

A Qualitative Study on How Refugees Use Technology after Arriving in Germany

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HCI-E MSc Final Project Report 2018

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ABSTRACT

In recent years a large number of people were forced to flee their countries and seek refuge elsewhere. A focus needs to be placed on the successful integration of refugees and asylum seekers in host countries. As technology could and might play an important role here, this study sets out to answer, how refugees use technology to achieve the best possible life situation in the given circumstances.

14 semi-structured interviews were conducted with male refugees that were between 20 and 30 years old, originally came from Syria or Afghanistan and were now living in Munich, Germany. An initial bottom-up thematic analysis of the data revealed two important themes: use of social networks and online information gathering. A second bottom-up thematic analysis identified three distinct user groups in the context of social media use: Social Users, Curious Users and Engaged Users. With regards to online information gathering, the initial bottom-up analysis revealed trust and perceived risk as important factors. Accordingly, the e-commerce acceptance model (EAM) was applied in a top-down analysis to reveal the specific criteria that influenced whether refugees chose to use the internet as an informational tool or not.

Most importantly this study points out that distinct user groups can be found within the refugee population and highlights the respective user needs of identified user groups. It also discovered that refugees might mainly be using existing tools that have not necessarily been designed for their specific needs. Thus, a challenge for future design lies in making these safer to use and to simultaneously enable refugee users to use them in a beneficial way.

MSC HCI-E FINAL PROJECT REPORT

Project report submitted in part fulfilment of the requirements for the degree of Master of Science (Human-Computer Interaction with Ergonomics) in the Faculty of Brain Sciences, University College London, 2018.

NOTE BY THE UNIVERSITY

This project report is submitted as an examination paper. No responsibility can be held by London University for the accuracy or completeness of the material therein.

Author Keywords

Refugees; information technology; social media; technology-mediated integration; HCI.

ACM Classification Keywords

H.5.m. *Information interfaces and presentation* (e.g., HCI): Miscellaneous

MSc Contribution Type

Empirical.

1. INTRODUCTION

Since 2015 over 3 million people have applied for asylum in the EU [23]. Most of the accepted applications in 2017 had been made by people coming from Syria, Afghanistan and Iraq. In that year Germany was responsible for over 60% of all positive asylum decisions in the EU [24]. However, being allowed to legally remain in the host country is only a first step to safety for refugees. Culture shock, social relations and more practical aspects of integration, such as access to meaningful employment and housing, are all factors that can influence mental health issues in refugees, such as depression and post-traumatic stress disorder [1, 21, 50, 54]. Thus, a successful integration process is of paramount importance. In liberal democracies integration is seen as a two-way process and can only succeed if both the host society and the refugee aim at achieving this [2, 36].

In history there have been other large waves of forced migration, but this is the first one since 2005 [20]. So, there is one central difference today: technology has never been as advanced. Technological advancements make it potentially possible to have access to all knowledge in the world, learn and speak nearly any other language, be non-stop entertained, meet new people day and night, chose your next date from afar, stay in contact with your friends and family wherever you are and create your own world - away from reality. These historically unique opportunities are also accompanied by a large number of potential problems: loss of control over personal data, addiction, fake news, internet fraud, easy access to illegal products and services or illegal ways of accessing otherwise legal content. What remains is that technology can only be beneficial for users if it is used and, most importantly, designed appropriately.

This means that designers and developers of technological tools and services discover from users, what needs they have and what challenges they face. And to then design and redesign tools and services to optimally support users, i.e. making them as easy, efficient and pleasurable to use as possible [42]. So what role does technology play for refugees? Which of the potential possibilities are used by and also beneficial to use for refugees? (How) can these tools support integration? What goes wrong due to inadequate design? And what is missing to support refugees in the best possible way? With regards to these questions it is important to highlight once again that integration is a two-way process. This qualitative study will focus on the perspective of refugees. It aims at gaining insights on the needs and requirements of this user group and to identify implications for design. It will examine how refugees use technology to achieve the best possible life situation in the given circumstances.

2. LITERATURE REVIEW

The field of human-computer interaction aims at solving challenges people are facing, in a user-centred way. As a first step to identify the needs refugees have and the challenges they face after arriving in their host country, relevant literature will be reviewed. This will focus on refugee integration, culture shock and important research and design studies concerned with refugees and technology. As trust and perceived risk in online transactions appeared as strong themes in an initial bottom-up analysis of the data collected for this study, relevant literature about this will also be presented.

2.1 Refugee integration and culture shock

Ager and Strang [2] proposed a now widely accepted [22, 41, 43, 51, 52] framework for understanding integration of refugees and migrants. The framework is comprised of ten domains which are placed within four categories. The refugee's status of citizenship and respective rights are seen as the foundation of integration (Category 1). A feeling of safety and stability, as well as knowledge of the other side's language and culture, are said to be facilitators (Category 2). Social bridging, bonding and other social links are categorised under social connections (Category 3). And lastly, access to employment, housing, education and health services are summarised as markers and means (Category 4). How and to what extent these domains are addressed by the host society and made use of by refugees influences the success of integration [2, 36].

With regard to these ten domains, research has found deficiencies in integration in different countries. A recent study about refugees in the US found that refugees were often not properly informed about their rights and lacked other important information, for example, how to access health care [30]. Other research found that it is important for refugees to not only have a job but to actually be employed in their original profession or in a position that they feel is meaningful [41, 57]. This however is often impossible for them to achieve [30, 41]. Considering the

role of social bridging and social bonding in refugee integration Deuchar [22] conducted a qualitative study with refugees in Glasgow focusing on the impact of social bonds and bridges on refugee integration and gang participation.

Social bonds refer to ties within a group of people with similar characteristics, such as age, education, background, whereas social bridges are links between people and groups whose characteristics differ [44]. Deuchar found that youth who had experienced discrimination and hostility, found acceptance and support when connecting to people with a similar cultural background [22]. They thus engaged in more social bonding and less social bridging. This often led outsiders to believe that young refugees were part of a gang – characterised by strong social bonds and normally linked to violence - when they actually were not or did not feel as part of a gang [22]. This highlights several challenges for both the refugees and the host society in building social bridges. As a possible easy way of creating social bridges another study suggested relationship building between neighbours in an Australian city [29]. The researchers focused on the responsibilities of the host society and they found that building social bridges in neighbourhoods was reliant on several factors, such as the availability of public meeting points, the structural characteristics of the neighbourhood and the predominant cultural assumptions of the people living there [29]. More research has focussed on the role of culture and cultural differences in integration [2, 12, 34, 54].

When coming to a new country with a new culture, four strategies have been identified to describe different levels and kinds of acculturation of refugees and other migrants: separation, assimilation, marginalisation and integration [12]. Separation refers to individuals sticking to their original culture and rejecting the new culture, whereas assimilation refers to the exact opposite. Marginalisation then again means that both nationalities are rejected and integration refers to individuals adopting the new culture while also identifying with their original culture [12]. Accordingly, other research has found that engagement with the original culture supports rather than counteracts integration [27, 34]. Thus, successful integration relies on a strategy that aims at understanding of the new culture by the migrant along with acceptance of the migrant's culture by the host society [2, 54].

With regard to this, a study conducted with Muslim asylum-seekers in the UK pointed out several challenges: an uncertain legal status, the cultural and religious background and the exclusion from existing Muslim communities in the new country, contributed to an alienation of asylum-seekers both towards their country of origin as well as the new host society [25]. As an alternative example Snyder [51] pointed out the positive effects of faith-based organisations on refugee integration in the UK if they welcomed newcomers – irrespective of their cultural and religious background – and used their influence on the host society to break down negative attitudes towards the newly arrived.

Successful integration and acculturation in the host society are important prerequisites for refugees to build up their lives in a new country. Research has been conducted on how refugees use technology along different parts of their journey. We will mostly focus on literature which refers to the time after refugees have arrived in the host country and what role technology has played in the integration process.

2.2 Refugees and the use of technology

Technology can and has been used to address several of the domains of the integration framework by Ager and Strang [2]. A study in Australia found that digital technologies are necessary to organise and access basic needs, such as education and employment, and that they supported the social inclusion of refugees [7]. The researchers also discovered a digital divide between refugee users and that the benefits related to technology depended on whether refugees had access to devices, knew how to use them and could pay for the necessary services, most importantly broadband internet [7]. The necessity of technology to access governmental and other important services was also found by a study focusing on mobile phone use by newcomers – including refugees – in Sweden [17]. With regard to this, participants felt they had little choice not to use their phone. Although it helped to make them feel safe and enabled, the centrality of the phone was also seen as a threat to being present in the moment [17]. While valuing the phone as a tool to stay in contact with their geographically distant family members and friends, they sometimes felt pressured to be available at all times. This was supported by a study conducted by Witteborn which focused on refugees living in Germany [55].

In both studies refugees reported to feel overwhelmed as they had to offer advice and psychological support to their relatives while being in a vulnerable state themselves [17, 55]. Witteborn's research was concerned with how technology mediated social interactions, the result of which she called *technologically mediated sociality* [55]. She used the concept of *becoming*, which is a dynamic process influenced by the individual's historical, social, political and economic context. She conducted an ethnographic study with refugees in Germany, including observations and semi-structured as well as open interviews about communicative practices on social media platforms, such as Facebook, Skype and blogs. These new technologies were found to be beneficial as they offered alternative ways of self-expression, information acquisition and networking when individuals' physical and social space was restricted due to legal and practical barriers [55]. Other research also identified the central role of social networks for social contact and as an important source of information [13]. Although refugees were aware of the presence of false information on these platforms, the passive use, i.e. to access information, and active use, i.e. to distribute information, was high both during the journey as well as after arriving in Europe [13]. New media can also provide a platform for learning. A study

by Yafi et al. [56] suggests that refugee youth living in a refugee camp engaged in *connected learning* since official learning opportunities in the camp were scarce. Connected learning is a framework developed by Ito et al. [31] that promotes the usage of new technologies and media to create equal opportunities for learning; especially for young people who lack access to official learning opportunities.

Overall, supporting refugees from technologically less developed countries develop digital literacy can be beneficial for their well-being and successful integration [7, 8, 27, 30]. Researchers in the field of human-computer interaction have however also emphasised the importance to design new technologies specifically for this user group [6, 7, 30, 53]. Talhouk et al. [53] point out several challenges this diverse user group is facing, which should be addressed by the HCI community. First, enhancing access to services related to health, education and employment, second, enabling successful integration of refugees into the host community, third, supporting the journey to a safe environment and fourth, giving refugees a voice – politically and socially - especially in matters that are connected to their long-term well-being [53].

To start identifying more general implications of designing for refugees Almohamed and Vyas conducted interviews in Australia with five refugees and two activists [8]. They pointed out that social isolation is a problem refugees are facing, that technology played a central role in the refugees' lives and that there was a need for culturally sensitive designs, which find a balance between the refugee's original culture and that of the host society. An interesting design was proposed by Brown and Ginter [14] to target the language barrier - a major problem for newly arrived refugees [14, 30]. They created a translation and language interpretation tool and introduced a new approach in their solution process: designing for transient use [14]. This means designing technological solutions to be used only for a set period of time or to become less used over time so as to avoid users becoming reliant on this technology [14]. This differs for example from the design solution proposed by Irani et al. [30]: to make mobile applications available in different languages. By mediating communication, Brown and Ginter's solution supports direct contact between the host society and the refugees [14].

The approach of designing for transient use - although not explicitly stated - can also be found in two recent student design projects focused on refugee integration [38, 49]. The GeeBot is an envisioned assistive robot which refugees will receive when arriving in a new country for a limited amount of time. It supports social interaction between host society and refugees, translates and teaches the language basics and can provide information critical for newcomers [49]. The other student design group developed a game concept to support social bridging between Syrian and German

youths. The game aims at creating empathy and when finishing the game, the players will meet face-to-face [38]. Both technologies aim at becoming redundant after a certain amount of time.

Clear user needs, requirements and design implications are still missing and thus more user research in this field is required. This study aims at helping to fill this knowledge gap. The subsequent adoption of technologies, however, has been studied in different fields. The following section of the literature review has been added after an initial analysis of the collected data as two important factors of online transactions had emerged: trust and perceived risk. With regard to this, some important findings and models will be considered.

2.3 Trust and perceived risk in online activities

The area of e-commerce has been considering the issues of trust and perceived risk for quite a while now and designing for trust has become central in this field [32, 39, 46]. Accordingly, Pavlou proposed the e-commerce acceptance model (EAM) [39] which combines the variables of perceived risk and trust, with the widely accepted technology acceptance model (TAM) [18, 19]. TAM states that external factors influence a technology's perceived ease of use and perceived usefulness. These, in turn, influence the attitude towards a specific technology, directly influencing the intention to use this technology, which then predicts actual use. It was originally developed to predict technology adoption in the work environment. However, in the last decades it has been applied to a variety of fields to explain and test the adoption of new technologies [39]. An overview of studies applying the model and also criticism of the model can be found elsewhere [33, 37, 47].

In the EAM trust and perceived risk are added as variables next to perceived ease of use and perceived usefulness (Figure 1), to predict if users will engage in e-commerce transactions [39]. Perceived risk and trust are added as variables since uncertainty characterises the online environment in which these transactions take place [39]. Trust in online interactions refers to the notion that other people's actions are socially responsible and that the online infrastructure is secure, for example by having encryptions and firewalls in place [39]. Similarly, perceived risks are either related to the other actors in the online environment or the technology and infrastructure of it [39]. Pavlou identified a number of risk categories in the context of e-commerce: economic risk, privacy risk, personal risk and seller performance risk [39]. Economic risk refers to possible monetary losses and can be attributed to either the actions of another person or the infrastructure itself. As can privacy risk, which is concerned with the possible loss of personal data. Behavioural uncertainty, so uncertainty caused by the trading partner, is also connected to personal risk, so physical or psychological harm caused by an unsafe product or service, and seller performance risk, referring to an underperformance of the seller due to inadequate monitoring [39]. Importantly, as trust,

perceived risks are based on individual's beliefs since information is often limited [39].

Overall, the model states that an increase in usefulness, trust and ease of use and a decrease in perceived risk are stated to increase the intention to transact which directly increases actual transactions. Furthermore, ease of use is positively related to usefulness while an increase in trust will both increase ease of use as well as usefulness and decrease perceived risk [39].

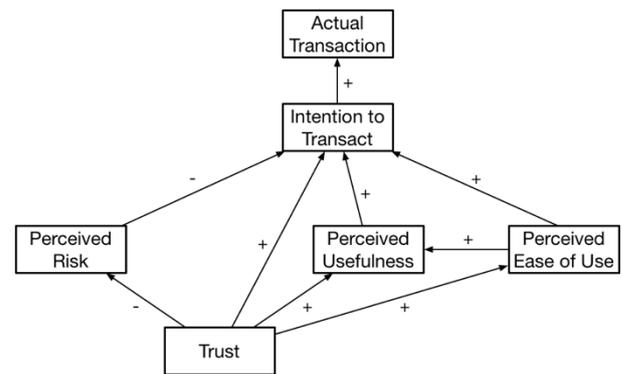


Figure 1. E-commerce Acceptance Model (EAM) by Pavlou

The EAM has also been used to explore other areas, for example with regards to the adoption of online health care services [48] and e-government services [4, 11, 15, 16, 35, 46].

Bélanger and Carter [11] was one of the studies focussing on trust and perceived risk in governmental online services. They found that a person's disposition to trust influenced both how much he trusted the internet and how much he trusted the government, both of which influenced the likelihood of adopting an e-government service [11]. They also found that trust in the government, i.e. the source of the information and platform provider, decreased perceived risk [11]. The same factors are considered by Liu and Carter [35] in their current project. In the context of cyber-attacks on governmental servers in the US and elsewhere, they added a third factor: information privacy concerns of internet users [35]. The results have not been published yet. However, data security was found to be an important factor influencing e-participation with regard to government decision making [46]. Other factors were: transparency the process and participation results as well as the perceived impact on government decision making.

Another factor that might influence the adoption of e-government services was culture. Carter et al. [16] had found out cultural differences in the adoption of these services. However, culture did not seem to have a strong impact on the attitude towards and use of a system in a study by Al-Hujran et al. [4]. Trust, on the other hand, was found to influence perceived public value, i.e. usefulness, which in return was an important indicator of

the user's attitude towards the system and thus the intention to use it [4].

Research on e-government services is concerned with a specific type of online service, as public service agencies need to ensure that the information provided on their platforms and the service received are in accordance with the best public interest [15]. This differs from other parts of the virtual environment, for example social networks or Wikipedia, where information is uploaded by a variety of sources and content is defined as user-generated [9].

With regard to participation on social media platforms, a study conducted by Fredheim et al. [26] showed that less anonymity and more long-term online identities could lead to a decrease in participation. This, however, could ultimately be beneficial for all users, as civility simultaneously increased [26]. Negative social interactions were found to be a risk perceived by students interacting on social media by another study [9]. Aramo-Immonen et al. [9] identified five distinct risk categories: time risk, psychological risk, social risk, privacy risk and technical risk. Most prevalent among these were privacy risks which included the loss of privacy through, for example, government surveillance and the sense that information posted online was permanent [9]. Social risk referred to the replacement of face-to-face interactions and subsequent isolation but also to cyberbullying and the loss of reputation. Psychological risk however was mostly concerned with a sense of being manipulated and controlled through the information exposed to online. Becoming addicted and spending an increasing amount of time online was categorised under time risk and technical risks were related to falling victim to criminal acts and data security issues. This links back to the EAM and Pavlous's risk categories [39], presented above, and shows that risk categories might differ depending on the context of the online transaction.

Considering the concept of trust in the context of social media platforms, Rauniar et al. [45] have found trustworthiness to play a central role in how freely users engaged in social transactions on these platforms and how secure they felt doing so. Glenski and Weninger [28] were concerned with the posting and commenting behaviour on Reddit and its susceptibility to manipulations. They found that ratings of posts, however not ratings of comments, reinforced themselves. This held true for up-votes (positive rating) as well as down-votes (negative rating). Thus, ratings of posts could be easily manipulated, which directly impacted the visibility of a post on the social media platform [28]. This is especially interesting in context of the second study on tweets about refugees, which found that the judgement about a tweet's credibility can be influenced rather easily too [3]. Each tested tweet contained false information and was tested using a within-group design, along six manipulation conditions: popularity, profile pictures, verified account, inclusion of web-link, presence of emoticons, retweeted [3]. The results showed that tweets that included a link – which was seen as a very easy type of manipulation – and those that were popular, were judged as more credible [3].

In the context of websites, Bansal et al. [10] assumed that there were individual differences in how people judged the trustworthiness of a website. This was based on the elaboration likelihood model (ELM) proposed by Petty and Cacioppo [40] which defines two routes for information processing [40]. The central route is mainly concerned with the content of the message and is used by people with high-privacy concerns to evaluate a website's trustworthiness. Low-privacy concern individuals on the other hand, use the peripheral route and consider factors such as the source of the message and the website design [40]. Bansal et al.'s [10] examined the likelihood of disclosing personal information on a website and found that individuals with high- and low-privacy concern used different strategies to identify whether a website was trustworthy or not. The strategies were in accordance with the ELM [10].

The reviewed literature shows that perceived risk and trust are valuable factors to include when considering the adoption of technological tools. Depending on the context the specific elements, for example the risk categories, might however differ and additional factors might appear. Accordingly, the aim of the study design was to approach the topic as open-minded as possible.

3. METHODS

This qualitative study set out to address a rather broad research question: how do refugees use technology to achieve the best possible life situation in the given circumstances? The participant recruitment process and an initial bottom-up analysis of the data refined the research focus. The study is about young male refugees from the Middle East who had arrived in Europe around the year 2015 and the analysis specifically focusses on two themes: use of social networks and online information gathering. The aim is to specify the requirements of this user group and to add to the literature on design implications for refugee users.

3.1 Participants and Sampling Method

Initially, this research was aimed at refugees and asylum seekers living in the UK. Due to difficulties in finding participants in the UK and the limited amount of time for this project it was decided to focus the research on refugees living in Germany. Other inclusion criteria were male, between 18-65 years old, originally from the Middle East (including Afghanistan, Iran, Turkey and Pakistan) and intermediate in German or English (minimum CEFR B1 language level). The first six refugees were recruited through convenience sampling. A personal contact of the researcher was a social worker who sent out an invitation to participate (Appendix 1) to several refugees she had met through the Students for Refugees Network. Data collection was then interleaved for a preliminary analysis of the data before another eight participants were recruited. Five of these were again recruited through the social worker while the remaining three participants were recruited through refugees that had participated in the first round of interviews, i.e. using snowball sampling. Thus, in total 14 participants – all

meeting the inclusion criteria - were recruited and interviewed in Munich, Germany. All participants were refugees or asylum seekers living in Munich and were between 20 and 30 years old. Nine of them reported they had been living in Germany for approximately 2.5 years, three for 3 years and only one participant (P10) had been already living in Germany for 5 years. All participants reported to have at least a CEFR B1 language level in German. Five participants (P3, P5, P6, P12, P14) were originally from Syria and seven participants (P1, P2, P4, P7, P8, P9, P10, P11, P13) were originally from Afghanistan. Each participant was given a 10€ gift voucher as compensation for their time.

3.2 Ethics

The project was approved by the UCLIC Ethics Officer. The Project ID Number is: UCLIC/1718/009/MSc Blandford/xxx. All data were handled under the Data Protection Act 2018 and were anonymised. Participants were provided with a hard copy of the information sheet and consent form (Appendix 2). The content of both documents was thoroughly explained to the participants by the researcher. The consent form was signed before taking part in the interview.

3.3 Data Collection

Semi-structured interviews were used to collect data. The questions of the semi-structured interviews were developed by using the literature reviewed. Most importantly the ten domains of the integration framework by Ager and Strang [2] were used as a basis to structure the interview guideline. The guideline comprised 5 parts concerned with: technology use in general, be(com)ing a refugee, understanding the host country, accessing basic needs and social interaction. The interview ended with a couple of closing questions asking about further uses of technology that were not discussed and additional comments. The interview guideline was adapted after the first round of interviews. Most importantly questions about following the news, connectedness to home country and using technology to cope with past distress were added. The full interview guideline can be found in Appendix 3 and all changes between the first and second round of interviews are marked in bold.

All interviews were conducted in German and were audio recorded. They were later transcribed and simultaneously translated into English. An exemplary transcript is displayed in Appendix 4. The interviews lasted between 25 and 50 minutes.

3.4 Data Analysis

After transcribing and translating the first round of interviews a preliminary thematic analysis was conducted. All interviews were coded, and the codes were clustered into preliminary categories: device infrastructure, social contact, accessing means, official domain, searching and selecting, translating, language learning, getting to know Germany, fake news, vulnerability of social networks, coping with

experiences. This preliminary analysis aimed at identifying possible areas of interest to guide the ongoing literature review as well as to refine the interview guideline as described above. After the second round of interviews, all 14 transcripts were coded as part of a bottom-up thematic analysis. Codes were clustered into seven themes: device use and access, language, accessing means, culture, use of social networks, online information gathering and concerns about technology. Two of these themes, i.e. *use of social networks* and *online information gathering*, were then considered in more detail. They were chosen because they were central factors of a participant's use of technology to build their life in a new country and the collected data pointed at some complexity within each of these themes and thus might contain some valuable insights. Thus, from the first overall bottom-up thematic analysis two more specific research questions evolved:

1. How do refugees use social media? (RQ1)
2. Which criteria need to be met so that refugees chose to use the internet as a source of information? (RQ2)

To answer the first of these research questions a second bottom-up analysis was conducted through which three user groups were identified. For the analysis of the second research question, the e-commerce acceptance model (EAM) was applied and thus a top-down analysis was conducted here. The details of each analysis will now be presented.

3.4.1 Use of Social Networks

To answer how refugees use social media, the codes of the first general bottom-up thematic analysis that related to the use of social networks were reviewed and clustered into four themes:

1. Contacting family members and friends: this includes geographically distant family members and friends as well as new found friends in Germany
2. Generating new social connections: this refers to meeting people online before meeting them in person
3. Gathering information and news: refugees have several channels for this and this will be more thoroughly discussed in the second part of the analysis and results, i.e. online information gathering. Here the focus lies specifically on social media as a resource for information, such as following pages of news providers on social media platforms or news articles being shared by friends on social media.
4. Engaging in online discourse: this specifically refers to written public discourse on social media platforms about political topics and news articles

A matrix was then created to obtain an overview of how these themes related to each participant's behaviours and attitudes. In this matrix a "+" means that the participant was using social media for the activity described by the

theme or had a positive attitude towards it. A “/” represents mixed results while a “-“ refers to an absence of this behaviour or a negative attitude towards it. If there is no marker, the interview did not provide any data on this theme. To make patterns in the data more visible, markers were colour coded and participants were subsequently grouped into three distinct user groups (Table 1): The Social Users (P2, P10, P13), The Curious Users (P1, P3, P6, P8, P14), The Engaged Users (P4, P5, P7, P9, P11, P12).

	Contacting friends & family	Generating new contacts	News & information	Online discourse
P2	/	-		-
P10	+		-	-
P13	+	-	/	
P1	+	/	+	/
P3	+	-	+	
P6	+	/	/	/
P8	+	-	+	
P14	+	-	+	-
P4	+	-	+	+
P5	+	+	+	/
P7	+	+	+	/
P9	+	+	+	/
P11	+	/	+	+
P12	+	+	+	+

Table 1. Social media themes represented across interviewed participants and division into three user groups

The characteristics of each user group will be presented in detail in the results section.

3.4.2 Online Information Gathering

Participants, although emphasising the importance of the internet as a source of information, also expressed concerns about the trustworthiness and reliability of online information. A second literature review, following the first full bottom-up analysis, brought the researcher’s attention to the EAM proposed by Pavlou [39]. The EAM was chosen as a framework to support the analysis of the data, to identify which criteria need to be met so that refugees use the internet as a source of information. Thus, a top-down analysis was conducted to answer this second research question with the aim of identifying design implications for online information services. The fit of the model was analysed considering four categories:

1. Data matches the model
2. Data adds to the model

3. Data contradicts the model
4. Aspect of the model is not found in the data

The findings will be presented in more detail in the second part of the results section.

4. RESULTS

4.1 Identifying user groups in social network use

Considering the use of social networks, participants were split into three distinct user groups. Although differences were identified, all participants valued social networks as a tool to keep in contact with – often geographically separated - family members and friends. Their attitudes and behaviours considering the three other themes, i.e. generating new social connections, gathering information and news and engaging in online discourse, however differed. The three user groups and their characteristics will now be presented.

4.1.1 The Social User

Participants in this user group (P2, P10, P13) used social networks first and foremost to stay in contact with family members and friends. This includes contact to new friends they had found in Germany, through for example German language classes. They were however not open to generating contacts online, did not use social media as a source of information or to access news articles, and did not like to participate in online discourse – neither active, by writing comments, nor passive, by reading comments. While one participant (P2) was generally interested in political discussions, he did not like these to happen online. He also emphasised that people’s opinions differed and that these would be best found out in a face-to-face conversation.

I think it is good to get general information about the country, but the people... everyone has a different opinion and you have to go to them and ask them what they think.

P2

Contrarily, the other two participants (P10, P13) did not like to engage in political discourse at all. Politics and news seemed to be connected to rather negative emotions. One participant (P10) was also concerned about the reliability of media in general, saying that the real news is often not correctly reported by the media. The other participant (P13) wanted to focus on the future and avoided exposure to the news as it reminded him of his past experiences.

I hate politics, I don’t like politics. I look at the news sometimes but not very often... (...) it’s not honest because they sometimes talk about Islam on the media and what they say is not true...

P10

I don’t want to know what is happening. I just want to be left in peace and start a new life in a new country. (...) Politics are everywhere, you

cannot know how politics are made (...) they say something on the outside and then they do something else, that's why I don't like it.

P13

Overall, this user group uses social media platforms in their most basic form, i.e. to connect to family members and existing friends, and is rather sceptical about other possible functions of these networks.

4.1.2 The Curious User

This user group (P1, P3, P6, P8, P14) uses social networks to stay in contact with old friends and family members but is reluctant to use it to generate new social connections. With regard to news, they access it in a more in a passive way, for example by reading news articles that appear in their Facebook Timeline when scrawling through (P6, P14). However, while writing comments for social contacting, they would rarely contribute to an online discourse about politics or other serious topics. With regards to reading other people's comments, two participants (P3, P6) appreciated the benefits of accessing the bandwidth of information and opinions on social networks.

I rarely write my opinion there but sometimes I share the news with my other friends, for example I write my friend's name so that he sees it. (...) I think that my opinion doesn't make a difference...

P14

(...) you know then how the people are feeling and what they're thinking.

P6

Their use of social networks is limited by pitfalls they associate with the internet in general, such as addiction (P14), isolation (P10), surveillance (P1), false information (P6) and limited real-world applicability of information found online (P3, P6, P14). Furthermore, one participant (P3) avoided news about his home country, with similar reasons as the two participants in the Social User group. However, he did use social networks for more general information, for example about topics he was personally interested in – as did some of the other participants in this group (P1, P6, P10).

This user group used social networks as a social and informational tool. However, although quite engaged in social interactions, they used social networks rather passively as an informational tool and avoided active participation in online discourse.

4.1.3 The Engaged User

This group of participants (P4, P5, P7, P9, P11, P12) uses social networks in all identified categories. Social media is an important tool for information for them, and most of them are open to meeting people online, with the exception of P4. They appreciate open online discourse either by passively but diligently following discussions and posts on social media (P5) or by actively contributing

to the discussion (P4, P7, P9, P11, P12). Although P4 is against meeting people online, he was placed in this group due to his engagement in online discourse and his general tech-affinity. P7 was placed in this group as he is open to meeting new people and normally engages actively in social discourse – at the moment, however, he generally reduced his use of social networks.

I follow the pages of nearly every political party. I see what they write, and I read the comments. I also like to see what the people comment especially if they're talking about refugees or something like that.

P5

For example, when I see an article from a company or an article about refugees or something like that -when I don't like something, or I do like something, then I comment.

P4

I need to say what I think... because there are a lot of Syrians that can't understand this, so I need to say this, to understand everything, what is happening, what politics is doing, why is there war in Syria, why Germany said welcome to refugees.

P12

This group of participants deems public discourse on social media platforms as important and emphasises the benefits of getting a variety of opinions and perspectives. They also actively communicate their opinion.

4.2 Identifying criteria for using the internet as a source of information

The second main theme of the initial bottom-up analysis was concerned with the use of the internet as a source of information. More specifically, the researcher wanted to find out which criteria need to be met so that refugees use the internet as a source of information. The EAM is a framework that specifies four variables – usefulness, ease of use, perceived risk and trust – to predict the use of online shops. This framework was applied to guide the top-down analysis of the collected data, as the same variables had emerged as important themes in the data in the previously conducted bottom-up analysis. It was assumed that these factors predict the adoption of the internet as a source of information as the EAM predicts in the context of online shopping. Through the top-down analysis of the data, a possible fifth independent variable was identified: affective states. The general fit of the model, the analysis of the individual variables of the model, as well as the addition of a possible fifth independent variable will now be discussed.

4.2.1 General Fit of Model

The variables of usefulness and perceived ease of use as indicators for the adoption of technological tools were first introduced in the Technology Acceptance Model [18]. In the context of online shopping, Pavlou pointed

out that the internet was an uncertain environment and thus added the two variables of perceived risk and trust. This corresponds with the collected interview as interviewed refugees viewed the internet - although helpful - as an uncertain environment, with biased opinions, false information and possible loss of control of their personal data. Accordingly, participants raised concerns about the trustworthiness of the internet and communicated risks they associated with using it as a source of information.

The two dependent variables of the EAM are both concerned with a transaction: intention to transact and actual transaction. In this context, the transaction will mostly refer to informational and social transactions. The specific role of the EAM's independent variables – perceived usefulness, perceived ease of use, trust and perceived risk – will now be analysed to identify which criteria need to be met so that refugees use the internet as a source of information.

4.2.2 Perceived Usefulness and Perceived Ease of Use

Perceived usefulness and perceived ease of use refer to the user's perception of whether something will support him to reach his goal and the amount of effort it requires, respectively. Using Google to search for information was described on the one hand as very easy: simply type in a keyword or question and get an answer. Furthermore, the availability of a large bandwidth of information and insights of people that you normally would not have access to, made the internet a useful tool for gathering information for the interviewed refugees.

The internet is educational, and you can get a lot of information, that is an advantage and if someone wants to find work they can also use the internet and for example, you can get up-to-date information and news easily...

P11

On the internet there are also a lot of people that are very renown so when I have a question about a specific thing then I can find a lot of very renown people that aren't like my friends, they really have experience, they learnt that, they did something in their lives or researchers or something. (...) I think that the internet is sometimes more important than the people with experience. Because on the internet you get different experiences.

P3

I knew that on the internet you can look up anything you just have to put the name and then you'll get images and information and also sometimes videos and also Youtube. There is also a lot of information on Youtube.

P13

However, there were some things that made it difficult for participants to find information online. Two

examples were directly related to the ease of use: a large number of links and difficulties in identifying the required information, either because of the language barrier or the layout of the page.

When I typed in the address of a hospital I got a lot of links I didn't know which one's the correct one, which one's up-to-date and which isn't.

P2

(...) they often or most of the times said that is our webpage, there you can search for that information. That was really complicated for me because it was all in German and I had to try and somewhere something was written about refugees or foreigners and how they can apply. (...) that was always hidden or very difficult, it was written too complicated for me.

P5

This added complexity to the interaction and directly reduced the usability of the internet as a source of information as is stated by the model. One participant (P2) mostly used recommended links and he only searched on Google to find recommended websites.

No, I don't google, it's better to have a specific web address or a link. (...) when I search myself, then I first have to find the right word, then the right website or the right information. It's better if I just go to someone with experience.

P2

Some participants adopted search and selection strategies to obtain correct information, such as checking the number of visitors of a webpage, whether the site was a secure website (i.e. clicking on a website and checking if the link was marked with a key), the design of the website and its source. The source was considered trustworthy if it was a government office, a recognised company – for example the Munich public transport company – or had been successfully used before.

Some pages have way too much advertisement, then... they only do it because of the money and the right pages... a right page does not have advertisement.

P7

Normally I look at the website, which group it belongs to or not or if they are academic or not.

P8

You can't trust the information because you don't know what a right page is and what isn't. But normally if I want to research something then I see the pages that I know, that I have already used, then I use that. Otherwise, I don't use it.

P11

As the last quote (P11) shows this issue directly links to the other two concepts of trust and perceived risk since participants were afraid of getting false information.

4.2.3 Trust and Perceived Risk

As perceived usefulness and ease of use, the concepts of trust and perceived risk also refer to general beliefs that are based on the user's subjective assessments of a certain situation at a certain point in time [39]. Trust refers to the belief that the other party will act as is expected by the user and will not exploit the user's vulnerabilities. In online transactions trust refers both to the other actor, such as an individual or organisation who is uploading information (party trust), and the infrastructure of the internet itself, such as the control mechanisms in place (control trust) [39]. Participants expressed trust in other people online, e.g. using ratings and user feedback, but were also concerned that simply anyone could upload information.

I look at ratings... if it's more than 4.5 or so, then I'll gladly go there... also other opinions are important.

P14

The one with the best rating... it's not a safe method but I believe the people because I think the people say the truth and yeah...

P12

I don't know if what I find is up-to-date or secure. Maybe someone just wrote it in the internet and I am getting false information.

P2

There are a lot of pages that aren't trustworthy or secure then I... for example sometimes I research on Wikipedia.... that is not (...) I heard that everyone can write there and edit... so it's not trustworthy for everything.

P7

The last quote also taps into the infrastructure of the internet and its self-correcting mechanism. This seemed to be appreciated by some participants, for example valuing the possibility for open discourse on social networks, while others were more concerned with the fact that false or biased information was available at all and the negative impact it can have.

When you search for something about Afghanistan you get a lot of information but a lot of it is wrong. Or things about Muslims that aren't true. Someone then found this information online and read it and thinks that it really is that way.

P2

I don't think it's very influenced on Facebook, everyone writes what he wants (...) Of course they are, they are influenced by the media that they see on TV or somewhere else but still something else

remains... you can say what you think, comment. If I see something that's wrong then I can comment, no in Aleppo you don't have this or that...

P5

(...) if I read a post on Facebook in which it says that some Syrian did something good then I read the comments, what the Germans wrote: "that really is very good" or "that's wrong" or "not everyone's like this". Then you know (...) the people's mood, how they're feeling, how they're behaving, what they think about this.

P6

Another trust issue was raised when using online translation tools. One participant reported that concerning critical information, such as which documents to request from Syria and get certified in order to be able to study in Germany, he would not simply trust an online translation.

I read somewhere that I need some documents from Syria and that's a lot of effort, I can't just trust Google Translator and start getting documents and then I go the university and they tell me no, we don't need that or something's not correct here. It's different to someone telling you face-to-face you need to do this and that.

P5

Using translation tools is a first example of risks perceived by the interviewed refugees when using the internet as a source of information. Pavlou highlights the uncertainty of online transactions and likelihood for users to perceive risks here. Similar to the trust concept, perceived risk can emerge from the infrastructure of the internet as well as the actors within it. Pavlou's risk categories of economic risk, personal risks, seller performance risk and privacy risk [39] do not seem to match the collected data. Consequently, the following alternative risk categories were identified from the data:

1. Security risk, e.g. loss of control of personal data, hackers, surveillance
2. Social risk, e.g. making a fool of oneself in front of others, loss of individualism
3. Psychological risk, e.g. being manipulated through online information, exposure to negative news
4. Transfer risk, e.g. information found online differs from reality

These are inspired by the risk categories found by Aramo-Immonen et al. [9] which are described in the literature review. A further category of health risks was identified as interviewed refugees expressed some general concerns about technology being addictive and unhealthy if used extensively. However, this was more of a general concern and not directly related to the use of

the internet as a source of information and will thus not be considered more closely.

While translations tools were mostly seen as helpful when translating words, participants said that they refrained from translating sentences as they knew this would not be translated correctly. One participant talked about an uncomfortable experience he had had in the past which falls under the category of social risk:

In the beginning, when I didn't speak any German, I searched for a sentence on the internet and the next morning I went to school and I said that sentence to my teacher and she laughed at me, they laughed at me, they said: what does he mean?

P2

Several participants were concerned with the security risks associated with the internet, such as hackers and loss of control of their personal data. One participant was especially concerned about state surveillance and being thrown out of Germany if searching for specific information or communicating his opinion on social networks.

You can't simply say your opinion on the internet or search for information about certain things, so there are always boundaries on the internet. For example, about ISIS or other such groups... some things, for example about nuclear energy, you can't simply search for information, you will get problems.

P1

Hacker or something like that, that's bad. Some people use the internet for their own personal interests and I don't think that's good. They harm others sometimes and I don't like that but I can't change it. But you can use it for good things, not to harm others or to make money. There are a lot of examples...

P3

I don't understand where is my information, my personal information? Someone wants to have all my... for example... all my information on Facebook or WhatsApp... want to have everything, then an expert would completely understand my personality, my life. (...) The government or organisations could demand our taste... like they want to.

P8

Other participants were criticising official news reporting as being biased by the political agenda of the country. They were afraid of people generalising this and

also of being the victim of manipulation (social risk, psychological risk).

It is difficult because what the media display is not correct, for example, I also talked to others about this... there is one guy, someone stupid and he does something wrong here in Europe and then everyone thinks that the Islam is such a bad religion. But it's not related, that guy doesn't know anything about Islam.

P10

(...) the news that are in German are very dependent on the German politics (...) for example, back then there was a terrible time in Aleppo and they always reported completely false news, nearly 100% wrong. I have my parents there and I know exactly what's happening and it was always false news, that really made us look bad.

P5

I am against the [Syrian] government, that is my opinion but if I look at the state press every day then I'll be in favour of the government at some point... it messes with your head... it convinces you... I don't think that is good, you need to inform yourself, read the news but be careful: this is wrong, this is right.

P14

Furthermore, participants were concerned about the applicability of information they found online to the real world. This is categorised as transfer risk since it made participants uncertain about what to believe and how to adapt their behaviour. They were also afraid that it could also stand in the way of real-world connections between refugees and citizens of the host country.

For example, in the media they always talk about AfD¹ but for example in Munich I met nice people and they were never against me, and they weren't behaving badly towards me and that was very different because in the media it sounded different and then I met only nice people... it's very different. (...)

P8

For example, I watched a video about Germany, about the culture but when I came to this city, I saw different things, it felt different.

P2

Finally, another psychological risk was based on the easy access to information online: exposure to negative news. For several participants logging into Facebook meant being directly exposed to negative news about the war in their home country. This was seen as quite intrusive, as they did not necessarily want to see that news and it

¹ AfD: far-right political party in Germany

affected them in a negative way. Some participants had deleted the Facebook app from their phones because of this.

I deleted the app (...) Because there are too many terrible things on Facebook. If I want to go on the Facebook page, then I always see (terrorist) attacks or terrible news. (...) And if I read this news in the morning then I think about it the whole day.

P7

I don't use Facebook on my phone... I don't like to look at the news on my phone because it's very disturbing.

P8

I never thought I would have to think those thoughts, I thought I have to forget it because when I think about it, then that might hurt and that's why I'd rather not. That's why for example, I don't look at anything on the internet. The people shared things there, really terrible pictures, how the houses break down or how people were dying and that hurt me a lot.

P3

The data also pointed to bad experiences participants had had in the past and these might influence which risks participants perceive and also the impact this has on adopting the internet as source of information. The EAM does not seem to account for past experiences and their possible reinforcing influence on the discussed variables. Furthermore, a possible fifth variable was identified: affective states.

4.2.4 Affective States

The analysis of the interview of one participant (P8) pointed out the possibility of *affective states* as a fifth independent variable that could predict whether the internet was used as a source of information or not. This participant (P8) talked very openly about his emotional experiences since arriving in Germany and although he seemed to value technology in general and also more specifically the internet as a source of information, he pointed out its limits in times where he felt stressed and overwhelmed by his new circumstances. He reported to have difficulties to process the information on the internet when he was in a negative affective state. Using the internet during this time even increased his negative feelings by making him feel lonelier and more isolated.

Generally, it's good but if you're stressed, you don't understand the information. For example, if someone's calm and reads a text he will understand a lot more. But I read it a couple of times and I didn't understand the information I was reading because my head wasn't working properly. My feelings were negative, and it made me understand less.

P8

For example, when I am alone or sad... and I talk to a person, so like a friend, then it helps me. But when I feel sad or feel lonely and I surf on the internet, then it gets worse.

P8

The data on affective states and their influence on the adoption of the internet as a source of information is quite limited in this study and thus the introduction of this fifth variable is only preliminary. It might however be worthwhile to conduct further research on this.

5. DISCUSSION

This qualitative study set out to answer how refugees use technology to achieve the best possible life situation in the given circumstances. Through 14 interviews conducted with Syrian and Afghan refugees living in Munich, two important and more specific themes were identified: *use of social media* and *online information gathering*.

Coles-Kemp et al. [17] and Witteborn [55] found that technology was valued as a tool to stay in contact with family members and friends. This was supported by the collected data. In contrast to Coles-Kemp et al. [17] and Witteborn [55], none of the interviewed refugees reported they were overwhelmed by the obligation to stay in contact with their family members and old friends; however, this was not explored as an explicit theme of the present study. Social contact with family members and friends from their country of origin, might support refugees to stay in contact with their original culture. This has been found to be beneficial for successful integration [27, 34]. Staying connected to the culture of origin was covered in the interviews, however, no valuable insights were gained here. This might have been due to a possible language barrier. It might be worthwhile to investigate how the meaning of constructs such as “to keep in contact with your culture” could be better transmitted. The interviewed refugees seemed to relate “to keep in contact” solely to an interaction between people.

Building new social connections is also an important factor in refugee integration [2] and this was found to be problematic at times, especially with regard to connecting to people from the host society [7, 13, 22, 29]. This study examined this topic from the viewpoint of refugees and discovered that although refugees wanted to build new social connections, most of them were opposed to doing so online. Interestingly, the interviewed refugees did report to interact with new people online with the purpose of getting information, for example in groups on Facebook or Telegram, or when engaging in online discourse. Considering this general reluctance, however, it remains unclear to what extent and in what way technology can support refugees to build new social connections – current social networks do not seem to be the answer.

In accordance with Borkert et al. [13] social media was found to be an important source for news and information for most interviewed refugees. Some of them mostly read articles that appeared in their timeline and did not actively contribute to the online discourse about political topics. More specifically, they did not write comments communicating their personal opinion under news articles. Others, however, diligently followed information and news pages on Facebook and other social media platforms and also actively contributed to the online discourse. This might be one way of giving refugees a voice in political and social matters which was emphasised as an important design challenge by Talhouk et al. [53]. However as pointed out not everyone felt comfortable engaging in online discourse and thus alternative ways and tools need to be considered.

Gathering information and news online was a central theme that was not only related to social media use. Other news platforms and ways to get information, e.g. Google search, were used by the interviewed refugees. However, there were some constraints to gathering information online and some participants were reluctant to use the internet as a tool for information. Existing research pointed out a gap in digital literacy between refugees [7, 8, 27, 30]. This gap was also found in the collected data - some participants had only started using the internet rather recently - and might be a factor here. However, this was not explored in detail. Almohamed et al. [8] identified social isolation as a central issue for refugees, which needs to be kept in mind when designing technological solutions. Accordingly, the analysis of the data of one participant in particular showed that he at times avoided the internet as an informational tool as it increased his negative affective states, such as the feeling of isolation. Other research had found that trust and perceived risk played a role in the adoption of online services and engagement in online interactions [4, 11, 15, 32, 35, 39, 46, 48]. The collected data found that these two themes were also important factors for interviewed refugees when they used the internet as an informational tool.

To avoid getting false information, some participants reported search and selection strategies which helped them chose appropriate links and information sources. However, Aigner et al. [3] and Glenski et al. [28] showed that people's judgement about which online information to trust could be easily manipulated. And the elaboration likelihood model [10, 40] clearly states that there are individual differences in strategies when judging the trustworthiness of a website. Thus, it is questionable if the participants' search strategies will necessarily support them to obtain correct information and might point to a need for other - more reliable - tools for assessing trustworthiness.

Overall, the EAM states that its variables - ease of use, usefulness, perceived risk and trust - can be designed for and places the responsibility to do so in the hands of the providers of websites and platforms. Similarly HCI researchers have emphasised the HCI community's

responsibility to design tools for the specific user needs and requirements of refugees [5, 7, 17, 30]. This also coheres with the idea of integration being a two-way process [2, 36] where designing and providing useful and beneficial tools as well as ensuring easy access to correct information lies within the responsibility of the host society. Interestingly, the data showed that participants often used existing tools which were not designed for refugees and are not solely used by them either. Considering the risk categories identified by Aramo-Immonen in a study on students using social media, there are large overlaps in what interviewed refugees perceived as risks online with risks pointed out by the Finish students [9]. Thus, it might be the case that making online informational tools safer and more beneficial to use for refugees might also improve the experience of other users. A difficulty could lie in possible cultural differences [15]. However, similar to the findings of Alam and Imran [7], the participants in this study did not report any difficulties in using technology that were related to cultural differences. At this point it is important to point out that the interviewed refugees were part of a quite specific fraction of the refugee population. This and other limitations will be discussed.

5.1 Limitations

A first bias may exist with regard to the recruitment of participants: they were convenience sampled, i.e. either recruited through a social worker who was a friend of the researcher or through the participants that took part in the first round of interviews. It is assumed that the social worker preselected participants and thus a gatekeeper bias was present, especially in the first round of interviews. Furthermore, some participants mentioned that they were thankful for the help provided by the social worker and were thus participating in the research study as a favour to her. However, there was no evidence that this influenced the participants' responses. It also needs to be emphasised that the participant group has very specific characteristics: they were all between 20-30 years old, male and originally from Afghanistan or Syria.

Furthermore, the interviewed refugees can be seen as vulnerable users considering their past experiences and also that some of them were asylum seekers and did not have a clear refugee status. Overall, participants seemed open to answer all questions posed by the researcher and were also quite elaborate - especially considering the language barrier. Refugees were not fluent in German and to correctly understand the intended meaning the researcher sometimes supported the participants by suggesting possible words. This might have led to an unintentional bias. The researcher however tried to be very cautious about this during the interviews. Interviews were also translated and there is always a chance that something might have been lost in translation. However, interviews were translated by the researcher and this was done as soon as possible after the interview had been conducted to ensure that the nuances of the meaning were captured as far as possible in the translations.

5.2 Future research and design

Overall, more research needs to be conducted to gain an in-depth understanding of the needs and requirements of refugee users in order to support successful integration. Although focussing on a specific fraction of the refugee population this research identified differences between refugee users and suggested three distinct user groups in the context of social media use. Future research should not only address refugees as a whole but also consider distinct user groups within this diverse population. Considering the results and discussion of this study there are also some specific questions that future research and design could address:

- To what extent can technology support integration by making refugees stay connected to their original culture while they familiarise themselves with a new culture?
- How can technology support new social connections between refugees and the people in the host society?
- How can technology enable refugees to participate in social and political discourse, especially with regard to topics that concern them directly?
- What role do affective states play when refugees use technology?
- How can informational online tools, such as social platforms and search engines, be (re)designed to be more beneficial for refugees to use?

6. CONCLUSION

How refugees use technology to achieve the best possible life situation in the given circumstances is a broad topic and several questions remain for future research to address. However, this study has shed light on two important themes: use of social media and online information gathering.

Three user groups were identified that engage with social media on different levels, i.e. mainly as a tool for social networking (Social Users), additionally as an informational tool (Curious Users) or even as a tool to participate in political and social discourse (Engaged Users). This finding is important in two ways. First, it points out that there are differences and distinct user groups within the refugee population and second, it highlights the different user needs of the identified user groups.

Online information gathering did not only take place on social media and it was considered as a second important theme. Through a bottom-up and a subsequent top-down analysis of the data it became clear that usability, perceived ease of use, trust and perceived risk played an important role in whether refugees chose to use the internet as an informational tool or not. A fifth possible factor was also identified: the affective state of a refugee when in need of information. Furthermore, the refugees' judgement on the trustworthiness of an internet source

might not necessarily be reliable and identified risks, such as the psychological risk of being exposed to negative news about the war in their home country, might negatively impact their wellbeing. With regards to design implications, it is important to keep in mind that refugees might mainly be using existing tools. The challenge then lies in making these safer to use and to enable refugees to use them in way that is most beneficial to them.

ACKNOWLEDGMENTS

I am very grateful for the support and feedback of my supervisor Ann Blandford. I also want to thank Janina Endesfelder for putting me in contact with a majority of the interviewed participants. Lastly, I want to express gratitude to my participants for their openness and amiability. It was a pleasure to meet each one of you.

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APPENDIX 1: INVITATION TO PARTICIPATE

Invitation – short version

This will be posted on social media platforms and if anyone is interested they will receive the send them the longer invitation (below) via email.

I am currently writing my dissertation and I'm looking for participants. My research is aimed at identifying how refugees use technology to achieve the best possible life situation in the new circumstances. What are the benefits for you? With your input you can support the development of new tools to help current and future refugees and if you are interested I am happy to share the results of the study with you. For your participation you will also be rewarded with a 10 Pound gift voucher. If you are a male refugee from the Middle East, aged between 18-65 years old and interested in participating please contact me: anouk.harde.17@ucl.ac.uk

Please feel free to share this post.

Invitation – long version

This will be sent out by email to anyone interested in participating.

Dear *full name*,

I am a postgraduate student at UCL and I am currently working on my dissertation. I am writing about how refugees use technology to achieve the best possible life situation in the new circumstances. I am looking for refugees from the Middle East that are willing to do a 50-minute interview with me.

What are the benefits for you? With your input you can support the development of new tools to help current and future refugees and if you are interested I am happy to share the results of the study with you. For your participation you will also be rewarded with a 10 Pound gift voucher.

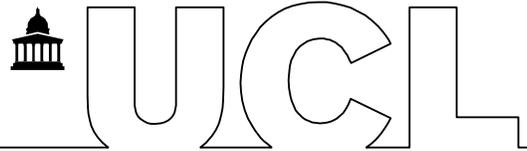
If this sounds good and you want to participate, we would meet up for a face-to-face interview in the next couple of weeks. In the interview we will talk about how you use or have used technology during your asylum application process, to understand the host country you are living in now, to access basic means, such as education, employment, housing and health services and how you use it to connect to other people.

I have attached the information sheet and consent form to this email.

If you are interested in participating and you are between 18-65 years old, please respond to this email and we will arrange a place and time for the interview.

Thank you and best wishes,
Anouk Harde

UCL DIVISION OF PSYCHOLOGY
AND LANGUAGE SCIENCES



Participant Information Sheet For Adult Refugees

UCL Research Ethics Committee Approval ID Number: _____

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study: A qualitative research perspective on how refugees use technology to achieve the best possible life situation in the new circumstances

Department: UCL Interaction Center

Name and Contact Details of the Researcher:

Anouk Harde

Email: anouk.harde.17@ucl.ac.uk

Telephone: +4915207348307

Name and Contact Details of the Principal Researcher:

Ann Blandford

Email: a.blandford@ucl.ac.uk

Telephone: +44 203 108 7049

Address: UCL Interaction Centre, 2nd Floor, UCL 66-72 Gower Street, London WC1E6AA

1. Invitation Paragraph

You are being invited to take part in a research project. Before you decide whether you want to take part or not it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. As me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

2. What is the project's purpose?

This study is about how refugees use technology to achieve the best possible life situation in the new circumstances. This study tries to shed light on specific user needs so that we can design technological solutions in the future that can support you even better. If you agree to take part in this study I will conduct a face-to-face interview with you that will take about 50 minutes. I will audio record this interview. Only I will listen to the audio recording. To share the data with my supervisor I will transcribe the recording and anonymise the transcription. My supervisor and me will have access to the transcription and I will use them to analyse what you and other interviewees have told me. If you are interested in the results of this study I am happy to share the final report with you.

3. Why have I been chosen?

I have asked you to participate in my study because you are a male refugee or asylum seeker now living in Germany or the UK. You are also aged between 18-65 years old and come originally from the Middle East. I am overall recruiting 10-15 participants that fit these criteria.

You cannot take part in this study if you:

- are younger than 18 years of age
- are older than 65 years of age
- do not speak English or German at an intermediate level

4. Do I have to take part?

'It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to.' if you decide to withdraw you will be asked what you wish to happen to the data you have provided up that point.

5. What will happen to me if I take part?

If you agree to take part in the study, we will meet up in the following weeks for a face-to-face interview. This interview will take approximately 50 Minutes. During this interview I will ask you about how you use technology in general and in more specific areas, including how you use and have used technology during your asylum application process, to understand the host country you are living in now, to access basic means, such as education, employment, housing and health services and how you use it to connect to other people.

I will analyse this data in combination with the data of other interviews to find out how refugees use technology to achieve the best possible life situation in the new circumstances.

For your participation you will receive a 10 Pound gift voucher.

6. Will I be recorded and how will the recorded media be used?

The audio recordings of your activities made during this research will be transcribed and anonymised after the interview. Only I will listen to the audio recordings. I will share the anonymised transcription with my supervisor and use these for the analysis. Transcribed quotes might be used in my dissertation, for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

7. What are the possible disadvantages and risks of taking part?

If at any time answering any of the interview questions makes you feel uncomfortable please let me know that you want to move on to the next question or that you want to withdraw from participating in the study.

There are no clear foreseeable risks or possible disadvantages to participating in this study.

8. What are the possible benefits of taking part?

With your input you can support the development of new tools to help current and future refugees and if you are interested I am happy to share the results of the study with you. For your participation you will also be rewarded with a 10 Pound gift voucher.

9. What if something goes wrong?

If you wish to raise a complaint about this study and the interview, please contact the Principal Researcher and my Supervisor Ann Blandford. Her email address is: a.blandford@ucl.ac.uk - You will find the full contact details at the beginning of this information sheet. If you feel like your complaint has not been handled to your satisfaction you can contact the UCLIC Ethics Officer Rachel Benedyk r.benedyk@ucl.ac.uk

10. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications.

11. Limits to confidentiality.

Confidentiality will be respected unless there are compelling and legitimate reasons for this to be breached. If this was the case, we would inform you of any decisions that might limit your confidentiality.

12. What will happen to the results of the research project?

The results of the study will be part of my written dissertation that I will hand in until the 13th of August 2018. They might hereafter be published in an academic journal or as part of a conference. Results might also be used during a presentation of the dissertation. I will announce any publication of this research on my website: www.anoukzarah.design and if you want to be informed personally about publications please let me know and I will send you an email. I am also happy to share my dissertation or a summary of it with you if you are interested. Please let me know.

13. Data Protection Privacy Notice

Notice:

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk UCL's Data Protection Officer is Lee Shailer and he can also be contacted at data-protection@ucl.ac.uk.

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be the provision of your consent. You can provide your consent for the use of your personal data in this project by completing the consent form that has been provided to you.

Your personal data will be processed up until the 13th of August. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

14. Contact for further information

Please feel free to contact me or my supervisor at any time for further information.

My contact details:

Anouk Harde

Anouk.harde.17@ucl.ac.uk

+49 1520 734 83 07

My supervisor's contact details:

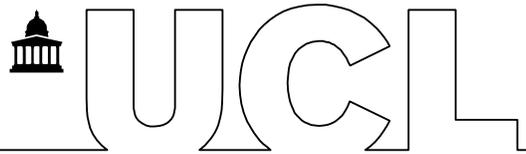
Ann Blandford

a.blandford@ucl.ac.uk

+44 203 108 7049

You will receive a copy of this information sheet and the signed consent form for you to keep.

Thank you for reading this information sheet and for considering to take part in this research study.



CONSENT FORM FOR ADULT REFUGEES IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and listened to an explanation about the research.

Title of Study: A qualitative research perspective on how refugees use technology to achieve the best possible life situation in the new circumstances

Department: UCL Interaction Center

Name and Contact Details of the Researcher:

Name: Anouk Harde, Email: anouk.harde.17@ucl.ac.uk, Telephone: +4915207348307

Name and Contact Details of the Principal Researcher:

Name: Ann Blandford, Email: a.blandford@ucl.ac.uk, Telephone: +44 203 108 7049

Address: UCL Interaction Centre, 2nd Floor, UCL 66-72 Gower Street, London WC1E6AA

Name and Contact Details of the UCLIC Data Protection Officer:

Name: Louise Gaynor, Email: l.gaynor@ucl.ac.uk, Telephone: +44 203 108 7050

Address: UCL Interaction Centre, 2nd Floor, UCL 66-72 Gower Street, London WC1E6AA

This study has been approved by the UCLIC Ethics Officer: Project ID number: _____

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
1.	<p>*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction</p> <p>and would like to take part in an individual interview</p>	
2.	*I consent to participate in the study. I understand that my personal information (gender, age, country of origin, years in host country) will be used for the purposes explained to me. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing.	
3.	<p>*I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified.</p> <p>I understand that my data gathered in this study will be stored anonymously and securely. It will not be possible to identify me in any publications.</p>	
4.	*I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.	
5.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.	
6.	I understand the direct/indirect benefits of participating.	
7.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
8.	I understand that I will not benefit financially from this study or from any possible outcome it may result in in the future.	
9.	I understand that I will be compensated for the portion of time spent in the study (if applicable) or fully compensated if I choose to withdraw.	
10.	I agree that the anonymised transcriptions of my research data may be used by others for future research. No one will be able to identify you when this data is shared.	
11.	I understand that the information I have submitted will be published as a report and I wish to receive a copy of it. Yes/No	
12.	I consent to my interview being audio recorded and understand that the recordings will be destroyed within 3 months of the data being collected.	
13.	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
14.	<p>I hereby confirm that:</p> <p>(a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and</p> <p>(b) I do not fall under the exclusion criteria.</p>	
15.	I have informed the researcher of any other research in which I am currently involved or have been involved in during the past 12 months.	
16.	I am aware of who I should contact if I wish to lodge a complaint.	

17.	Use of information for this project and beyond I would be happy for the transcripts of the data I provide to be archived on an encrypted external drive. I understand that other authenticated researchers will have access to my anonymised data.	
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If you would like your contact details to be retained so that you can be contacted in the future by UCL researchers who would like to invite you to participate in follow up studies to this project, or in future studies of a similar nature, please tick the appropriate box below.

	Yes, I would be happy to be contacted in this way	
	No, I would not like to be contacted	

Name of participant

Date

Signature

Researcher

Date

Signature

APPENDIX 3: GUIDELINE FOR SEMI-STRUCTURED INTERVIEW

Introduction

Hi, I am Anouk. Thank you for meeting with me.

I am a postgraduate student at UCL and I am currently working on my dissertation. I am writing about how refugees use technology to achieve the best possible life situation in the new circumstances. This is also what I want to talk to you about today.

Do you have any questions so far?

I have prepared a couple of questions. We will first talk about how you use technology in general and then move on to some more specific questions that address different areas where technology could be used. Please feel free to talk as much or as little as you want about each question. If you don't want to or can't answer a question just let me know and we will move on.

Our conversation should not take longer than 50 minutes.

Is this procedure alright for you?

Do you have any (more) questions for me?

This is the information sheet and consent form which I've shared with you in advance. Please take a couple of minutes to read through the information again. When you're done you can sign the form here (*show where to sign the consent form*).

It says in the consent form that I will record our conversation. I will use this to re-listen to the conversation and transcribe the recording. I will anonymise the data when I transcribe the recording. Me and my supervisor will have access to the transcriptions. I will use the transcriptions to analyse the interviews. The recording itself will not be shared with anyone - only I will use it.

Do you have any questions about this?

Is it alright for you if I start recording now?

Interview Guideline

Technology use in general

Do you have (access to) a smartphone, computer, tablet?

How frequently do you use these devices?

What do you normally use them for?

Technology use in the formal domain of be(com)ing a refugee

What role did technology play in your asylum application process?

Do you use technology to inform yourself about your rights and responsibilities?

How do you use it?

Where do you go to access information?

Is this a more active or passive way of obtaining information? (e.g. asking questions on forums versus reading information on webpage)

How do you get to these websites?

How do you decide which website to look at? / which link to click on?

Does this work well? Does it help you?

Are there any problems with this?

Is something missing?

Does something not work correctly?

Can you think of anything else where you have used technology in the legal process of applying for asylum?

Technology use for accessing basic means

Did or does technology support you in getting access to education / housing / employment?

How do you get to these websites?

How do you decide which website to look at? / which link to click on?

Do you use technology to access health services?

How do you use technology with regards to health services?

Are there specific applications / forums or other platforms you use?

Does it help you?

What could be even better?

You experienced a lot before coming to Germany, do you use technology to cope with this or address this?

Does technology help you with this?

Is there anything that isn't helpful or maybe even makes it worse?

Is there anything that could be done (better) here?

Can you think of anything else you have used technology for that is related to accessing basic means?

Technology use to understand the host country **and stay connected to the home country**

Do you use technology to inform yourself about German culture?

How do you use technology to inform yourself about German culture?

How do you get to these websites / platforms?

How do you decide which website to look at? / which link to click on?

Does this work well? Does it help you?

Are there any problems with this?

Is something missing?

Does something not work correctly?

Do you use technology to learn German?

How do you get to these websites / platforms / apps?

How do you decide which website to look at? / which link to click on? / which app to download?

Does this work well? Does it help you?

Are there any problems with this?

Is something missing?

Does something not work correctly?

Does technology play a role in making you feel safe in Germany?

How does it achieve this / not achieve this?

What could be better?

Do you use technology to inform yourself about news?

...about your host country and what's happening there?

...about your home country and what's happening there?

Does technology play a role in how connected you feel to your home country?

For example do you use it to stay connected to the culture of your home country?

Can you think of any other way you have used technology to get a deeper understanding of Germany?

Can you think of any other way you have used technology to stay connected to your home country?

Technology use in the social domain

Do you use technology to keep in contact with your friends or family?

How do you use technology to keep in contact with your friends or family?

What medium do you use?

What platforms do you use?

What is working well here?

Where are problems? Is there anything that's not working well?

Do you use technology to establish new social connections?

How do you use technology to establish new social connections?

What medium do you use?

What platforms do you use?

What is working well here?

Where are problems? Is there anything that's not working well?

(How) do you use technology to connect to other refugees?

...people with a similar culture

...UK citizens?

...people with a different background than yours?

What is working well here?

Where are problems? Is there anything that's not working well?

Can you think of anything else you use technology for in the context of social relations?

Closing questions

What are the main challenges when you use these devices and platforms?

Is there anything we didn't cover that you use technology for?

Great, thank you. I am going to stop recording now.

Debrief

Thank you for your time. It has been very nice talking to you!

I am conducting interviews with a couple of more people. I will adapt my questions a bit depending on who I talk to and what I have found out in past conversations, for example the one I have had with you today. From these interviews I hope to find out a bit more about how refugees coming to this country use technology. I also want to discover what you need so that we can design technological solutions in the future that can support you even better.

So thank you again.

Here are my contact details in case you have any more questions or comments and these are my supervisor's contact details.

Do you want to ask me anything before I go?

Thank you again and enjoy the rest of your day.

APPENDIX 4: EXEMPLARY INTERVIEW TRANSCRIPT

Interview Transcript - Participant 5

You have a smartphone and a computer right?

Yes

Do you also have a tablet or a different device, for example a TV?

Yes, I have a TV

And how often would you say you use your computer and your phone and you TV?

Most of the times... like since 3 months, since I'm working, I use my laptop and computer the most, because of my work and otherwise when I'm at home also my phone mostly. I spend a lot of time on my phone and often with not that important stuff, like Facebook or something like that. I also need it to contact my parents. Sometimes when I have to get something done at home I also use my laptop. I don't use the TV very often, I don't watch a lot of TV. My phone mostly, also because I use Youtube.

On the phone more fun stuff, like Facebook and Youtube and your laptop more for work...

Exactly, so most of the times when I want to write an official email, an application or something like that, so always if it's something serious I use my laptop. But for fun or that stuff I use my phone or the TV or something like that.

To stay in contact with your parents you also use your phone...

Yeah exactly, pretty normal

And did you use your phone and your laptop when you were applying for asylum too? In this legal and official process?

Before I started working?

Yes...

I only had a different laptop that wasn't very good. I only used that one a bit when I was writing my CV in German and when I was applying everywhere. And I practiced a bit of Photoshop so that I won't forget it. I was planning to work somewhere. Otherwise my smart phone I used it in the same way I'm using it now in my free time.

Did you also use the internet to inform yourself about your rights and responsibilities?

Ah, no, I didn't use that. The papers that I got from the different offices were enough for that. I got those in my native language and that was enough everything I was reading there.

You didn't feel like you had to look up more stuff because you had gotten the information on leaflets or so?

Exactly and when I arrived here I went to the police straight away and they told me all the information, exactly what I needed to do and step-by-step, every office gave me leaflets telling me what to do. It is very uncommon that they tell you you need to do something on a webpage online. That rarely happens.

And then they give you exactly the webpage, like the link?

Yes they also give me a leaflet on which it says you need to go to this webpage and you need to do this there. I also used it when I was searching for an apartment. I also used my phone here quite often to search for that. There is an app with which you can search for an apartment. The first

apartment I found in a Facebook group. I posted a post there saying that I am looking for an apartment and that's where I found the first apartment and I also found the second one on the internet.

Can you remember what the app was called?

No, I can't remember what it was called. A friend of mine showed it to me and then I downloaded it but I can't remember the name.

Cool and you just messaged the people that had posted an apartment?

Exactly

Through the app or via email?

On this app if you want to send someone something then you need to use your email. So that's how I contacted the people. I also tried different ways. I also searched on Google, for example I searched for "Wohnen mit Hilfe" (living with help) in the beginning, because it is difficult to find an apartment in Munich. I also searched that and was in contact with an organisation...

...that help you find an apartment?

Yes exactly, I contacted them

And you found them through Google?

Yes, via Google. Someone told me search for "Wohnen mit Hilfe" on Facebook. And I searched for it on Google and I found a page and contacted them.

And for your work now, did you also use the internet for that?

With "awo", where I was, with the help of "awo", I got a page on which I could search for jobs. There I sent various applications and then I got this work.

So you had a page on which different jobs were advertised...

Exactly

You got that recommended?

Yes

Where there any problems or anything that didn't work well? Where technology didn't support you that well when you were searching for an apartment or a job...

Not when I was searching for jobs. For example it is often at the university... so my goal in the beginning was that I continue to study and every time I went to the university and my German was worse than it is now, I didn't speak German very well and every time I went to unis and said that I want to get some information on how I should apply, which documents I need, then they often or most of the times said that is our webpage, there you can search for that information. That was really complicated for me, because it was all in German and I had to try and somewhere something was written about refugees or foreigners and how they can apply. That was really annoying because they always said go to our webpage...

Because you made the effort of going there and then they always told you to go online instead...

Exactly

And you didn't find the information on that page...

Exactly, that was always hidden or very difficult, it was written too complicated for me. Especially in the beginning I just wanted to have a spot where I could improve my German language skills and

then continue with my studies, so I didn't want to continue with my studies immediately, because I didn't have enough practice with the language. Yes well that was complicated for me...

And thought that you could maybe also learn the language at the university...

Yes for example at the LMU you only need to have an A2 level at the beginning and then you can continue until C2. And there were different universities that said the same thing.

But you didn't find that on the webpage?

Yes I searched and language-wise it was really difficult for me. I read but it takes extremely long and I often read something that doesn't have anything to do with it.

Because you didn't know whether or not this was the correct page and you spent time reading it and then at some point you notice that it's not the right page...

Yeah on some pages there wasn't anything specific to what I wanted to know, about foreigners and how they should apply...

And then you read and read...

for nothing... yes. Sometimes I got help from some Germans and we still couldn't find anything. That was so annoying.

Did you also try to translate that?

Yeah I did that a couple of times, but it doesn't help very much because if you translate a complete page then it often changes completely. It's often translated incorrectly... or a bit unclear. For example I read somewhere that I need some documents from Syria and that's a lot of effort, I can't just trust Google Translator and start getting documents and then I go the university and they tell me no, we don't need that or something's not correct here. It's different to someone telling you face-to-face you need to do this and that.

Yes that sounds complicated... so for the job and apartment search it was okay but before that when you were interested in universities...

Yes, another good thing, when I moved to Munich my room wasn't furnished and I bought second-hand furniture online, on eBay and I bought all my furniture through that app, I thought that was very cool.

And did you find that app online or was it recommended to you?

A friend of mine told me to go to eBay "Kleinanzeigen" (small ads). And it was really easy to use, very clear, you can easily contact the people. You don't need a high level to contact the people. That was very good because I got all my furniture online.

Did you also use technology to find your way around in Germany? So to learn something about the culture or the language?

Hmmm... no, I didn't. I can remember that I did research something at one point to know a bit about German culture, mostly I asked a German myself, how does this work here or something like that. But I researched something else, I can't remember right now.

Maybe you'll remember it later. So you didn't really use it to learn something about the culture you rather asked someone in person. And for the language, did you maybe use it to translate?

In the beginning I didn't have a German language course, I didn't have a residence permit, I wasn't allowed to do anything and I am in Germany... I didn't have any German friends or something like that and then I did a German language course on Youtube. It was a Syrian teacher, he started from

zero up to the B1 level... I always learned German with that until I actually started school. So I had a base before I started.

And you were only allowed to start school after you received your residence permit?

Yes exactly, that were the first 7 to 8 months or something like that.

That's nice that he uploaded that.

Yeah, in the beginning I downloaded a different app and one of them was English-German although my English isn't very good, but in the beginning I didn't really find the possibilities. I tried a lot of apps and the best were German-English and then I said okay. And then someone recommended this Youtuber. That was much better, especially in the beginning you need Arabic-German.

Do you also use Youtube now? So maybe in the beginning to learn the language and now for fun?

Yes I did in the beginning, actually I still use it. There's also another Youtuber, he does B2 level... I already have C1 but I use it for repetition and to hear nice sentences. There is another Youtuber he does that level and I often do that now if I, well not regularly, before I did one lesson every day and I had a notebook and I really studied, but now I only do it while I'm eating, I put down my phone and watch something. He also does other things for example he has a program that's called "Frag mich" (Ask me). Refugees write him on Youtube, how can I say this and that in German? He's been in Germany for 15 years and he studied at the university, he has a high level and he answers that. He says.... he answers it in a different video and I watch all of those videos too. Because it's things you need in everyday life and he says it in a very nice way.

Probably things that are relevant because the others have the same problems...

Yes exactly...

Does he explain to you why you need to say it a certain way?

Yes he explains a lot... with a lot of sentences he says that you can't say that in German but you can for example say it in this or that way. It's very flexible and his accent, so for example I showed it to some Germans and they said he has the right accent, so he doesn't have an accent.

Do you think that technology plays a role in how secure you feel in Germany?

Yeah I do think so, technology helped me a lot... for example I moved to Munich, I don't know anything, anyone, if I wouldn't have a phone to use the Google Maps app I wouldn't have gone anywhere. Even today... you told me this department store, I knew I could find this on Google Maps. After work I searched for it or also before in my lunch break, when I told you I was coming, I looked up how far away that is so that I'll be on time. I looked and it was close by, not very far away and yeah, then I came here. I always use it without that I wouldn't have gotten through here in Munich.

You're now talking about finding your way around, about orienting yourself, is there anything else where technology makes you feel insecure or secure?

No, I normally think it's all positive. It helped a lot. Without the internet so without this technology it would be really stupid in Germany, I mean it would be very difficult. It already helped me in all kinds of areas, like apartment, work, even on the journey to find my way, everywhere...

And normally it's very good?

Yeah it's always very good.

Do you also use it for news?

I also use it for news, I don't use the radio very often for news because I always have to hear stuff about transportation or something like that, I'm not interested in that as long as I don't have a car,

but mostly... I follow different pages about different political areas, with Syrian News different pages and also with German news. I follow the pages of nearly every political party. I see what they write and I read the comments, I also like to see what the people comment especially if they're talking about refugees or something like that. Then I read how many people are on our side and often I see...

What the opponents...

Yes exactly.

And how or where do you follow those pages?

On Facebook

You followed them on Facebook and then you read the comments below?

Yes I am very diligent on Facebook.

Do you also write comments yourself?

No actually not. I once wrote a comment and on one page, I'm not sure if I'm allowed to say the page, but it was the AfD (far-right winged political party).

Very interesting...

Yes I read the comments there... actually I've been in Germany for 2.5 years and I've actually never experienced racists in every day life...

You never experienced racists in every day life?

Never, everyone is really nice to me or my friends. They are really normal, it never happened. Only if I'm on Facebook, that's why I often click on their profiles and have a look what they look like and why I don't see that on the street but on the AfD page... I normally don't comment at all, I don't like, nothing. On all pages - I just look. And at one point they were discussing about the same topic over and over again and I didn't think that that was very interesting. It was about whether Islam is part of Germany or not and I didn't think that was very important. It's not important whether it's part of it or not, it's not going to change no matter if they say yes or no. They talked about the same topic 10 times... they should also think about something else, not only about refugees and then at some point I wrote a comment, then I received so many answers on my comment and I didn't want that and that's why I deleted the comment and I never wrote anything again.

Do you want to tell me what you wrote?

I can't really... I thought... I can't remember 100% but I said something along those lines... you're so concerned about something that's not important, I now have concern for you... I am concerned about you... yeah something like that. I thought this topic was especially unimportant because a lot of religions, so no religion belongs to a country. You can't say in any country this religion is part of it or me. There are different religions in every country. It's really strange when something like this is discussed in Germany. Because in Syria to be honest, before the war, Syria was an atheistic country although it were mostly muslims, 45% were muslims but it was an atheistic country so everyone can live together under the same law. You can't say that Syrian is a muslim country although we have christians too, that doesn't work.

The state was separaten from religion?

Yes, there was no religion in the law. It was the same in Germany but I don't think it's very good when politicians talk about stuff like that. They also support the hate if they say: is it a part of this or not? They sensitise the topic, it should simply... is it part or not, you shouldn't think about that.

You don't have to talk about whether it is part of the country or not, you could maybe talk about how everyone can live together in a good way, so emphasise the positive?

What's written in the German constitution is really perfect you don't have to discuss about it. It's their strength that their against refugees. I also heard other opinions on other pages, for example from the "Grünen" (The green party - left-winged party) or other political parties. Most of it was positive. The AfD is especially negative.

And you follow the different political parties?

The ones very much for it and those very much against it...

So that you have an overview?

Yes, I want to know... so that I don't only follow the AfD and say everyone hates us or only follow the Grünen and say everyone likes us.

You want to get a feeling for the atmosphere in Germany...

Who are the most? I told you in everyday life I only have positive experiences.

That might be a bit... it might have to do with the security, so that you know... how the atmosphere is?

It helped me although I still don't quite understand why it's different... yeah one German did tell me that the AfD is louder in Facebook, they aren't that many but their louder.

Let's have a look at social contacts, you might use Facebook for that or also other apps, do you want to tell me what you're using to stay in contact with people?

I don't know, that's a bit embarrassing... in the beginning when I came to Germany I obviously didn't have any friends and I don't know somehow I found this app, it's called "Lovo" you can meet people using that and then I downloaded that app and then I met my first girlfriend.

Oh that's why you said it's embarrassing, that's like a dating app or something like that?

Yes, a dating app and through the app I met a girl and then we were together for 1.5 years.

Okay but not anymore...

Not anymore, after I moved to Munich the distance got too far.

Oh so you lived somewhere else before.

Exactly, 100km from here. It was too far for me and it was also difficult for her...

It's difficult over distance. Okay so you met here, I don't know the app. Is that for young people specifically?

Young and old

And then with your family and friends from at home, how do you stay in contact with them?

Whats App, Facebook. Normally WhatsApp. I also have different groups, I'm still in some from my university, for example we had a group in our course of in our class and I'm still in there although I don't have anything to do with that anymore. I stayed in contact with them anyways. I still write with them and they think it's interesting to hear my messages, what I'm doing... they also often want pictures from me. Where are you, show us. When I moved to Munich, Fotos from Munich, Fotos from my apartment and me too, when they have projects at university. I also recommend stuff sometimes if I have an idea. And with my family I also do video calls.

Through WhatsApp?

Yes also Whats App, we also used Skype but then Whats App added the video function and then we only used Whats App. Actually for everything, to send pictures, videos...

Did you also meet people here in a different way through the internet or apps? Or rather face-to-face?

You could say my former landlord, I befriended them and I met them through facebook.

On this Facebook page?

Exactly, I still visit him. That was also through the internet. Actually, if we connect everything it's all through the internet. Because the people I know, I mean my flatmates, I met them through my former landlord and my work colleagues too.

So indirectly through the internet...

Yes indirectly.

Can you think of anything else where you used technology that would be interesting to talk about?

News on TV are also part of this aren't they? I don't watch news on TV because I find that this area isn't very good. I think it is very much connected to politics, for example the news that are in German are very dependent on the German politics, for example if they show news about Syria, for example back then about Aleppo... I'm from Aleppo and my parents still live in Aleppo, for example back then there was a terrible time in Aleppo and they always reported completely false news, nearly 100% wrong. I have my parents there and I know exactly what's happening and it was always false news, that really made us look bad. My parents for example... so the war is between the government and the rebels and my parents live on the edge of Aleppo. Also the rebels aren't actually rebels, it's people that fight because of religion, they are real terrorists but still they're fully supported in German TV although we are bombed daily by them. And back then my dad also... well they shot him, in his stomach, his still alive... and the news they made me cry out of anger, because they say things that are really annoying, just because of politics, so that...

Because it makes sense for German politics?

Yes because Assad is on Russia's side and the side of the rebels is America. Germany sides with America that means we're supporting the rebels, no matter what they do. They destroyed Aleppo, they killed so many people, they are all terrorists, they are so religious, extremely... so that you can't live with them and their religion. Catholics can't go there. I personally had problems with them because of how I look... so they said I look like a woman. They are extremely religious and stupid... Assad is a dictator but they support the rebels, so in the end the dictator goes, well great then we have new dictators that additionally are extremely religious and stupid and there is no other way and still they support these people on the news. That made me very very... that was the worst if I should say something about technology... They sell the blood, the children... they support the war they don't want... their not looking for a way to end this war, so that less people die instead they support the rebels that maybe own 20% of Syria and as long as they are supported, also on the media... then they're really being supported and through that people get killed. Because of the media more people will be killed. I think that is infuriating.

It's also not that simple, there are different rebel groups right?

Thousand groups, in the beginning... so when the revolution against Assad started, I was with them completely but after I had seen the others, I was completely... I just want them to go away from Syria and if he stays, Assad, then yes he's a dictator, but before the war we had freedom, we had a good live, a good country we were just lacking political freedom that was all. And now we want to get someone else who's stupid and extremely religious... and they fight because of that and most of the time, most of the time our people aren't very religious, they can't live with those people.

It was very modern in Syria, because it wasn't very religious...

No and really I don't think that the people before the war were very religious. The country was very secure, I could do what I wanted at 3 o'clock at night, exactly as in Germany. But after the war, personally I am asking myself where the people came from, those terrorists that do those things, that have those thoughts. I ask myself that because before the war I never met anyone like that. But unfortunately they came from everywhere in the world, the people that have those thoughts, they came to Syria and what is really terrible is that they are still being supported instead of them... just because of politics. Because it helps politics... I know that Assad is a dictator, I know that, I'm not necessarily on the side of Russia but I search for security for Syria, I think that's the right way, to get rid of the terrorists... since 7 years we have war and they still do the same, when will it end? How many refugees do we have now, how many dead people? How many people that were handicapped... In the past before the war a lot of Europeans had probably never heard of Syria, because no-one wanted to leave their country, we had a good live... and I think from the media... I can criticise this a lot.

So you think that the media is too much influenced by politics and it would be better to show different perspectives...

Yes and I don't think it's very influenced on Facebook, everyone writes what he wants and it is not completely official that's why no-one is interested in what they write. Of course they are, they are influenced by the media that they see on TV or somewhere else but still something else remains... you can say what you think, comment. If I see something that's wrong then I can comment, no in Aleppo you don't have this or that... I have someone in Aleppo and I know what's happening there. Actually the same in Syrian news, I don't watch it on TV, I look at Facebook, I call my parents and ask what's happening, friends of my and so on... because now, if you watch news that are related to Assad then they are completely influenced by that side. Then you'll never know what's true, that's why...

I have a friend from Jordan and they started a revolution there last week and she follows the whole thing on Twitter. Do you use that in Syria?

No in Syria it's Facebook. Also Instagram but mostly Facebook, first instance Facebook.

Can you think of another problem or challenge with technology?

Otherwise everything is positive.

We talked about the language before, that when you come to a country that things are phrased in a complicated way and that there are difficulties finding some information on university webpages and that you can't translate a whole page because Google Translator isn't good enough for that.

We also have a lot of positive stuff, there are so many positive things in Germany in this respect.