Inclusion in the event industry focusing on visually impaired participants

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Abstract

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The thesis discussed improvements of concepts for visually impaired participants in events. The objective of the thesis was to define improvements of different front- and backstage actions for creating more accessible and inclusive events for visually impaired participants. The purpose was to create a general customer journey map for visually impaired participants to increase the awareness and understanding of vision impairement.

The theoretical framework was based on literature of events management, including customer journey mapping and experience management. Additionally, the concept of disabilities and vision impairment, its challenges, and solutions was explained. Lastly, the concept of social inclusion and benchmarking examples of inclusion in the event industry were presented.

The study was conducted by semi-structured interviews with interviewees who are affected by vision impairment for finding improvements based on personal experiences and ideas. Therefore, the research methodology was qualitative. The results were analysed by comparing the answers of the respondents with the prevoiusly done theoretical framework.

The results indicated that information regarding accessibility at the event need to be provided beforehand for deciding to pariticipate and prepare for an event accordingly. Additionally, accessible transportation need to be provided. Furthermore, venues might be adapted by different technological devices and safety measurements for provding a similar and safe experience for visually impaired participants. Moreover, a two-senses guidance and signage system can be implemented for offering information to persons with visual limitations. Lastly, staff training regarding disabilities and inclusive approaches should be provided beforehand.

In conclusion, a customer journey map for visually impaired participants was presented. The interviewees' answers and ideas provided valuable and subjective insights which were analysed by comparing them to the sources of the theoretical framework and the need of inclusion in events was evidently presented.

Keywords
Events management, inclusion, vision impairment, accessibility

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1 Introduction

Social inclusion is the process of offering solutions, opportunities, resources, and respect towards all members of society, and particularly, to disadvantaged individuals and minorities. It includes improving environments and various aspects of everyday lives' situations for fair participation. The opposite component of inclusion is exclusion, which is defined by the United Nations (2021) as the limited access to resources and opportunities for certain parts of society. (United Nations 2021.)

A minority group, which might face exclusion in societies, are visually impaired persons. Vision impairment is a limitation in the visual sense and can be a physical disability. The limitation might create certain challenges and needed adaptions in the lifestyle of affected persons. A disability can impede affected persons by different body structures as well as challenges due to perceived normative regulations of majorities in the environment. (WHO 2021b; Lecerf 2017, 15.)

As part of our society, events are an important possibility for social and educational encounters, which should be accessible to every member of a society or community. The event industry is the organization and implementation of social assemblies for different purposes, scopes, consumers, and types. The concept of inclusion in the event industry aims to offer fair participation in events to every member of society. (Lecerf 2017, 15; Surve 2019.)

The reasons for the importance of inclusion of visually impaired persons in events are primarily to provide social encounters, create values, understand different perspectives, and offer equal opportunities. As an inclusive society, it is essential to provide fair and equal possibilities to learn and engage. Additionally, events are significant social encounters for learning and understanding different perspectives, concepts, and ideas by various social groups. The Global Burden of Diseases (2017) has ranked vision impairment, including blindness, as the third highest cause among all impairments. Additionally, it has been shown by the WHO (2019, 5) that every person might be affected by an eye condition, if an older age will be reached. It shows how important it is to provide solutions and adaptations in events management processes to offer accessible and inclusive events.
(WHO 2019, 3-10.)

The thesis aims to present recommendations and improvements for different events to make them more accessible and inclusive for participants with vision impairment.

Therefore, a general customer journey map for a visually impaired participant is created to increase the awareness and understanding of persons without vision impairment.
The research questions are:
“How to make events more inclusive for participants with vision impairment?”
“How to inform event organizers and other participants about vision impairment for better integration processes?”

Due to the scope of the topic, the research is limited towards the studied disability and event types. Firstly, especially older persons might face different disabilities, for example, visual and auditory limitations. The research is focusing on persons with only vision impairment. Secondly, there are many various event types with different programs and offers, which also might evoke different challenges for visually impaired participants. Therefore, only the most common event types including cultural happenings, festivals, conferences, and fairs are represented. Additionally, the focus is on on-site events, and not on offline events.

The thesis consists of a theoretical framework, methodology, results, recommendations, and discussion. The theoretical framework in chapter two includes concepts, terminology, and theories about customer journey maps of events, disabilities, and social inclusion. Firstly, the concept of customer journey maps in general as well as of events are described. For understanding possible improvements, it is important to recognise all stages and steps of events for participants. Secondly, the terminology of disabilities as well as vision impairment including its challenges and solutions are explained. Thirdly, the concept of social inclusion is described. Furthermore, ideas and concepts of inclusion in the event industry are presented by different benchmarking examples.

Moreover, the methodology of the study is presented in chapter three. It includes the concept of qualitative research, the description of the implementation of data collection, and lastly, the analysed results. In chapter four recommendations combining the theories from chapter two and findings from chapter three are presented. These include again a customer journey map with ideas and improvements for inclusion for visually impaired participants. Lastly, chapter five summarises discussions regarding the conducted research. It consists of the research’s validity and reliability, self-evaluation, the possible use of the recommendations as well as further research ideas. The first generalised customer journey map of events can be found in appendix one. The adapted customer journey map of events with improvements for visually impaired participants can be found in appendix two.

2 Inclusion in the event industry

The following chapter presents a theoretical framework for this research paper. It consists of three main parts: customer journey map of events, disabilities, and inclusion.

2.1 Customer journey map of events

The following chapter focuses on the theory of customer journey mapping, including its aim and advantages. It also describes a general customer journey map of an event regarding different possible touchpoints of participants during an event journey. All explained stages of the customer journey map aim to show where inclusion and accessibility need to be provided and will be re-mentioned in further chapters.

A customer journey map is defined by Agius (2021) as “a visual representation of the process a customer or prospect goes through to achieve a goal with [your/a] company”. The idea roots in a model defined by Howard and Steth (1996) about a customer’s purchasing process, including recognising the own needs, researching information, purchasing, and post-purchasing while using different channels (Lemon & Verhoef 2016). The customer journey map aims to increase the understanding of the customers’ needs and, in conclusion, to improve the company’s processes for a better customer experience. It focuses on the decision-making process of customers, particularly highlighting the different touchpoints where most customers decide to purchase or to not purchase. (Kalbach 2016.)

The advantages and benefits of a customer journey map can affect different departments of a company. Firstly, the customers’ pain points can be analyzed in detail, and the gained knowledge can be used for product and service improvements. Secondly, customer service can improve their communication between the customer and the business for a more efficient purchasing process. Thirdly, inbound marketing can focus on valuable and interesting content for the specific target audience, which is defined in the customer journey map. (Agius 2021.)

To create a customer journey map, it is important to define overall objectives that need to be achieved. Additionally, it is beneficial to create one or more buyer personas and their aims, which are defined by Kusinitz (2018) as a representation of the business’s target audience based on research of real customers and the business’s statistics. This supports the understanding process of creating the touchpoints of customers with the company. Lastly, it is recommended to follow the own customer journey to re-live the customer’s point of view. (Agius 2021.)

As explained by Lemon & Verhoef (2016) a customer experience can be divided into three key stages: pre-purchase, purchase, and post-purchase. The pre-purchase includes all interactions which are done before the purchase and are, for example, becoming aware of a product or service through marketing as well as doing research, and the decision-making process to purchase or to not purchase. The second stage includes characteristic actions or non-actions such as choosing, ordering, and paying (Lemon &Verhoef 2016). The last stage is the actual consumption as well as after-sales services. This phase can also be the decision-making process to become a loyal customer. (Lemon &Verhoef 2016.)

As already mentioned, the different touchpoints during the three stages can be experienced through different channels. Lemon & Verhoef (2016) specified them as "brand-owned, partner-owned, customer-owned, and social/external/independent". Firstly, brand-owned touchpoints are controlled by and depend on the business itself. Secondly, partner-owned touchpoints are interactions with stakeholders and partners of the business, for example, marketing agencies and delivery services. Thirdly, customer-owned touchpoints are the individual needs and pain points as well as expectations of each customer. Lastly, social, and external touchpoints can include for example other customers and independent information, which influence the decision-making process. (Lemon & Verhoef 2016.)

A customer journey map can be used for any business and therefore, it is also an important measurement tool for events. It also can be called attendee journey map, which focuses more on the touchpoints of experiences between the attendee and the organizer. (Gale 2018.) As described by Hormess, Lawrence, Schneider & Stickdorn (2018, 43-46) customer journey maps can be used for visualizing intangible experiences, which consumers perceive.

Although a customer/attendee journey map is an ultimate customized process, this tool is used for the research paper as a general summary of the event procedure. To understand the attendees' touchpoints in detail of different events, it is used as an example. The three stages, which were mentioned above, can be adapted to an attendee journey map: pre-event, during the event, and post-event. (Betts 2020.)

For a better visual representation, the customer/attendee journey map usually shows five stages: awareness/attention (pre-event), consideration (pre-event), purchase (pre-event), consumption/service (during the event), and loyalty (post-event) (Betts 2020). Furthermore, the map consists of steps, which are all possible actions and non-actions. These are a further division of the mentioned stages. Additionally, touchpoints are

presented, which are all interactions between the organization and an attendee. Lastly, there are moments of truths, which are moments, where participants make decisions regarding the event. (Hormess & al 2018, 56.)

Figure 1 presents a generalized example of a customer journey map for an imaginary event. Although the purchase usually is part of the second stage, in the event customer journey map it can be part of the first stage since the event itself has a high number of touchpoints between the attendee and organizer which are crucial for a positive experience for participants. (Betts 2020.)

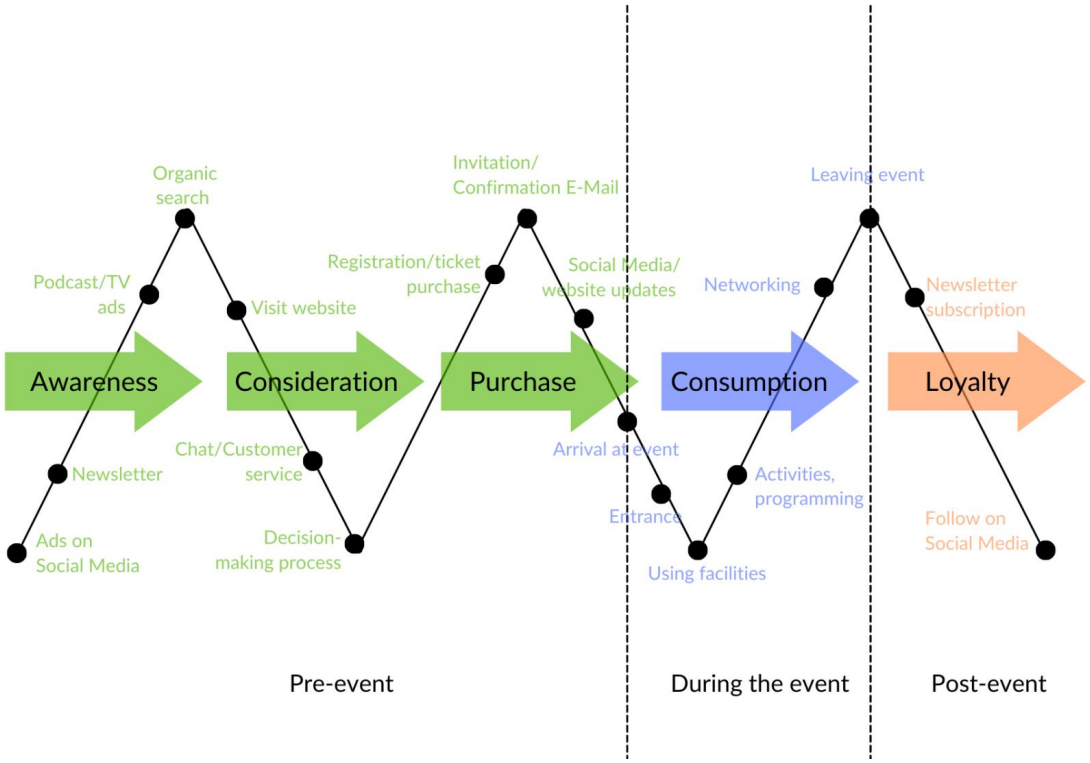

Figure 1. General customer journey map of an event

In the following chapters, the different stages are explained further.

2.1.1 Pre-event process

The pre-event process includes the attention/awareness, consideration, and purchase steps of the customer journey map (figure 1). As shown in the case study of “Paaspop Den Hout” by Gerristen and Olderen (2014, 58), the awareness stage is the first touchpoint of a possible attendee to participate in an event. There is a wide variety of different channels which can be used, and they depend on the event type and scale. Examples of common channels are the event organizer’s owned website as well as their owned social media channels. Furthermore, marketing includes press releases in local, national, and international newspapers and magazines, other social media channels of

partners and stakeholders as well as influencers, or other advertisers and other advertisement possibilities like billboards, radio, and TV. Lastly, word-of-mouth, either from reviews or acquaintances, is part of the awareness stage. On the other hand, frequent attendees, or customers of previous events can catch attention by newsletters or inbound e-mail marketing from the event organizer. (Booth 2010, 23-25; Gerristen & Olderen 2014, 57.)

The consideration stage is an individual experience by every customer and is based on research. The aim is to receive enough information about the event to decide whether to attend it or not. The information might be gathered by the provider itself via the website, social media channels, ads, and newsletters as well as by partners and outsiders. Additional information is also collected via customer service. The decision to attend depends on external factors, for example, timing and accessibility of a venue and different program options as well as on individual preferences of interest and values. As shown in the case study of “Paaspop Den Hout” (2014), the programming, including the expected atmosphere and content of the event, are the main drivers of the decision-making process. (Booth 2010, 23-25; Gerristen & Olderen 2014, 57.)

If the consideration stage turns positive, the purchase stage starts. Regarding events, it commonly contains an (online) registration or ticket purchase. The ticket purchase leads to a physical, or online ticket and the registration leads, for example, to an invitation e-mail. Throughout the waiting process between the purchase and the actual event, the organizer can try to keep the interest of the participants by presenting teasers and more information on social media, websites, newsletters, and advertisements. This content is creating and building up the expected atmosphere at the event for a better value expectation for the participants. (Booth 2010, 23-25; Gerristen & Olderen 2014, 57.)

2.1.2 During the event

The event itself represents the main touchpoints for the participants, where the created expectations need to be met to guarantee satisfaction. Usually, an event begins with the arrival, entrance, and welcoming. Depending on the event type and scale the venue, catering, programming including timing, atmosphere, decoration, lighting, workshops, meetings, and customer service are crucial parts of the event, which are explained further in this chapter. However, it is important to mention that not all event types and program offers are represented in this chapter due to the high variety of event types. Additionally, there are certain background actions, which are not direct touchpoints for the participants, however, they are immensely important for the front actions and touchpoints. These are

mainly part of the safety and risk management as well as the logistics. (Oriade, Robinson & Gelder 2010, 74; Gerristen & Olderen 2014, 57-61.)

The arrival to the event is an important touchpoint and experience for the customer already. Accessibility increases the positive expectations for the event itself, which has also been shown in the case study of “Paaspop Den Hout” (2014). Therefore, it is important to consider a venue which is accessible by different transport methods for the different needs of participants. Additionally, appropriate guidance is crucial, which can include maps delivered pre-event as well as signs near the venue. The safety of the participants needs to be considered, especially in events with a high number of participants. For example, the public transportation might be on a higher frequency in the event area, and there can be staff guidance in parking areas. (Oriade, Robinson & Gelder 2010, 82-85, 106-107; Gerristen & Olderen 2014, 57-61.)

The entrance needs to be thoughtfully organized. The ticket or invitation checking can usually be processed with digitalized tickets, which can be scanned by staff or entrance gates. Repeatedly, the security measurements have an important role in this touchpoint. In many cases, safety check-ups, for example, metal detectors should be considered. However, a personal welcoming, for example, guidance to the cloakroom or opening area, is recommended. (Oriade, Robinson & Gelder 2010, 83; Gerristen & Olderen 2014, 57-61.)

The atmosphere is created by the venue, the decoration and lighting, the catering, the programming, and the participants themselves. A venue needs to be carefully picked, not only for the atmosphere but also according to the expected number of participants, the different needs for the programs, and according to safety regulations. Certain needs are, for example, a specific number of rooms, stages, and technological accessories. On the other hand, the risk of accidents needs to be minimized by the appropriate venue. (Oriade, Robinson & Gelder 2010, 81-89; Gerristen & Olderen 2014, 57-61.)

The programming can include, for example, workshops, lectures, concerts, meeting times, fairs, classes, and dining. Depending on the event type, the concepts are very versatile and individual. It is important to meet the needs and expectations of the target audience for the particular event type, which were created during the advertisement and pre-event phase. The timing and frame are crucial for the atmosphere and satisfaction since an appropriate combination of different activities and choices as well as enough spare time for breaks are needed for different target groups and their expectations. (Oriade, Robinson & Gelder 2010, 85; Gerristen & Olderen 2014, 57-61.)

Additionally, part of the atmosphere and programming are experiences. Nowadays, creating meaningful moments is one of the main purposes of attending events for participants. Event consumers are an important active part of the event process. Therefore, involvement and interaction of participants in the programming is important to create personal experiences. (Gerristen & Olderen 2014, 50-54; Miettinen, Markuksela, & Valtonen 2015, 25-27.)

The guidance in the venue can be done by signs as well as customer service. A combination of both is the safest. The staff should be trained not only for the venue, but also for different event-related information, which customers could ask for. Each customer can have their individual needs which need to be solved. (Oriade, Robinson & Gelder 2010, 83; Gerristen & Olderen 2014, 57.)

Depending on the scale and event type there are many different issues which need to be organized and considered to present a safe event, which matches the expectations of the participants. (Oriade, Robinson & Gelder 2010, 90; Gerristen & Olderen 2014.)

2.1.3 Post-event

Leaving the event can be compared to arriving at the event. Therefore, certain safety measurements need to be met again as well as a good transportation is important. The de-construction, which is a crucial part for the event organizer, should not start or bother the attendees, since it might disturb the atmosphere as well as it can increase the risk of accidents when it is not done by professionals. (Oriade, Robinson & Gelder 2010, 108; Gerristen & Olderen 2014, 56.)

An important touchpoint of the post-event are memories from the event. These can be very versatile and individually or commonly. For example, the event organizer can provide an after-movie for the social media channels and press releases as well as goodie bags. On the other hand, participants might take pictures or videos during the event. However, these memories can be also non-tangible, which are funny and interesting stories, new gained knowledge as well as possible friendships or network connections. These are obviously, very individual, and not simple to influence, however the possibility to gain these memories can be created by a good atmosphere and meeting the set expectations. (Oriade, Robinson & Gelder 2010, 109; Gerristen & Olderen 2014, 56.)

If the event is repetitive, for example annually, the previous participant can decide to become a loyal customer by participating in the next event again, for example, by

following the social media channels or subscribing to the newsletter. (Gerristen & Olderen 2014, 61.)

2.2 Disabilities

The following chapter focuses on the definitions of disabilities and describes the different forms and the frequency of disability in our society. Secondly, it focuses on visual impairment as a disability with its definition, forms, frequency, challenges, and solutions. However, due to the different conditions and the various intensity and subjective perceptions of disabilities, there is no objective definition, which is generally and globally accepted (Lecerf 2017, 3).

Scientists and philosophers developed two different approaches of definitions: the medical and social approach (Wassermann, Asch, Blustein & Putman 2017). The medical definition is represented, for example, by the Centers for Disease Control and Prevention (2020) as an impairment of the body or mind which limits or impedes specific actions with the surrounding. Further, within the medical definition, disabilities are categorized into different forms. Wassermann & al. (2017) describe them as “physical, sensory, cognitive [and] affective”. Additionally, the Centers for Disease Control and Prevention (2020) categorizes them into limitations in vision, hearing, intellect, learning, movement, mental health, remembering, communicating and social relationships. (Wassermann & al. 2017; Centers of Disease Control and Prevention 2020.)

On the other hand, a disability is summarised by the United Nations (2017) as a long-term impairment, which impedes specific actions and interactions and an equal and full participation in a society and environment compared to others. Due to constant prejudices against persons with impairments, the UN Conventions (2017) emphasised the importance of defining disability as a “result of the interaction between a person and his or her environment” (United Nations 2017). Therefore, the UN states that every individual’s perception depending on education, history, politics, and culture, creates disabilities. As an example, the UN Convention explains that a person in a wheelchair might have difficulties working not because of the “disability”, but certainly because of the inaccessibility of the environment for wheelchairs. This explanation represents the social definition of disabilities. (United Nations 2017.)

Further, the World Health Organisation (WHO) (2021b) defines disability as a difference from “norm conditions” regarding body functions and structures. Wood classified in the “International Classification of Impairments, Disabilities and Handicaps” (1988) disability in three different forms: impairment, limitation, and restriction. Firstly, impairment is the

actual body structure's difference, such as amputations, damages of nerves, and spinal cord injuries. Secondly, limitations mean the inability to do certain actions, for example, to communicate, to walk, and to see. Thirdly, restrictions mean the inability or limitation to participate in society, for example, the inability to earn a living. (Lecerf 2017, 3.)

Wassermann & al. (2017) also present a similar theory and call it the human variation model. It implies that the challenges which disabled persons are facing, are created by the discrepancy of the persons' characteristics and the social environment. Additionally, it is debated if there is even a difference between disability and normality due to the significant variation of human characters and structures. Therefore, it can be argued that impairment and disability are a "social construction classified by people" (Wassermann & al. 2017).

Further, Wassermann & al. (2017) demonstrate that disabled persons form a minority group in our society and face similar issues regarding exclusion and discrimination as minorities of race, religion, sexual orientation, and gender. The need for inclusion is explained further in chapter 2.3. In many societies, a combination of both theories is present, which also depend on each other. Disability is a combination of both a life with divergent body structures and functions as well as facing exclusion and difficulties based on these differences. (Lecerf 2017, 8.) According to Wassermann & al. (2017), often medical interventions, for example, surgeries, can support disabled persons to live. However, there is a social responsibility to include and improve the environment for support, including respect and justice towards the minority groups. (Wassermann & al. 2017.)

The reason for the importance to understand disabilities can be partly seen in the high numbers of affected persons. There are about 70 million persons above 15 years in the European Union who are facing difficulties or challenges with everyday tasks due to a limitation or disability. These are about 17% of the mentioned age group. Women with 19.9% are affected more often than men with 15.1%. Persons above 65 years represent about 42% of all disabled persons. Persons with lower education are more likely to be affected by disabilities than persons with higher education. (Lecerf 2017, 15.)

2.2.1 Reasons and causes for visual impairment

To understand vision impairment and its definition, it is essential how the visual system works and why diseases are causing vision impairment. The optical system contains the eye and optic nerves, which proceed the information to a brain area in which images are created. In simple terms, the eye consists of these main parts: iris, cornea, lens, vitreous body, and retina, which is explained in figure 2.

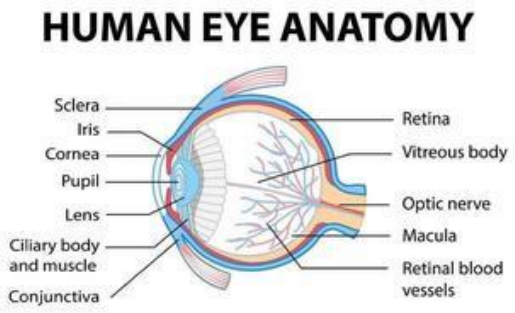

Figure 2. Structure of the eye (WHO 2019, 6)

The iris, which is a colourful plate including a “whole”, called the pupil contains muscles that can contract to increase or decrease the pupil, depending on how much light is entering the eye. In front of the iris is the cornea, which protects the eyeball together with lashes and eyelids from foreign bodies such as dust. (WHO 2019, 6.)
When the light enters through the pupil, it meets the lens, which is connected to muscles to focus on near or far objects. The retina consists of receptors to transmit the electrical signals to the brain. There are cone cells for colour vision and rod cells for black and white vision. The highest number of these receptors are in the fovea, a part of the macular. (WHO 2019, 6.)

There are different visual functions, which are needed for a fully functioning eye system. They are shortly explained in the following list with an example of use for a better understanding (WHO 2019, 8).

- Visual acuity is the ability to see sharply regardless of distance
- Near visual acuity: for example, reading, writing, using mobile phones, eating, etc.
- Distance visual acuity: for example, reading signs, recognising people, doing sports, watching television, etc.
- Colour vision: ability to differentiate objects of same shape and size according to colour, for example, in fashion, aviation, and differentiating medication
- Stereopsis/binocular vision: ability to calculate depth/distances, for example, for pouring water in a glass
- Contrast sensitivity: ability to differentiate objects according to different shades, for example, during the night
- Peripheral visual field: ability to see in the side vision, for example for driving and doing sports

(WHO 2019, 8.)

The leading causes of visual impairment are refractive errors, cataracts, and macular degeneration. Some different eye diseases and causes for vision impairment are explained further in the following list (WHO 2019, 7; Cattaneo & Vecchi 2011, 9; Epping, Fischer, Rauch, Wahl, & Wedlich 2006):

- Refractive errors are caused by an abnormal shape of the eyeball, which leads to blurred vision. There is a difference between myopia, also known as near-sightedness, so persons cannot see objects which are far away, and presbyopia, which is the opposite, where persons cannot see near objects, often starting at the age of 40 and older. About 2.3 billion persons have refractive errors worldwide. In many cases, refractive errors can be compensated with spectacles or lenses, and therefore, it does not lead to impairment; however, if it is not treated, it is counted as visual impairment, particularly, low vision. These are about 670 million persons.
- A cataract causes blurry vision due to a cloudy lens. It is one of the highest risks of vision impairment and about 47.8% of visually impaired persons are affected.
- Glaucoma is progressive damage of the optic nerve which might lead to severe impairment, and vision loss, which causes about 12.3% of vision impairments.
- The mostly age-related macular degeneration is damage of the retina. It leads to dark dots and shadows of the central vision. About 8.7% of vision impairments are caused by macular degeneration.
- Corneal opacities are caused by injuries, infections, or a deficiency of vitamin A during early childhood years. It leads to a scarred or cloudy cornea, and approximately 5.1% of impairments are caused by it.
- A diabetic retinopathy, which causes about 4.8% of impairments, leads to blocked blood vessels in the retina, which leads to a swollen retina.
- About 3.9% of impairments are caused by childhood blindness, which can be traced back to gene defects or diseases in early childhood which lead to blindness.
- Trachoma is a bacterial infection which blurs the vision and causes about 3.6% of impairments.
- A small amount of vision impairment is also caused by brain and/or nerve damages, which do not affect the eye itself, however, the information cannot be transformed into an image in the brain.

(WHO 2019, 7; Cattaneo & Vecchi 2011, 9; Epping, Fischer, Rauch, Wahl, & Wedlich 2006.)

The reasons for these diseases and disfunctions can increase due to the main cause of aging, genetics, for example, diabetes, and multiple sclerosis, and lastly, lifestyle, for example, smoking, nutrition, and exposure to deleterious gases. They can also be caused by bacterial, viral, and microbiological infections in different parts of the visual system. Environmental surroundings can also increase the risk of eye diseases such as the access to and use of hygiene, and medical care. However, in many cases, it has multiple reasons or causes. Even though many diseases or disfunctions cannot be healed, they or their progression can be prevented by good medical care. (WHO 2019, 15.) Cattaneo & Vecchi (2011, 9), show that the environmental and societal factors have the highest impact on vision impairment since approximately 87% of patients are from developing countries. The lack of sanitation, hygiene, and medical care lead to these numbers. In addition, it constructs a cycle of poverty and vision impairment. Since visually impaired

persons face higher challenges in finding employment in developing countries, they cannot afford medical care due to their poverty. (Christoffel-Blindenmission 2021.)

2.2.2 Visual impairment and blindness

The discussion about the human body's senses is versatile, and there is no final decision on how many senses there are. However, there are five senses, which are scientifically approved: seeing, hearing, feeling, tasting, and smelling. The sense of vision is the most dominant. The brain area for the visual sense is larger than all the other senses together (WHO 2019, 5). The reasons for the higher use of the visual sense are that the human's vision is more trustworthy than other senses due to its very detailed results and convenient use. (Cattaneo & Vecchi 2011, 6.) Globally, all societies are built on the sense of vision. For example, visual seeing is needed for mobility in cities, working life in economies, educational systems, and entertainment such as sports and cultural activities. Additionally, digitalization is also based on the vision in many cases due to screens with fast-moving pictures. Within the different members of the society, the communication depends not only on the auditory sense but also on the visual sense. In face-to-face communication non-verbal signs, including mimic expressions and gestures, are important for understanding emotions, humour, and meaning of words better. (WHO 2019, 3.)

Therefore, vision impairment is a limitation in the visual sense. It is defined by the WHO (2019, 3), as an eye condition which affects one or more parts of the visual system in accordance with one or more visual functions while interacting in and with an environment. There is not a globally accepted definition of blindness and vision impairment; however, by most European countries and the WHO it is defined by a vision loss of at least 70% (DBSV 2021).

Visual impairment and blindness are mainly based on visual acuity, which represents the sharpness of sight, and the visual field, which represents the size of the total area a person can see sharply. Visual acuity is measured with a numerical system, which shows the intensity of the vision impairment. A fixed chart with a distance of six metres to the tested person is placed with objects which need to be differentiated. The denominator in the measurement shows the distance in metres a person with healthy eyes would see the difference. At the same time, the numerator represents the metres the tested person can differentiate the objects. When persons are wearing visual aid, for example, spectacles or lenses, then these are worn during the tests. Therefore, vision impairment is counted as the best-corrected version of the vision. (WHO 2019, 15; Cattaneo & Vecchi 2011, 9.)

According to this measurement, visual impairment and blindness regarding visual acuity is defined as the following (WHO 2019, 15; Cattaneo & Vecchi 2011, 9):

- Mild impairment: 6/12 to 6/18
- Moderate impairment: 6/18 to 6/60
- Severe impairment: 6/60 to 3/60
- Legally blind: higher than 3/60

(WHO 2019, 15; Cattaneo & Vecchi 2011, 9.)

On the other hand, the visual field of a healthy sighted person is normally 60 degrees above and 75 degrees below the horizontal meridian. If the better eye has less than 20 degrees of a visual field, it is defined as low vision. If it is less than 10 degrees, it is defined as blindness. In conclusion, the International Classification of Diseases (2020) divides visual impairment into low vision and blindness. If the best-corrected acuity is between 3/60 and 6/18 and/or the visual field is less than 20 degrees, it is low vision. If the best-corrected acuity is less than 3/60 and/or the visual field is less than 10 degrees, it is blindness. (WHO 2019, 8; Cattaneo & Vecchi 2011, 8.)

Additionally, in rare cases the vision impairment is caused by colour blindness, contrast sensitivity and the imbalance of the eyes. Firstly, colour blindness is the inability to distinguish different colours, which is caused by an eye, nerve, or brain damage. Secondly, contrast insensitivity is the inability to see objects sharply, even though the measured acuity is in normal range. Lastly, the imbalance of two eyes is called amblyopia, where the brain favours one eye which leads to a smaller visual field. (Cattaneo & Vecchi 2011, 9.)

If persons with a certain condition do have no or only little access to appropriate eye care the limitation and therefore disability is higher compared to persons with accessibility to eye care. There are different diseases and reasons which can cause vision impairment, however, only some of them cause a disability. Nonetheless, each disease or disfunction of the visual system needs to be cured to prevent a higher risk of vision impairment. (WHO 2019, 3.)

According to the WHO (2019, 5) every person might be affected by an eye condition, if they reach an older age. Even though these do not have to lead to an impairment, they still require medical treatments. However, tens of million persons have severe eye diseases, which are counted as vision impairment. About 1.1 billion persons have a visual limitation, 43 million of them are legally blind and 295 million have an impairment. About one billion of these limitations could have been prevented by appropriate medical care. (Cattaneo & Vecchi 2011, 9; Christoffel-Blindenmission 2021.)

2.2.3 Challenges and barriers of visually impaired people in life

The life of a visually impaired person is affected by limitations in almost every part of everyday life. Challenges are, for example, the higher risk of accidents, restriction in mobility, barriers in information search, and communication, household, and (sports) activities. (Audiofaktur 2021.) The following chapter presents different aspects in which challenges can be found.

Mobility

One of the biggest challenges is mobility and moving as a visually impaired person. The main challenges are finding the current location, detecting the destination, estimating the distance, and maintaining the orientation with different distractions. Especially unfamiliar spaces are complex to orient in since persons can orient due to different memories in familiar places. As presented in a study by Jeamwatthanachai, Wald and Wills (2019), public and unfamiliar spaces might bring challenges like unexpected obstacles, distractions by noises and crowds, not enough landmarks, and too long distances. It shows that 70 to 87% are not confident to walk in wide spaces alone due to the risk of losing orientation. (Jeamwatthanachai & al. 2019.)

Difficult spaces can be, for example, universities, hospitals, shopping malls, museums, airports, train stations, and libraries. For example, a hospital is very large and crowded. The different noises, as well as the hectic movements, might disturb the orientation process. Secondly, the structure is well-organized in a department store, however, many moving obstacles make it hard to remember appropriate paths to make an unfamiliar space into a familiar one. Thirdly, museums might be intimidating, for example, due to the very valuable exhibits, which might be damaged. Lastly, travel ports like airports or train stations are confusing due to the large size, pathways, and the hectic noises of other passengers. These places often are challenging to orient in for sighted persons already. (Jeamwatthanachai & al. 2019.)

On the other hand, smaller spaces are easier to navigate and orient in, however, visually impaired persons are afraid of the higher risk of hitting or being disturbed by obstacles, which can lead to losing the body balance and accidents or damaging valuable obstacles. Especially, hanging obstacles, which cannot be detected on the ground, are dangerous for visually impaired persons. Additionally, libraries are well-structured and mostly easy to access, however, it might be very difficult to find specific books and media since Braille is often not installed here. Lastly, places and events in which seats have to be found are bringing up similar challenges. (Jeamwatthanachai & al. 2019.)

Reading and writing

The usual reading and writing expect a high visual sense to distinguish letters. Even though there are different solutions to solve this, these solutions are not available or accessible in every situation. However, reading and writing are part of many various situations in humans' everyday lives. Some examples are communication via chat, email, and letter, information search in books, newspapers, and online, choosing and purchasing products and services, education, and free-time activities like reading. (Lourens & Swartz 2016, 240-251; Araujo & Real 2019.)

Seeking information is part of various daily tasks, therefore, it is very important to provide accessible information for visually impaired persons. In most cases, the variety and scope of the provided information are less since different technologies have to be used, such as, voice recordings, audios, and Braille. Often these methods take more time to "read through" the content compared to the normal reading. Additionally, a higher and longer concentration is often expected to produce the same amount of information as sighted information seekers. Especially written short-term announcements are difficult to understand since it is mostly an unfamiliar situation and there is a shorter time to prepare to find accessible information. (Erilanti & Fatmawati 2020, 245.)

In addition, education depends intensely on visually provided information, for example, textbooks, diagrams, and maps. However, some of this information is inaccessible for visually impaired persons and, additionally, auditory, or tactile accessible information is more time-consuming and more demanding regarding concentration. This can cause challenges in group and teamwork tasks since visually impaired students might need more time or a quiet room. Additionally, teachers might be uneducated and unexperienced regarding challenges for them and, therefore, might not provide the required information and resources. (Lourens & Swartz 2016, 240-251.)

While making purchases challenges occur, when choosing a product; for example, pictures and product texts are only visually available. Moreover, communication on social media, for example, chat programs as well as platforms like Instagram and Facebook are often designed for sighted consumers. (Lourens & Swartz 2016, 240-251; Araujo & Real 2019.)

Seeing different shapes and colours helps sighted persons to differentiate obstacles and objects. It is used, for example, in watching movies, doing sports, and driving. However, it is also important for smaller tasks like picking clothes and food. Due to a low vision or

blindness, shapes cannot be seen clearly and therefore not differentiated. (Lourens & Swartz 2016, 240-251; Araujo & Real 2019.)

Social skills and self-esteem

The different mentioned challenges might lead all together to a lower self-perception of visually impaired people. Social challenges within groups and society as well as independence are further limitations for them. During the development process of the body system, which also includes the development of the visual sense, an infant typically needs the visual recognition for cognitive and social development. As shown by Salleh and Zainal (2010), infants need observation and imitation for developing motoric and cognitive skills. (WHO 2019, 3; DBSV 2021; Salleh & Zainal 2010, 895-863.)

The limitation of developing a coping mechanism to adapt to different surroundings and situations is one of the main reasons for visually impaired peoples' social challenges. Lacking social skills might be the ability to be cooperative, understand others' needs and emotions, and control the own behaviour. Significantly, the missing feedback of peers of the same age is a reason why the social skills might not be as developed as by sighted children, which shows again the importance of inclusion. (Salleh & Zainal 2010, 859-863.)

During childhood, the educational development, as well as the development of social skills, might be limited due to the impairment, which can lead to lower self-esteem and well-being due to less participation in social activities and social isolation by peers. (WHO 2019, 3; DBSV 2021; Salleh & Zainal 2010, 859-863.)

The limitations might continue as an adult in the workplace as well as the own sense of identity. It can be more difficult to participate in society and to be independent. Studies show that persons with vision impairment have higher rates of anxiety and depression as well as higher rates of violence and abuse, including bullying, discrimination, and sexual violence. (WHO 2019, 3; DBSV 2021; Athanasios, Doxa, Eleni, Konstantinos & Lefkothea 2009.)

In addition, La Grow, Alpass & Stephens (2009, 155-158) presented in their study that blind and visually impaired persons feel more isolated and lonelier compared to sighted people, for example, due to a lower income, physical and mental health challenges as well as lower social support. Lastly, persons who are becoming visually impaired during older ages need to learn and adapt to a completely new lifestyle. Additionally, accepting a disease and vision impairment usually is a difficult mental and emotional process. (La Grow & al. 2009, 155-158; Athanasios & al. 2009.)

2.2.4 Solutions and advantages for visually impaired people

Although, as explained in the previous chapter, the visual sense is the most important one, visually impaired persons have many possibilities and solutions to live independently and safely. The lack of visual input can be compensated by guidance and assistance, digitalization, and especially the use of other senses. However, it is also important to understand that an imagery process does not rely only on visual input. Images are created by the input of other senses. For example, the sea cannot be seen; however, it can be smelled, tasted, felt, and heard, which creates an “image” in the brain. (Cattaneo & Vecchi 2011, 2.)

Guidance and assistance

Different tools and assistance devices support persons with vision impairment in their everyday lives’ tasks. Besides environmental cues like light, noises, and obstacles, which help immensely to orient, as well as count steps and stopping time for calculating the distance, these devices can be used for orientation and movement. Moreover, visually impaired persons train their memory to recognise and remember common paths that are part of their everyday lives. Additionally, in known and personal spaces the memory of how the place is structured is one of the most significant supports to find objects. (Jeamwatthanachai & al. 2019.)

The most important and most common support is a sighted guide, which might be relatives and friends or a professional. The sighted guide supports physical, social, financial, and other everyday tasks. As presented in the study of Jeamwatthanachai & al. (2019), the sighted guide is the most reliable and used support by visually impaired persons. For example, in unfamiliar places, 34% of them prefer a sighted guide over other assistance. (Jeamwatthanachai & al. 2019.)

The white cane is commonly used as a tool to walk independently and safely in surroundings. There are two different types: the support cane and the probing cane. The support cane is a white stick providing physical stability and identification as a person with blindness or low vision due to the white colour. The probing cane is a long, white stick, used as an extension of the person’s arms and hands. Thus, obstacles can be detected and avoided, steps and doorways can be found, and vehicles can be accessed. The white colour identifies the vision impairment for sighted people, which is important in case of danger, for example, fast-moving obstacles. Even though the white cane is an immense support for visually impaired persons’ independence, in most cases, it cannot detect

hanging obstacles, for example, branches, and slippery floors. (National Federation of the Blind 2021; Jeamwatthanachai & al. 2019.)

In addition to the white cane, public spaces usually have tactile floor landmarks. These consist of grooves and nubs, which can be recognised with the white cane on the floor. The plates with the grooves and nubs are 70- to 80 centimetres wide and lead straight to the next information point, for example, a wall. Nubs can also indicate the possibility to turn right or left. It is used indoor and outdoor and is especially useful for pedestrian crossings. (Stadt Graz 2021.) According to Jeamwatthanachai & al. (2019), 30% of visually impaired persons use the mentioned landmarks.

Additionally, tactile maps, for example, in shopping malls and public places, provide information for better orientation and route planning. Tactile maps are a cartographical representation of a particular area for the sense of touch. Usually, symbols are used by raised surfaces, which can be felt with fingers and recognised as obstacles in the location. However, it is important to mention that visual maps cannot be translated into haptic maps, but they need to be adapted to the other sense. Moreover, understanding and using a tactile map is difficult und often needs to be trained beforehand. (Ojala, Lahtinen & Hirn 2017.)

Furthermore, for reading and writing, a code has been developed, which can be used for most languages. It is called Braille and includes raised dots, which can be recognised by touching them with fingers. One Braille cell has six dot spaces. Depending on the line-up of the dots, different letters, words, numbers, and signs can be recognised. Textbooks, information, and maps can be translated into Braille. Visually impaired persons can use a braillewriter, similar to a typewriter, to write Braille themselves. (American Foundation for the Blind 2020a.)

Lastly, there are guide dogs, which are specially trained for guiding persons with visual impairment. They can support in everyday tasks, especially for orientation and walking safely. However, guide dogs are scarce due to the high costs and the challenging training. (American Foundation for the Blind 2020a.)

Enhancement of other senses

As explained in the previous chapter, the visual sense is the most dominant one. However, other senses are needed in most situations, and the best result depends on multi-sensual perceptions. Touching and hearing can provide sufficient information to produce an image. Many scientists presume that blind and visually impaired persons have

an enhanced auditory and tactile acuity. However, these study results can only be projected on people who have been affected by visual impairment since their early childhood. Vision impairment occurring in older ages is often not compensated due to slower brain structure developments, and slower learning abilities, as well as elderly persons, might have impairments regarding other senses as well, for example, in hearing. Due to the lack of visual information, it could be that the other senses are improving to cope with the deficit. However, this is not scientifically proven. Scientists are convinced that the experience of the sense is more remarkable due to the lack, which can lead to the perception, that senses are improving. For example, in a concert, a visually impaired visitor might experience the music on a deeper level since they are not distracted by visual impacts. As shown by Cattaneo & Vecchi (2011, 12), blind participants have a superior auditory sense, when sounds need to be localized, and fast sounds have to be discriminated. Significantly, the auditory memory is enhanced compared to sighted persons, which can be seen in a study by Rax and Striem (2007), in which participants had to memorize a word list verbally. Early childhood blind participants performed better than sighted participants. (Cattaneo & Vecchi 2011, 33.)

On the other hand, the tactile sense might also have some improvements, especially in tactile spatial discrimination. This means that early childhood blind persons can decode very small structures easier and better than sighted persons. (Cattaneo & Vecchi 2011, 33.) This is especially important for reading Braille.

The other senses are not only in general less important in the human body system but also are not researched to such an extent. In conclusion, the auditory and tactile sense might improve in certain parts; however, all visually impaired and blind persons do improve their attributional mechanisms as well as pay more attention to other signs, for example, light, noises, floor textures, and landmarks, in which they use their other senses. (Cattaneo & Vecchi 2011, 15.)

Digitalization

Even though digitalization is based on and designed for the needs of sighted persons and the visual sense, it also offers many new opportunities and solutions for people with vision impairment. Mainly, regarding reading and writing, Access Technology provides fast and more effortless chances to receive information. (American Foundation for the Blind 2020b.)

Firstly, screen readers are software programs for displaying written texts into speech output or a Braille text. It can be included on different operating systems as well as on websites. (American Foundation for the Blind 2020c.)

Secondly, screen magnifiers are tools to enlarge the visual content, especially for persons with low vision. Thirdly, there are Alt-Tags mainly for images, figures, videos, and gifs. These are invisibly written descriptions of the shown content, which can be read aloud. It is commonly used on websites and social media platforms, for example, Instagram. Finally, similar to Alt-Tags, there are also audio descriptions for videos and movies. These can be both live or recorded and should be provided by a professional interpreter. (American Foundation for the Blind 2020b; American Foundation for the Blind 2020d.)

Fourthly, there are flatbed scanners, which can project visually written texts into synthesized speech. Lastly, there are customized devices, for example, adapted keyboards with Braille and different options for Braille displays. Digitalization also allows the transfer of printed media into online media, which can be read more easily by visually impaired persons, for example, due to screen readers. (American Foundation for the Blind 2020b.)

2.3 Social inclusion

The third part of the theoretical framework focuses on inclusion as a term and its importance. Furthermore, the idea of inclusion in events and a positive benchmarking example of an inclusive event, the Paralympics, are presented.

The word inclusion originates from the Latin word ‘inclusio’, translated to ‘to be involved’ and ‘belonging’. In modern terms, it is explained by fair participation. (Hoffmann-Wagner & Jostes 2021, 8.) Nowadays, inclusion usually refers to social inclusion, which means the improvements of environments for individuals and groups to participate in society. In addition, it relates to offering abilities, opportunities, and dignity to minorities, who are facing disadvantages in societies and communities. (Wordlbank Group 2021.)

Scorgie & Forlin (2019, 4) define social inclusion as the possibility to have a feeling of belonging, identification, and acceptance. The feeling of belonging is a strong motivational factor, which can be found in all human cultures as a significant trait. A similar approach can also be seen by Hoffmann-Wagner & Jostes (2021, 8), where inclusion is equated to belonging, the feeling of attachment, and being valued.

The feeling of belonging is defined by five factors: the ability to choose and make social bonds, to deny social bonds, to understand the meaning of relationships, the ability to express emotions towards these relationships, and the feeling of negative emotions due to

loss of these relationships. (Scorgie & Forlin 2019, 4; Hoffmann-Wagner & Jostes 2021, 8.)

The excluded groups are, for example, minorities of age, occupation, race, ethnicity, religion, sexual orientation, and identity, indigeneship, non-urbanite, and disability. Minorities might be excluded in a legal system as well as by stigmatized perceptions. For example, a legal system states that a particular minority is excluded from elections. On the other hand, perceptions and prejudices can lead to significant challenges in the labour, housing, and education market. (Worldbank Group 2021.)

Exclusion of communities usually leads to a negative reaction of anger, sadness, and embarrassment. The adverse effects can lead to lower self-esteem as well as to lower well-being. Furthermore, the structural exclusion is part of discrimination, although it is not always intentional. It consists of four steps: Minorities are labelled as 'something different' (1). The minorities are associated with negative-perceived attributes (2). These attributes are used to justify the labelling (3). Finally, society creates a hierarchy in which the minority is in a lower stage (4). (Scorgie & Forlin 2019, 8.)

Additionally, especially persons with disabilities are facing pity and compassion from non-disabled persons. Although it often has a positive intention, it can make feel persons helpless and less worthy. The intention to point out differences of a minority is perceived as negative by the minority, even though it was intended to be supportive and positive-perceived by the society or majority (Wassermann & al. 2017).

In addition, the UN Convention of the Right of Persons with Disabilities (2008) highlights the importance of changing to view persons with disabilities as "objects" to "subjects". Furthermore, it is stated that disabled persons should not only be integrated but certainly, be included. In simple terms, this means that not persons with disabilities must adapt, but the environment has to adapt to their needs. (United Nations 2008; Hoffmann-Wagner & Jostes 2021, 8.)

In conclusion, exclusion might lead to adverse effects on cognitive, emotional, and behavioural traits. Therefore, it is important to give equal voices to every member of society as well as to accept everyone without judgement. (Scorgie & Forlin 2019, 15.)

Additionally, diversity and social inclusion are important advantages for an entire society. Hence, minorities can give different ideas and insights on various challenges to find new solutions and change the way of thinking. According to Hoffmann-Wagner & Jostes (2021, 8), for providing diversity and inclusion, it is necessary to offer possibilities to interact

between different social groups, including minorities. Additionally, it is vital to identify problems of exclusion and state them clearly for finding solutions. Finding similarities between the mentioned groups can increase the feeling of attachment and belonging. Moreover, failures and challenges should be called out and analysed for improvements. Lastly, the promotion and clearly stating the own values and social inclusion can increase society's tolerance and educate younger generations. (Hoffmann-Wagner & Jostes 2021, 8.)

Furthermore, listening to minorities and valuing their experiences and ideas supports the inclusion process. Therefore, it is recommended to engage experts of certain minorities to improve inclusion processes since they might give a more detailed insight due to expertise and personal experiences. Secondly, it is always important to re-new, and update policies and legislations to new standards and new learned expertise since societies and communities are changing. Lastly, educational training, for example sensitivity training, supports without a minority background to understand the needs and challenges of minorities better. (Wassermann & al. 2017.)

The European Commission states in their agenda active inclusion as one of the main aims to achieve in the following years. The European Commission defines active inclusion as the process of enabling full participation of all members of society especially for the "most disadvantaged" members. It consists of three main objectives: equal opportunities in the labour market, equal working conditions, and social protection from disadvantages. (European 2021a; European Commission 2021b.)

2.3.1 Inclusion in the event industry

The improvement of inclusion in the event industry is still a very young development, however, it is increasing and considered in many different events. It is obligated by law in the European Union. The definition of an accessible and inclusive event is the possibility to participate for everyone (including disabled and non-disabled persons) without high challenges and support from outside. Due to the demographic change and the aging population accessible events are a very needed development. Since the population is becoming older and healthier, the expectation to participate in events also in older ages is growing. As an event planner, it is recommended to think about the audience and their possible needs, not divided into disabled and non-disabled persons, since their needs are often similar for different reasons. For example, non-disabled participants also might be interested in experiencing activities with different senses due to variety and learning opportunities, and visually impaired persons can participate due to the provision of other senses. (Hoffmann-Wagner & Jostes 2021, 11-14.)

Inclusion in the event industry is considered for all different minorities in a community and society, for example, culture, ethnicity, gender, sexuality, intellect, and disability. This chapter focuses mainly on inclusion for participants with disabilities, including the accessibility, experiences, and education of and for events.

Accessibility of events is the main factor for inclusion in the industry. Making events accessible to participate for persons with disabilities and impairments offers abilities and opportunities for them, which is part of the idea of social inclusion. Accessibility in events includes mainly transportation to and from the venue, entering it, guidance in the venue, participating in the program, and the design of the venue. Furthermore, events also need to be accessible not only for participants but also for employees, volunteers and for example, guest speakers. (Hoffmann-Wagner & Jostes 2021, 11-14.)

Firstly, the arrival either by public transport or individually must be easily accessible. Information regarding different options as well as clear descriptions needs to be provided beforehand and communicated clearly. In many cities, public transportation still lacks elevators, landmarks for orientation, and acoustic information provision. On the other hand, parking areas need to include enough parking spaces for persons with disabilities. Additionally, the ground should be even and accessible to prevent accidents and support walking with white canes. (Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 38-45; MPI 2018.)

The venue is one of the most crucial factors for many events, and in addition, it is the base of an accessible event. However, each venue can be adapted to compensate for challenges regarding accessibility. For example, historic buildings are often not initially designed for persons with disabilities; however, by providing sufficient information as well as trained staff, these challenges can be mastered. (Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

Firstly, pathways, halls, entrances, rooms, bathrooms, and stages need to be big and wide enough to orient as visually impaired participants. It is recommended to have enough space around obstacles to prevent accidents and disorientation. These should also be included in orientation and safety plans as well as warned of them. Especially, glass obstacles, for example, glass doors, need to be warned of since these are very difficult to recognise by persons with vision impairment. Aids for guidance need to be allowed in the whole venue, for example, white canes, electric devices, and guide dogs. Secondly, stairs should have railings and sticker stripes on each step to prevent falling and slippering.

(Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

Thirdly, there need to be landmarks that provide an orientation system for participants with vision impairment on the ground, which is explained in chapter 2.2.4. Fourthly, the entrance system should be adapted to different needs. For example, counters of information desks and cloakrooms should have different heights, and an alternative for turnstiles needs to be provided. Lastly, the catering and food should have proper lighting and high contrast decoration for accessibility. (Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

Furthermore, the signage and guiding/orientation system is improved by a two senses provision. The information should always be accessible with the visual, auditory, or tactile sense. For example, written texts (visual) can be provided in Braille (tactile) and an auditory narration via an app or scanner. On the other hand, a speech on a stage (auditory) should be interpreted by a sign language interpreter or subtitles on video (visual) for participants with hearing impairment. For visually impaired participants happenings on stages can be described with spoken words which can be accessed via specialised apps and headphones (auditory). (Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

In general, the lighting, especially in hallways and bathrooms, needs to be very good, and high-contrasted. In addition, the stage and action area can be lighted accentuated. Finally, the acoustic system can be improved by headphones, which can adapt to each participant's needs. (Barrera-Fernández & Hernández-Escampa 2018, 21-30; City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

Moreover, the event communication before, during, and after the event is vital for accessibility and inclusion. Firstly, printed media should again be easily readable, for example, by high contrast, wide spaces, and simple typeface. Because these materials can usually be read by scanners. Secondly, online information is in general more easily accessible for everyone. Indeed, Web Content Accessibility provides a guideline and instructions on improving websites and online content for persons with disabilities, which is also recommended by the European Union.

Some examples of guidelines and standards are explained in the following list (W3C 2018):

- Clear text structures with plain typefaces, wide spaces, and big headlines
- Simple texts and words which are understandable for everyone, possibly in a different section

- Alt-Tags, which can be scanned to explain pictures and videos in words
- Short description of each picture, gif, and video
- Videos with auditory content should have subtitles
- Hashtags should have capital letters at the beginning of each word to be readable by scanners

(City of Tampere 2021; Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018; W3C 2018.)

An event should create personal experiences and memories for every participant. Therefore, it is crucial to involve minorities in the event process for finding ways and touchpoints to produce experiences for persons with disabilities. For example, visually impaired persons cannot see the same activities as sighted persons. Therefore, another experience needs to be created in a different sense. Engagement of diverse event employees and guests increases the understanding of the needs of participants with impairments, which is part of social inclusion. As described by Cowan, Dede, Kenig & Spasovski (2017), one of the crucial parts of inclusion is to engage and involve minority groups in tasks and responsibilities of communities. (Cowan & al. 2017; Hoffmann-Wagner & Jostes, 11-14.)

Thirdly, education and training of employees can be an important improvement for inclusion. As shown in the study of Kirillova & Faizrakhmanova (2016, 650), preschool employees are facing issues in inclusive education like lacking experiences, poor awareness, and a low level of inclusive cultures. Although teachers usually have an educational background on inclusion, they fear being unable to teach children with disabilities and impairments. Therefore, it is understandable that employees of events might face similar issues while helping and providing services for participants with impairments during events. An inclusion and sensitivity training for employees can increase awareness of unconscious bias, communication skills, recognising invisible disabilities, and modelling inclusive behaviour. This training can improve the behaviour and service offers of employees for participants with impairments as well as between participants. (Krilillova & Faizrakhmanova 2016, 650; Miller 2019.)

While assisting persons with low vision, it is essential to keep in mind that every person has their own needs and wishes, and there is no general approach, which can be used as a guideline. However, some common rules create a better understanding on how to offer support and aid. The Australian Association for persons with low vision Vision Australia (2021) gives examples of guidelines for sighted persons. While approaching visually impaired persons, it is recommended to identify yourself by greeting and introducing yourself. Since it might be difficult for persons to recognise when others are coming or leaving a place, it is important to inform them about the actions of arriving and leaving. (Vision Australia 2021.)

Additionally, it is essential to always ask for consent before helping. In many situations, persons with vision impairment might not need help, and helping without asking, might make them feel less independent. Moreover, it is also necessary to ask for consent to touch them, for example, for guiding and directing. Assisting and supporting should only be done when requested. While giving directions it is important to give clear instructions and describe the environment. For example, “over there” is not an appropriate instruction, however, “on the right hand you can feel a wall” is more practical and useful. Furthermore, explaining what is happening around them, is a useful way of including visually impaired persons. On the other hand, Vision Australia (2021) also describes that words like “look” and “see” can be used in general conversations, so, visually impaired persons do not feel treated differently compared to sighted persons. (Vision Australia 2021.)

Moreover, events are often used as a tool for inclusion. According to Duffy, Mair & Waitt (2018, 10), events like festivals usually create a feeling of community and belonging, which is one of the primary factors for social inclusion as mentioned above. Different groups of the society and community are meeting, and an event might create the chances of exploring diversity, while the event structure offers a safe framework. The possibilities to exchange different opinions, stories, and lifestyles might increase an inclusive and accessible community by providing social encounters for engagement. However, these events might also increase the risk of conflicts due to heterogenic society. Since the audience and participants are co-creators of events, they have a lead position of influencing inclusion and diversity. Certain events can be seen, according to Duffy & al. (2018, 12), as a political mechanism to promote diversity and provide an improvement in inclusion. One of the main aims is to understand the varying needs of minority groups to give them the feeling of safety, and inclusion. (Duffy & al. 2018, 8-17.)

Lastly, after each event feedback by the organizers as well as participants should be considered for improvements on the accessibility of events in the future. Social inclusion in general and in events management is a process which should be adapted to new needs, expectations, and expertise, which has been learned from experiences. (Hoffmann-Wagner & Jostes 2021, 46-74.)

2.3.2 The Paralympics as an example of accessibility

The following chapter summarises the values and standards of the Paralympics as an example of accessible events as well as a theoretical approach to build international guidelines for accessibility and inclusion in the event industry.

The Paralympics are the equivalent of the Olympics. It is a sports competition for athletes with impairments and disabilities. In 1948 the first competition for participants with wheelchairs was organised during the Olympic games. In 1989 the International Paralympic Committee was introduced, and since then, the competition has existed alongside the Olympic games. The Paralympics offer competitions for athletes in wheelchairs, with mobility impairment, vision impairment, hearing impairment, and intellectual impairment. (International Paralympic Committee 2021.)

Besides offering sports competitions for persons with different body structures, the Paralympics also represent minorities and diversity in public. Moreover, since the Olympics usually attract many live visitors and many visitors via media channels, the Paralympics also gain a lot of attention during this time. Additionally, they represent the idea of inclusion by showing the abilities and talents of persons with impairments, non-disabled persons often forget. Therefore, it contributes to changing the way of thinking of persons with disabilities as helpless persons towards independent persons with extraordinary talents and ambitions. (International Paralympic Committee 2021; Wassermann & al. 2017.)

Moreover, the Paralympics set higher standards for accessibilities in general as well as in events management. The International Paralympic Committee (2015) created an accessibility guide for improvements in inclusion for the Olympic and Paralympic Games, which can be used for other events as well. The Committee (2015) states that the legislation has been improved in many countries; however, in most parts of the world, accessibility is still not reality even in high-developed countries, for example, the European Union. It creates design standards for new buildings and facilities as well as criteria and regulations for games. (International Paralympic Committee 2015, 14.)

The Accessibility Guide aims to present internationally accepted standards, which have not been created yet. It consists of accessibility standards, Paralympics requirements, and the UN Convention of the Rights of Persons with Disability. The central values are equity, dignity, and functionality. Firstly, equity aims to offer the same experiences regardless of body structures. Secondly, dignity means the maintenance of every participant's respect. Lastly, functionality means that the different needs of groups are equally met. (International Paralympic Committee 2015, 18-22.)

Furthermore, the guide gives clear standards for hosting cities regarding the game requirements such as sports facilities, accommodations for athletes and broadcasting options, transportation, and accessible tourism in the host city. In conclusion, a host city

needs to consider accessibility in all parts, where participants, athletes, workers, and visitors take part. (International Paralympic Committee 2015, 18-22.)

The guide covers topics of mobility, venues, accommodations, publications, and communications, and transportation. Additionally, it covers instructions of the games themselves as well as tourism in the host city. Some specific examples are guidelines for the construction and sizes of pathways, ramps, stairways, and doors, which are essential for accessibility with wheelchairs, white canes, and (sighted) guides. (International Paralympic Committee 2015, 18-22.)

The following list shows some examples of regulations for accessibility in the venue and during the games (International Paralympic Committee 2015, 30-56):

- Pathways need a minimum width of one metre for guaranteeing the use of wheelchairs, strollers, and rollators as well as walking in pairs
- Disturbing obstacles, which cannot be detected on the floor, need to be at least higher than 70 centimetres from the ground and a maximum of 40 centimetres from the wall for visually impaired persons
- Every 50 metres, there need to be a place to rest
- Street crossings need to include visual and auditory indicators
- Information desks should provide at least two different heights; the lower one should be between 75 to 65 centimetres high
- Escalators should include tactile warnings at both ends
- Live audio description services via headphones need to be provided for visually impaired persons
- Braille versions of documents should be provided
- Symbols should be 6x6 centimetres big if the distance is less than seven metres

(International Paralympic Committee 2015, 30-56.)

On the other hand, the guideline also provides instructions for training of employees for inclusive behavior. Some hints can be summarized as follows: The approach towards persons with impairments should not be different as to persons without impairment. As already mentioned above, it is important not to feel pity towards them. It is necessary to keep in mind that there are invisible disabilities, which cannot be seen directly. Employees and other participants should not assume that they do need help. If a person with impairment approaches somebody while seeking for support, it is important as an employee to address them directly, be patient, and to listen carefully. Lastly, it is always important to ask for consent to touch another person while offering support. (International Paralympic Committee 2015, 101-108.)

Lastly, it is important to highlight that accessibility is not only important for persons with disabilities but also for other participants, for example, families with children, seniors, persons with heavy luggage, and emergency services. This repeatedly highlights the

positive contribution of inclusion for a whole society. (International Paralympic Committee 2015, 23.)

3 Research

The following chapter focuses on the research conducted for this thesis. Firstly, different research methods are presented. Secondly, the chosen research method is explained in more detail as well as the reason for choosing this method. Lastly, the process, implementation, and results of the research are summarised.

Generally, the research process includes collecting, analysing, and interpreting data. There are three approaches: quantitative, qualitative, and mixed research methods. Depending on the needed data, the method is chosen. (Williams 2007.)

Qualitative research is based on discovery and investigation to interpret detailed data, experiences, and knowledge. On the other hand, quantitative research is mainly based on numerical data which can be analysed statistically. The aim is to collect a certain amount of data to provide objective analysis, which is often needed for causal relations as well as predictions. Common qualitative research methods are surveys as well as observations. (Williams 2007.)

3.1 Qualitative research

Qualitative research usually is empirical and naturalistic. The method aims to answer the research question, and to understand causal relations and subjective perceptions, thoughts, and interpretations regarding researched topics. Moreover, it explores data in detail and gives perspectives of insiders. The main advantages of qualitative research are a progressive and flexible development since the content of data collection can be adapted throughout the process as well as receiving detailed and expertise information. (Williams 2007.)

Interviews can be part of qualitative research as well as quantitative research, depending on the form and questions. Usually, it consists of a conversation between two persons: a researcher and an interviewee, discussing and questioning a particular research topic. However, there are also interview situations in which groups and panels discuss, for example, focus groups. (Guion, Diehl & McDonald 2001.)

It can be face-to-face or distant via email or video communication tools. There are three primary interview forms: structured, semi-structured, and open interviews. The structured interview can be compared to a survey or questionnaire, including closed questions, and collecting a high amount of data. It is part of quantitative research. (Gubrium & al. 2012, 78-81; Guion, Diehl & McDonald 2001.)

On the other hand, the unstructured interview usually is a conversation about a certain topic with less prepared questions. The direction of the data collection is flexible regarding the interviewee and their knowledge and ideas. (Gubrium & al. 2012, 130-139; Guion, Diehl & McDonald 2001.)

The semi-structured interview is part of the qualitative research since it focuses on insider and expertise knowledge. It aims to find detailed information on personal matters including experiences, values, decisions, and knowledge of culture. (Gubrium & al. 2012, 100-109.) Diehl, Guion & McDonald (2001) define it as a research method, focused on discovery, understanding, and interpretation. It usually includes open-ended, but pre-planned questions, however, these can be adapted during the interview to provide the needed flexibility. (Diehl, Guion, McDonald 2001.)

It is often used in combination with other research methods, for example, field studies. The analysis shows multiple perspectives and provides a wide range of possible results. One of the main disadvantages is the difficulty in analysing the answers. Since the focus is on personal experiences and subjective ideas, the results can be misunderstood or too dependent on one interviewee. (Gubrium & al. 2012, 100-109; Guion, Diehl & McDonald 2001.)

3.2 Data collection

The method used in this research is qualitative with semi-structured interviews. This method has been chosen to collect data, including personal and subjective experiences, ideas, and expectations regarding improvements. The interviewees are part of the minority group and have vision impairment. Due to their own experiences as visually impaired persons, they have detailed and expertise knowledge on the researched topics. Especially, inclusion is a concept with versatile and personal perceptions and ideas. Therefore, the semi-structured interview offers a data collection method for opening a platform for personal results of improvements for events.

The interviewees were found on social media, particularly on Instagram. All the participants are active on this platform and share their everyday life with their followers focusing on their vision impairment. They were contacted personally by introducing the topic and the research method and asking to participate. After agreeing to the interview, a specific time was chosen. The interviews were held online via Zoom or via phone call and were recorded for data collection purposes.

There were five interviews in total, which were conducted with the same structure and questions. In table 1, the interviewees and for the research important characteristics are presented. The sign column shows an abbreviation for differentiating the individual answers, and the signs are used in chapter 3.4. All interviews were held in German; the results were translated into English.

Table 1. Interviewee presentation

Age	Impairment	Age of impairment's beginning	Interview Date	Interview Form	Sign
35	Legally blind	6 years	20.09.21	Zoom	A1
40	Legally blind	20 years	18.10.21	Phone call	A2
46	Severe impaired	30 years	21.10.21	Phone call	A3
24	Impaired (20% vision)	birth	26.10.21	Phone call	A4
28	Legally blind	birth	27.10.21	Phone call	A5

Each interview began by introducing myself and the topic as well as the research. Afterwards, it was reassured that the interview could be recorded and that all questions could be answered voluntarily.

The interview questions can be found in the following list:

(1) How and when did your impairment start?
(2) What kind of support and assistance or devices do you use in your everyday life regarding your vision impairment?
(3) In what kind of events did you participate and where do you want to participate?
(4) What kind of experiences did you make during events (positive and negative)?
(5) How do you receive and/or seek information about news and events?
(6) What kind of support do you need while using transportation?
(7) What kind of concerns do you have regarding security measurements in unfamiliar places/venues?
(8) How do you feel about using technologies or other support to participate in program activities with sighted persons?
(9) How do you feel included and comfortable in a heterogenic group (of strangers)?
(10) How do you approach sighted people to connect, and how do you want to be approached by sighted people? (Possibly also for support?)
(11) What do you want to take out of the event, or what kind of experiences do you want to collect?
(12) How do you think events can increase inclusion and connect different groups?

The interview questions aim to collect data regarding the interviewees' experiences, expectations, perceptions, and ideas on making events more inclusive for visually impaired persons.
Question (1) and (2) aim to give insights into the interviewee's background. The information of impairment is important to compare the results. The age of the impairment's beginning and the intensity of the impairment are essential factors on how interviewees face challenges. The results depend on these two factors. For example, an interviewee,

who has had a vision impairment since early childhood years, has most likely a more adapted lifestyle.
Questions (3) and (4) ask for experiences and expectations for events particularly. It should show the interests of the interviewee as well as important insights on improvements in events. It especially should highlight in which parts exclusion is experienced. The questions are stated in broad terms to prevent that the interviewees are limited in their answers and personal ideas.

Questions (5) and (6) are part of the pre-event process, questions (7), (8), (9) and (10) are part of during the event, question (11) is part of the post-event. As explained above, finding information is usually the first touchpoint of an event and, therefore, an important encounter for personal experiences. Hence, the aim is to find improvements in providing sufficient information and making events inviting for visually impaired persons (5). As explained in chapter 2.2.3, mobility is one of the biggest challenges for visually impaired persons. Therefore, question (6) should provide information on support for transportation to and from a venue.

Security measurements in venues (7) are necessary in general and certainly for participants with limitations. Therefore, interviewees can share their own experiences, including thoughts and fears, where security measurements are insufficient. Question (8) aims to find out when participants are feeling excluded and included. Due to the impairment, certain aids and technological devices are needed to provide the same programs and activities during an event. Therefore, persons could feel treated in a different way, which is not the aim of inclusion. Additionally, technological devices can also be a distraction and could hinder participants from communicating with other guests and using networking possibilities. Therefore, it is crucial to determine, if and how technological aids are a solution for compensating limitations.

Question (9) builds on the previous question and aims to find positive impacts and ideas on making events inclusive. The question is chosen to be very open not to limit the ideas and suggestions. The following question (10) pursues to find appropriate and inclusive communication between visually impaired persons and sighted persons. As described in chapter 2.3.1, a suitable approach is part of social inclusion.

Question (11) aims to find different ideas of memories which participants can collect. This question is not directly connected to vision impairment; however, the answers could possibly differ from sighted participants. Question (12) offers a summary of the interview and aims to determine how events can be used as a tool for inclusion. Lastly, the

interviewees can ask follow-up questions and add important topics, which were not covered during the interview.

3.3 Results

The following chapter presents the results of the conducted interviews. The answers are compared, and differences, as well as similarities, are shown.

To sum up, the interviewees' answers were in most parts very similar, particularly, regarding the need of inclusion and how it can be implemented in events. However, negative experiences in events were perceived very differently, because two interviewees had to mention only positive experiences. Additionally, the lack of security measurements in venues and transportations was partly a significant concern and partly no concern. Tone of the reasons could be the different impairment's intensity. Since both respondents, who have low vision, had less or no fears regarding safety factors.

Interviewees' backgrounds

The results of question (1) can be seen in table 1 in detail. All interviewees have a vision impairment or are legally blind. Additionally, it is essential to notice that interviewees A1 and A2 have other impairments or diseases in addition. Question (2) has very similar results from all interviewees. Different devices and aids, which are used, are technological devices, for example, tablets, phones, and headphones, including aiding apps, scanners, screen readers, as well as white canes. Furthermore, most of the participants have a guide dog and have support from family and acquaintances. Interviewee A3 mentioned that many everyday tasks are usual habits and practice. A4 also added that contact lenses and spectacles are used for daily tasks.

Experiences and expectations in events

A2, A3, A4, and A5 visited and are interested in concerts, festivals, fairs and markets, museums as well as conferences, and training. A2 also added that online events are a suitable and valuable option for her. On the other hand, A1 prefers small-scaled events, for example, birthdays. In earlier years, she participated in concerts, club celebrations, and fairs. A1 pointed out that events often are terrifying due to the lack of security measurements and the overload of the other senses, and the insecurities of other participants regarding the impairment. The main concern is that most venues are not fully accessible. A2 also explained that certain parts are not accessible, and the guide dog is not allowed in all parts of everyday life. Additionally, she mentioned that it would be helpful

to be prepared for an event by providing information regarding accessibility. A3 pointed out that tribunes in the middle of the crowd for disabled participants are a great way to be part of the audience. Most interviewees mentioned that many events are thoughtfully organized and offer memories and experiences for visually impaired persons. The offer to use different senses, for example, on fairs, was a positive memory by interviewee A2.

Pre-event improvements

The information research is mainly conducted online. All interviewees mentioned social media, internet, newsletter as well as radio and podcasts. In addition, A3 explained that she also asks for help and information from other people. A4 also receives information from acquaintances or the surroundings, including the university.
The main transportation modes used are car, taxi, professional medical transportation, tandem, and public transportation. Most interviewees explained that transportation could only be used with a sighted guide in many situations. For example, the reasons are inaccessibility of stations, insufficient information provision as well as fast-changing schedules, which are difficult to understand. However, A4 explained that due to his low vision compared to the legally blind respondents, he is able to travel alone in public transportation and busses. Additionally, walking is a great transport mode.

Improvements during the event

As already mentioned, risks in security measurements are mainly traffic including lighting systems, street crossings, and construction sides. A1 added e-scooters and electronic cars since they cannot be seen or heard. In addition, objects in unusual places such as cars parking on pathways, can be dangerous. A3 highlighted that she trusts sighted persons or her companion as well as auditory systems which usually are provided. A4 did not have concerns regarding security measurements; however, he added that specific actions might take longer than for sighted people, which must be preplanned during a day or event.

Technological devices for fair participation are perceived by all interviewees as positive and an appropriate way on how to offer similar activities during the programming in events. It is a great way to understand visual happenings better without disturbing other participants. It is also an easier way for sighted companions since they need to explain less. A2 highlighted that it creates a feeling of self-determination. Additionally, A1 said that it might increase the acceptance within society as seeing visually impaired persons as individual and independent participants as well as increase the courage of visually impaired persons to participate in events. A4 added that it is an important tool to receive

information online, which can be used before, during, and after the event. The information can be enlarged on a phone and tablet to read, and therefore, create a helpful aid. Primarily, certain information like menu lists can be provided beforehand for checking them in advance. Lastly, A4 mentioned that organizer-owned apps could be a useful tool not only for visually impaired persons, for example for orienting in the venue; however, they also should be accessibly designed. A3 pointed out that the offer can be challenging to implement due to only a few users. However, most of the respondents mentioned the example of an app, which is in use already. It has been created for movies in cinemas and includes an auditory description which can be accessed via headphones during the action.

All interviewees mentioned that acceptance and not being seen as an impairment are their main criteria for inclusion and the feeling of belonging. It is important that not the companion is approached, but the person themself. Additionally, it is immensely important to ask, if support, and touching is needed and wanted and if support is declined, to accept it. Furthermore, ignoring is perceived as negative. It was also highlighted that in most cases, it is perceived as positive when help is offered as well as when insecurities regarding the right approach by sighted people are admitted. Lastly, most participants agreed that training for staff and employees for a better understanding of impairments are useful and recommendable.

Post-event improvements

The interviewees want to collect experiences and memories in events, which can be created by other senses. Additionally, meeting other participants and having other inputs for relaxation and inspiration were mentioned by all interviewees. On the other hand, they mentioned that they do not want to stand out with their impairment and want to experience similar memories as sighted persons. A4 also mentioned that taking flyers or information sheets is a great memory when it includes a link to online information.

Events as a tool for inclusion

All interviewees agreed that events could be a tool for inclusion. As main reasons were mentioned that persons from different backgrounds can meet, connect, and communicate. Persons who are often invisible in our society could be presented and be visible (A2). Events are perceived as more various and versatile than most societal happenings. A1 and A5 explained further that inhibition thresholds can be more easily overcome. Additionally, A3 said that it creates the possibility also to understand other persons with different disabilities. Additionally, A4 explained that events could create equal opportunities which are important for a fair society.

4 Recommendations

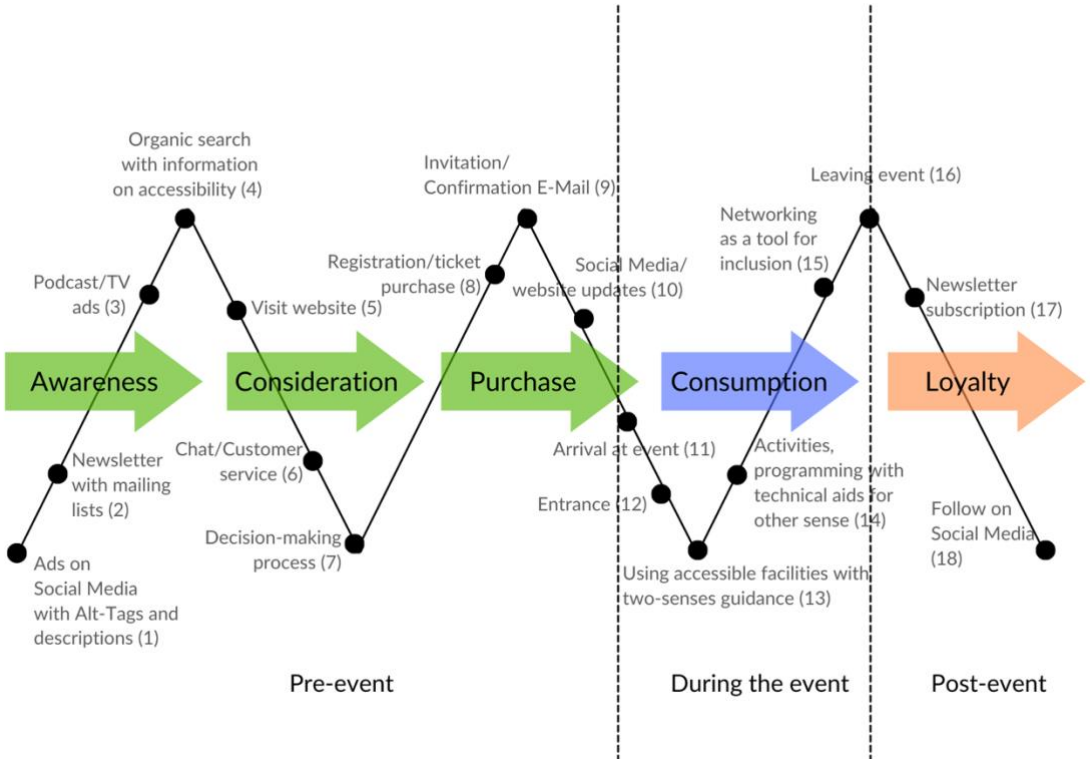

Figure 3. Customer journey map for visually impaired participants

The following chapter presents recommendations on how to improve an event for visually impaired participants. As a guideline, the customer journey map is used for a better understanding. It again consists of five stages: awareness, consideration, purchase, consumption, and loyalty. Each step and touchpoint are explained further and can be recognized by the number.

Pre-event

As described by Gerristen & Olderen (2014, 57), the awareness stage is the most crucial part of the decision-making process. As shown in the research, all participants use mainly online tools for seeking information about events. Thus, ads and information on social media (1), (10) should include Alt-Tags, which can be scanned for understanding pictures and include video descriptions as well as Hashtags with capital letters for scanning. In general, it is recommendable to follow the Web Content Accessibility guidelines for providing accessible information on online platforms. (W3C 2018). Lastly, one of the most significant learnings from the research is that information regarding accessibility should be provided before the event, which can immensely influence the decision-making process to participate. Insecurities regarding safety and exclusion can be minimized and it might encourage persons with vision impairment to visit unfamiliar places and events due to the sufficient information on how accessibility has been implemented. (A1, A2, A4)

Secondly, newsletter (2) can be adapted to mailing lists for especially visually impaired participants, as explained in the interviews. Thirdly, podcasts (3) can be an excellent way for using auditory information and creating expectations for visually impaired persons, which is not only the main pull factor for the interviewed persons to participate in events, but it is also described as the primary purpose to attend by Miettinen, Markuksela & Valtonen (2015, 25-27).

Organic search (4) and the brand-owned website (5) should provide information on offered accessibility. As shown by the conducted research, one of the main reasons not to participate is the lacking information on accessibility as explained above in detail. The brand-owned website can already describe information on transportation possibilities, venue, and programming. Therefore, participants are prepared, feel safer, and more independently. (Hoffmann-Wagner & Jostes, 11-14.)

Regarding the customer service (6) -not only during the pre-event phase- training for a better understanding of the needs of participants with low vision can be provided. The training can be expanded to other disabilities as well as other minorities. As explained in chapter 2.3.2, it is essential to include visually impaired persons themselves in these training for better understanding and social inclusion. Due to the training, customer service can provide more detailed answers regarding accessibility for better planning and an easier decision-making process (7). (Krilillova & Faizrakhmanova 2016, 650; Miller 2019.)

The ticket purchase (8) as well as the ticket or invitation (9) itself should include again enough information on accessibility as well as for example, if there are discounts. (Hoffmann-Wagner & Jostes, 11-14.)

During the event

Improvements for arriving at and leaving an event (11), (16) are mainly in public transportation. Public transportation should provide proper signage and information systems for auditory and tactile senses. Additionally, as seen in the interviews, it could be a suitable option to offer extended transportation to and from the event. For example, these transporters can be larger than regular buses and have a slower schedule to reduce stress. (Barrera-Fernández & Hernández-Escampa 2018, 21-30.)

Further, the entrance (12) is the first live touchpoint and welcoming part of an event and, therefore, an important factor for reaching set expectations. (Gerristen & Olderen 2014,

57-61.) Entrances can be adapted by providing auditory systems for information and guidance and providing another option for turnstiles since these cannot be used easily with white canes. (Hoffmann-Wagner & Jostes 2021, 46-74; Jeamwatthanachai & al. 2019.)

Using the different facilities (13) in venues needs many adaptations in accessibility. Risk and security management are important for choosing to participate in an event as a sighted person and especially as a visually impaired person (Gerristen & Olderen 2014, 57-61). The interview results show that participants expect accident and risk prevention. Therefore, spacious venues and appropriate space around obstacles are important to prevent these. Additionally, landmarks are among the most used guiding systems by visually impaired persons and therefore, a suitable option for venues since these can be temporarily installed. (Jeamwatthanachai & al. 2019.) In this regard, aiding devices need to be accepted and allowed in the entire venue. As described by one interviewee, guide dogs are not permitted in some places; however, when they are announced in advance, they can be part of most events. Lastly, a guiding and signage system should always include at least two senses. Especially the auditory sense offers an important alternative for most participants, which can be seen in the results of question 2. A suitable approach could be using an app with headphones for auditory instructions at certain times and places. Additionally, it is recommendable to follow instructions and guidelines, for example, by the European Union or the Paralympic Guidelines which include exact measurements of venues, obstacles, and accessibility provision. (Hoffmann-Wagner & Jostes 2021, 46-74; MPI 2018.)

Programming and activities (14) are the main factors for creating an atmosphere and inspiring memories. Technological devices and digitalization, in general, are great options to compensate the visual sense. For example, interpreters can be used to explain visual happenings on a stage or video. These can be pre-recorded or live and distributed via headphones. All interviewees were convinced that auditory additions are a great solution to be part of activities and are easier to be implemented. Another example is specially designed tribunes, which are placed in the middle of the crowd or venue. These simplify the guidance and accessibility as well as offer the option to be part of the happening, as explained by one of the respondents. Lastly, it is immensely important to offer different activities for other senses. For example, art pieces can be touched, food and drinks can be smelled and tasted. (Oriade, Robinson & Gelder 2010, 85; Gerristen & Olderen 2014, 57-61; Cattaneo & Vecchi 2011, 33; American Foundation for the Blind 2020b; Hoffmann-Wagner & Jostes 2021, 46-74.)

The possibility to meet other participants and networking platforms (15) is among the main activity in many events. Therefore, as agreed by all interview participants, events can be used as a tool for social inclusion. According to the respondents, the main reasons are the opportunity to meet different persons from different backgrounds and to learn from each other. This is also shown by Duffy & al. (2018, 8-17), where events are described as a political mechanism for social inclusion as well as diversity. Furthermore, social encounters, which would not happen in everyday life situations, might open new learnings, and help understand each other. Additionally, the research shows that approaching visually impaired persons usually is perceived as something positive by them since it shows interest and the willing to learn. (Duffy & al. 2018, 8-17.)

Post-event

As an improvement for the post-event stage, it is recommendable to offer memories and take-aways for visually impaired persons. As explained by one interviewee, it could be an information sheet provided on paper as well as online. Additionally, after-movies can be complemented with auditory descriptions. The possibility to attend in an upcoming event can be demonstrated by subscribing to accessible newsletters (17) and following on social media (18). Lastly, if a survey is held within the participants, one important question could be to improve on accessibility and social inclusion. Therefore, the event organizer can find relevant and personal ideas for upcoming events. (Gerristen & Olderen 2014, 56.)

5 Discussion

The following chapter summarizes and evaluates the conducted research and results, including validity and reliability, describes how the recommendations can be implemented, and how the topic can be used for further studies.

The research objective was to present recommendations and improvements for different events to offer more accessibility and inclusion for participants with vision impairment. Therefore, the research was conducted with visually impaired interviewees who are facing challenges and barriers as well as have adapted their lifestyle regarding their limitations. Their personal ideas and recommendations were used to create an adapted customer journey map of events. The theoretical framework has supported the results and findings. The results evidently show that providing opportunities for using other senses, creating accessible venues by adaptations, as well as providing enough information regarding accessibility and lastly, educating event organizers and their team members about disabilities, their challenges, and solutions can implement social inclusion in events.

For using the results as generalized ideas of improvements, it is essential to analyze the validity and reliability of the conducted research. As described by Kirk and Miller (1986, 9-10), objectivity is the main aim to achieve while researching and collecting and interpreting data. It aims to prove everything scientifically by causality. Two crucial factors, which are part of objective research, are validity and reliability. Validity refers to the results and their truthfulness. It shows if results measure and present the terms which they are supposed to present. Comparing established and well-known theories can prove validity. Reliability refers to reproduction of research. In simple terms, if research is conducted under the same conditions again, the results should be the same. (Kirk & Miller 1986, 14-16.)

In qualitative research, these two factors are more challenging to implement, and proof compared to quantitative research. Due to the empirical approach of qualitative research, results can differ in every implementation as well as be interpreted differently. Therefore, data collection processes and implementation need to be described clearly and as objectively as possible. The aim is to offer a structure that can be implemented again by another researcher and create a common understanding of the data collection method and how the results were interpreted. The interpretation should be conducted as objectively as possible. (Kirk & Miller 1986, 9-10.)

The research implementation is described detailed, including finding interviewees and conducting the interviews. It shows important insights into how the interviews could be repeated and how the results can be interpreted. The aims of the questions were

explained beforehand for a better understanding of the interpretation. The results were summarized by similarities and differences in the answers. The interviewees were chosen due to their own experiences as well as expertise. However, the aim was also to select persons with different backgrounds to create a more comprehensive range of results and opinions, creating better validity.

In the theoretical framework, academic sources were used to explain important terminology for a common understanding. Additionally, concepts of disabilities and social inclusion were presented by well-established organizations. The interview questions provided sufficient information on event experiences and possible improvements. Due to their subjective results, it was essential to compare them and validate them by theories and concepts presented in the theoretical framework.

During the research, I familiarized myself with the concepts of customer journey mapping, disabilities, and social inclusion in detail. I had the chance to broaden my knowledge about disabilities and their challenges, and solutions in everyday life. It offers me to re-think certain actions and routines, which I usually considered straightforward and practical. It enables me more understanding and empathy as well as the understanding to find more inclusive solutions. Additionally, conducting interviews was a significant chance to listen to personal experiences. My primary learning outcome was to understand the need for inclusion in societies as well as in events.

The research results and recommendations can be used by event organizers as well as staff members who are conducting events. It gives a general guideline for many different events with practical hints and improvements that can be considered during the event planning phase. The customer journey map allows organizers to understand the different steps and touchpoints of participants with a vision impairment and, therefore, provide more inclusive options. It can be used in combination with other guidelines and given laws and instructions, for example, by the European Union.
As an example, a checklist for accessibility and inclusion in an event can be elaborated by following the customer journey map, which is used during the planning phase to implement all needed adaptations.

This research can be used for further research and studies in the field of social inclusion as well as events management. Firstly, other impairments and limitations can be considered and researched in a similar approach. A generalized version for physical and mental disabilities could offer many different insights and options for event planners. Secondly, the research could be used to create a checklist for event planners for an even

more practical approach. Lastly, the conducted interviews could be expanded by observations as well as field studies.

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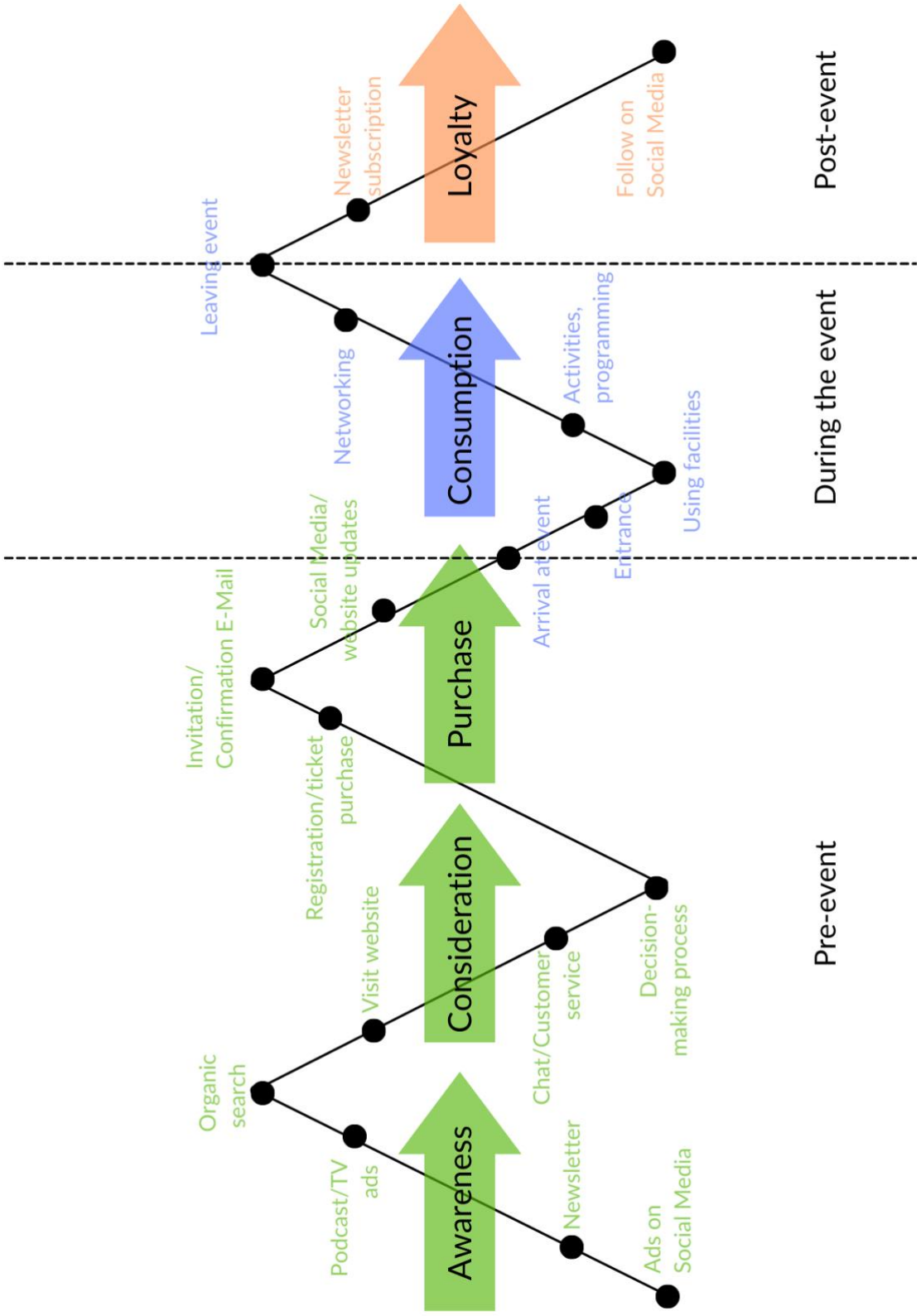
Appendices

Appendix 1. General customer journey map



Appendix 2. General customer journey map of a visually impaired participant