H11a). No one of the twelve participating students mention organizational image as important for their intention to use the conversational agent. This leads to the fact that I cannot make a clear statement about this relationship.

Therefore, hypothesis H11a is partially supported.

Organizational Image and Use Behavior

The following sections present the results of the relation between organizational image and use behavior (i.e., hypothesis H11b). All twelve students speak about the organizational image and they show different views on it which are not consistent with their use behavior. For example, three students perceive a

positive organizational image from outsiders but they use the CA on a low level (P2, P3, P4). Furthermore, the moderators age, gender, and experience don't affect these relationships. The interviewees mention the factor organizational image 17 times during the interviews.

The organizational image based on the impression of the study participants is mainly linked to the following aspects. First, the image of the organization is associated with the city and the region where the university is located. The students speak about how outsiders have a positive opinion of the university because of the proximity to the Alps and their mountains as well as the local situation in the beautiful region of Allgäu. An example statement from participant 8 describes it as follows: *"The university is associated with the beautiful Allgäu region. It's not about the university itself, but about the beautiful surroundings ..."* (P8). Furthermore, the interviewees report that people who are not studying or working at Kempten University of Applied Sciences often see the location of Kempten as a beautiful place to study. The participating students mention for example that people want to study at the university *"... because of Kempten, because of the town itself and the location near the mountains"* (P9). The interviewees tell me that it is not about the university itself and its image, but rather about its location and the offers around it as a statement from participant 10 displays: *"They don't usually refer explicitly to the university, but rather to Kempten itself. Kempten is a beautiful town and there is a lot to do there"* (P10). Other students also report that outsiders see the university not positively because it is the best university to study but because of the location. The students who speak about this aspect of the organizational image have mainly a low use level in the CA (P3, P6, P7, P9, P10), only participant 8 uses the CA on a high level.

Second, the organizational image of the university is perceived positively by outsiders due to different reasons. People whom the interviewees talk to speak enthusiastically about the university because they are former students with positive memories as the statement from participant 2 shows: *"They are usually very enthusiastic when they hear about Kempten University of Applied Sciences. That they have been here before and that everything was a bit smaller. So, generally a positive experience"* (P2). In addition, outsiders see it positively because it is a small university with a small number of students. They think it is positive because of the small number of students in degree courses and learning groups where the students have a good and strong team spirit to benefit more from and learn more. The statement from participant 4 supports this view: *"One positive thing is that we are a relatively small university, because that means you have smaller study groups. When I tell my parents or friends about this, for example, who are often at large universities, they are totally envious of me. Because you have a good sense of community here, for example, because you make great friends. You have very small groups, you can take a lot more with you and learn a lot more"* (P4). Other interview participants report that the image of the university perceived by outsiders is very good in general and the university is seen as *"... a very innovative university, and relatively small, so you benefit fully"* (P4). Participant 3 describes it more generally how outsiders perceive the university's image in the following words: *"From what I've heard, the external image is very good. [...] We do all that and more. I think it's already a very positive image"* (P3). Even if some of these students perceive a positive organizational image from outsiders, they use the conversational agent on a low level (P2, P3, P4).

Other students mention in the interviews how outsiders have negative opinions about the university. The interviewees tell me about the impression of others that the university is too small, it is *"... almost a village school, according to the motto, we are at the ass end of the world"* (P4). Participant 6 shares this impression about the opinion of others on the university. People outside of the university cannot understand why the student studies there. They ask questions like *"It's far too small, what do you do there? What do you want there?"* (P6). In addition, outsiders think at Kempten University of Applied Sciences it is easy to get an academic degree. Participant 10 describes that another person from outside the

university believes “... *that studying here is easy and should be feasible*” (P10). These aspects are perceived by outsiders as negative in connection with the university's image. The students who get to know this negative organizational image show mainly a low usage behavior towards the conversational agent. Only participant 6 uses the CA on a medium level.

Besides positive and negative aspects of the organizational image, some external people the students talk to do not know the university or are not familiar with it as a statement from participant 1 displays: “*In my experience, many people don't even know that the university exists*” (P1). I classify the aspect that the university is not very well known by outsiders as a negative organizational image. The students who perceive these views from others also show a low use level of the CA (P1, P9).

In addition to the above-mentioned impressions on the organizational image of the university, some study participants report that they heard nothing special about the university or no “[concrete] things ...” (P12) about the image. They can't tell me whether something positive or negative about the university's view of outsiders as participant 11 explains: “*Kempton University of Applied Sciences does not have a negative reputation, but neither does it have a particularly good reputation ...*” (P11). Participant 5 shares this point of view. The student mentions that he or she hadn't heard anything special about the university, and if there was something very curious about the university, the student is sure someone would have told it as the following statement shows: “... *because I don't talk much about the university or I don't ask 'What do you think of the university?'. I think the university has a neutral reputation. Otherwise, I'm sure there would have been comments if I said I was studying in Kempton. They would certainly have said something. If you know stories about strange things that have happened at a university, you'll hear something. But no one in Kempton has ever said anything to me about it*” (P5). These students perceive the organizational image as neither positive nor negative (P1, P5, P11, P12). In comparison, their use behavior remains low.

As a result of the findings from the factor organizational image and its relation to use behavior, hypothesis H11b is rejected.

Behavioral Intention and Use Behavior

Last, these sections deal with the findings on the relation between behavioral intention and use behavior. The participating students show different levels of use behavior towards the conversational agent. One study participant uses the conversational agent on a high level (P8). Two participating students use the CA on a medium level (P6, P10). Nine of the twelve students use the university's conversational agent on a low level (P1, P2, P3, P4, P5, P7, P9, P11, P12). The interviewees mention the factor behavioral intention 38 times and use behavior 46 times during the interviews. The moderators age, gender, and experience show no significant effect on the relation between behavioral intention and use behavior.

Participant 8 is the student with the highest use level. The student reports that he or she uses the conversational agent “...*a lot for work*” (P8). The student works for the university and compiles information on study programs and prefers using the CA instead of other options, e.g., searching on the website, or asking others. The student describes the high use level as “*I use it a lot when I'm working. I work about two or three times a week*” (P8). On the other side, participant 8 intends to use the conversational agent more if it would work better, if there are more advertisements, and if the CA can provide personalized information and advice. The following example statement describes the wish for more personalized information: “*Then I would also use it often, just to get even more information about myself when I want to find some*” (P8). In this case, the student's higher intention to use the conversational agent which is affected by some of the antecedents leads to a higher level of use.

Other participants like participants 6 and 10 use the conversational agent on a medium level. They report they use the CA not too often but “... *once every two weeks, when [they were] looking for something*

specific” (P10) and “[depending] on the situation, several times or perhaps only once a quarter” (P6). Both participants mention a higher behavioral intention in their interviews. Participant 6 speaks about the perception of the conversational agent as a service employee who can help with questions about studying. The student intends to use the CA first before calling someone from the university staff as the following statement displays: “For me, a conversational agent is a substitute for calling an employee, I use that first and if I don’t have anything, then I go to someone, to a real person” (P6). In comparison, participant 10 mentions several influencing factors that increase the intention to use the CA like higher performance expectancy, social influence, and trust in provider: “If you get a tip like this, then it is usually the case that you use it more often once it has worked” (P10). Both students show a higher behavioral intention to use the conversational agent and a medium level of use behavior which confirms the positive relation between these two factors.

Among the twelve students, nine students use the conversational agent on a low level. The students report that they use it “... sometimes ...” (P12), “... usually relatively little ...” (P2), “... actually not very often” (P4), “[as] good as never” (P11), “... actually never really used ...” (P1) or “... used it twice so far” (P3). They only use the conversational agent to test how it works and try some questions or in rare situations when they cannot find something on the website. They report that the reason for their low use level mainly results from their knowledge about the university website and where to find the required information. One student mentions that he or she uses the CA “[very], very rarely because I now know where the pages are and I have my contacts” (P4). On the other side, the students speak about antecedents that influence their behavioral intention. The most mentioned factor is performance expectancy. The students intend to use the conversational agent if it saves time for searching for information, guides them faster to the required information, or replaces the search bar. Furthermore, the CA should be able to provide more information and give concrete answers. An example statement from participant 12 describes these expectations: “If it were to gain the functionality I have already mentioned, I would definitely use it because it would save me a lot of time or often save me research work” (P12). Other influencing factors the students mention are trust in technology, habit, advertising effectiveness, and visual and social attractiveness. For example, participant 11 describes that the visual and social attractiveness of the conversational agent plays an important role in the behavioral intention because the student needs to be attracted by the CA’s appearance: “I think it’s basically good that it’s available directly on the homepage and it’s already noticeable because it’s at the bottom right” (P11). In addition, participant 3 reports the importance of higher advertising effectiveness: “In connection with [information events], an introduction to the conversational agent” (P3) would be useful to get to know and test the conversational agent. Even if these students show a low level of use, they speak about their behavioral intention based on the influence of antecedent factors that affect their use behavior.

As a result, after looking at the results on the relation between behavioral intention and use behavior, hypothesis H12 is supported.

4.3 Summary of Results

The following table presents an overview of all findings (see Table 2). It displays the hypotheses the study deals with, example quotes from the interviews that are relevant to the hypotheses, and the results, whether the hypotheses are supported or rejected.

Hypothesis	Relationship	Example Quote	Supported?
H1	PE -> BI	“I would use it if it saved me an honest amount of time...” (P11)	Supported
H2	EE -> BI	“It’s always best if there’s the least effort when entering something and then something comes out.” (P10)	Supported

H3	SI -> BI	<i>"... there was never a suggestion to "ask the conversational agent". Personally, I wouldn't have thought of it." (P5)</i>	Supported
H4	HM -> BI	<i>" What I might enjoy is that it would be even more personal if he knew my data and could work with it. If it knows, for example, how many exams I've already failed and I then ask "How should the next exam phase go?". That would be funny. Then I would use it often, just to get even more information about myself that I don't want to look up myself." (P8)</i>	Supported
H5a	HB -> BI	<i>"... that I could imagine trying it out more in the future and seeing if I could integrate it well into my everyday university life." (P3)</i>	Partially supported
H5b	HB -> UB	<i>"... I think it always depends on the phase. It depends, I can't say for sure, but especially for the Bachelor's thesis you have to spend more time on the homepage. Less so in normal semesters. It depends and then I use the homepage the most, especially for dates, just to know when exams are due, when the grades are due, when the exam period is. I always use [the CA] first ..." (P6)</i>	Partially supported
H6a	TP -> BI	<i>"The university is a reputable institute or a reputable university that does a lot of things right, that does a lot of things well. That's why I can well imagine that it can improve and that my wishes will be taken into account and that they can turn things around. I trust the university to deliver a good product and a good service." (P11)</i>	Partially supported
H6b	TP -> UB	<i>"... on the whole, they were always very helpful..." (P7) "[I use it] as good as never." (P7)</i>	Rejected
H7a	TT -> BI	<i>"These are the kinds of questions that I don't usually expect to find on the university website, but I can well imagine that the conversational agent will be able to answer them for me." (P2)</i>	Supported
H7b	TT -> UB	<i>"This suggests that if I search for something, I get an answer or it spits something out for me. If I'm looking for e-mail addresses, it doesn't give me a phone number for xy, it's explicitly designed to give me the right one. That's why you get the feeling that it knows exactly what you want." (P10)</i>	Supported
H8a	VSA -> BI	<i>"I think it's basically good that it's available directly on the homepage and it's already noticeable because it's at the bottom right." (P11)</i>	Supported
H8b	VSA -> UB	<i>"The writing style doesn't put me off, quite the opposite. I think I'll get a sensible answer. It's not that it just sends in links, I'd find that daft. I think it's good that it writes a bit with you." (P8)</i>	Supported
H9a	DP -> BI	<i>"I would actually find it very helpful because it would make it much easier for the university to evaluate data and it would of course be cool if they could see much more easily that there are problems with students, who are often looking for something or are frequently asked to optimize things." (P12)</i>	Rejected
H9b	DP -> UB	<i>"... doesn't see any danger in asking the conversational agent questions." (P5) I have used this once. (P5)</i>	Rejected

H10a	AE -> BI	<i>"It should definitely be better known. That more people know about it, that you tell the first-semester students about it straight away, because I would certainly have been able to use it more effectively in the first semester or make more use of it if I had known about it."</i> (P3)	Partially supported
H10b	AE -> UB	<i>"At the moment I'm not using it, it's quite clear that it's not so well known here."</i> (P3)	Partially supported
H11a	OI -> BI	No statements	Partially supported
H11b	OI -> UB	<i>"From what I've heard, the external image is very good. [...] We do all that and more. I think it's already a very positive image."</i> (P3) <i>"I have used it twice so far."</i> (P3)	Rejected
H12	BI -> UB	<i>"Then I would use it often, just to get even more information about myself that I don't want to look up myself."</i> (P8) <i>"I use it a lot when I'm working. I work about two or three times a week."</i> (P8)	Supported

Table 2: Overview of Results

After the presentation of the findings, this study presents in the following chapter the interpretation and discussion of the results. It involves the theoretical and practical contribution, limitations of the study, and recommendations for future research.

5 Discussion

In this chapter, I discuss and interpret the results of my study. It includes an explanation of the impact of my findings on existing theory and practice. I describe how researchers and practitioners will benefit from my results. In addition, I point out the limitations of this study and how my study provides opportunities for future research.

5.1 Implications for Research

This study aims to answer the research question *"How are user-, agent-, and organization-related factors of facilitating conditions related to technology acceptance of conversational agents?"* and identify relevant factors for the acceptance of conversational agents. Regarding the main findings, first, almost all hypotheses of the original UTAUT2 are supported. Only the relations between habit and behavioral intention as well as use behavior are partially supported. Second, the results on the user-, agent-, and organization-related factors I integrate into the concept of facilitating conditions show mixed results. The factors trust in technology and visual and social attractiveness significantly influence behavioral intention and use behavior. The hypotheses on the relation between other factors (i.e., trust in provider, advertising effectiveness, and organizational image) and behavioral intention are partially supported. Use behavior is partially affected by advertising effectiveness. Data privacy does not influence behavioral intention and use behavior. Additionally, the factors trust in provider and organizational image show no effect on use behavior. Furthermore, the results show support for the hypothesis on the relation between behavioral intention and use behavior. The following sections provide a deeper dive into the findings and the implications for research which I divide into two parts for a better overview. The first part involves the original factors from UTAUT2, and the second part involves the user-, agent-, and organization-related factors of facilitating conditions.

Factors of UTAUT2

First, looking at the original UTAUT2 factors, performance expectancy, and effort expectancy are the most significant for the influence on the intention to use the conversational agent. Similar to prior findings in the literature, these factors show high importance for the technology acceptance of conversational agents (Diederich et al. 2022; Janssen et al. 2021; Laumer et al. 2019; Mesbah and Pumplun 2020). Performance expectancy and effort expectancy are also important for the acceptance of other technologies, e.g., collaboration technologies (Brown et al. 2010), e-government applications (Hofmann et al. 2012), accounting information systems (Alamin et al. 2015), or smartphones (Choudrie et al. 2014).

Besides these two strong factors, social influence and hedonic motivation also affect behavioral intention but they are not as strongly pronounced. Hedonic motivation is a controversial factor in the technology acceptance literature (Heijden 2004). Technologies can be divided into hedonic and utilitarian systems (Heijden 2004). “Hedonic systems aim to provide self-fulfilling value to the user in contrast to utilitarian systems, which aim to provide instrumental value to the user” (Heijden 2004, p. 696). In utilitarian systems, users want to achieve an external subject, e.g., task performance. Hedonic systems do not have to provide such a subject (Heijden 2004). Usually, developers focus either on a utilitarian system to provide sufficient functionality to the user or the hedonic benefit, but some technologies like the Internet offer both values (Heijden 2004). In contrast to findings from Mesbah and Pumplun (2020) and Laumer et al. (2019) that explore the acceptance of healthcare CAs, the participants of this study show at least a low level of hedonic motivation. This indicates that conversational agents can provide both utilitarian and hedonic benefits if developers also strengthen the hedonic elements of the CA. The conversational agent in this study only contains a low level of hedonic elements such as animated images, colors, or an attractive visual appearance and concentrates more on the provision of relevant information. This explains the low effect of hedonic motivation on the intention to use the CA. With the reinforcement of the hedonic elements in the CA, the hedonic motivation, and the intention to use can increase. These findings present an implication on existing theory that deals with the effect of hedonic motivation and the role of CAs as utilitarian and hedonic systems.

Furthermore, the factor social influence is relevant for students' acceptance of the conversational agent in this study but on a lower level in comparison to performance expectancy. This supports findings from Mesbah and Pumplun (2020) and Laumer et al. (2019) that see social influence as relevant for the acceptance of CAs. Only a few studies on conversational agents include the factor social influence to explain their technology acceptance. Following this, my study provides a further contribution to research on conversational agents with the consideration of the factor social influence. Looking at the results of social influence on students in the context of other technologies, a study on the acceptance of an e-recruitment system by students confirms the positive effect of social influence on the intention to use technology (Laumer et al. 2010). In contrast, a study on the acceptance of a digital learning environment at a university cannot find support for social influence on the student's behavioral intention (Cruz et al. 2014). In addition, these authors do not consider the influence of professors as important others for students. This study emphasizes that not only close friends but also authority figures like professors are relevant for the effect of social influence on students' intention to use a conversational agent. With these findings, I provide a further perspective on the factor social influence for study participants like students and contribute to existing theory.

The last factor of the original UTAUT2 model I investigate in this study is habit. The students see habit as only partially relevant to their behavioral intention and use behavior. For example, the habitual use of the conversational agent has to overcome the habitual use of the university website for searching for information. According to Mesbah and Pumplun (2020), younger people are more used to accepting new technologies and learning how they work. Therefore, students can easily develop and reinforce the

habit of using a CA instead of searching on a website for information to answer their questions. Following this, the participating students for example connect the habit of using the conversational agent to a number of positive beliefs and experiences with it. The positive beliefs about the ability of the conversational agent depend on their trust in the technology which increases their intention to use the CA. In addition, they create positive experiences mainly by using the CA. Following this, students who have already gained experience with the CA use it which is an aspect UTAUT2 does not consider. This indicates that the habit of using a conversational agent depends on users' trust in the technology and positive experiences based on the findings from some interviews.

In summary, my study provides further evidence for the successful application of UTAUT2 by Venkatesh et al. (2012) and extends the findings from prior research in the context of conversational agents.

User-, Agent-, and Organization-related Factors of Facilitating Conditions

Second, in addition to the original UTAUT2 and its well-known factors, I offer an extension of the model by integrating user-, agent-, and organization-related factors into the concept of facilitating conditions. This allows me to adapt the model to explore the technology acceptance of conversational agents and to provide a more comprehensive perspective on the concept of facilitating conditions. I start with the user-related factors which are represented by the construct trust in the research model. It involves the factors trust in provider and trust in technology. Trust in technology shows a positive influence on the intention to use the conversational agent and the actual use. The findings on trust in technology support results from prior researchers in the context of conversational agents (Følstad et al. 2018; Janssen et al. 2021; Zierau et al. 2020). In addition to conversational agents, trust in technology is a major driver for the acceptance of different technologies (Söllner et al. 2016). Only a few studies indicate trust in technology as non-significant for the intention to use technology, e.g., for e-government systems (Teo et al. 2008). Furthermore, the authors point out the importance of trust in the technology as well as trust in the provider (Janssen et al. 2021; Laumer et al. 2019; Mesbah and Pumplun 2020). In this study, trust in provider only partially affects the intention to use the CA and shows no effect on the use behavior. Studies on the application of CAs in the context of healthcare find that trust in the provider does not directly affect the intention to use the system (Laumer et al. 2019; Mesbah and Pumplun 2020). The authors formulate that trust in provider influences performance expectancy and the perception of risk in data privacy which then affects the intention to use the system and the actual use. This can be an explanation for why trust in provider doesn't influence the use of the conversational agent and only partially affects the behavioral intention in this study. Some of the study participants report no concerns about their data privacy because of higher trust in the CA provider. The higher level of trust in the provider lowers the data privacy concerns which results in a higher level of behavioral intention and use. In comparison, some of the participating students do not trust the university as the CA provider to care enough about the conversational agent to fulfill their performance expectancies. The benefits they believe to receive from using the CA depend partially on their belief in the ability of the university to deliver the required services in the conversational agent. Based on statements from some of the interviews, the factor trust in provider seems to have a connection to other factors like data privacy and performance expectancy. This confirms results from prior studies (Laumer et al. 2019). Following the above-mentioned findings, it is important to divide the construct of trust into the factors trust in technology and trust in provider to examine the technology acceptance of CAs due to the different perceptions of the users and the effect on their technology acceptance. In addition, these findings indicate the importance of the factor trust as part of the facilitating conditions in the context of conversational agents to provide resources and support the use of the technology. It provides a further contribution to the research on the relation between trust and behavioral intention and use behavior where trust in the technology plays an important role in the explanation of the technology acceptance.

The second category in the concept of facilitating conditions presents the technological characteristics of the CA, i.e., the agent-related factors. They consist of the CA's visual and social attractiveness and data privacy. Both the relation between visual and social attractiveness and behavioral intention as well as use behavior is positively related. These findings confirm prior studies on the importance of the visual and social attractiveness of CAs to influence their acceptance (Diederich et al. 2022; Ling et al. 2021; Riquel et al. 2021; Seeger et al. 2018). The visual and social attractiveness of the conversational agent plays an important role in the acceptance of the study participants. The visual appearance of the CA must draw attention to the opportunity of using the CA and encourage the students to use it. The social attractiveness is often associated with the belief or knowledge that the conversational agent acts like a human which influences the students to use it. Similar to findings from prior literature, different design elements of visual and social attractiveness are important to influence technology acceptance (Diederich et al. 2022; Janssen et al. 2021; Ling et al. 2021). For example, the human-like design, especially for social attractiveness, is an important aspect that the results of this study also represent as important. Feine et al. (2019) point out the relevance of social cues for the design of a CA. The students expect that the conversational agent is able to communicate in a dialog and respond interactively. They also associate human characteristics like politeness or helpfulness with the CA. Besides the social behavior, other design elements that are mentioned in the interviews and presented by literature are the general visual appearance on the website, movement, embodiment, or likeability (Diederich et al. 2022; Ling et al. 2021). The participants mention a lot of improvements for the visual and social attractiveness of the conversational agents which shows the relevance of this factor and the strong influence on their intention to use it. In prior studies on conversational agents, some authors find out that the visual and social appearance of a conversational agent only has an indirect effect on the intention to use it (Ling et al. 2021). Based on their findings, the factor influences the perceived enjoyment (Yang and Lee 2019) or the users' performance expectancy because of the human-like design which raises the expectation that the CA can act like a real person (Brandtzaeg and Følstad 2017). In the findings of this study, these aspects occur on a low level. One participant reports enjoyment because of the attractive design. In addition, a few students expect a more human-like conversation which is similar to a dialog or interaction with a person. The study participants connect the CA's appearance with their performance expectancies. Following this, the factor visual and social attractiveness can affect performance expectancy. These findings emphasize the importance of visual and social attractiveness for the technology acceptance of conversational agents.

Besides the positive results from the influence of visual and social attractiveness on behavioral intention and use behavior, the factor data privacy does not influence the intention to use the conversational agent as well as the actual usage. The findings indicate that data privacy is not important for the acceptance of the conversational agent. Most of the study participants have no or very low concerns about the processing or storage of the data they enter into the CA which results from different aspects. The students don't perceive high risk in using the university's conversational agent because they use other systems with a higher risk of data misuse. Additionally, they trust the university to care for sufficient precautions for data privacy. As mentioned earlier, the factor trust in provider can influence data privacy. The findings further indicate that a higher level of data privacy is only necessary if the use of the conversational agent requires personal data. These results are consistent with prior studies. For example, conversational agents for healthcare need a high level of data privacy because of the procession and storage of personal data (Laumer et al. 2019; Mesbah and Pumplun 2020). In contexts of other technologies that use sensible personal data, like e-banking (Gorbacheva et al. 2011), data privacy is an important factor that affects the intention to use the system. The results from these studies show that if the system deals with personal data, users need a high level of data privacy to use the system (Gorbacheva et al. 2011; Laumer et al. 2019). In contrast, some of the participating students would like to lower the

data privacy standards to enter more private data. They prefer using the conversational agent and entering personal data to get more personal advice. In addition, they perceive it as positive if the university connects their personal study data with their CA data to offer more personalized answers in the conversational agent. The personalization-privacy paradox, states that individuals who are most concerned about their data privacy are less willing to provide personal information for personalization purposes (Awad and Krishnan 2006). Looking at this paradox the other way around, the results of this study show that some students are more willing to provide personal information, suggesting that these students also have low privacy concerns. Even if the students have some concerns about data privacy when the conversational agent deals with their personal data, they perceive the benefits through the usage as higher. The participating students believe in the benefits of personalization in the CA because it reduces their cognitive effort, e.g., for decision-making (Hong and Tam 2006). In addition, several prior studies confirm that users make a trade-off between the potential social and economic benefits and risks of sharing their personal data (Bandara et al. 2020). If the advantages of using a conversational agent outweigh the disadvantages for users, they are more willing to provide data. In sum, the factor data privacy shows no relevance for the study participants to use the conversational agent in this study. A higher intention and use cannot be affected by a higher level of data privacy. An exception can be the use of personal data for most of the students, but the mentioned trade-off between the benefits and risks of sharing personal data also plays a central role. These results show that research should consider the factor data privacy as part of the concept of facilitating conditions when conversational agents store and process personal user data.

The organization-related factors are the third category of the concept of facilitating conditions. I divide them into advertising effectiveness and organizational image. Advertising effectiveness is partially relevant to the technology acceptance of the conversational agent. A lot of the study participants report that they need higher advertising effectiveness to raise their intention and use behavior. The findings show that even if there is an advertisement, it does not reach the target group, i.e., it is not effective. In addition, low advertisement effectiveness only leads to low intention and use. As Janssen et al. (2021) point out, users need to be aware of the conversational agent and need sufficient information about it to take the step towards using it. The literature presents several steps of advertisements that are required to get people to know a product in the first place and then use or even buy it (Lavidge and Steiner 1961). To achieve a higher level of behavioral intention and use behavior for the conversational agent, advertising and its effectiveness must increase concerning the mentioned steps. Other researchers also support the communication of the availability of a CA to raise awareness and trust (Aoki 2020). The author points out that higher advertising effectiveness also influences trust in the technology if the CA provider communicates the advantages of using it (Aoki 2020). Some students mention in the interviews that the advertisements should involve information about how the conversational agent works and what it provides for the students. The knowledge about the CA's capabilities can influence the students' trust in the technology. This effect of advertising effectiveness on trust in technology may explain the lack of clear statements from a few study participants on the relation between advertising effectiveness and behavioral intention as well as use behavior. These findings contribute to the knowledge about the factor advertising effectiveness and demonstrate the importance of its effect on the technology acceptance of conversational agents.

The second factor of the organization-related factors is organizational image. The relation between organizational image and behavior intention is partially supported because no one of the participants mention its relevance in a direct connection to their intention to use the CA. In addition, organizational image doesn't influence the use of the conversational agent. The findings show mixed results about the perception of the organizational image by the students. It ranges from neutral, to positive and negative, and is not directly related to the students' levels of use behavior. These findings can result from several

aspects. First, the organizational image the study explores is only the view of outsiders or externals on the university. People from outside the university the participants talk to are mainly their family and friends. Most of these outsiders have no direct relationship with Kempten University of Applied Sciences. Following this, they don't have to take the image of the university into account or evaluate it for a specific purpose. For example, it is only important for pupils who want to study at the university, potential employees, or current students. In comparison, the study participants don't perceive the organizational image from outsiders as important enough to influence their intention to use or the actual use of the conversational agent. Second, I formulate the hypotheses on the influence of the organizational image on the acceptance of the conversational agent based on findings on the effect of the organizational image on the performance of employees. The authors find out that employees' engagement and performance in an organization increase through a positive organizational image (Dhir and Shukla 2019). I adapt the increase in employee engagement and performance to the increase in the intention to use and the actual usage of the organization's conversational agent. My hypotheses that the students who perceive the organizational image as positive show a higher behavioral intention and use behavior are not supported. These findings may occur from the following aspects. On the one hand, the study participants don't perceive the image of the organization as important for themselves, i.e., they don't identify with the university's image. Because members feel connected to their organization when they find the characteristics they ascribe to their organization in themselves (Dutton et al. 1994). In addition, a strong match between the values of an organization and the values of the members can influence the members' behavior (Chatman 1991). The missing connection between the values of the university and the values of the students may explain the lack of influence of organizational image on technology acceptance. On the other hand, the results from the interviews display that there doesn't exist a clear and tangible organizational image. This makes it difficult for the students to identify with. The image of an organization consists of the values, beliefs, and assumptions of the organization that members perceive (Dutton et al. 1994). The organization has to communicate these aspects of its image to enable the members to identify with it (Dutton et al. 1994). By focusing on clear values that the university communicates as important to its image, they can get students to use the conversational agent. These findings indicate that this study does not fully explain the connection between the factor organizational image and technology acceptance of CAs.

The overall theoretical contribution of my work is that I create a model for technology acceptance in the context of conversational agents and provide a more comprehensive understanding of the concept of facilitating conditions. My research proves that the underlying model of UTAUT2 is also valid in the area of CAs. In addition, research needs to consider user-, agent-, and organization-related factors involved in the concept of facilitating conditions that are necessary to explain the technology acceptance of conversational agents.

Furthermore, this study provides some indications of the inter-relationships between the factors of the research model. In the chapter on the theoretical background of this study, I have already described how other authors show the relationship between some UTAUT2 factors. The authors demonstrate that facilitating conditions have an effect on effort expectancy (Stefi 2015) and how effort expectancy influences performance expectancy (Alalwan et al. 2017). Some of the participating students in this study also mention the relation between effort expectancy and performance expectancy. If they believe their effort for using the conversational agent is low, they think they can benefit more from using it. In addition, in the sections above, I describe some relationships between the user-, agent-, and organization-related factors of facilitating conditions among themselves and the UTAUT2 factors that emerge during the interviews. For example, the effect of visual and social attractiveness and trust in provider on performance expectancy. The participating students expect higher benefits through the use of the CA if its

design attracts them and if they have a higher level of trust in the CA provider. Furthermore, the interviewees speak about how the visual and social attractiveness of the CA influences their effort expectancy. They describe that the CA expresses an effortless use through its design. Following this, some factors of facilitating conditions influence performance expectancy and effort expectancy similar to findings from prior research (Stefi 2015). Other examples of inter-relationships are how trust in technology affects habit and the impact of trust in provider on data privacy. Some of the study participants report that they have no data privacy concerns because of their high level of trust in the provider of the conversational agent. These results reinforce the findings from previous studies that point to the link between trust in provider and data privacy (Laumer et al. 2019). The results of this study indicate inter-relationships between the factors of the research model, but I cannot clearly confirm these stated effects between the factors as only some of the study participants mention the relationships. To be able to provide clear confirmation, all participating students need to report the relation between the factors.

As mentioned in the chapter about data analysis, this study provides the opportunity through inductive category formation to explore additional factors that I do not consider in the research model. Besides the mentioned factors in the research model, no new factors for the technology acceptance of the conversational agent emerge during the interviews.

After presenting the implications for research in the sections above, the following sub-chapter describes the practical implications the findings of this study provide.

5.2 Implications for Practice

In terms of practical implications, the results offer several aspects. This sub-chapter first presents the general practical implications that derive from the study. Following this, I offer concrete implications for Kempten University of Applied Sciences and the service department that provides the conversational agent which is the explored subject of this study.

5.2.1 General Practical Implications

The results provide several factors that influence the acceptance of conversational agents that practitioners should consider when implementing this technology. Besides the well-known factors from UTAUT2, there are user-, agent-, and organizational factors as categories of facilitating conditions that affect the acceptance and use of conversational agents.

From UTAUT2, there are three factors I want to highlight. First, performance expectancy is the most mentioned factor in this study and shows a high relevance for the acceptance of conversational agents as well as several other technologies. The CA has to provide benefits to its users, for example, in the form of saving time through a fast and efficient search process, lowering search effort, and providing the required information. In addition, the users expect more personalized information and concrete information directly offered by the conversational agent. Practitioners should consider the provision of these benefits when they develop and improve their conversational agents.

Second, social influence is another factor that practitioners should draw attention to especially in conversational agents for students or people of a similar age. This user group is vulnerable to influence from important others. These important others don't have to be only close friends. Important other people or authority figures with whom young adults have frequent contact and from whom they receive relevant information, such as fellow students or professors, can also encourage them to use a conversational agent. Practitioners should consider these groups as important social influencers when organizations offer a conversational agent.

Third, I see hedonic motivation as another relevant factor for the acceptance and use of conversational agents. In addition to the pure utilitarian use of CAs which is linked to performance expectancy, conversational agents can contain hedonic elements to offer hedonic benefits. These elements can involve movements, animated pictures, different colors, sounds, or an attractive visual appearance, to provide fun and enjoyment to users and increase technology acceptance. As companies develop conversational agents, they should consider the possibility of incorporating hedonic elements to provide hedonic value to their users in addition to utilitarian benefits.

Besides these three factors from the original UTAUT2, the other factors, i.e., effort expectancy and habit, are further opportunities for practitioners to increase the acceptance of conversational agents. In order to increase the habitual use of a CA, companies can, for example, offer the execution of certain processes only in combination with the use of a conversational agent to integrate it into the everyday lives of users.

The extension of UTAUT2 by integrating user-, agent-, and organization-related factors into the concept of facilitating conditions gives practitioners valuable suggestions on important components that facilitate and support the acceptance of conversational agents. I see the most value for practitioners if they concentrate on the factors trust in technology, advertising effectiveness, and visual and social attractiveness. The results of this study show that trust in the technology of a conversational agent leads to a higher intention to use it and a higher actual use behavior. Organizations have various options for strengthening users' trust in the CA. They should present what the conversational agent is able to do to strengthen users' beliefs that the technology has the features and characteristics that are necessary to help users perform their tasks. As described in the section about performance expectancy, users expect for example to get fast and easy required information from the conversational agent. Organizations need to communicate how the CA can support them in performing their tasks and how they benefit from using the CA. There are different ways to do so, for example, in direct personal contact in conversations with users, different events where the conversational agent is presented, or through advertisements on different channels (e.g., print, e-mail, social media, etc.). Besides communicating the capabilities of a CA in theory, one of the best ways to convince people of technology is to let them try it out and support them personally if they have any questions. If users experience that the conversational agent can fulfill their expectations, their trust in the technology increases. These approaches facilitate the use of a conversational agent. In addition, they counteract the users' uncertainty about what the CA is able to provide which increases their confidence in it and the intention to use it and the actual use.

As already mentioned, publishing advertisements is one way to communicate the features of a conversational agent. Furthermore, I see advertising effectiveness as another important factor in increasing the use of a conversational agent. Practitioners should consider it even if not all study participants make a clear statement on the relation between advertising effectiveness and behavioral intention as well as use behavior. The results of this study show that a high and effective number of advertisements that reach the users' attention is needed to increase CA use. Regular advertisements draw people's attention to the conversational agent and remind them to use it. Individuals who have never used it get to know the CA and people who use it on a low level get reminded that it is an opportunity to perform the required tasks. This results in a higher behavioral intention and use behavior. The results from the study emphasize the importance of regular and effective advertisements. Most of the study participants make recommendations on how to achieve higher advertisement effectiveness to achieve a higher CA use. The two most mentioned advertising types are social media and events. The participants suggest social media as a suitable advertisement channel because they spend a lot of time on social media. Regular advertising on social media seems to be a promising way to increase the technology acceptance of CAs,

especially for young adults like students. Combined with valuable content about the benefits the conversational agent can offer users, advertising can be more effective and increase trust in the CA. A second type of advertisement the participants often mention is to present the conversational agent at events. These can be pure information events on a similar topic, in which the presentation of the CA can be integrated, or external events such as trade fairs. The presentation of the conversational agent in those events can range from a theoretical presentation to a practical application in which the guests of the event are involved. Other types of advertisements like e-mail or print products (e.g., flyers, posters) can also be effective in promoting conversational agents and increasing their acceptance.

Practitioners should consider another relevant factor for the acceptance of conversational agents, i.e., the visual and social attractiveness of the CA. The results of this study show that when the visual and social appearance of a conversational agent attracts users, their acceptance increases. The visual and social attractiveness of a CA is important to draw attention to it in the first place. The visual appearance plays a particularly important role here. Through the visual design, there are various options available for practitioners to draw attention to the conversational agent. These can include for example different colors, images, movements, or sounds. Especially a human-like appearance seems to attract users. Practitioners who offer a conversational agent can use human-like avatars (i.e., virtual characters) to simulate that the CA can communicate like a human and foster its social attractiveness. Compared to the newly developed conversational agents such as ChatGPT, which do not offer a human-like visual design, the decision about the visual human-like appearance must be well thought out. I suggest concentrating on the user group, what kind of CA it is, and if a certain character displayed through a picture or another graphical element is necessary. Besides only drawing attention to a conversational agent through its visual design, both the visual and social appearance of a CA encourage people to use it. If users like the visual design of the chat window and the structure of the conversation they use it more often. Practitioners can support this visual attractiveness for example with appealing colors within the chat window or emojis to strengthen the emotional expressions. As previously described, social attractiveness starts with the human-like design at the starting point of the conversational agent. Users associate the ability to act like a human and build social relationships with a CA (Nass and Moon 2000; Qiu and Benbasat 2009). This impression proceeds in the communication with the conversational agent. As the study participants report, they expect to communicate in an interactive dialogue, where they get suitable answers to their questions. In addition, they assign human characteristics to the CA like politeness or helpfulness. Practitioners can apply these social aspects in their conversational agent by integrating so-called “social cues” which can occur in visual or verbal form. These can involve small talk phrases, polite communication with “please” and “thank you” or a short delay when the CA answers to imitate that it is thinking about the answer or needs time to write it. Practitioners can draw on a wide range of design elements as mentioned above to increase the visual and social attractiveness of a conversational agent and higher users’ acceptance. It is important not to exaggerate the application of these social cues and visual design elements to encourage the use of a CA. The attractiveness of a design lies in the eyes of the users, and they have different views on what is attractive. Furthermore, a highly human-like design can raise too high user expectations of the CA’s skills (Robert 2017). Practitioners who develop a conversational agent should find a balance in the use of visual and social design elements to attract people’s attention and encourage them to use it.

Apart from the three factors mentioned above, the agent-related factor data privacy and the organization-related factor organizational image should also be taken into account in practice in certain cases. Data privacy becomes relevant if the conversational agent stores and processes personal data of its users. Practitioners should higher their data privacy precautions and communicate transparently all relevant information on how they protect user data. In addition to the purely technical guarantee of a high level of data protection and the reference to the data privacy precautions, the factor trust in the provider

also supports this aspect of acceptance of the CA. When organizations increase users' trust in themselves as CA providers, users' uncertainty about data privacy decreases, which leads to higher usage behavior. To increase trust in the provider, the organization must ensure that the conversational agent delivers the expected service to its users by continuously improving it and providing users with positive experiences. In addition to data privacy, the factor organizational image becomes significant, if outsiders want to become members of the organization that offers and provides the conversational agent. They form an opinion about the organization and assess whether they share the same values and beliefs in order to decide whether to join the organization. This perception of the organization's image can include the opinion about the conversational agent that influences the acceptance of this technology. If organizations want outsiders to use their conversational agent, their image can play an important role. They need to consider whether their image supports the use of the CA and communicate important values to enable users to identify with them.

5.2.2 Practical Implications for Kempten University of Applied Sciences

In addition to the described general implications for practice, I offer in the following sections specific practical implications for the conversational agent at Kempten University of Applied Sciences and give recommendations for improvement to increase the use of the CA. As mentioned above, the three factors from UTUAT2 I recommend considering for further development are performance expectancy, social influence, and hedonic motivation. To fulfill the students' performance expectancies, the conversational agent should be regularly improved and further expanded. This means that the information the CA delivers has to be up to date and tailored to students' requirements to ensure a faster and more efficient search via the CA. In addition, the conversational agent should be able to give more direct information in general and more specific information. The students criticize that it often provides general information or only links to the university website. To offer more benefits to the students and increase their intention to use it, the CA should give direct answers that include specific information and give a concrete answer to the asked question in the conversational agent. If it is not possible for the conversational agent to give a direct answer, students prefer to receive a summary of the web page to which the conversational agent provides the link. This enables them to estimate in advance if the web page offers the required information. These changes can provide the students with the expected performance and comfort (i.e., less search effort, finding quick information) they require from the conversational agent to intent to use it.

Another important factor the university and the responsible service department can address is social influence. The students can influence each other when they speak about it, or they recognize that other students use it successfully. This is a starting point the university can utilize. I recommend inviting students who in general like to use the CA or who are familiar with the service department responsible for the CA to act as multipliers (i.e., a person who spreads certain information) and influencers for the conversational agent. They should be trained to speak with other students in their immediate environment about the conversational agent and their positive experiences. In addition, to emphasize it, the students should show the CA on their smartphones with example conversations and encourage other students to test it. To reach a high number of students at the university, the multiplier students should represent different characteristics (gender, age) and study programs as well as study experiences. Furthermore, professors can be another relevant group of multipliers and influencers for the students at the university to use the conversational agent. They have close and regular contact with their students and are another important source of relevant information for the students. In addition, the students are used to listen to and learn from them. If professors talk positively about the conversational agent in their courses, show how it works, and how the CA provides benefits for the students, they can influence them towards using it. A further starting point for social influence is the impact of the service departments at

the university (e.g., student advisory service, academic registry, library, etc.). Most of them have to deal with students on a daily basis, answering their questions or helping when students are struggling. The university's conversation agent is able to answer many of the questions the students bring up and repeatedly ask the service staff. On this occasion, they can point to the conversational agent and mention that it can answer these questions to offer the students more convenient access to information. These recommendations show that there are several aspects of the factor social influence the university can use to increase the students' CA use.

Hedonic motivation is the third factor of UTAUT2 the university should consider in the further development of the conversational agent. The involvement of hedonic elements can increase their intention to use the CA. As mentioned above these elements can have different forms, e.g., animated pictures, different colors, sounds, or an attractive visual design. One of the study participants mentions a further recommendation to higher the hedonic aspect. The CA can involve quizzes, for example about the students' knowledge of the university, studying, or student life in Kempten, to offer playful incentives. By focusing on a playful approach, the conversational agent can also offer little games to encourage the students to use it. The involvement of such hedonic elements should be taken into account for the further development of the conversational agent at Kempten University of Applied Sciences to increase the students' behavioral intention and use behavior.

In addition to the factors from UTAUT2 mentioned above, there are important user-, agent-, and organization-related factors from the concept of facilitating conditions that support students' acceptance of the conversational agent and the university can use to improve the CA. The three factors I want to highlight are trust in technology, advertising effectiveness, and visual and social attractiveness. Trust in the technology of the CA is one aspect the university should consider increasing the use behavior of the students. To convince the students that the conversational agent has the abilities, features, or characteristics to provide benefits (e.g., faster and more efficient search for required information, less search effort, etc.), the university has several opportunities that are mainly based on communication. It is about how convinced the students are of the abilities of the conversational agent and what advantages its use offers. My first recommendation is to communicate the features of the CA on different channels which is strongly connected with advertising effectiveness. To create trust through communication, the content and what is presented are important. The students need to get to know and see specific examples of what the CA is able to provide for the students. This could start with the collection of the most frequently asked questions from students and the most common issues the service departments have to deal with, and the CA can answer. The university should communicate at regular intervals that the conversational agent can answer these questions and show examples directly from the CA. In addition, the students should test their questions directly in the CA. This approach addresses several of the students' senses and increases their trust in the technology because they experience what the conversational agent can provide. These examples of how the CA answers a lot of the students' questions should be communicated on different channels like personal contact in service departments, via e-mail, on social media, or with print products at the university campus.

As I already mentioned, the factor trust in technology is linked to the factor advertising effectiveness. On the one hand, the capabilities of the conversational agent have to be communicated on different channels to increase trust, which is also a way of advertising for the CA. On the other hand, the communication of the fact that there is a conversational agent available to the students is an important step the university should conduct beforehand. Both aspects require a high frequency of advertisements on the available communication channels I listed above. The participating students see advertising on social media as a favorite communication channel, as they use it like most other students to receive relevant information. Furthermore, the university should use events for students at the university to advertise the

conversational agent. The study participants see especially the events at the beginning of studying as highly relevant to reach students at an early stage with the advertisements on the CA. The direct and personal contact at events with employees of the service departments of the university who speak about the CA, showing the CA for example on a digital device (e.g., table, laptop) or letting the student directly try it out at those events, increase the advertising effectiveness. It appeals to several senses (i.e., hearing, seeing, touching, or feeling) and remains stronger in the students' memory. In addition, the university or the team that is responsible for the CA should use other student events as well as the general communication channels at the university (e.g., e-mail, print products) to advertise the conversational agent regularly. These are necessary steps to influence the students towards using the CA. They reach their students on different levels of advertising effectiveness. This starts with students who do not know about the CA, continues with students who raise awareness, and finally also affects students who use the conversational agent towards a higher level of use.

In addition to these two factors, visual and social attractiveness is the third factor I recommend focusing on for the improvement of the conversational agent of Kempten University of Applied Sciences to increase its use. Visual and social attractiveness plays an important role in drawing attention to the CA, its existence, and the ability to use it. In addition, the factor is relevant to foster the use of the CA. I first recommend thinking about changing the visual appearance of the conversational agent on the university website. Based on the reporting of the study participants, I suggest using more and/or striking colors to make the CA stand out from the blue color of the university website. In addition, a small movement could be helpful to draw more attention to it when students enter the website. If the university decides to involve a movement, it should be designed to not annoy the visitors of the website. Once someone clicks away the movement, it should not again run for that person. Looking at the social attractiveness, I recommend improving the interaction and dialogue ability of the conversational agent which makes it more human-like and feels like a conversation with a real person. A change of the graphical representation of the conversational agent to make it look more human-like or the other way around to make it less human is a difficult decision. Most of the study participants like the current design which tends to be more human-like. Some of the participating students think a human-like design is not necessary. This decision should take into consideration what objective the university wants to achieve with the conversational agent in the future. If the CA should act like a personal study advisor the design should be more human-like. If the conversational agent only acts as a convenient source of information, a higher level of human-like design is not necessary. Based on the statements from the study participants I recommend slightly reducing the humanity of the CA's visual appearance because most of the students regard it as a fast and efficient alternative to their search for information on the university website. These results originate mainly from students with higher study experiences. Based on a few statements from younger interviewees who have just started to study, these interviewees prefer a more human-like design and see the conversational agent as a personal advisor to find their way around at the university. It will not be easy to satisfy both groups with the design of the CA. Therefore, I recommend focusing on one group, i.e., students who study in lower semesters or students who study in higher semesters, to determine the degree of human likeness of the university's conversational agent. In general, the university should not exaggerate changes in the visual and social appearance of the CA because they can result in an opposite effect and put students off using it. Small, well-thought-out changes in the design can increase the CA's attractiveness and the students' technology acceptance. The general design of the chat window of the conversational agent seems to be visual and socially attractive to the students. This includes for example the colors, the structure, and the used emojis. These aspects should continue to be taken into account during further expansion of the CA to increase the students' acceptance.

As I mentioned in the sections above about the general practical implications, the factors data privacy and organizational image can play important roles in the acceptance of the conversational agent for

certain cases. If the university develops its CA further and offers personalized information and advice to its students, data privacy becomes relevant because of the storage and procession of personal user data. I recommend evaluating whether the current data privacy precautions are also sufficient for personal data. If not, the precautions must be adapted. Furthermore, the high level of data privacy must be communicated transparently before users start their conversation with the conversational agent to give them a sense of control and security over their data. In addition, the organizational image can play an important role for people who don't study or work at the university, i.e., outsiders. If these outsiders are for example prospective students who want to become members of the university, their opinion about the university can affect their acceptance of the CA. To foster the use of the conversational agent by outsiders like prospective students, the university should check whether its image fits the values and beliefs of the outsiders.

After I described the implications for practice in general and for Kempten University of Applied Science in particular, the next sub-chapter presents the study's limitations and the opportunities for future research.

5.3 Limitations and Future Research

There are some limitations to this study that I would like to address. The limitations I describe in the following sections also provide opportunities for future research. The first limitation is the limited generalizability of the findings. I only interview 12 students from Kempten University of Applied Sciences. This number of participants could be too small to represent all students from the university, i.e., the sample could be unrepresentative. The random composition of study participants does not display the realistic student distribution at the university. Following this, I cannot offer clear results on influences from different study programs or study experiences (i.e., semesters) or demographics (e.g., age, gender) on the technology acceptance of conversational agents. The expectations on the performance of a CA may differ between students in the first semester and students who study in the higher semester because of their knowledge about the university and studying. Similar results may occur for the factor trust in provider. Students with longer study experience at the university have more positive and negative experiences with the university and its service departments, which has an impact on their trust in the university. Future research should conduct a study with a higher number of participating students to identify differences based on study programs or study experiences and demographics. Furthermore, a quantitative study with a representative number of students can support the results of the qualitative approach and provide a broader, statistical view.

Another limitation in the area of generalizability is that I only involve German-speaking students in my study. The study does not provide the effect of different cultural backgrounds on technology acceptance which could result from the involvement of international students. Especially the influence of factors such as social influence, trust in provider, and trust in technology, or data privacy may differ between different cultures. In order to examine possible cultural influences, researchers should execute further studies with English-speaking students at the university.

Furthermore, the study considers only students from one German university which makes it difficult to apply the findings to students in Germany in general. The influence of factors that distinguish universities is not taken into account. The impact of organizational image on the technology acceptance of CAs may become clearer through the involvement of different universities. Additionally, interviews with students from universities in other countries can bring out different results for example regarding their culture. These limitations provide further potential for future research regarding studies that involve different universities in Germany to learn more about the effect of organizational image. In addition, through the

comparison of students from universities in different countries, researchers can explore cultural differences.

Another limitation is the concentration on only one user group of the university's conversational agent. Besides the university's students, the CA is also developed to support pupils as prospective students in deciding to study at the university in Kempten and to select a suitable study program. This study does not offer results on the views of prospective students and if there are differences in comparison to students' opinions. The expectations of the CA's performance can differ between pupils and students as well as the advertising effectiveness because the university has to address pupils for example on other communication channels. The statements from the study participants emphasize this aspect of investigating the technology acceptance of CAs by prospective students. Eleven of the twelve participating students would have liked a CA as prospective students. Future research should consider prospective students in their studies to investigate the differences in the technology acceptance of the conversational agent compared to students. This can support the university to improve its CA more centered on its main target groups. In general, a comparison of the technology acceptance of conversational agents between prospective and current students can provide information about generational differences. Furthermore, the study excludes other potential user groups of the conversational agent. The CA is available on the university website and every website visitor can use it, e.g., people who are interested in working at the university or in the university's research center. This lowers the study's generalizability and the technology acceptance of conversational agents to people outside of student life. This lack can guide future research to focus on groups with other characteristics, i.e., other demographics, professions, or levels of education.

In addition to the aforementioned limitations in terms of generalizability, another limitation in this area is that the focus lies on a public educational institution as the provider of the conversational agent. By focusing exclusively on the CA of a university, the scope of this study could be too narrow and restrict the broader applicability of the results to different contexts or industries. In addition, some factors, for example, trust in provider may show other results regarding their effect on the technology acceptance of conversational agents if the provider is a private company with economic objectives. People can be more skeptical of these companies than of a university that is not oriented towards profit and performance targets. Some of the participating students refer to this aspect in their interviews. Future researchers should conduct studies that involve conversational agents from organizations and companies from different contexts and industries to show if there are differences in comparison to the results of this study and to provide more generalizable results.

Besides the limited generalizability, another limitation is the methodological bias towards the interviewer in the form of social desirability bias. The interview participants know that the interviewer is part of the project team at the university that developed the conversational agent. In addition, the interviewer and study author are the same person. This knowledge the students have about the interviewer can have an effect on their answers in the interviews. They don't want to disappoint the interviewer with negative answers or opinions about the conversational agent due to the fear the interviewer could take it personally. This can influence the results regarding that they show a too positive and not realistic picture of the technology acceptance of the CA. To gain more objective results, future studies should use a neutral, external, and more experienced interviewer to help overcome the social desirable bias of the interviewees.

6 Conclusion

In summary, this study aims to examine the technology acceptance of conversational agents by integrating user-, agent-, and organization-related factors into the concept of facilitating conditions. The results show that besides the original factors from UTAUT2, especially the factors trust in technology and visual and social attractiveness from the concept of facilitating conditions are significant for the acceptance of conversational agents. Based on the theoretical background of technology acceptance literature and results from studies on conversational agents, I develop a research model to explain the technology acceptance of CAs. With the qualitative method of semi-structured interviews that involve 12 participants, I test the hypotheses derived from my research model. The subject of this study is the conversational agent from Kempten University of Applied Sciences and the participants are the university's students. As listed above, the results show that two user-, agent-, and organization-related factors I integrate into the concept of facilitating conditions are especially important for the acceptance of the conversational agent. The findings from the study have important implications for research and practice. With this study, I add knowledge to the body of literature on the technology acceptance of conversational agents by breaking down the concept of facilitating conditions and examining factors to provide a further explanation for their acceptance. In addition, the study offers practical implications regarding CAs in general and for Kempten University of Applied Sciences in particular. The results open up potential for future research and guide the development and design of conversational agents to foster their acceptance.

7 References

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8 Appendix

Appendix A – Interview Guideline

1. Demografische Daten Teilnehmende/r

- Name, Alter, Geschlecht, Studiengang (MA/BA), aktuelles Semester
- Seit wann ist die Hochschule Kempten bekannt? Wie viele Jahre Erfahrung mit der Hochschule Kempten?

2. Allgemeine Nutzung und Erfahrung mit Chatbots

- Nutzt du überhaupt Chatbots? Wenn ja, welche?
- Was sind deine Alternativen zu Chatbots die du nutzt?
- Welche Erfahrungen hast du bei der allgemeinen Nutzung von Chatbots gemacht, unabhängig vom Chatbot in Kempten?
- Gibt es noch Dinge, die dir positiv oder negativ in Erinnerung geblieben sind?

3. Nutzung und Erfahrungen mit dem Chatbot der Hochschule Kempten

Erzähle mir mal, wie dein bisheriger Umgang mit dem Chatbot war?

- | | |
|--|--|
| <ul style="list-style-type: none">▪ Ich hatte bereits Umgang mit dem Chatbot: Dann erzähl doch bitte mal mehr dazu?▪ Was hast du gemacht? Was war dein Eindruck?▪ Bitte beschreibe mal, wie du den Chatbot nutzt und gib mir Beispiele (positive/negative).▪ Für welche Zwecke hast du ihn genutzt? | <ul style="list-style-type: none">▪ Hatte ich nicht: Kennst du ihn überhaupt?▪ Ja: Was hält dich zurück ihn zu verwenden? Beschreibe mal, wie du dich ansonsten informierst?▪ Erkläre mir mal, warum du ihn nicht nutzt? |
|--|--|

Evtl. Nachfragen:

- Was weißt du noch über ihn? Was kannst du mir noch über ihn erzählen?
- Welche Vorteile siehst du in der Verwendung des Chatbots?
- Siehst du Nachteile? Wenn ja, erkläre sie bitte näher.

4. Spezifische Fragen zu den Faktoren des Forschungsmodells (falls nicht von den Interviewten bereits erwähnt)

- **PE:** Kannst du bitte beschreiben, was der Chatbot leisten soll?
- **EE:** Kannst du bitte beschreiben, wie einfach der Chatbot zu nutzen sein soll?
- **SI:** Kannst du bitte beschreiben, inwieweit dich deine Freundinnen/Freunde oder Kommilitoninnen bzw. Kommilitonen bei der Nutzung des Chatbots beeinflussen?
- **HM:** Kannst du bitte beschreiben, was dir bei der Nutzung des Chatbots Spaß macht.
- **HT:** Kannst du bitte beschreiben, zu welchen Zwecken und wie oft Du den Chatbot nutzt?
- **TT:** Kannst du bitte beschreiben, inwieweit und warum Du denkst, dass der Chatbot Dir bei bestimmten Fragen weiterhelfen kann?
- **TP:** Kannst du bitte beschreiben, inwieweit Du der Hochschule Kempten zutraust, die von Dir erwarteten Services zu erbringen?
- **VSA:** Kannst du bitte beschreiben, was dir an der Gestaltung des Chatbots gefällt/missfällt?
- **DP:** Kannst du bitte beschreiben, welche Bedenken gibt es deinerseits zum Umgang mit deinen Daten im Chatbot?
- **AE:** Kannst du bitte beschreiben, wie du vom Chatbot erfahren hast?
- **OI:** Kannst du bitte beschreiben, wie die Hochschule Kempten von Außenstehenden gesehen wird?

5. Follow-Up-Fragen

- Kannst du das genauer erklären?
- Kannst du mir mehr dazu erzählen?
- Was meinst du damit?
- Kannst du hierzu Beispiele nennen?
- Kannst du das näher beschreiben?
- Warum denkst/empfindest du so?
- Warum siehst du das so?
- Warum machst du das so?
- 5-Warum-Fragen
- Du hast vorher erwähnt, dass...
- Denkst du auch so darüber?
- Hast du das so gemeint ...?
- Was hat dazu geführt?
- Was findest du daran gut? Was schlecht?
- Was bedeutet das für dich?
- Wie wirkt sich das auf ... aus?

6. Ende

- Jetzt wurde viel abgefragt, gibt es einen Punkt, der dir am Herzen liegt, denn ich nicht gefragt habe? Möchtest du mir noch etwas zum Chatbot sagen?
- Kannst du mir nochmal zusammenfassend sagen, was für dich die wichtigsten Punkte sind, damit du den Chatbot verwendest oder warum gerade nicht?
- Hättest du dir einen Chatbot schon als Studieninteressierter gewünscht? Warum? Warum nicht?
- Was wünschst du dir denn eigentlich, wie die Kommunikation generell sein sollte?
- Kannst du mir noch sagen, was dir fehlt oder was du brauchst, um den Chatbot zu nutzen?

-
- Was kann dich überzeugen, den Chatbot (noch mehr) zu nutzen?
 - Nun, ich denke, das ist alles, worüber ich sprechen wollte. Gibt es noch etwas, das du mich fragen möchtest?
-

Zum Abschluss noch ein Hinweis, was mit den Daten weiter passiert und dann für die Teilnahme bedanken.

Appendix B – Used Quotes from the Interviews

<i>Nr.</i>	<i>Quote German</i>	<i>Quote English</i>	<i>Participant Nr.</i>	<i>Hypotheses</i>
1	Der müsste so gut sein, dass ich mich besser zurecht finde mit dem Chatbot, als auf der Web-site durchs Navigieren über die Oberfläche.	It should be so good that I find my way around the conversational agent better than navigating the surface on the web-site.	2	H1: PE-BI
2	Man muss sich nicht selbst überall durchsuchen ...	You don't have to search everywhere yourself ...	7	H1: PE-BI
3	Für mich wäre es eine Unterstützung, um zu Informationen zu kommen bzw. an Kontaktpersonen zu kommen. Da finde ich, sollte der einen unterstützen und die Suche erleichtern.	For me, it would help me to find information and contacts. I think it should support you and make the search easier.	12	H1: PE-BI
4	... wenn ich direkt die Antwort bekomme, ohne noch mal selber auf der Seite schauen zu müssen.	... when I get the answer straight away without having to look at the page myself.	1	H1: PE-BI
5	... er mich auf die gewünschte oder gesuchte Seite weiterleitet.	... it directs me to the desired or searched page.	2	H1: PE-BI
6	... dass man nicht viel suchen muss ...	... that there is not much to search for ...	1	H1: PE-BI
7	... Ich habe das Gefühl, ich habe keinen Suchaufwand.	I have the feeling that I have no search effort.	10	H1: PE-BI
8	Ich fände es cool, wenn er die Suchleiste ersetzen würde. Die Suchleiste ist auf jeden Fall sehr schlecht und wenn man das komplett ersetzen würde, dass ich statt in der Suchleiste eingebe "Ich will Infos zu diesem Studiengang", dass ich das nur noch in den Chatbot eingebe. Oder "Wann sind die Prüfungstermine?" oder "Wann sind Semesterferien?", dass das einfach immer nur noch da kommt und ich nicht mehr die Suchleiste benutze und Termine eintippen muss. Sondern, dass ich alle Fragen, die die Suchleiste beantwortet, auf jeden Fall vom Chatbot abgedeckt bekomme.	I think it would be cool if it replaces the search bar. The search bar is definitely very bad and if it were to be completely replaced, so that instead of entering "I want information about this study program" in the search bar, I could just enter it in the conversational agent. Or "When are the exam dates?" or "When are the semester holidays?" so that it just comes up there and I no longer have to use the search bar and type in dates. Instead, I get all the questions that the search bar answers covered by the conversational agent in any case.	8	H1: PE-BI
9	Dass ich da ziemlich gut durch die Website geleitet werde ...	That I am pretty well guided through the website ...	3	H1: PE-BI
10	Der navigiert dich einfacher durch.	It navigates you more easily through.	7	H1: PE-BI
11	... da wäre ich froh, wenn ich kurz mit dem schreiben könnte und er mich dann einfach gut durchlotet.	... I'd be happy if I could write to it briefly and then it would simply guide me through.	11	H1: PE-BI

12	Für mich soll der Chatbot Orientierung leisten. Zum Beispiel Kontaktdaten geben, wenn man nicht weiß, wohin gehe ich, wen ich bei diesem Problem fragen soll. Was mache ich oder wen schreibe ich an bei welchen Problemen? Was ich cool finde, wäre ein bisschen Orientierung in der Webseite, weil ich fand es am Anfang ein bisschen unübersichtlich.	For me, the conversational agent should provide guidance. For example, providing contact details if you don't know where to go or who to ask about this problem. What do I do or who do I write to for which problems? What I think would be cool is a bit of orientation on the website, because I found it a bit confusing at first.	5	H1: PE-BI
13	Um möglichst schnell antworten auf seine Fragen zu bekommen.	To get answers to its questions as quickly as possible.	1	H1: PE-BI
14	Dass mein Suchverhalten effizienter wird, dass das alles schneller von sich geht.	That my search behaviour becomes more efficient, that everything happens faster.	10	H1: PE-BI
15	Ich würde ihn nutzen, wenn er mir eine ehrliche Zeitersparnis bringt...	I would use it if it saved me an honest amount of time...	11	H1: PE-BI
16	... wenn ich von dem Professor die E-Mail brauche, dann gebe ich ein E-Mail und den Professor, dann spuckt es mir das aus. Ist in gewisser Weise effizienter und schneller. Wenn ich keine Lust habe alles zu suchen, gebe ich das ein. Der spuckt mir die Seite aus, die ich suche.	... if I need an e-mail from the professor, I enter an e-mail and the professor and it spits it out for me. It's more efficient and faster in a way. If I don't feel like searching for everything, I just type it in. It spits out the page I'm looking for.	10	H1: PE-BI
17	... dass man sich Zeit sparen könnte, wenn man direkt an die Sache hingeleitet wird, die man sucht und nicht diese Zeit verschwendet, sich durch die ganze Hochschul-Website zu klicken.	... that you could save time if you were guided directly to the thing you were looking for and didn't waste time clicking through the entire university website	3	H1: PE-BI
18	Ich habe mir Prüfungsthemen, Prüfungstermine angeschaut, weil da muss man immer auf 20 Webseiten und ich weiß nicht immer auswendig, wo genau sie sind. Ich glaube, das ist schon ganz nützlich, wenn man das schnell finden kann.	I looked at exam topics and exam dates because you always have to go to 20 websites and I don't always know exactly where they are by heart. I think it's quite useful if you can find them quickly.	9	H1: PE-BI
19	... weil ich schneller Informationen finden kann, und das spart mir Zeit und dass ich mir diesen persönlichen Kontakt sparen kann.	... I can find information more quickly, which saves me time and means I don't have to deal with this personal contact.	9	H1: PE-BI
20	Es ist meine Erwartung, dass wenn ich mit dem rede, dann möchte ich eine Antwort haben.	It is my expectation that when I talk to it, I want an answer	11	H1: PE-BI
21	... gute, richtige Informationen bekommt.	... get good, correct information.	1	H1: PE-BI
22	Für mich ist es wichtig, dass wenn ich eine spezifische Frage habe, dass ich auch eine spezifische Antwort bekomme.	For me, it's important that if I have a specific question, I also get a specific answer.	10	H1: PE-BI

23	Das heißt, dass ich eine Frage stelle und schnell darauf eine Antwort bekomme und die auch auf meine Anfrage zugeschnitten ist.	This means that I ask a question and quickly receive an answer that is also tailored to my enquiry.	2	H1: PE-BI
24	Grundsätzlich könnte man auf den Link gehen und schauen, was da steht, aber das war nicht die Antwort auf meine Frage.	In principle, you could go to the link and see what it says, but that wasn't the answer to my question.	9	H1: PE-BI
25	... konkrete Antworten, konkrete Daten, konkrete Werte, konkrete Zahlen	... concrete answers, concrete data, concrete values, concrete figures.	11	H1: PE-BI
26	... wenn er wirklich quantitative oder wirklich richtige Antworten gibt: "Ja" oder "Nein", 80% oder 100%, 25 Studierende, 50 Studierende, NC von 2,7.	... if it gives really quantitative or really correct answers: "yes" or "no", 80% or 100%, 25 students, 50 students, NC of 2.7.	11	H1: PE-BI
27	Man bekommt direkt Antworten auf eine Frage. Wenn ich jetzt nur in diesem Suchfeld eingebe "Abteilung Studium", dann spuckt das mir Abteilung Studium aus und wo ich anrufen muss, wo ich rein theoretisch hingehen muss, wann die Öffnungszeiten sind.	You get direct answers to a question. If I now just enter "Academic Registry" in this search field, it spits out the Academic Registry and where I have to call, where I theoretically have to go when the opening hours are.	7	H1: PE-BI
28	Wäre schon cool, wenn da das genaue Datum stehen würde, Prüfungsbeginn ist dann und dann.	It would be cool if the exact date was written, the start of the exam is then and then.	4	H1: PE-BI
29	Er gibt mir eine persönliche Antwort und die Lösung von meiner Frage, die ich brauche. Das wäre, glaube ich, mein Wunsch-Chatbot. Also individuell zugeschnitten auf meine persönliche Frage.	It gives me a personalized answer and the solution to my question that I need. I think that would be my dream conversational agent. In other words, customized to my personal question.	2	H1: PE-BI
30	... nicht nur Links geben, sondern eine individuelle Antwort auf meine Frage.	... not just provide links, but an individual answer to my question.	3	H1: PE-BI
31	Es wären schon sehr individuelle Fragen, aber es wäre tatsächlich cool, weil dann müsste man nicht immer das Sekretariat belagern oder E-Mails schreiben.	It would be very individual questions, but it would be really cool because then you wouldn't always have to bother the secretary's office or write e-mails.	3	H1: PE-BI
32	... zum kurz was finden, wo ich über zehn Klicks hin muss. Da hat er mich aber dann trotzdem immer auf allgemeine Seiten verwiesen. Da war er nicht ganz so spezifisch.	... to quickly find something where I have to click ten times.	6	H1: PE-BI
33	Was man nicht will, ist, ich suche was und dass er dann zehn Vorschläge macht, sondern ich brauche den Professor und dann gibt er mir auch den Professor ...	What you don't want is for me to look for something and then it makes ten suggestions, but instead I need the professor and then it gives me the professor ...	12	H1: PE-BI

34	Was oftmals war, der hat immer zu irgendwelchen Seiten verlinkt. Zum Beispiel, wenn man nur eine kleine Frage hat, zum Beispiel ob es Hochschulsport gibt. Dann kam plötzlich schon das ganze Programm. Vielleicht, dass ein Satz davor noch die Frage beantwortet.	What was often the case was that it always linked to some pages. For example, if you only had a small question, such as whether there was university sport. Then suddenly the whole program came up. Maybe that one sentence before it answered the question.	1	H1: PE-BI
35	... kurz wiedergeben, was auf der Webseite ausführlich beschrieben ist. Wie eine Kurzzusammenfassung, was das ist, dass ich schon mal weiß, ob es in die richtige Richtung geht oder nicht und mich dann auch zu mehr Informationen leiten.	... briefly summarise what is described in detail on the website. Like a brief summary of what it is, so that I already know whether it's going in the right direction or not and then guide me to more information.	6	H1: PE-BI
36	... dass er recht simpel ist, dass er gleich sagt, was er ist, was er will, dass man dann einfach reinschreiben kann.	... that it is quite simple, that it says straight away what it is, what it wants, that you can then simply write it in.	1	H2: EE-BI
37	Er ist einfach, weil er gleich, wenn man draufkommt, sagt, wer er ist, was er macht, was er kann. Dann ist da gleich das Feld, wo man was reinschreiben kann.	It's simple, because as soon as you find it, it tells you who it is, what it does and what it can do. Then there's the field where you can write something.	1	H2: EE-BI
38	Man ihn einfach anklicken und was eingeben.	Just click on it and enter something.	11	H2: EE-BI
39	Das ist alles selbsterklärend, wie man das macht und das ist mir wichtig ...	It's all self-explanatory how to do it and that's important to me ...	1	H2: EE-BI
40	... kurz und prägnant in einem Satz oder zwei Sätzen oder nur mit Stichpunkten beschreiben kann, was das Problem ist und dass er dann die Lösung ausspuckt.	... can briefly and concisely describe what the problem is in a sentence or two, or just in bullet points, and that it then spits out the solution.	12	H2: EE-BI
41	... nicht einen kompletten Roman schreiben muss. Ich brauche nicht die komplette Frage ausführlich schreiben, sondern es reicht, wenn ich kleine Sequenzen hinschreibe ...	... don't have to write a complete novel. I don't need to write the entire question in detail, it's enough to write small sequences ...	6	H2: EE-BI
42	Am besten ist immer, wenn man am wenigsten Aufwand hat, wenn man etwas eingibt und dann kommt etwas.	It's always best if there's the least effort when entering something and then something comes out.	10	H2: EE-BI
43	Ich habe eine Eingabemaske, ich klicke drauf und gebe meinen Text ein. Das ist schon ziemlich einfach. Es gibt jetzt noch als kleine Erweiterung, dass ich per Sprachbefehl die Suchanfrage eingeben kann. Viel einfacher wüsste ich gerade gar nicht, würde ich es nicht erwarten. Ich habe ein Eingabefeld entweder für Sprache oder per Tastatur und bekomme meine Antworten da drin.	I have an input mask, I click on it and enter my text. That's pretty simple. There's now a small extension that allows me to enter the search query by voice command. I wouldn't expect it to be much easier right now. I have an input field for either voice or keyboard and I get my answers in there.	2	H2: EE-BI
44	... dass man es kurz und prägnant in einem Satz oder zwei Sätzen oder nur mit Stichpunkten beschreiben kann, was das Problem ist und dass er dann die Lösung ausspuckt.	... that you can describe the problem briefly and concisely in one or two sentences or just with bullet points and that it then spits out the solution.	12	H2: EE-BI

45	Ich finde es manchmal einfacher, gerade wenn man viel sucht. Wenn man eine längere Frage hat, dann ist es meistens schneller, wenn man spricht.	I sometimes find it easier, especially when you're searching a lot. If you have a longer question, it's usually quicker to speak.	7	H2: EE-BI
46	Das ist für mich komfortabler, dass ich nicht noch lesen muss, und er erzählt mir, was die Antwort ist.	It's more convenient for me that I don't have to read, and it tells me what the answer is.	2	H2: EE-BI
47	... finde es ganz gut, dass es auf der Webseite der Hochschule einfach ist. Das sieht man sowieso und man kann selber draufklicken.	... it's quite good that it's easy to find on the university's website. You can see it anyway and you can click on it yourself.	9	H2: EE-BI
48	Keine komplizierten Anleitungen, also leicht zu öffnen, was er jetzt schon ist, dass man einfach draufklicken muss.	No complicated instructions, so it's easy to open, which it already is, you just have to click on it.	3	H2: EE-BI
49	Dass es jederzeit zugänglich ist, das wäre auch ein Grund, das zu nutzen.	That it is accessible at all times would also be a reason to use it.	9	H2: EE-BI
50	Es war so, dass eine gesagt hat, "Komm, gib es einfach mal schnell ein, das geht meistens schneller". Das war dann auch so. Wenn du so einen Tipp bekommst, dann ist es meistens so, dass du es auch öfter anwendest, wenn es mal geklappt hat.	One of them said, "Come on, just enter it quickly, it's usually quicker". And that was the case. If you get a tip like that, then it's usually the case that you use it more often once it's worked.	10	H3: SI-BI
51	... da kam jetzt nie der Vorschlag „Frag doch den Chatbot“. Ich persönlich wäre nicht darauf gekommen.	... there was never a suggestion to "ask the conversational agent". Personally, I wouldn't have thought of it.	5	H3: SI-BI
52	Aber ich denke schon, dass wenn jemand Werbung machen würde und der sagt, der ist voll gut oder prinzipiell damit zufrieden ist, könnte das schon beeinflussen.	But I do think that if someone were to advertise and say that it's really good or that they're basically happy with it, that could have an impact.	6	H3: SI-BI
53	Ich habe mit niemandem darüber geredet ...	I didn't talk to anyone about it ...	12	H3: SI-BI
54	Der war bei uns ehrlich gesagt noch nie im Gespräch.	To be honest, we've never discussed it before.	1	H3: SI-BI
55	Das ist nicht wirklich Thema bei uns.	That's not really an issue for us.	4	H3: SI-BI
56	Das kommt auch gar nicht wirklich zur Sprache.	That doesn't really come up at all.	8	H3: SI-BI
57	Was mir aufgefallen ist, dass dieser Chatbot wirklich noch nie irgendein Dozent erwähnt hat. Wir hatten zum Beispiel dieses Jahr das Erstsemester-Event mitorganisiert und da hat auch niemand in keinsten Weise diesen Chatbot erwähnt.	What I've noticed is that no lecturer has ever really mentioned this conversational agent. For example, we co-organized the first semester event this year and nobody mentioned this conversational agent in any way.	1	H3: SI-BI
58	Die beeinflussen mich gar nicht, weil sie nutzen ihn alle nicht.	They don't influence me at all because they don't use it	3	H3: SI-BI
59	... die anderen benutzen ihn auch nicht wirklich und dann ergibt sich das nicht.	... the others don't really use it either and then it doesn't happen.	7	H3: SI-BI

60	Ich würde sagen die haben keinen Einfluss darauf, ob ich den Chatbot nutze oder nicht.	I would say they have no influence on whether I use the conversational agent or not.	2	H3: SI-BI
61	... wenn einem langweilig ist und dann irgendwelche Fragen an ihn stellt. Das ist ein bisschen zur Unterhaltung.	... when you're bored, and then ask it any questions. It's a bit of entertainment.	1	H4: HM-BI
62	Was man jetzt in der Freizeit machen kann, was vielleicht der höchste Berg im Allgäu ist.	What you can do now in your free time, which is perhaps the highest mountain in the Allgäu.	1	H4: HM-BI
63	... "Wie alt bist du?" oder "Wer hat dich eigentlich gebaut?", also private Fragen.	... "How old are you?" or "Who actually built you?", i.e. private questions.	2	H4: HM-BI
64	Dass man den einfach mal irgendwas fragen kann. Was man nicht in die Suchleiste reinschreiben kann. Dem kann man eher mal einen Text schreiben. In der Suchleiste macht man das ja nicht. Das finde ich dann schon spannend, was der dann auch sagt, was er dann zurückliefert.	That you can just ask it anything. Something you can't type into the search bar. You can rather write it a text. You can't do that in the search bar. I find it exciting to see what it then says and what it returns.	6	H4: HM-BI
65	Ich finde es witzig, dass da direkt eine Nachricht rausgeploppt wird. Also, dass es innerhalb von Sekunden wirklich geht und man direkt auf alles zugreifen kann.	I think it's funny that a message pops out straight away. So it really works within seconds and you can access everything directly.	3	H4: HM-BI
66	... wenn es funktionieren würde, hätte es mir sicherlich mehr Spaß gemacht, als irgendwelche Informationen rauszusuchen. Eben, dass er die Zeit verkürzen sollte, das würde mir Spaß machen.	... if it worked, I would certainly have enjoyed it more than searching for information. Just that it should shorten the time, that would be fun for me.	12	H4: HM-BI
67	Was mir Spaß machen könnte, wäre, dass es noch persönlicher wäre, wenn er meine Daten kennt und damit arbeiten könnte. Wenn er weiß, zum Beispiel durch wie viele Prüfungen ich schon gefallen bin und ich dann frage „Wie muss die nächste Prüfungsphase laufen?“. Das wäre schon witzig. Dann würde ich den auch oft benutzen, einfach nur um noch mehr Infos über mich selbst zu bekommen, die ich selbst nicht raussuchen will.	What I might enjoy is that it would be even more personal if he knew my data and could work with it. If it knows, for example, how many exams I've already failed and I then ask "How should the next exam phase go?". That would be funny. Then I would use it often, just to get even more information about myself that I don't want to look up myself.	8	H4: HM-BI
68	... ob der wirklich schön gestaltet ist und ich klicke da drauf, da macht es mehr Spaß.	... if it's really nicely designed and I click on it, it's more fun.	10	H4: HM-BI
69	... ist es eine schnelle Nutzung. Da muss man nicht unbedingt Spaß haben.	... it's a quick use. You don't necessarily have to have fun	5	H4: HM-BI
70	Hauptsache, dass man findet, was man sucht.	The main thing is to find what you are looking for.	9	H4: HM-BI

71	Es gefällt mir nicht, weil ich unzufrieden mit den Ausgaben bin. Weil es nicht meine Erwartungen erfüllt, weil es im Endeffekt verschwendete Zeit war, weil ich mich geärgert habe. Deshalb macht es keinen Spaß.	I don't like it because I'm unhappy with the expenditure. Because it doesn't meet my expectations, because in the end it was a waste of time, because I was annoyed. That's why it's not fun.	11	H4: HM-BI
72	Ich glaube, wenn ich ihn öfter nutzen würde, dann würde er für mich die Suchfunktion ersetzen.	I think if I used it more often, it would replace the search function for me.	7	H5a: HB-BI
73	... dass ich mir vorstellen könnte ihn in Zukunft mehr auszuprobieren und zu schauen, ob ich ihn gut in meinen Uni-Alltag integriert bekomme.	... that I could imagine trying it out more in the future and seeing if I could integrate it well into my everyday university life.	3	H5a: HB-BI
74	... brauche ich eine neue Art von Skill-Fertigkeiten Chatbots zu benutzen. Ich muss lernen, wie ich meine Eingaben so gut mache, dass ich die Antwort auch bekomme, die ich benötige, damit ich ihn automatisch für die Suche benutze. Das habe ich bis jetzt gar nicht gelernt.	... I need a new kind of skill-set to use conversational agents. I have to learn how to make the entries so well that I get the answer I need so that I can use it automatically for the search. I haven't learned that yet.	2	H5a: HB-BI
75	Ich glaube, ich müsste nur anfangen das mehr zu probieren und dann würde ich das mehr nutzen.	I think I would just have to start trying it more and then I would use it more.	9	H5a: HB-BI
76	... am Anfang vom Studium nutzt man ihn prinzipiell mehr und vor allem auch vor dem Studium. Je weiter man dann mittendrin ist, eher gar nicht mehr. Dann am Ende vielleicht noch mal, weil es dann auch eher rückblickend ist. Dann interessiert es auf einmal, was es Neues gibt, weil man nicht mehr vor Ort ist.	... at the beginning of your studies, you generally use it more and especially before you start studying. The further you get into the program, the less you use it. Then maybe again at the end, because then it's also more retrospective. Then you're suddenly interested in what's new because you're no longer there.	6	H5a: HB-BI
77	Wenn ich arbeite, benutze ich den sehr oft. Ich arbeite ungefähr zwei, drei Mal die Woche ...	I use it a lot when I'm working. I work about two or three times a week ...	8	H5b: HB-UB
78	... alle zwei Wochen so einmal, wenn ich nach was spezifisch geguckt habe.	... once every two weeks, when I was looking for something specific.	10	H5b: HB-UB
79	Wenn ich zum Beispiel einen Kontakt brauche, dass ich das da reinschreib, dass ich Infos zu einem Professor brauche. Für sowas nutze ich ihn, weil ich weiß, die Seiten gibts und dass ich nicht mich zehnmal durchklicken muss, sondern dass ich da schneller durchkomme.	If I need a contact, I put it in there that I need information about a professor. I use it for things like that because I know that the pages are there and that I don't have to click through ten times, but that I can get through them more quickly.	6	H5b: HB-UB

80	... ich finde es ist auch immer phasenweise bedingt. Je nachdem, ich kann es nicht genau sagen, aber gerade für die Bachelorarbeit muss man sich dann wieder mehr mit der Homepage beschäftigen. In normalen Semestern eher weniger. Da kommt es drauf an und dann auch gerade für Termine nutze ich die Homepage am meisten, um einfach zu wissen, wann Prüfungsanmeldung ist, wann die Noten kommen, wann der Prüfungszeitraum ist. Da nutze ich ihn eigentlich immer zuerst ...	... I think it always depends on the phase. It depends, I can't say for sure, but especially for the Bachelor's thesis you have to spend more time on the homepage. Less so in normal semesters. It depends and then I use the homepage the most, especially for dates, just to know when exams are due, when the grades are due, when the exam period is. I always use it first ...	6	H5b: HB-UB
81	So gut wie nie.	As good as never.	11	H5b: HB-UB
82	... noch nie benutzt, [... nur] um ihn auszuprobieren, um zu wissen, wie es funktioniert.	... never used [... only] to try it out, to know how it works ...	1	H5b: HB-UB
83	... ein paar Fragen gestellt und ausprobiert.	... asked a few questions and tried it out	5	H5b: HB-UB
84	... eigentlich echt nicht sehr oft.	... actually not very often.	4	H5b: HB-UB
85	... um die Suchfunktion zu ersetzen.	... to replace the search function.	7	H5b: HB-UB
86	Ich habe bisher nur gute Erfahrungen gemacht und sie haben mir immer weiterhelfen können oder waren auch sehr zuvorkommend. Als ich meine Frist verschlafen habe beim Semesterbeitrag überweisen oder mich zurückzumelden, dann war das kein Problem. Man hat mir direkt weitergeholfen und es ging auch immer sehr schnell. Deswegen bin ich dem ganzen sehr positiv gegenüber eingestellt.	I have only had good experiences so far and they have always been able to help me or have been very obliging. When I missed my deadline for transferring the semester fee or re-registering, it wasn't a problem. They helped me straight away and it always went very quickly. That's why I have a very positive attitude towards the whole thing.	12	H6a: TP-BI
87	Die Hochschule ist ein seriöses Institut oder eine seriöse Hochschule, die vieles richtig macht, die vieles gut macht. Deshalb kann ich mir schon gut vorstellen, dass sich das verbessern kann und dass auch auf meine Wünsche eingegangen wird und dass die das zum Positiven wenden können. Ich traue es der Hochschule zu, dass sie ein gutes Produkt und eine gute Leistung liefern.	The university is a reputable institute or a reputable university that does a lot of things right, that does a lot of things well. That's why I can well imagine that it can improve and that my wishes will be taken into account and that they can turn things around. I trust the university to deliver a good product and a good service.	11	H6a: TP-BI
88	...weil man weiß, wer ihn gemacht hat und von wem das alles ausgeht.	...because you know who made it and where it all came from.	1	H6a: TP-BI
89	... Vorreiter-Projekt.	... pioneer project.	11	H6a: TP-BI

90	Dass sowas unsere Hochschule hat, hat mich gewundert, weil ich hatte immer das Gefühl die Hochschule Kempten ist nicht so innovativ. [...] Dann kommen wir mit sowas modernen um die Ecke. Zu dem Zeitpunkt, wo es den gab, gab es das gar nicht auf vielen anderen Seiten.	I was surprised that our university had something like this because I always had the feeling that Kempten University of Applied Sciences wasn't that innovative. [...] Then we come around the corner with something modern like this. At the time it was launched, it didn't exist on many other sites.	4	H6a: TP-BI
91	... typisch Hochschule, dass das nicht funktioniert.	... typical university that this does not work.	4	H6b: TP-UB
92	Ich habe da nicht unbedingt Vertrauen. Ich sehe einfach den Chatbot, wie er ist und wenn er gut funktioniert, dann ist er gut. Aber wenn er schlecht funktioniert, dann ist es schlecht. [...] Ich nehme es einfach so, wie es ist und dann arbeite ich damit.	I don't necessarily have confidence in it. I just see the conversational agent as it is and if it works well, then it's good. But if it works badly, then it's bad. [...] I just take it as it is and then I work with it.	5	H6b: TP-UB
93	Wenn ich ein persönliches Anliegen habe, das funktioniert immer recht gut. Es sind alle höflich.	If I have a personal request, it always works quite well. Everyone is polite.	10	H6b: TP-UB
94	Ich hatte nie Probleme. Mir wurde immer weitergeholfen. Ich muss nicht oder selten lange warten.	I never had any problems. I have always been helped. I rarely or never have to wait long.	6	H6b: TP-UB
95	Also ich traue es ihnen schon zu, dass sie es gut machen, aber mit ein bisschen Zeit.	So I trust them to do it well, but with a bit of time.	1	H6b: TP-UB
96	... zwei bis drei Tage gedauert, bis eine Antwort kam.	... two to three days for a reply.	2	H6b: TP-UB
97	... geringere Bearbeitungszeit ...	... shorter processing time ...	2	H6b: TP-UB
98	Wenn ich mich direkt an eine Person wende oder telefoniere, wird man schon immer zuverlässig weitergeleitet oder bekommt direkt die Info. Da habe ich bisher noch keine negativen Erfahrungen gemacht. Mir wurde bisher immer perfekt weitergeholfen. Manchmal ist die Wartezeit natürlich doof, zum Beispiel beim E-Mailverkehr.	If I contact a person directly or make a phone call, I am always reliably forwarded or receive the information directly. I haven't had any negative experiences so far. I have always been helped perfectly. Sometimes, of course, the waiting time is a bit of a bummer, for example when sending e-mails.	8	H6b: TP-UB
99	Ich würde sagen, dass ich der Hochschule eher vertraue. Was mich ein bisschen stört, sind die Öffnungszeiten. Man kann nicht immer zu jeder Zeit hin gehen. Wenn man eine E-Mail schreibt, dann dauert es sehr lange und beim Anruf kommt man auch nicht durch.	I would say that I have more confidence in the university. What bothers me a bit are the opening hours. You can't always go there at any time. If you write an e-mail, it takes a long time and you can't get through on the phone either.	9	H6b: TP-UB
100	Aus meiner Erfahrung, wo ich Probleme hatte und mich an eine Abteilung gemeldet habe, war das in der Regel so, dass ich gleich mehrere Abteilungen angeschrieben habe, da ich nicht davon ausgegangen bin, dass das Problem gelöst wird.	In my experience, when I had problems and contacted a department, I usually wrote to several departments at once because I didn't assume that the problem would be solved.	2	H6b: TP-UB

101	Sobald man die Person rausgefunden hat oder bei der richtigen Person rausgekommen ist, wo man sein will, fand ich es immer perfekt und freundlich und man hat direkt eine E-Mail zurückgeschrieben bekommen. Mein Anliegen ist immer direkt geklärt worden.	As soon as you have found out who the person is or got in touch with the right person where you want to be, I always found it perfect and friendly and I got an e-mail back straight away. My concerns were always clarified straight away.	12	H6b: TP-UB
102	Es ist voll abhängig, wen man da an der Strippe hat.	It depends entirely on who you have on the line.	4	H6b: TP-UB
103	... im Großen und Ganzen waren die immer sehr hilfsbereit ...	... on the whole, they were always very helpful...	7	H6b: TP-UB
104	Dass jemand an der Hochschule das Problem lösen kann, bestimmt. Aber die richtige Stelle zu finden, finde ich schwierig.	That someone at the university can solve the problem, sure. But finding the right place is difficult.	2	H6b: TP-UB
105	Ich merke, dass die Hochschule viele Dinge im Sinne von Organisation und Übersichtlichkeit an Informationen nicht gut hinbekommt.	I notice that the university does not manage many things well in terms of organization and clarity of information.	3	H6b: TP-UB
106	... unüblich viele schlechte Erfahrungen gemacht.	... an unusual number of bad experiences.	11	H6b: TP-UB
107	Ich denke, er kann bei Fragen helfen, weil er mir entweder direkt eine Antwort gibt oder weil er sonst zumindest die Seiten verlinkt, wo man die Antwort finden könnte, somit die Frage beantwortet werden könnte.	I think it can help with questions because it either gives me an answer directly or because it at least links to the pages where you could find the answer, so the question could be answered.	1	H7a: TT-BI
108	... dass er gut helfen könnte.	... could be a good help.	12	H7a: TT-BI
109	... dass ich schon weiß im Vorhinein, wenn ich reingehe und es trotzdem nicht finde, dann gibt es einen Chatbot, der mir helfen könnte.	... I know in advance that if I go in and still can't find it, there's a conversational agent that could help me.	5	H7a: TT-BI
110	... kann mehr beantworten, außer nur mir hier ein paar Kontaktdaten zu geben, die ich sowieso schon auf der Webseite finden kann.	... can answer more than just giving me a few contact details here, which I can already find on the website anyway.	5	H7a: TT-BI
111	Umso mehr ich merke, dass es das Ergebnis bringt, was ich mir wünsche, umso mehr tendiert man dann dazu, dass zu nutzen.	The more I realize that it produces the result I want, the more I tend to use it.	10	H7a: TT-BI
112	... er in vielen Bereichen ein bisschen mehr Profi ist als ich.	... it's a bit more professional than me in some areas.	3	H7a: TT-BI
113	Das ist irgendwie ganz cool, dann zu versuchen oder zu wissen, da ist eine "Person", wo man darauf zurückgreifen kann, die einem das nochmal ein bisschen gesammelt sagt, weil es ist schon ein Überfluss an Informationen teilweise.	It's kind of cool to try and find or know that there's a "person" you can fall back on who can tell you a bit more in a collected way because there's already an abundance of information in some cases.	3	H7a: TT-BI
114	Dass man da eine Anlaufstelle hat, wo man weiß, man bekommt da eine Antwort, mit der man weiter arbeiten kann.	That you have a point of contact where you know you'll get an answer that you can continue to work with.	3	H7a: TT-BI

115	Aber wenn ich nicht weiterkomme, ich habe 24/7 jemanden da, dem ich Fragen stellen könnte ...	But if I get stuck, I have someone there 24/7 who I could ask questions ...	7	H7a: TT-BI
116	"Würdest du mir lieber Informatik oder Game Engineering empfehlen?"	"Would you rather recommend computer science or game engineering?"	2	H7a: TT-BI
117	Das sind solche Fragen, wo ich in der Regel nicht erwarte die auf der Hochschul-Website zu finden, aber mir beim Chatbot gut vorstellen kann, dass der mir die beantworten kann.	These are the kinds of questions that I don't usually expect to find on the university website, but I can well imagine that the conversational agent will be able to answer them for me.	2	H7a: TT-BI
118	Dann kann ich nicht selbst so schnell suchen und zum Beispiel Infos zum Studium im Ausland suchen, sondern ich kann gleich auswählen und ganz schnell zum Ergebnis kommen. Das finde ich ganz gut. Das würde ich wahrscheinlich auch nutzen.	Then I don't have to search so quickly myself and look for information about studying abroad, for example, but I can make a selection straight away and get a result very quickly. I think that's quite good. I would probably use that too.	9	H7a: TT-BI
119	Ich weiß nicht, ob er das vielleicht doch noch kann.	I don't know whether it might still be able to do that.	4	H7a: TT-BI
120	Dadurch, dass ich nicht weiß, kann er mir helfen, kann er mir nicht helfen, schaue ich lieber zuerst selber nach.	Because I don't know if it can help me, if he can't help me, I prefer to look it up myself first.	5	H7a: TT-BI
121	In der Regel habe ich überlegt, welche Fragen habe ich aktuell, die ich zum Studium habe und die eingeben in den Chatbot. So ist das abgelaufen. Häufig hat es dann ganz gut funktioniert ...	I usually think about what questions I currently have about my studies and enter them into the conversational agent. That's how it worked. It often worked quite well ...	2	H7b: TT-UB
122	... wenn ich mal wirklich was gesucht habe, dann war es wirklich prägnant.	... when I was really looking for something, it was really concise.	10	H7b: TT-UB
123	Es ist dann immer jemand da, der Ansprechpartner ist.	There is always someone there to contact.	7	H7b: TT-UB
124	... wenn ich irgendeine Info nicht finde, wie zum Beispiel "Wann muss ich meine Wahlpflichtmodule wählen?", dann screent er einmal überall durch und zeigt dann, hier auf der Seite steht es. Das heißt, auch wenn ich mich relativ gut auskenne, manchmal sucht man doch irgendwie Sachen und findet sie nicht. Dann ist es ganz gut, wenn man irgendwas hat, was einmal durchscannen kann und das einem dann auswerten kann.	... if I can't find some information, such as "When do I have to choose my compulsory elective modules?", then it screens everywhere and then shows that it's here on the page. This means that even if I know my way around relatively well, sometimes you're still looking for things and can't find them. Then it's quite good if you have something that you can scan through and then analyze.	7	H7b: TT-UB
125	Dann hätte ich ihn gefragt "Wo ist das Gebäude D?". Dann sagt er zwar, er hat keinen digitalen Raumplan, aber "Hier ist der Link zum Lageplan". Insofern hat mir das geholfen, weil ich über den Link das gefunden habe.	Then I would have asked it "Where is building D?". Then it says it doesn't have a digital floor plan, but "Here's the link to the floor plan". In this respect, it helped me because I found it via the link, which I could then analyze.	11	H7b: TT-UB

126	Das suggeriert, dass wenn ich etwas suche, bekomme ich eine Antwort oder spuckt er mir etwas aus. Wenn ich nach E-Mail-Adressen suche, dann gibt er mir nicht eine Telefonnummer von xy, sondern es ist genau explizit darauf ausgerichtet, dass ich das richtige bekomme. Darum hat man das Gefühl, der weiß genau, was man will.	This suggests that if I search for something, I get an answer or it spits something out for me. If I'm looking for e-mail addresses, it doesn't give me a phone number for xy, it's explicitly designed to give me the right one. That's why you get the feeling that it knows exactly what you want.	10	H7b: TT-UB
127	Ich fand, dass er schon ziemlich präzise war, wenn man was wollte, dass es schon ziemlich schnell die richtige Richtung war.	I found that it was pretty precise when you wanted something, that it was the right direction pretty quickly.	3	H7b: TT-UB
128	... weil ich weiß, dass er nicht gut genug auf meine Fragen eingeht und weil ich weiß, dass er nicht über genügend Informationen verfügt.	... because I know that it does not respond well enough to my questions and because I know that it does not have enough information.	11	H7b: TT-UB
129	... er es kurz erfasst, dass ich nicht die ganze Website durchscrollen muss und durchlesen muss, um zu wissen, ob das die richtige Stelle ist ...	... it captures it briefly so that I don't have to scroll through the whole website and read through it to know whether this is the right place ...	6	H7b: TT-UB
130	... das beim Chatbot eingebe, bekomme ich bessere Ergebnisse und die richtigen Links.	... enter this into the conversational agent, I get better results and the right links.	8	H7b: TT-UB
131	Man weiß, es sitzt niemand so richtig dahinter und man kann sich das anschauen, der gibt einem Antworten, man kann sich da durchsuchen.	You know there's nobody really behind it and you can look at it, it gives you answers, you can search through it.	7	H7b: TT-UB
132	Ich weiß nicht, ob der Chatbot überhaupt ausgerichtet ist, um Orientierung auf der Webseite zu finden oder einfach nur die Quicklinks aufzurufen.	I don't know if the conversational agent is even designed to find orientation on the website or simply to call up the quick links.	5	H7b: TT-UB
133	Manchmal überlegt man sich, liegt es am Stichwort, dass er dazu nichts finden kann oder liegt es an meiner Wortwahl. Müsste ich da irgendwas umstellen? Das ist ein bisschen zeitaufwendig, weil man da keine Rückmeldung hat. Findet man dazu einfach nichts oder liegt es an mir? Das kann man nicht gut rausfinden.	Sometimes I wonder whether it's because of the keyword that it can't find anything or whether it's because of my choice of words. Would I have to change anything? It's a bit time-consuming because you don't have any feedback. Is it just that you can't find anything or is it me? It's not easy to find out.	10	H7b: TT-UB
134	... wenn ich ihn frage, wieder das Risiko ein, dass ich wieder keine Antwort bekomme.	... If I ask it, I again run the risk of not getting an answer.	8	H7b: TT-UB
135	Das habe ich auch bei mir gemerkt. Dann habe ich einmal keine Antwort bekommen und schon habe ich wieder angefangen, nur die Suchleiste zu benutzen, obwohl die insgesamt ja schlechter ist. Aber bevor ich den Chatbot frage, der mir nicht helfen kann, gebe ich es in die Suchleiste ein.	I noticed the same thing with me. Then I didn't get an answer once and I started using only the search bar again, even though it's worse overall. But before I ask the conversational agent, which can't help me, I type it into the search bar.	8	H7b: TT-UB

136	... tiefgründigere Sachen ...	... in-depth things ...	6	H7b: TT-UB
137	Das wusste er auch nicht, da hat er nur gesagt, es gibt viele Möglichkeiten, aber auch nicht die Frage beantwortet.	It's not like it knew that either, it just said there were lots of possibilities, but didn't answer the question.	1	H7b: TT-UB
138	Was mir nicht so gut gefallen hat, wenn man jetzt nicht weiß, dass das dieser Smiley da am Rand ist. Das ich den dann gar nicht so leicht finde.	What I didn't like so much, if you don't know now, is that this smiley there in the margin. That I can't find it easily.	1	H8a: VSA-BI
139	... ist einfach nur ein Symbol und wenn du da nicht draufklickst, dann kriegst du es gar nicht mit, dass da ein Chatbot wäre.	... there's just an icon and if you don't click on it, you won't even realize that there's a conversational agent there	4	H8a: VSA-BI
140	Ich finde es grundsätzlich gut, dass er direkt auf der Startseite verfügbar ist und er fällt schon auf dadurch, dass er da unten rechts ist.	I think it's basically good that it's available directly on the homepage and it's already noticeable because it's at the bottom right.	11	H8a: VSA-BI
141	... dass er ein bisschen sichtbarer sein soll. Mir fallen jetzt knallige Farben ein, dass du direkt darauf aufmerksam gemacht wirst, da ist etwas, was dir helfen könnte, wenn du es möchtest. Nicht dieses Blaue, was schon auf der ganzen Hochschul-Webseite auftaucht.	... that it should be a bit more visible. I can now think of bright colors that you are directly made aware of, there is something that could help you if you want it. Not that blue color that's already all over the university website.	3	H8a: VSA-BI
142	... vielleicht eine auffälligere Farbe.	... maybe a more striking color.	5	H8a: VSA-BI
143	Mehr Farbe.	More color.	5	H8a: VSA-BI
144	... dass er am Anfang auch einmal kurz aufplopt, "Hallo, ich bin hier" und dann wieder klein wird. Das fände ich ganz cool.	... that it pops up briefly at the beginning, "Hello, I'm here" and then becomes small again. I think that would be really cool.	4	H8a: VSA-BI
145	... auf manchen Websites ist es zu penetrant	... on some websites, it is too intrusive	10	H8a: VSA-BI
146	... am Anfang ist es ganz hilfreich	... it is quite helpful at the beginning.	10	H8a: VSA-BI
147	Das es blau ist, das war okay, aber es war nicht so einladend. Ich finde es schön, wenn es ein bisschen farbenfroher ist ...	It was okay that it was blue, but it wasn't that inviting. I like it when it's a bit more colorful ...	3	H8a: VSA-BI
148	Früher war das sehr normal, dass man dem ein Gesicht geben wollte, um damit zu chatten, damit es einfach akzeptierter ist. Aber dadurch, dass es jetzt moderne Programme wie ChatGPT gibt, ohne dass man diesen Gedanken hat, man spricht mit einem WIssl oder man spricht mit einem imaginären Irgendwas. Dadurch ist es viel akzeptierter und man würde das auch nicht brauchen, dass ein Bild dahinter ist. Es ist auch schon voll akzeptiert, wenn da einfach gar nichts dahinter ist, sondern dass es professioneller ist.	In the past, it was very normal to want to give it a face in order to chat with it so that it was simply more acceptable. But now that there are modern programs like ChatGPT, you don't have to think that you're talking to a WIssl or an imaginary something. This makes it much more acceptable, and you wouldn't need a picture behind it. It is also fully accepted if there is simply nothing behind it, but that it is more professional.	8	H8a: VSA-BI
149	... neutralen Namen.	... neutral name.	8	H8a: VSA-BI
150	... dass man es vergrößern könnte.	... that it could be enlarged.	10	H8a: VSA-BI

151	... eine freundliche Person ...	... a friendly person ...	5	H8a: VSA-BI
152	... ein direkter Ansprechpartner.	... a direct contact person.	1	H8a: VSA-BI
153	... ein Kumpel ...	... a buddy ...	2	H8a: VSA-BI
154	Mit einer Maschine zu chatten ist ein bisschen verrückt, aber dass er trotzdem normale Sätze antwortet und auch höflich. Ich weiß nicht, warum mir das wichtig ist. Ich glaube, dass man sich ein bisschen behütet fühlt und dass man ernst genommen wird. Dass seine Fragen wichtig sind, schätze ich.	Chatting to a machine is a bit crazy, but the fact that he still replies with normal sentences and politely. I don't know why that's important to me. I think it makes you feel a bit protected and that you are taken seriously. I appreciate that his questions are important.	6	H8a: VSA-BI
155	Es ist was anderes, wenn einfach nur ein Text dasteht oder wenn der Text dann dahinter noch mit dem Daumen hoch oder mit dem Smiley ist. Da weiß man, so soll es rüberkommen für mich.	It's different when there's just a text or when the text is followed by a thumbs-up or a smiley. You know that's how it should come across to me.	5	H8a: VSA-BI
156	Interaktiv ist für mich, ich habe mehrere Auswahlmöglichkeiten und ich klicke da drauf und bekomme das gewünschte Ergebnis. Oder danach leitet es mich nochmal irgendwo anders weiter oder ich kann mich einfach durchklicken.	For me, interactive means that I have several selection options and I click on them and get the desired result. Or afterward it redirects me somewhere else or I can simply click through.	10	H8a: VSA-BI
157	... in der Gestaltung finde ich ihn gut.	... I think the design is good.	2	H8b: VSA-UB
158	Das Design ist schlicht, minimalistisch gehalten. Das finde ich gut ...	The design is kept simple and minimalist. I like that ...	11	H8b: VSA-UB
159	... dann kam er immer und wollte irgendwas und frag mich was. Dann habe ich ihn ausprobiert und dachte, eigentlich ist es schon ganz cool.	... then it always came and wanted something and asked me what. Then I tried it out and thought it was actually quite cool.	6	H8b: VSA-UB
160	Wenn er jetzt nicht noch mal aufklappt, ist er ein bisschen unscheinbar in der Ecke.	If it doesn't open up again now, it's a bit inconspicuous in the corner.	1	H8b: VSA-UB
161	Die Farbgestaltung passt auch zur Website	The color scheme also matches the website.	10	H8b: VSA-UB
162	... es farbig ist und mit Bildern [...] und mit dem farbigen Hintergrund.	... it is in color and with pictures [...] and with the colored background.	9	H8b: VSA-UB
163	... es im Gesamt-Design von der Hochschule gehalten ist. Dass es dieses klassische Hochschul-Blau ist, dass man von Kempten kennt	... it has the overall design of the university [which] is the classic university blue that we know from Kempten	7	H8b: VSA-UB
164	Ich glaube da war mal ein Emoji und das reicht mir schon. Weil dann ist es nicht so kalt, sondern ein bisschen positiv.	I think there used to be an emoji and that's enough for me. Because then it's not so cold, it's a bit positive	4	H8b: VSA-UB

165	Da gibt es diese Funktionen, die man auswählen kann, für Studieninteressierte und für Studierende. Da habe ich zum Beispiel angegeben "für Studierende", und da gab es auch unterschiedliche Optionen. Das fand ich ganz gut.	There are these functions that you can select, for prospective students and for students. For example, I entered "for students" and there were different options. I thought that was quite good.	9	H8b: VSA-UB
166	Was ich auch gut fand, waren die unterschiedlichen Optionen, die man anklicken konnte.	What I also liked were the different options that you could click on.	3	H8b: VSA-UB
167	Das ist schon etwas anders, ob ich mich die ganze Zeit durchklicken muss oder ob der wirklich schön gestaltet ist.	It's a bit different whether I have to click through all the time or whether it's really nicely designed	10	H8b: VSA-UB
168	... weil das Fenster ist ganz groß, da kann man entspannt mit ihm schreiben.	... because the window is really big, so you can write to it in a relaxed way.	4	H8b: VSA-UB
169	... kleines Chat-Fenster ist und dass man nicht alles überdeckt, damit man noch die Seite an sich da hat.	... that you don't cover everything so that you still have the page itself.	5	H8b: VSA-UB
170	Mir gefällt nicht so gut, dass das recht klein ist auf der Webseite. Es ist eher wie ein Handy-Chat. Ich muss sagen, ich mag meine Suchanfrage groß haben. Ich habe einen großen Bildschirm, ich will die ganze Fläche des Bildschirms benutzt haben. Sonst hast du viele Antworten vom Chatbot, aber du musst scrollen dabei. Das ist ein bisschen unhandlich. Auch kamen manchmal Antworten, wenn Kontakte gezeigt werden, dann muss ich auf kleine Punkte klicken, der das dann von rechts nach links scrollt. Das war auch super unhandlich. Das war nicht so gut.	I don't like the fact that it's quite small on the website. It's more like a mobile phone chat. I have to say, I like my search query to be big. I have a big screen, I want the whole screen to be used. Otherwise, you have a lot of answers from the conversational agent, but you have to scroll. That's a bit unwieldy. Also, sometimes answers come when contacts are shown, then I have to click on small dots, which then scroll from right to left. That was also super awkward. That wasn't so good.	2	H8b: VSA-UB
171	Wenn du durch eine Website klickst, ist es dort dann strukturiert und unpersönlich meistens geschrieben, nur objektiv.	When you click through a website, it's structured and impersonally written most of the time, just objective.	10	H8b: VSA-UB
172	... ein bisschen persönlicher, wie wenn man nur für sich selber sucht.	... a bit more personal, as if you were only looking for yourself.	7	H8b: VSA-UB
173	Der Schreibstil schreckt mich nicht ab, sondern ganz im Gegenteil. Ich denke, da bekomme ich eine vernünftige Antwort. Es ist nicht so, dass er einfach nur Links reinschickt, das würde ich doof finden. Sondern, dass er ein bisschen mit einem schreibt, finde ich gut.	The writing style doesn't put me off, quite the opposite. I think I'll get a sensible answer. It's not that it just sends in links, I'd find that daft. I think it's good that it writes a bit with you.	8	H8b: VSA-UB
174	... hat man diese Interaktion, die man auch mit realen Menschen rein theoretisch hat, was ich gut finde.	... you have this interaction that you also have with real people in theory, which I think is good.	7	H8b: VSA-UB
175	Weil man ihn selbst mit "Du" anspricht, weil es sich menschlich anfühlt.	Because you address it as [informal] "you" yourself because it feels human.	11	H8b: VSA-UB

176	... recht süß.	... pretty sweet.	10	H8b: VSA-UB
177	... recht höflich.	... quite polite.	10	H8b: VSA-UB
178	... damit man sich verstanden fühlt ...	... so that you feel understood. ...	5	H8b: VSA-UB
179	... kam einfach freundlicher rüber.	... simply came across as friendlier.	5	H8b: VSA-UB
180	Ich würde keine besonderen Daten reinschreiben. Ich weiß nicht, ob ich überhaupt solche Fragen stellen würde, wo ich Bedenken habe. Das wären eher allgemeine Fragen und ich würde nicht was Persönliches fragen.	I wouldn't put any specific dates in there. I don't know if I would even ask such questions where I have concerns. They would be more general questions and I wouldn't ask anything personal.	9	H9a: DP-BI
181	Es würde mich ja nur stören, wenn die Daten von mir preisgegeben, die privat sind, das habe ich denen ja nicht gegeben.	It would only bother me if they were to disclose data about me that is private, which I haven't given them.	1	H9a: DP-BI
182	Werden die zwischengespeichert? Werden sie nicht zwischengespeichert?	Are they stored temporarily? Are they not stored temporarily?	11	H9a: DP-BI
183	... persönliche Daten sollten bzw. dürfen auf alle Fälle nicht dafür verwendet werden, dass das Modell besser trainiert wird. Das darf auf alle Fälle nicht sein. Persönliche Daten müssen davon ausgenommen werden, wenn es sich selbst verbessern könnte. Das würde ich erwarten, dass die Daten, die ich eingegeben habe, auf alle Fälle nicht weiterverarbeitet werden für PR, für Training, allerhöchstens für interne Statistiken, die nicht veröffentlicht werden.	... personal data should not or must not be used to improve the training of the model. In any case, this must not be the case. Personal data must be excluded if it could improve itself. I would expect that the data I enter would not be processed further for PR, for training, at the very most for internal statistics that are not published.	11	H9a: DP-BI
184	Weil es die Hochschule ist und ich weiß, die Hochschule hat auch schon viele Daten von mir durchs Studium. Ich habe auch schon Erfahrung gemacht, dass mit diesen Daten gut umgegangen wird. Deswegen hätte ich jetzt beim Chatbot von der Hochschule tatsächlich ein bisschen weniger Bedenken.	Because it is the university and I know that the university already has a lot of data about me from my studies. I've also found that this data is handled well. That's why I would actually be a little less worried about the university's conversational agent.	3	H9a: DP-BI
185	... dass der Chatbot viel gefährlicher für mich sein könnte	... that the conversational agent could be much more dangerous ...	5	H9a: DP-BI
186	Ich fände es sogar sehr hilfreich, denn die Hochschule kann dadurch deutlich leichter Daten auswerten und es wäre natürlich cool, wenn die viel leichter sehen, das sind Probleme bei Studenten, die suchen oft nach was oder das wird häufig angefragt, dass man da Sachen optimieren kann.	I would actually find it very helpful because it would make it much easier for the university to evaluate data and it would of course be cool if they could see much more easily that there are problems with students, who are often looking for something or are frequently asked to optimize things.	12	H9a: DP-BI
187	Das wäre auch noch persönlicher, wenn ich weiß, er kann mir persönliche Beratung geben, weil er mich kennt.	It would also be more personal if I knew it could give me personal advice because it knows me.	8	H9a: DP-BI
188	Gar keine.	Not at all.	6	H9b: DP-UB

189	Beim Hochschul-Chatbot habe ich keine Bedenken, ehrlich gesagt. Hier ist alles so gut geregelt mit Datenschutzverordnung und man kriegt auch direkt einen Ansprechpartner. Da habe ich keine Bedenken.	I don't have any concerns about the university conversational agent, to be honest. Everything is so well regulated here with data protection regulations and you also get a direct contact person. I have no concerns about that.	2	H9b: DP-UB
190	... ein Gefühl, dass ich weiß die Daten werden wirklich nur für meine Studien-Zwecke benutzt.	... a feeling that I know the data is really only being used for my study purposes.	3	H9b: DP-UB
191	... sehe keine Gefahr darin, dem Chatbot Fragen zu stellen.	... doesn't see any danger in asking the conversational agent questions.	5	H9b: DP-UB
192	Die Daten werden zur internen Auswertung bestimmt benutzt oder können genutzt werden, aber ich glaube nicht, dass meine Daten an dritte Firmen weitergegeben werden, die dann bei mir zu Hause anrufen oder eine E-Mail schreiben oder, dass Identitätsdiebstahl damit stattfindet. Ob intern die Daten benutzt werden, weiß ich nicht. Es kann gut sein. Aber ich sehe nicht, was das Problem mit den nicht persönlichen Daten sein sollten.	The data will certainly be used or can be used for internal evaluation, but I don't believe that my data will be passed on to third-party companies who then call or e-mail me at home or that identity theft will take place with it. I don't know whether the data is used internally. It could well be. But I don't see what the problem is with the non-personal data.	12	H9b: DP-UB
193	Ich habe da eigentlich nie private Sachen von mir preisgegeben. Bei allgemeinen Sachen zur Hochschule, das ist mir egal ob da was preisgegeben wird oder nicht. Da habe ich jetzt nicht große Bedenken, dass irgendwas Privates von mir da preisgegeben wird.	I've never actually revealed anything private about myself. When it comes to general things about the university, I don't care whether something is revealed or not. I don't have any major concerns about revealing anything private about myself.	1	H9b: DP-UB
194	Ich wüsste nicht, was ich auf der Hochschul-Seite für persönliche Daten eingeben will. [...] Ich würde nicht sagen, dass das bedenklich ist, weil ich kann mir nicht vorstellen, was ich da Persönliches, Privates eingabe, was einen vertrauensvollen Umgang mit irgendwelchen Datensätzen bräuchte ...	I don't know what personal data I would want to enter on the university website. [...] I wouldn't say that's questionable because I can't imagine what personal or private information I would enter there that would require confidential handling of any data records ...	12	H9b: DP-UB
195	Beim Chatbot stell ich nur Fragen, die wirklich wichtig sind und der leitet nicht weiter. Da gebe ich nicht so viele persönliche Daten preis. Selbst wenn, das hat eh jeder andere schon. Deswegen ist mir das ehrlich gesagt echt wurscht.	With the conversational agent, I only ask questions that are really important and it doesn't forward them. I don't disclose that much personal data. Even if I did, everyone else already has it anyway. That's why I honestly don't really care.	4	H9b: DP-UB
196	So ein Chatbot funktioniert ja nicht, ohne dass er die Daten verwenden kann. Der muss es ja verarbeiten. Es ist immer ein gewisses Risiko mit dabei. Aber dadurch, dass es keine dramatischen Daten von mir sind, ist es okay. Es stört mich nicht.	A conversational agent doesn't work without being able to use the data. It has to process it. There's always a certain amount of risk involved. But because it's not dramatic data from me, it's okay. It doesn't bother me.	7	H9b: DP-UB
197	Der ist mir nicht so bekannt ...	I'm not so familiar with it ...	1	H10a: AE-BI

198	... viele wissen einfach nicht, dass es ihn gibt.	... many people simply don't know that it exists.	11	H10a: AE-BI
199	... dass der nicht gut in meinem Kopf präsent ist.	... that it's not very present in my head.	8	H10a: AE-BI
200	... wenn viel mehr drauf aufmerksam gemacht werden würde.	... if much more attention would be drawn to it.	8	H10a: AE-BI
201	Es sollte auf jeden Fall bekannter sein. Dass mehr Leute davon wissen, dass man es auch gleich den Erstsemestern erzählt, weil im ersten Semester hätte ich das sicher effektiver nutzen können oder mehr genutzt, wenn ich davon gewusst hätte.	It should definitely be better known. That more people know about it, that you tell the first-semester students about it straight away, because I would certainly have been able to use it more effectively in the first semester or make more use of it if I had known about it.	3	H10a: AE-BI
202	Was immer auch gut geht, was ich bei mir im Studiengang merke, dass viele auch auf Instagram unterwegs sind. Dass solche Beiträge auch immer viele erreichen und gut ankommen [...]. Der Instagram-Beitrag wird einem viel schneller angezeigt.	What always works well, which I notice in my study programme, is that many people are also on Instagram. That such posts always reach a lot of people and are well received [...]. The Instagram post is displayed much more quickly.	3	H10a: AE-BI
203	... das zeigen und erklären, wie der funktioniert, wie man damit umgeht.	... show and explain how it works, how to deal with it.	8	H10a: AE-BI
204	... dass man da die Studierenden darauf hinweist, dass er da ist und den kurz benutzen lässt.	... that you inform the students that it is there and let them use it briefly.	8	H10a: AE-BI
205	... wenn ein Vortrag darüber gehalten worden wäre bei der Einführung, der kann das und dafür könnt ihr den benutzen, so könnt ihr den bei euch im Alltag integrieren.	... if a lecture had been given about it at the introduction, it can do that and you can use it for that, so you can integrate it into your everyday life.	12	H10a: AE-BI
206	Wir hatten ein Erstsemester-Event und da haben die uns schon Insider-Tipps gegeben oder haben uns auch das EDV-System von der Hochschule erzählt und auch die Website gezeigt und dass sie dann gesagt hätten: "Das ist Wissl, wenn ihr Fragen habt oder einen Überblick braucht, dann könnt ihr auch einfach mit dem schreiben".	We had a first-semester event and they gave us insider tips or told us about the university's IT system and also showed us the website and then said: "This is Wissl, if you have any questions or need an overview, you can just write to it".	1	H10a: AE-BI
207	Man könnte an den Mensa-Türen Plakate aufhängen, auf denen man zum Chatbot aufmerksam macht.	You could put up posters on the canteen doors drawing attention to the conversational agent.	11	H10a: AE-BI
208	... man mir immer wieder sagt, dass es den gibt ...	... people keep telling me that it exists ...	9	H10a: AE-BI
209	Im Moment, dass ich ihn nicht verwende, ist ganz klar, dass er nicht so bekannt ist bei uns.	At the moment I'm not using it, it's quite clear that it's not so well known here.	3	H10b: AE-UB

210	Es ist nicht im Kopf, den immer zu nutzen. Wenn er mehr beworben werden würde, dann würde ich den öfter benutzen. Es liegt daran, dass der nicht gut in meinem Kopf präsent ist.	It's not in my head to use it all the time. If it were advertised more, I would use it more often. It's because it's not very present in my head.	8	H10b: AE-UB
211	... ich hatte das nie im Kopf, dass es diesen Chatbot gibt, sonst hätte ich ihn vielleicht mehr benutzt.	... I never realized that this conversational agent existed, otherwise I might have used it more.	1	H10b: AE-UB
212	Ich glaub, da gab es mal eine E-Mail ...	I think there was once an e-mail ...	6	H10b: AE-UB
213	Ich würde jetzt behaupten, es war Werbung da.	I would now say that there were adverts.	7	H10b: AE-UB
214	Vielleicht wurde es da erwähnt, aber es ist mir nicht in Erinnerung geblieben. Vielleicht kam auch eine Mail, aber es ist nicht so, dass mir das in Erinnerung geblieben ist.	Maybe it was mentioned there, but I don't remember it. Maybe there was also an e-mail, but I don't remember it.	8	H10b: AE-UB
215	Ich muss ehrlich zugeben, als er eingeführt worden ist vor zwei Jahren ungefähr, da habe ich ihn eigentlich gar nicht benutzt.	I have to be honest when it was introduced about two years ago, I didn't actually use it at all.	12	H10b: AE-UB
216	Die Hochschule wird mit dem schönen Allgäu verbunden. Da geht es gar nicht um die Hochschule an sich, sondern um die schöne Umgebung ...	The university is associated with the beautiful Allgäu region. It's not about the university itself, but about the beautiful surroundings ...	8	H11b: OI-UB
217	... wegen Kempten, wegen der Stadt selbst und der Lage in der Nähe von den Bergen.	... because of Kempten, because of the town itself and the location near the mountains.	9	H11b: OI-UB
218	Explizit auf die Hochschule beziehen sie sich meistens nicht, sondern eher auf Kempten an sich. Kempten ist eine schöne Stadt und da kann man viel machen.	They don't usually refer explicitly to the university, but rather to Kempten itself. Kempten is a beautiful town and there is a lot to do there.	10	H11b: OI-UB
219	Die sind in der Regel ganz begeistert, wenn sie von der Hochschule Kempten hören. Dass sie auch schon früher hier waren und wo das alles noch ein bisschen kleiner war. Also, in der Regel positive Erfahrung.	They are usually very enthusiastic when they hear about Kempten University of Applied Sciences. That they have been here before and that everything was a bit smaller. So, generally a positive experience.	2	H11b: OI-UB
220	Positiv ist, dass wir eine relativ kleine Uni sind, weil dadurch hat man kleinere Lerngruppen. Wenn ich davon zum Beispiel bei meinen Eltern oder bei meinen Freunden erzähle, die sind ganz oft an großen Unis, die beneiden mich total. Weil man hier zum Beispiel einen guten Zusammenhalt hat, weil man hier super Anschluss findet. Man hat sehr kleine Gruppenstärken, man kann viel mehr mitnehmen und lernen.	One positive thing is that we are a relatively small university, because that means you have smaller study groups. When I tell my parents or friends about this, for example, who are often at large universities, they are totally envious of me. Because you have a good sense of community here, for example, because you make great friends. You have very small groups, you can take a lot more with you and learn a lot more.	4	H11b: OI-UB

221	... voll die innovative Uni, auch relativ klein, dadurch profitiert man voll.	... a very innovative university, and relatively small, so you benefit fully.	4	H11b: OI-UB
222	Das Image nach außen ist sehr gut, was ich mitbekommen habe. [...] Das und das machen wir alles. Ich glaube, es ist ein schon sehr positives Image.	From what I've heard, the external image is very good. [...] We do all that and more. I think it's already a very positive image.	3	H11b: OI-UB
223	... fast eine Dorfschule, nach dem Motto, wir sind am Arsch der Welt.	... almost a village school, according to the motto, we are at the ass end of the world.	4	H11b: OI-UB
224	Das ist viel zu klein, was macht man da? Was will man da?	It's far too small, what do you do there? What do you want there?	6	H11b: OI-UB
225	... dass hier studieren leicht ist und machbar sein sollte.	... that studying here is easy and should be feasible.	10	H11b: OI-UB
226	Viele wissen gar nicht, dass es überhaupt die Hochschule gibt, so war meine Erfahrung.	In my experience, many people don't even know that the university exists.	1	H11b: OI-UB
227	Konkrete Sachen ...	Concrete things ...	12	H11b: OI-UB
228	Die Hochschule Kempten hat keinen negativen Ruf, aber auch keinen besonders herausstechend guten Ruf ...	Kempten University of Applied Sciences does not have a negative reputation, but neither does it have a particularly good reputation ...	11	H11b: OI-UB
229	... weil ich rede nicht viel über die Hochschule oder ich frage auch nicht "Wie findet ihr die Hochschule?". Ich denke, die Hochschule hat einen neutralen Ruf. Sonst wären bestimmt Kommentare gefallen, wenn ich sage ich studiere in Kempten. Da hätte man sicher was gesagt. Wenn man Storys kennt von irgendwelchen kuriosen Geschichten, die bei einer Uni vorgekommen sind, da hört man schon was. Aber in Kempten hat mir noch nie jemand was dazu gesagt.	... because I don't talk much about the university or I don't ask "What do you think of the university?". I think the university has a neutral reputation. Otherwise, I'm sure there would have been comments if I said I was studying in Kempten. They would certainly have said something. If you know stories about strange things that have happened at a university, you'll hear something. But no one in Kempten has ever said anything to me about it.	5	H11b: OI-UB
230	... sehr viel zum Arbeiten.	... a lot for work.	8	H12: BI-UB
231	Wenn ich arbeite, benutze ich den sehr oft. Ich arbeite ungefähr zwei, drei Mal die Woche.	I use it a lot when I'm working. I work about two or three times a week.	8	H12: BI-UB
232	Dann würde ich den auch oft benutzen, einfach nur um noch mehr Infos über mich selbst zu bekommen, wenn ich welche raussuchen will.	Then I would also use it often, just to get even more information about myself when I want to find some.	8	H12: BI-UB
233	... alle zwei Wochen so einmal, wenn ich nach was spezifisch geguckt habe.	... once every two weeks, when I was looking for something specific.	10	H12: BI-UB
234	Je nachdem mehrfach oder vielleicht auch nur einmal im Quartal.	Depending on the situation, several times or perhaps only once a quarter.	6	H12: BI-UB

235	Für mich ist ein Chatbot der Ersatz als würde ich einen Mitarbeiter anrufen, dass ich erst mal den nutze und wenn ich da nichts habe, dann gehe ich auf jemand, auf einen echten Menschen zu.	For me, a conversational agent is a substitute for calling an employee, I use that first and if I don't have anything, then I go to someone, to a real person.	6	H12: BI-UB
236	Wenn du so einen Tipp bekommst, dann ist es meistens so, dass du es auch öfter anwendest, wenn es mal geklappt hat.	If you get a tip like this, then it is usually the case that you use it more often once it has worked.	10	H12: BI-UB
237	... manchmal ...	... sometimes ...	12	H12: BI-UB
238	... in der Regel relativ wenig ...	... usually relatively little ...	2	H12: BI-UB
239	... eigentlich echt nicht sehr oft.	... actually not very often.	4	H12: BI-UB
240	So gut wie nie.	As good as never.	11	H12: BI-UB
241	... eigentlich nie wirklich benutzt ...	... actually never really used ...	1	H12: BI-UB
242	Ich habe ihn bis jetzt zweimal genutzt.	I have used it twice so far.	3	H12: BI-UB
243	Sehr, sehr selten, weil ich mittlerweile weiß, wo die Seiten sind und ich meine Ansprechpartner habe.	Very, very rarely because I now know where the pages are and I have my contacts.	4	H12: BI-UB
244	Wenn er die von mir schon angesprochene Funktionalität dazu gewinnen würde, würde ich ihn auf jeden Fall benutzen, weil ich mir viel Zeit sparen würde oder oft Recherche-Arbeit sparen würde.	If it were to gain the functionality I have already mentioned, I would definitely use it because it would save me a lot of time or often save me research work.	12	H12: BI-UB
245	Ich finde es grundsätzlich gut, dass er direkt auf der Startseite verfügbar ist und er fällt schon auf dadurch, dass er da unten rechts ist.	I think it's basically good that it's available directly on the homepage and it's already noticeable because it's at the bottom right.	11	H12: BI-UB
246	Im Zusammenhang damit auch eine Einführung zum Chatbot.	In connection with this, an introduction to the conversational agent.	3	H12: BI-UB
247	Ich habe den einmal benutzt.	I have used this once.	5	Summary of Results

Appendix C – Coding Guideline

Category Title	Definition	Anchor Examples	Coding Rules
Performance Expectancy	Performance expectancy is defined as the degree to which using a technology will provide benefits to consumers in performing certain activities.	1. Dann ist es auch einfacher den Chatbot zu fragen für die Zeiten und Fristen und dann gibt er dir den Link und dann öffnet es das. (P7) 2. ... um möglichst schnell Antworten auf seine Fragen zu bekommen. (P1)	People perceive advantages from using the system, e.g., faster, easier access to information
Effort Expectancy	Effort expectancy is defined as the degree of ease associated with consumers' use of technology.	1. Er war einfach zu bedienen. (P1) 2. Mir gefällt das er recht simpel ist, dass er gleich sagt, was er ist, was er will, dass man dann einfach reinschreiben kann. (P1)	
Social Influence	Social influence is defined as the extent to which consumers perceive that important others (e.g., family and friends) believe they should use a particular technology.	1. Aber ich denke schon, dass wenn jemand Werbung machen würde und der sagt, der ist voll gut oder prinzipiell damit zufrieden ist, könnte ich es mir vorstellen, dass das beeinflusst. (P6)	
Hedonic Motivation	Hedonic motivation is defined as the fun or pleasure derived from using a technology.	1. Ein bisschen rumzuprobieren finde ich schon witzig. (P1) 2. Was Spaß macht, wenn man wirklich eine Frage hat und dann schnell eine Antwort bekommt oder schnell weiß, zumindest an wen man sich wenden muss oder wo man nachlesen kann. (P1) 3. Manchmal, wenn einem langweilig ist und dann irgendwelche Fragen an ihn stellt. Das ist ein bisschen zur Unterhaltung. (P1)	
Habit	Habit is defined as the extent to which the beliefs and behavior of a consumer is described as automatic, since they have become a routine over time.	1. ... dass ich mir vorstellen könnte ihn in Zukunft mehr auszuprobieren und zu schauen, ob ich ihn gut in meinen Uni-Alltag integriert bekomme. (P3) 2. Ich glaube, ich müsste nur anfangen das mehr zu probieren und dann würde ich das mehr nutzen. Das ist Gewöhnungssache. Ich bin es gewohnt, selbst zu suchen. (P9)	

Trust in Technology	Trust in technology is defined as the user's belief that the technology has the attributes, i.e., a set of skills, competencies, and characteristics, required to meet the user's expectations in performing their tasks.	1. Ich denke, er kann bei Fragen helfen, weil er mir entweder direkt eine Antwort gibt oder weil er sonst zumindest die Seiten verlinkt, wo man die Antwort finden könnte, so mit die Frage beantwortet werden könnte. (P1) 2. Dadurch, dass ich nicht weiß, kann er mir helfen, kann er mir nicht helfen, schaue ich lieber zuerst selber nach. (P5)	Beliefs and expectations of individuals on what the CA is able to do.
Trust in Provider	Trust in provider is defined as users' trust in the integrity and ability of the provider to ensure that its technology delivers the expected service.	1. Ich traue es denen schon so, weil auch die Profs und alle anderen sehr hilfsbereit sind. (P1) 2. Das würde mich schon beeinflussen den Chatbot mehr nutzen, wenn die Hochschule sicherstellt, dass er die Services erbringt. (P1) 3. Ich bin eher skeptisch, dass die Hochschule das erreichen kann, damit es mir was bringen würde im Chatbot. (P2)	
Visual and Social Attractiveness	Visual and social attractiveness is defined as users' tendency or predisposition to evaluate the conversational agent's appearance and degree of sociality (i.e., ability in social interactions) in a positive way.	1. Ich fände es auf jeden Fall cool, wenn er so agiert wie ein Mensch. (P1) 2. Ich würde ihn auf jeden Fall verwenden, wenn man ihn besser sehen würde auf der Website. (P3)	
Data Privacy	Data privacy is defined as a high degree of transparency in order to give users the opportunity to control and determine the use of their data and the transfer of sensible, personal data to third parties.	1. Ich habe da eigentlich nie private Sachen von mir preisgegeben. Bei allgemeinen Sachen zur Hochschule, das ist mir egal ob da was preisgegeben wird oder nicht. Da habe ich jetzt nicht große Bedenken, dass irgendwas Privates von mir da preisgegeben wird. (P1)	
Advertising Effectiveness	Advertising effectiveness is defined as the degree to which the company's advertising encourages individuals to like the brand, improve its image, buy a product, or use the offered system by communicating relevant information.	1. Mir war nicht bewusst, dass der existiert. (P1) 2. Ich glaube niemand von uns wusste wirklich, dass es den gibt, dass da sehr schlecht Werbung dafür gemacht wird. (P1) 3. Dass ich ihn nicht verwende, ist ganz klar, dass er nicht so bekannt ist. (P3)	

Organizational Image	Organizational image is defined as the perception of the members of an organization on how outsiders perceive the organization.	1. Die sind in der Regel ganz begeistert, wenn sie von der Hochschule Kempten hören. Dass sie auch schon früher hier waren und wo das alles noch ein bisschen kleiner war. Also, in der Regel positive Erfahrung. (P2) 2. Ich glaube, es ist ein schon sehr positives Image. (P3)	
Behavioral Intention	Behavioral intention is defined as the degree to which a user intends to use the system.	1. Aber ehrlich, ich hatte das nie im Kopf, dass es diesen Chatbot gibt, sonst hätte ich ihn vielleicht mehr benutzt. (P1) 2. Wenn ich im Chatbot schneller wäre, würde ich ihn eher nutzen. (P2)	
Use Behavior	Use behavior is defined as the degree to which individuals actually use a technology.	1. ich habe den eigentlich nie wirklich benutzt (P1) 2. ... ich nutze ihn alle zwei Wochen so einmal. Wenn ich nach was spezifisch geguckt habe, habe ich ihn manchmal auch öfter genutzt (P10)	