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Brückner, Kim; Ehrlinspiel, Miriam; Huneke, Sina; Prien, Marie Henny

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Imprint

Sound or Silence? Current Developments in Organizational
Communication

Edited by Alexander Godulla, Miriam Ehrlinspiel, Simona Gulich,
Valentin Leißner, Annika Müller, Antonia Rüth, and Moritz Sauer

Book design by Miriam Ehrlinspiel and Simona Gulich

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Leißner, Annika Müller, Antonia Rüth, and Moritz Sauer

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Breaking Barriers: Exploring the Power of Immersive Media as a Strategic Communication Tool in NGOs

A Qualitative Analysis on the Current and Potential Applications
of Immersive Media in the German NGO Landscape

Kim Brückner, Miriam Ehrlinspiel, Sina Huneke, Marie Henny Prien

Abstract

The change in media has shaped our society for decades and new forms and technologies for mediated communication have been created. This paper explores the use of immersive media in the context of strategic communication of non-governmental organizations in Germany. The research, based on semi-structured interviews with communication officers, reveals that immersive media is not yet widespread in the NGO landscape and remain in a trial phase. Most NGOs do not consider immersive technologies suitable for their target groups, preferring traditional communication measures. However, a general openness towards the development of immersive media has been identified when financially justifiable and appropriate for the target groups. The primary purpose of immersive media projects is to generate public attention, supporting NGOs in their organizational goals. Although immersive media are partly implemented in the communication mix, they do not serve a predefined strategic objective within the strategic communication management of NGOs. This research contributes to existing literature by analyzing the use of immersive media in the third sector from a strategic communication perspective.

Keywords: Immersive Media, Strategic Communication, NGOs, NGO Communication, Virtual Reality, Augmented Reality

Introduction

Immersive technologies such as augmented reality (AR) and virtual reality (VR) have taken a firm place in the multimedia landscape, offering a wide range of possible applications (Bitkom, 2021, p. 9). Due to its potential to dissolve boundaries between a medium and its environment, immersion is attractive and omnipresent (Kolesch, 2017, p. 62). Technologies that enable immersion, or those that allow for some level of immersion in a virtual setting, have recently matured to a high degree and provide a variety of potential applications (Bitkom e.V., 2021, p. 9). Through a wide range of trends, such as the hype around the AR technology-based app Pokémon Go, immersive media have long since reached society. As a result, various industries and companies have started to address the issue, for example for automobile production, virtual shopping worlds, and training purposes (Bitkom e.V., 2021, pp. 24-48). Hence, immersive media have arrived in reality and are already beneficial to various areas (Bitkom e.V., 2021, p. 82).

Along with that, the third sector has started to adapt to these developments, as it is particularly dependent on people empathizing with their mission to understand their issues and goals. A growing number of well-known NGOs such as Greenpeace (Greenpeace, n.d.) or Amnesty International (Amnesty International, n.d.) have used immersive technologies to implement projects and raise awareness about their mission among their target groups. As the competition for donations and media attention becomes more intense, NGOs must work more resourcefully and cannot neglect the threats and opportunities presented by trends in the system environment in which they exist (Stötzer, 2008, p. 406). Furthermore, innovative communication is a key way to draw attention to the organization and its specific issues (Stötzer, 2008, p. 404), which is becoming more relevant to stand out within the sector.

Previous studies in the field of immersive media in NGOs mainly focus on the user's perspective, investigating the reception level (Breves & Schramm, 2021; Chen & Yao, 2021). Instead, this paper aims to take the

communicator's perspective and look at it through a strategic lens by examining the strategic use of immersive media in the communication department of NGOs. Therefore, the following research question was developed: *To what extent do NGOs operating in Germany use immersive media as part of their strategic communication?*

For this purpose, 14 semi-structured interviews were conducted with communication officers from German NGOs and evaluated with a qualitative content analysis according to Mayring (2022). The interviewees provided insights into the forms, contexts, or immersive technologies as well as challenges and objectives of implementing immersive media projects in their organizations. Since not only NGOs that have implemented projects with immersive media were included in the sample, the paper also examines the decision criteria of NGOs when considering the possible implementation of immersive media for their communication. In return, these provide interesting findings about the reasons against projects involving immersive technologies.

Thus, the study focuses on the types of immersive technologies used in the NGO sector, their potentials, and risks as well as the strategic communication goals related to immersive media projects.

Literature Review

In order to better understand the use of immersive media as part of the strategic communication by NGOs operating in Germany, existing theoretical and empirical research, such as technological trends and developments are closely examined and elaborated upon. This literature review will be used to derive three research questions that will be answered throughout this study.

Immersive Media – A Future Trend?

Immersive media draw a picture of different approaches, influences, and fields of application. The discussion usually begins with the phenomenon of immersion as such. Immersion is considered as an umbrella term that

includes concepts such as involvement, illusion, presence, and interaction (Hochscherf et al., 2011, p. 10). Immersive media are referred to as medium whose perceptual-sensory properties on a technical and architectural level (e.g. holographic sound systems, 360° projections, S-3-D visualizations) eliminate the separation of physical and virtual space through illusionistic processes (Hochscherf et al., 2011, pp. 15-16). This applies to multiple types of immersive technologies in the field of immersive media in which VR and AR are the two most common examples (Bitkom e.V. & Deloitte, 2017, p. 44). Additionally, the combination of AR and VR is known as mixed reality (MR) (Bitkom e.V., 2021, p. 13).

Typically, immersive media are characterized by increased immersion in the digital environment, which distinguishes immersive media from established media such as radio, television, cinema, or video games (Kaplan-Rakowski & Meseberg, 2019, p. 144). Immersive media blur the boundaries between a medium and its user, dissolving the separation of physical and virtual space (Hochscherf et al., 2011, p. 9). Next to that, the technology of immersive media stimulates the physical senses to such an extent that the user can feel completely absorbed in a so-called virtual reality (Kaplan-Rakowski & Meseberg, 2019, p. 144). Sensory perceptions such as seeing, hearing, or touching and smelling that mimic reality consequently create a feeling of immersion (Li, 2020, p. 20). Literature frequently refers to this as an altered experience of presence (Li, 2020, p. 19; Kaplan-Rakowski & Meseberg, 2019, p. 152; Hochscherf et al., 2011, p. 9). Accordingly, Hochscherf et al. (2011, p. 15) describe immersion as an ambivalent phenomenon in which users both feel present in the virtual and real world, while constantly being aware of the unique user experience. Li (2020, p. 20) adds to this by highlighting the importance of visual stimulation for creating immersion, as 90% of human perception occurs through vision.

Immersive media often serve as a starting point for discussions regarding the significance of these technologies in everyday life in the future

(Bitkom e.V., 2022, p. 16). The extent to which such technologies could become an integral part of everyday human life or even lead to full-immersion technologies as a direct exchange of information between humans and machines (Gandorfer, 2019) remains to be seen in the future.

With all these factors considered, this paper thus aims at investigating the use of immersive media in NGOs operating in Germany. In this research context, an NGO is understood as “an organization that tries to achieve social or political aims but is not controlled by a government” (Cambridge Dictionary, n.d.). However, to generate deeper insights, it is essential to first examine the forms and contexts of the use of immersive media in this field. Thus, the question to address is:

RQ1: What forms and in what context are immersive media used by NGOs operating in Germany?

NGO Communication – Maximum Impact with Minimal Resources

According to the McKinsey Technology Outlook 2022 (Chui, Roberts & Yee, 2022), an annual market growth of approximately 20 % can be predicted in the private sector due to increasing investments in immersive media technologies. This could create an impact on organizations in the third sector, which direct their communication strategies towards the market more frequently (Barz et al., 2018, p. 132). Since the competitive environment makes innovative media formats such as immersive media more significant for the communication strategies of NGOs organizations (Yoo & Drumwright, 2018, p. 11), international NGOs such as Greenpeace (Greenpeace, n.d.) or Amnesty International (Amnesty International, n.d.) have already implemented projects that incorporate immersive media to create awareness for specific issues. The latter will be explained briefly to demonstrate the strategic relevance of immersive media for NGOs: In 2015, with the help of 360-degree videos and VR glasses, the human rights organization Amnesty International developed the immersive project "360 Syria" to enable recipients to experience the destruction of the Syrian capital, which was bombed by IS terrorists. The

aim of the project was to create a more memorable and lasting connection with the beneficiaries, which would preferably also translate into higher donations (Amnesty International, n.d.). This example is a relevant indicator about the consideration and use of immersive media as a strategic tool within NGO communication to support the organizations' goals and objectives.

However, since this case cannot be generalized without empirical evidence and an answer to the question about the potentials and problems of using immersive media as a communication tool remains largely unanswered (Kandaurova & Lee, 2019, pp. 571-572), further research is needed. Based on the initial efforts of Amnesty International to use immersive media projects as a strategic tool, an analysis of the general integration of immersive media in the communication departments of German NGOs represents the second step of this study. Thus, the following research question was posed:

RQ2: What opportunities and challenges do NGOs see in the use of immersive media?

Strategic NGO Communication – Communication that Matters?

For the purpose of exploring the use of immersive media from a strategic communication point of view, it is essential to first determine the use of strategic communication in general before elaborating on the strategic communication objective of NGOs.

Strategic communication is frequently considered in the context of for-profit organizations and corporate success (Bruhn et al., 2016, p. vii). The term is defined as communication that encompasses all communication forms which are substantial for the survival and sustained success of an entity. Additionally, it is used for purposeful communication by an organization or other entities to engage in conversations of strategic significance for its goals (Zerfass et al., 2018, p. 493). However, not all targeted communication is strategic, as it is highly dependent on the changing dynamics of communication landscapes and new technologies

which in turn can have an impact on the communication. One technological transformation in the communication field is the development of immersive media, which have set new forms of communication.

When taking a closer look into the current NGO communication, it is also crucial to examine the extent of its strategic background. Through non-profit communication, views, perspectives, and actions are addressed, questioned, and attempted to be changed (Bürker, 2018, p. 461). Yet, the communication of NGOs differs from classic corporate communication due to the following unique characteristics of NGOs:

- 1) *A qualitative character of the objectives* (Bruhn & Herbst, 2016, p. 606), instead of quantitatively measurable profit figures, such as the fight against hunger for example (Brot für die Welt, n.d.),
- 2) *no material nature of the product or service*, since the service of NGOs is rather defined in activities such as the transmission of certain values (Bruhn & Herbst, 2016, S. 606),
- 3) *a more complex web of stakeholders* (Stötzer, 2008, S. 407),
- 4) *a tight communication budget*, as financial resources are scarcer in the non-profit sector than in commercial industries (Remus & Rademacher, 2018, p. IX),
- 5) *the omission of the increase in demand by the target group as a central goal*: NGOs often even act against the resistance of these groups in order to change certain behaviors or values and to mobilize social forces for their purpose (Bruhn & Herbst, 2016, p. 619),
- 6) *the public as an amplifier of NGO communication*, which helps the organizations to exert pressure on politics and the corporate sector (Bürker, 2018, pp. 462-463).

Thus, these differentiating characteristics have a direct influence on the management, and ultimately also on the communication of NGOs, since

the setting and formulation of their objectives generally differ to those of for-profit organizations (Stötzer, 2008, p. 405).

The increasing role of online communication and social media further reinforces these unique characteristics (Bürker, 2018, pp. 462-463). This enables the emergence of new possibilities, which affect the quantity, quality, type, and content of media used in NGO communication (Stötzer, 2008, p. 406). One of these are immersive media technologies.

Additionally, NGOs face changing conditions in their environment with a socio-political competition for donors, volunteers, and media attention. NGOs therefore operate in an extraordinary field shaped by unique and challenging conditions as well as tensions that force them to achieve the greatest possible benefit with a relatively small communication budget (Bruhn & Herbst, 2016, p. 614). Accordingly, communication tools in the NGO sector are assessed based on their return on investment and outcome due to their generally low communication budgets (Bruhn & Herbst, 2016, p. 614). In this respect, an increasing professionalization among NGOs can be observed: The choice of certain communication measures over others is based on strategic decisions. Thus, communication strategies that have been considered standard practice in corporate management have also been adopted by NGOs (Barz et al., 2018, p. 132). While previous research has provided evidence that the need to define strategic objectives in NGO communication is now more prevalent, there is currently a lack of knowledge on the role that immersive media play in relation to certain strategic communication objectives. Therefore, the third research question addresses the following:

RQ3: How do NGOs understand the use of immersive media for strategic objectives?

As a last step, this research paper analyzes the strategic perspective of the implementation of immersive media, which have primarily been used in the corporate context and are now gaining ground in the third sector.

Methodology

For this study, a qualitative approach was chosen to analyze the use of immersive media as part of the strategic communication in German NGOs. Due to the relatively new and theoretically underdeveloped research area of immersive media in the non-profit sector and the contextuality as well as individuality of immersive media applications, in-depth semi-structured interviews were used to allow for a more flexible conversation with an explorative nature. With the intention of adequately answering the central research question of this research, 14 people from NGOs operating in Germany were interviewed. The interviewees were mainly communication officers from NGOs, most of whom held the position of head of communication and public relations or press officer.

Sampling Procedure

The sample was formed using the criterion sampling method by Patton (2002, p. 238) and extended by the snowball principle during the sampling process. To be included in the sample, the organizations had to be operating in Germany and registered as a non-profit organization in the German Commercial Register. Additionally, only NGOs with the highest donation sum were included in the sample. The sample was taken from a study on impact transparency in non-profit organizations, which contains a list of the 50 NGOs with the highest donation amounts in Germany in the year of 2016 (von der Ahe & Lüdecke, 2016).

Communication professionals at the upper management level from every NGO on the list were chosen as contact people, since it was assumed that communication officers with higher positions have more insights into the communication measures and strategies of the NGOs as well as decision-making authority. The sample acquisition was done via email and *LinkedIn* between December 2022 and January 2023. Four additional organizations were recommended by employees from NGOs in the original sample and were thus included in the sample via the snowball sampling method.

The final sample includes 14 NGOs (n=40) based in Germany that receive some of the highest donation amounts with the interview partners from the respective NGOs predominantly holding leadership positions in communications, marketing, or fundraising. An overview of the final sample can be found in Table 1, which includes the field of operation and the present or absent experience with immersive media for each interviewed organization in an anonymous manner.

Table 1.

Final sample of interview partners.

Interview Number	Field / Area of Operation	Experience with Immersive Media
1	Humanitarian aid	yes
2	Inclusion	no
3	Denominational / missionary	no
4	Medical and humanitarian aid	yes
5	Health	yes
6	Medical aid	no
7	Environmental / nature conservation	yes
8	Health	no
9	Denominational / missionary	yes
10	Environmental	yes
11	Human rights	yes
12	Animal rights	yes
13	Environmental / nature conservation	yes
14	Nature conservation	yes

Data Collection

All interviews were conducted virtually between January and February 2023. The semi-structured interviews were conducted with an interviews guide consisting of two versions: version one was used for NGOs with experience using immersive media and version two for NGOs that have not worked with immersive media technologies so far. Both versions contain three blocks of questions that each address one of the three research questions. The first version includes eight main questions with one subordinate question in an open response format and the second version consists of seven open-ended questions. Both interview guides followed a similar structure and logic to enable a combined analysis of the interview results, while still being able to evaluate differences among the NGOs and their immersive media experiences.

The interviews were analyzed and evaluated using the qualitative content analysis approach according to Mayring (2022). Prerequisite for this method is a category system whose categories were deductively derived from the three research questions as well as from the interview questions. The final category system consists of eight main categories and twelve subcategories, which are all subject to one of the three research questions (see Table 2). To further understand the research process, the questions from the two interview guides were added next to the according subcategories in Table 2.

Additionally, a coding manual with definitions and anchor examples for the respective categories along with coding rules was created during the early stage of the coding process to increase the reliability and validity of the results.

Table 2.

Section of the final category system.

Research Question	Main Category	Subcategory	Interview Questions V1 = experience with immersive media V2 = no experience with immersive media
RQ1	<i>Forms of Immersive Media</i>	Technologies Technological tools	What immersive media were used in your project(s)? (V1) / From your observations, what immersive media are organizations currently using? (V2)
	<i>User Context</i>	Physical setting Social setting	What is your organization's experience related to immersive media? (V1)
RQ2	<i>Chances and Challenges of Immersive Media</i>	Challenges in Planning and Implementing Immersive Media	What challenges did you face during planning and implementation? (V1)
		Chances of Immersive Media	What new opportunities do you see for your organization by using immersive media and what does this mean for the future work of your organization? (V1)

<i>Potential Chances for the Application of Immersive Media</i>	Chances for the Organization	What opportunities would you see in the use of immersive media for your organization? (V2)
	Probability of the Use of Immersive Media in the Organization	How likely is the use of immersive media in your organization in the future? (V2)
	Chances for the Third Sector	Regarding the third sector, do you see the use of immersive media as a promising communication measure in the future? (V2)

Concerns about intercoder reliability were eliminated since only one coder executed the coding. The coding and subsequent evaluation was done using MAXQDA Analytics Pro data analysis software and lays the groundwork for the key implications of the research findings.

Findings

The following findings were clustered according to the three research questions to identify the extent to which German NGOs use immersive media as part of their strategic communication.

Forms and Contexts of Immersive Media

The results for the first research question show that the most frequently used immersive technology within NGOs was virtual reality. It was

noticeable that the majority of NGOs used two or three technologies in their immersive media projects. Furthermore, a direct connection between VR and 360-degree videos could be identified, as 360-degree videos can be integrated into VR experiences using VR glasses. AR and MR technologies played a subordinate role in NGOs. In terms of the technologies chosen, NGOs most frequently used VR glasses for technical implementation, followed by 360-degree videos. In accordance with immersive media forms, VR glasses and 360-degree videos were the most common combination of immersive media technologies used in the NGO sample. This is clearly demonstrated by the following quote of one interviewee: “We produced 360-degree content during the event. Then we put foldable VR-glasses, the ones you put your smartphone in, into the goodie bags for the guests. So they could watch the same evening on their way home and move 360 degrees through the event.”

To analyze the context of immersive media applications, both the physical and social setting were considered for the research. In this study, the physical setting is understood as the actual place of the use and reception of immersive media content, while the social setting is defined as independent of the physical environment and focuses on the system or sector in which the immersive projects might be taking place. Regarding the physical setting of the projects in the sample, the majority of the immersive media content was distributed online - partly at several access points in the network: “It is embedded on our website and [...] also the 360-degree videos via the HTTP store [...] and via the app.”

The second most common physical setting for immersive media was the display and application in other organizations or companies. This was followed by projects in educational institutions, such as schools, and in their own NGO environments for training staff. The display of immersive media projects in public places played a minor role in the sample.

In terms of the social setting, the majority of NGOs applied immersive media projects in the educational sector. Only a few NGOs applied immersive media in a political or professional context in which the

immersive media were presented to employees of other organizations or companies.

In summary, the first research question can briefly be answered as follows: NGOs operating in Germany mainly used VR and 360-degree applications, mostly distributed online, with the educational sector being the most common context for immersive media.

Opportunities and Challenges in the Use of Immersive Media by NGOs

To fully assess the opportunities and challenges of immersive projects, the results include data from the entire study sample. This includes NGOs that have had no experience in projects using immersive media. Therefore, their input was based on predictions about opportunities and challenges, which simultaneously serve as arguments against the past use of immersive media.

The organizations in the sample saw the greatest challenges of immersive media in the implementation process of such projects as well as in the application and understanding of their technologies. Another difficulty was the uncertainty about the sufficient reach and marketing of the projects. Additional challenges were the high personnel costs and financial expenditures associated with immersive media projects. One interviewee named several of these points: “[...] it was very difficult and extremely lavish to get the footage [...] you can count the photographers who can do this with one hand.”

However, the greatest potential of immersive media, as stated by the subjects, was the ability to raise awareness of the organizations’ issues. As said, for example, in one interview: “[...] I think that immersive media offer a great chance to make topics accessible, for which I would not have the time to wrap my head around. That offers the starting point and shows that this [topic] has a relevance.”

Aspects such as the higher emotionality, the liveliness of immersive media content and the fun factor were emphasized as additional potentials that immersive media have for organizations and their communication. Furthermore, immersive media represented an opportunity for fundraising and the communication with (potential) donors since they were able to present complex issues of NGOs in a comprehensive and vivid manner. Linked to this, some NGOs saw these projects and the associated storytelling strength as another promising possibility for their membership recruitment. Interviewees also highlighted immersive media as a potential tool for positioning an organization as an innovative pioneer or for transferring knowledge internally as well as retaining their target groups.

In addition to the organizational view of the NGOs regarding the immersive media trend, the interviewees were asked about the opportunities for the third sector in general. The results are in line with those in the corporate sector, as both for- and nonprofit organizations see the greatest opportunity in the ability to increase awareness for the mission and respective issues. An increased perception of the NGO at the organizational level and increased funding opportunities through the implementation of immersive technologies were also frequently mentioned by the interview partners as future prospects for the third sector.

The Use of Immersive Media for Strategic Objectives of NGOs

The challenges NGOs face during the process and implementation of their projects with immersive media were revealed by the results of the third research question. Further challenges voiced by NGOs, which have not implemented any immersive media projects, provide insights into the reasons against the use and the general hesitation towards the use of immersive media in NGOs.

In general, all NGOs that have had implemented immersive media projects commissioned external companies to fulfil the projects for or with them, mainly due to lack of know-how or personnel resources. The lack of

experience and knowledge about immersive technologies was also an argument of the NGOs in the sample that did not use immersive media for their communication. The main argument against the application of immersive technologies was the unpredictable cost-benefit calculation of such projects and the doubts about their suitability for the target groups. Financial reasons were also frequently mentioned as hindering NGOs from realizing projects with immersive media so far. Other less dominant reasons were lack of personnel resources and procedural difficulties for the preliminary rejection of immersive projects. While the findings on the challenges of immersive media were provided by the entire NGO sample regardless of their experience with immersive media, the results on strategic objectives needed to be differentiated.

For the purpose of this study and in order to adequately answer the third research question on the strategic use of immersive media in NGO communication, the results were limited to insights from NGOs that have already implemented projects involving immersive media. Regarding these organizations, the majority had strategic objectives for their projects with immersive media but none with concrete performance indicators or other measurable goals. Furthermore, the majority of the NGOs could not provide any evaluation of these objectives, as most projects were still in the field or evaluation phase.

To gain a better understanding of how immersive media are used to achieve strategic objectives in NGO communication, the results must be interpreted in relation to the general goals encompassing all communication measures of the organization. As mentioned, the most important goal for the use of immersive media was to create public awareness for the issues of the NGO and the respective organization in general. Thus, immersive media projects were frequently implemented or planned with the intent to create greater public attention to the projects and issues involved. However, the results also show serious challenges that NGOs had or foresaw in relation to immersive media projects. Accordingly, in several NGOs, immersive media were part of projects

aimed at meeting strategic NGO communication objectives, but they were not considered a strategic tool or strategic objectives by themselves. One interviewee summed up the hesitating position of NGOs towards immersive media: “For sure the media will get more popular [...] But for now we do not see a priority to use them.”

It can be summarized that immersive media projects play a part in the strategic NGO communication but are not implemented explicitly as strategic tools to reach predefined goals.

Discussion

This discussion addresses the results of the study in order to answer the overarching research question concerning the extent to which NGOs use immersive media as part of their strategic communication. In summary, the study revealed that while immersive media currently do not play a dominant role within the NGO landscape, they show great potential in respect to organizational objectives, such as increased awareness towards the organization and its issues. While the majority of NGOs subject to this study have had first experiences with immersive technologies, there are general challenges that mainly relate to the unique characteristics of NGOs, such as tighter communication budgets (Remus & Rademacher, 2018, p. IX). The results will be closely discussed by looking at the three research questions regarding 1) the forms and context of immersive media applications in NGOs, 2) their opportunities and challenges and 3) the use of immersive media in a strategic communication context by NGOs.

Forms and Contexts of Immersive Media in NGOs: VR and 360-Degree Videos in Diverse Application Settings

VR and 360-degree videos are the main immersive media applications within the research sample; understanding this tendency is multifaceted. One explanation for the frequent use of 360-degree videos lies in their low-threshold applications, as no additional equipment other than cameras for recording are needed. Since NGOs usually have a tight communication budget, the use of 360-degree videos represents a reasonable entry point

into the world of immersive media. Additionally, there is a clear link between the use of VR and 360-degree videos in the surveyed NGOs that have implemented several immersive media projects. This can be attributed to the fact that 360-degree formats can be further developed by receiving the 360-degree films through VR glasses. At the same time, the technology opens up a wide range of design possibilities for NGOs. However, it remains unclear why certain immersive technologies were used instead of others, as interviewees could not always give complete insight into the decision process, since the choice was often made by an external service partner.

The dominant online distribution for the immersive media projects, often through several media channels, aligns with the increasing importance of online communication and social media for NGOs (Bürker, 2018, pp. 462-463) as well as the general trend of digitalization within society. Furthermore, the results highlight the diverse application possibilities of immersive technologies for NGOs. The varying contexts in which immersive media are used was mainly determined by the thematic field and objectives of the NGOs. Therefore, physical and social settings differed depending on the organization.

Yet, a tendency towards the educational field for the application of immersive media by NGOs could be identified. These findings generally align with a preliminary analysis by Bitkom e.V. (2021, p. 16) in which education was identified as a popular application context for AR. Even though the immersive technologies in this study were mainly VR and 360-degree videos, a trend towards the use of immersive media for educational purposes within the third sector becomes evident from the results. In contrast to expectations that immersive media would be used mainly to address potential donors in public, the professional educational sector turns out to be a relevant and promising field for NGOs.

Moreover, the immersive projects examined in this study were frequently employed in multiple social settings. One possible explanation for this finding is rooted in the complex and multi-faceted nature of NGO topics,

as well as the need to engage with a diverse field of stakeholders (Stötzer, 2008, S. 407). Furthermore, the analysis related to the social setting reveals that immersive media projects of the surveyed NGOs primarily focus on specific target groups and serve particular purposes. For instance, immersive media were utilized in companies, schools, or as a training tool for employees.

Additionally, NGOs that have already used immersive media technologies all collaborated with an external service partner. This was mainly due to the lack of know-how within the organization on the use of immersive applications. Some NGOs even sought additional support concerning the dramaturgy or budget planning of immersive projects. This further highlights the early stage that immersive media are still in within the third sector. In summary, the majority of NGOs expressed a greater need for both human and financial resources, indicating that implementing immersive projects entails a considerable additional effort for them.

Opportunities and Challenges for the Third Sector: Attention Generation and Complex Technologies

Results about the challenges of immersive media also revealed that NGO communicators are still not familiar with and properly trained for applying immersive media into their communication strategy. This lack of experience and training creates an uncertainty in dealing with immersive technologies, especially with regard to the technical requirements and the assessment of the necessary resources. Thus, familiar and traditional communication measures remain the ordinary means of choice. If immersive projects were implemented in an NGO, they generally served as an additional measure in the communication mix but were not seen as equivalent to established measures.

In terms of the procedural challenges, there are differences within the sample, which is mainly due to the individuality of the immersive projects. Marketing methods and public placement are additional challenges for NGOs, which further highlights the expressed doubts of NGOs about the

general reach of immersive media. On a broader level, NGOs are uncertain about the extent to which immersive media will become an established trend at all. They do not consider the medium as a common everyday technology yet. This is a decisive reason that discourages both the first-time and repeated implementation of projects using immersive media. According to Bitkom e.V. (2022, p. 14), VR glasses are occasionally used in a private context by 18 % of the German population aged 16 and over. Thus, not even a quarter use VR glasses privately. This generally low application within society supports the hesitations voiced by the NGOs. Simultaneously, the small percentage of immersive media users has an impact on the relatively high acquisition costs of such technologies. This in turn is a key challenge for NGOs given their limited financial resources. Additionally, it is difficult for NGOs to set realistic budgets for immersive projects, since most of them are implemented as pilot projects or trials and do not provide proper benchmarks for the NGO sector as a whole. This further slows the spread of immersive media in the non-profit sector. It can be concluded that immersive media are not yet established media formats, as most NGOs are skeptical about the high costs of such technologies and often do not consider their application as justified in terms of reach and outcome.

However, the NGOs surveyed also see potential for their organizations and the third sector in general. The key potential of immersive media lies in attracting attention for the organizations and their missions. Applications with immersive media enhance the accessibility for civil society issues for people, which is a considerable finding of this research. Thus, immersive media have the chance to contribute to a main goal of NGOs, which is to increase awareness for their causes.

The discovery that emotionality, liveliness, and enjoyment are further potential advantages of using immersive media aligns with the findings of a study conducted by Bitkom e.V. and Deloitte (2017, p. 46). They claim that VR should be understood as a technological means to create compassion and empathy. Contrary to findings of Yoo and Drumwright

(2018) and practical experiences by Greenpeace (Greenpeace, n.d.) and Amnesty International (Amnesty International, n.d.), that immersive media contribute to the objectives of membership recruitment and donation acquisition, this research shows that immersive technologies are not primarily used for fundraising purposes in German NGOs. Rather, they support the overall objective of increasing awareness. The pioneer position created through the use of immersive media offers further potential for gaining and retaining members or volunteers as well as transferring internal knowledge through in-house training for staff members. Therefore, immersive media could indirectly contribute to the overall objectives of NGOs. However, these findings are not statistically significant and would require further research to validate their significance. NGOs that do not prioritize the use of immersive media for future projects currently feel uncertainties caused by factors such as the high costs involved in realizing immersive projects. Additionally, the unpredictable development of the immersive media trend leads to a certain ambivalence about the use of immersive media by NGOs in the future. In summary, immersive media are considered as supporting measures but do not play a leading role in their use by NGOs today. However, the general engagement with immersive media is considered as relevant by the NGOs of this study's sample. This provides ground to further observe and pursue the potential and experienced opportunities of immersive media for NGOs analyzed in this research.

Another challenge for NGOs lies in the skepticism about immersive media being adequately able to address target groups. For them to be effective tools within NGO communication, they must engage with the relevant stakeholders. In most cases, immersive media are currently not suitable to address the target groups of NGOs. The primary reason for this is that the stakeholders do not use VR glasses or similar technologies required for an immersive experience in a private context. Since individuals such as new members, volunteers or donors form the most important target groups for German NGOs, traditional communication activities such as e-mail communication or written letters are mostly preferred at this point. The

results of the study show that immersive projects can be used for specific purposes or target groups, but less for the general approach of individuals in the fundraising context. Therefore, immersive media are not primarily used to address the mass media, instead they are specifically used to inform, raise awareness and educate about certain topics for specific target groups. Even though there is a general openness towards the (future) implementation of immersive media projects in NGOs, the balance between the costs and benefits is decisive for the (potential) use of immersive media for NGOs. The planning, implementation and conception of immersive projects requires high expenditures which cannot be responsibly implemented by non-profit organizations that are mainly financed by donations. The significant costs associated with immersive technologies represent one of the key factors that discourage the utilization of immersive media in NGOs. The findings in this study align with Bruhn and Herbst (2016, p. 614), who claim that NGOs use their communication tools based on a high potential benefit at a justifiable cost, which is clearly reflected in the argumentation of the surveyed NGOs against the first or recurring use of immersive media in their communication strategy.

Immersive Media for Strategic Goal Setting: Supporting Role and Evaluation Problems

To examine the strategic role of immersive media for the objectives of NGOs, the nature of goal setting in non-profit organizations should be taken into account. Information on predefined strategic goals were formulated very vaguely by the interview partners and included no concrete key indicators on the performance of immersive media projects. This can be explained by the trial phase in which most of the projects are currently still in. There is no prior experience or available benchmark for NGOs to base their objectives on when first experimenting with immersive technologies for their communication. The uncertain outcome and impact of such innovative and fairly new projects additionally contribute to a rather vague or even missing formulation of goals or strategic objectives by NGOs. At this point, it is relevant to mention Bruhn

and Herbst (2016), as they highlight the rather qualitative character of NGO objectives in comparison to those of for-profit organizations (p. 606). This reveals that projects involving immersive technologies do not follow certain key point indicators (KPIs) or quantitative goals and objectives within NGO communication have a rather qualitative nature.

For these reasons, the strategic objective for immersive media technologies in NGOs cannot be explained by measurable figures and must be viewed from a different angle. Instead, NGOs assess their communication strategy based on the opportunities that certain measures provide for their organization. Therefore, qualitative objectives such as gaining public attention and strengthening the positioning usually prevail in NGOs. Accordingly, immersive media contribute to overarching strategic communication goals of an NGO, but do not have an independent strategic role within the communication strategy of the third sector. It should also be noted that this does not have to be understood as a problem, since the value of immersive media can generally lie in supporting the overall communication strategy of NGOs by adding an innovative and unique dimension to the commonly used communication measures. This would imply that immersive media on their own do not determine the strategy of communication, but indirectly support it by contributing to the communication mix.

While this study offers valuable insights into the use of immersive media in the third sector, there are some limitations that need to be addressed. Methodologically, qualitative semi-structured interviews bear inevitable limitations due their subjective nature and the small sample size (n=14) does not allow for generalizations about the results (Herczeg & Wippersberg, 2021, p. 119). This was mainly due to the fact that immersive media are not yet widely used, especially in the third sector. However, since the aim of this predominantly unexplored research field was to generate initial findings and patterns for further research, the method presented here is best applicable. Furthermore, only communication officers within the NGOs were interviewed, excluding

any outside perspective on the use of immersive media in the third sector. Many NGOs in the sample were still in the testing or evaluation phase at the time of the interview, which is why no verifiable insights on the level of success regarding the use of immersive media as a strategic communication measure could be obtained.

The two versions of the interview guide, which were created due to the mixed sample of NGOs both with and without experience in dealing with immersive media, led to a further limitation. The interview partners answered the questions based on different levels of experience and knowledge. Therefore, a separate consideration of the answers between NGOs with and without experience on immersive media could have generated closer insights but would have reduced the comparability among the sample. Furthermore, future studies should eliminate the separation between technology and technical tools within the immersive media field since interviewees could not distinguish between them. The sole use of the term technical tool would have been sufficient in regard to the validity. However, the limitations are not exclusively a weakness of the present study but offer a basis for future research on immersive media in the NGO sector.

Conclusion and Future Prospects

The study reveals that immersive media can be seen as an innovative and valuable contributor to the communication mix of NGOs to pursue strategic objectives and generate more attention for the organization. Although initial approaches to the use of the immersive media as a strategic communication measure could be identified, immersive technologies in the non-profit sector are still at an early stage and not a firm part of the organizational strategy so far. NGOs are still wary about the development of the immersive media trend and favor conventional communication strategies. The underlying problem for this pattern lies in the high costs of immersive media technologies. Therefore, more affordable and generally accessible VR and AR technologies are needed to reduce the inhibition threshold. In addition, NGOs that have experience

with immersive technologies lack adequate evaluation of project outcomes, which is related to the general lack of sufficient evaluations of non-profit communication interventions, as already pointed out by Bürker (2018, pp. 463-468). Although immersive media are not yet equivalent to traditional communication tools in NGOs, the results show that the interviewed NGO communication managers see the potential of immersive media to enrich and complement traditional communication tools to generate attention for the organization, as immersive media can be used in diverse and innovative contexts.

Managerial Implications

While the trend of immersive media has not undergone a large breakthrough within society, NGOs should not sit back, but instead use the potential of immersive media with their innovative and diverse applications as an advantage in a highly competitive fundraising market to stand out in the third sector and offer new approaches beyond mainstream communication measures. This implies that NGOs have to be courageous and invest financial and personnel resources such as hiring external service partners or training staff in the use of immersive media. In addition, innovative, proactive NGOs are needed in the third sector to pioneer the successful use of immersive media to overcome skepticism about the use of immersive media, highlight its benefits and build the currently missing benchmark in the NGO landscape.

Future Research

Since the research field of immersive media in the third sector is fairly new, this study reveals some areas that could be relevant for future studies. Firstly, it would be interesting to analyze the individual technologies of immersive media separately, since their different technological properties could bear different outcomes, especially regarding strategic goals and potentials for NGOs. Secondly, understanding common arguments against the use of immersive media and their interrelation can offer further insights into the cautious engagement with immersive media in the third

sector. Thirdly, the study reveals an uncertainty within NGOs about the effectiveness of immersive media, which can be explained by the lack of evaluation for the existing immersive media projects. The development of analytical tools and methods to measure the outcomes of immersive media applications in the field of research, but also in collaboration with the practical non-profit sector, can therefore fill a major gap in research and practice.

Additionally, the results demonstrate a tendency towards the use of immersive media for educational purposes suggesting the need for a closer empirical understanding of the reasons and potentials of immersive media in an educational context. Lastly, research can be extended to an international sample to gain a deeper understanding of the potential of immersive media for non-profit organizations in general.

References

- Amnesty International. (n.d.). *360 SYRIA: INFORMATION SHEET. Virtual reality in Aleppo*. Amnesty International.
https://www.amnesty.org.uk/files/1_information_sheet-_360_syria_-_vr_in_aleppo.pdf?VersionId=rNuRdYUpw9T0eEpYBZD8MlrcHGeFtSZI
- Barz, A., Reinert, C. & Hartmann, J. (2018). NGO-Kampagnen im Vergleich [NGO campaigns compared]. In N. Remus & L. Rademacher (Eds.), *Handbuch NGO-Kommunikation* [Handbook NGO communication] (pp. 131-146). Springer VS.
<https://doi.org/10.1007/978-3-531-18808-9>
- Bitkom e.V. (2021). *Augmented und Virtual Reality. Potenziale und praktische Anwendung immersiver Technologien* [Augmented and Virtual Reality. Potentials and practical application of immersive technologies]. Bitkom e.V..
https://www.bitkom.org/sites/default/files/2021-04/210330_if_ar_vr.pdf

- Bitkom e.V.. (2022). *Zukunft der Consumer Technology – 2022: Marktentwicklung & Mediennutzung, Trends & Technologien* [Future of Consumer Technology - 2022: Market Development & Media Use, Trends & Technologies]. Bitkom e.V..
https://www.bitkom.org/sites/main/files/2022-08/220823_CT_Studie_2022.pdf
- Bitkom e.V. & Deloitte (2017). *Zukunft der Consumer Technology – 2017: Marktentwicklung, Trends, Mediennutzung, Technologien, Geschäftsmodelle* [Future of Consumer Technology - 2017: Market Development, Trends, Media Use, Technologies, Business Models]. Bitkom e.V..
<https://www.bitkom.org/sites/main/files/file/import/170901-CT-Studie-online.pdf>
- Breves, P. & Schramm, H. (2021). Bridging psychological distance: The impact of immersive media on distant and proximal environmental issues. *Computers in Human Behavior*, 115(2021), 1-9. <https://doi.org/10.1016/j.chb.2020.106606>
- Brot für die Welt. (n.d.). *Über uns: Brot für die Welt* [About us: Brot fuer die Welt]. Brot für die Welt. <https://www.brot-fuer-die-welt.de /ueber-uns/>
- Bruhn, M., Esch, F. & Langner, T. (2016). *Handbuch Instrumente der Kommunikation. Grundlagen – Innovative Ansätze – Praktische Umsetzungen* [Handbook Instruments of Communication. Basics - Innovative approaches - Practical implementations] (2nd ed.). Springer Gabler. <https://doi.org/10.1007/978-3-658-04655-2>
- Bruhn, M. & Herbst, U. (2016). Kommunikation für Nonprofit-Organisationen [Communication for Nonprofit organisations]. In M. Bruhn, F.-R. Esch & T. Langner (Eds.), *Handbuch Instrumente der Kommunikation. Grundlagen – Innovative Ansätze – Praktische Umsetzungen* [Handbook Instruments of Communication. Basics - Innovative approaches - Practical implementations] (pp. 605- 622). Springer Gabler.
<https://doi.org/10.1007/978-3-658-04655-2>

- Bürker, M. (2018). „Mehr Wert für eine bessere Welt?“. Evaluation und Controlling der Kommunikation von Nichtregierungsorganisationen [“More value for a better world?”. Evaluation and controlling of the communication of non-governmental organisations]. In N. Remus & L. Rademacher (Eds.), *Handbuch NGO-Kommunikation* [Handbook NGO communication] (pp. 461-487). Springer Fachmedien. <https://doi.org/10.1007/978-3-531-18808-9>
- Cambridge Dictionary. (n.d.). *Meaning of NGO in English*. Cambridge Dictionary. <https://dictionary.cambridge.org/dictionary/english/ngo>
- Chen, C. & Yao, M. Z. (2021). Strategic use of immersive media and narrative message in virtual marketing. Understanding the roles of telepresence and transportation. *Psychology & Marketing*, 39(3), 524–542. <https://doi.org/10.1002/mar.21630>
- Chui, M., Roberts, R. & Yee, L. (2022). *McKinsey Technology Trends Outlook 2022*. McKinsey & Company. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-top-trends-in-tech#/>
- Gandorfer, S. (2019). *Was sind immersive Technologien?* [What are immersive technologies?]. IT-Business. <https://www.it-business.de/was-sind-immersive-technologien-a-833153/>
- Greenpeace. (n.d.). *Augmented Reality-Anwendung. Der Artenvielfalt auf der Spur* [Augmented reality application. On the trail of biodiversity]. Greenpeace. <https://www.greenpeace.de/ueber-uns/umweltbildung/augmented-reality-anwendung-artenvielfalt-spur>
- Hochscherf, T., Kjær, H., & Rupert-Kruse, P. (2011). Phänomene und Medien der Immersion [Phenomena and media of immersion]. *Jahrbuch immersiver Medien* [Yearbook of immersive media], 3, 9-19. Schüren. <https://doi.org/10.25969/mediarep/18222>
- Kandaurova, M. & Lee, S. H. (2019). The effects of virtual reality (VR) on charitable giving: The role of empathy, guilt, responsibility, and social exclusion. *Journal of Business Research*, 100, 571-580. <https://doi.org/10.1016/j.jbusres.2018.10.027>

- Kaplan-Rakowski, R., & Meseberg, K. (2019). Immersive Media and Their Future. In R.M. Branch, H. Lee & S. S. Tseng (Eds.), *Educational media and technology yearbook (Vol. 42)* (pp. 143–153). Springer Nature. https://doi.org/10.1007/978-3-030-27986-8_13
- Kolesch, D. (2017). Vom Reiz des Immersiven. Überlegungen zu einer virulenten Figuration der Gegenwart [On the appeal of the immersive. Reflections on a virulent figuration of the present]. *Paragrana*, 26(2), 57-66. <https://doi.org/10.1515/para-2017-0020>
- Li, Q. (2020). *Immersive Communication. The Communication Paradigm of the Third Media Age*. Routledge.
- Mayring, P. (2022). *Qualitative Inhaltsanalyse. Grundlagen und Techniken* [Qualitative Content Analysis. Basics and techniques] (13th ed.). Beltz.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Sage Publications.
- Remus, N. & Rademacher, L. (Eds.). (2018). *Handbuch NGO-Kommunikation* [Handbook NGP communication]. Springer VS. <https://doi.org/10.1007/978-3-531-18808-9>
- Stötzer, S. (2008). Stakeholderorientierte Informations- und Kommunikationspolitik in Nonprofit-Organisationen - Leistungsberichterstattung als Instrument zur strategischen Beziehungsgestaltung [Stakeholder-oriented information and communication policy in non-profit organisations - performance reporting as an instrument for strategic relationship building]. In F.U. Siems, M. Brandstätter & H. Gölzner (Eds.), *Anspruchsgruppenorientierte Kommunikation. Neue Ansätze zu Kunden-, Mitarbeiter- und Unternehmenskommunikation* [Stakeholder-oriented communication. New approaches to customer, employee and corporate communication] (pp. 403-420). VS Verlag für Sozialwissenschaften. <https://doi.org/10.1007/978-3-531-91204-2>

- von der Ahe, B. & Lüdecke, R. (2016). *Wirkungstransparenz bei Spendenorganisationen (2016). Im Namen der Guten. Wie transparent arbeiten 50 große Spenden- Organisationen?* [Transparency of Impact in Donor Organisations (2016). In the name of the good. How transparent are 50 major donor organisations?]. PHINEO gemeinnützige AG.
<https://www.phineo.org/magazin/spendenorganisationen-im-transparenz-check>
- Yoo, S.-C. & Drumwright, M. (2018). Nonprofit fundraising with virtual reality. *Nonprofit Management and Leadership*, 29(1), 11-27.
<https://doi.org/10.1002/nml.21315>
- Zerfass, A., Verčič, D., Nothhaft, H., & Werder, K. P. (2018). Strategic communication: Defining the field and its contribution to research and practice. *International Journal of Strategic Communication*, 12(4), 487–505.
<https://doi.org/10.1080/1553118X.2018.1493485>