# Reducing Change Resistance: Stakeholder-based Approach for Extended Reality (XR) Implementations

Lena Sophie Leitenbauer\*, Sabrina Romina Sorko, Miriam Lutz

Abstract: As digitalization progresses, assistance systems in the field of XR are now also increasingly finding their way into industry. This and the advancements in this area make it more and more interesting for industrial companies. However, it is not only the maturity of the technology in the form of hardware and software that is decisive for its use in combination with suitable corporate use cases, but above all the acceptance of the employees who are supposed to integrate this new technology into their everyday work routine. In this context, it is of utmost relevance to identify all necessary stakeholders at an early stage. Therefore, a model for XR implementation projects will be developed to identify stakeholders and derive appropriate measures in terms of change communication and participation.

Keywords: change management; extended reality; participation; stakeholder integration; technology acceptance

### 1 INTRODUCTION

With the digital transformation, a large number of technological developments has reached market maturity. One area are extended reality (XR) technologies, which have been used since the 1960s, particularly in the military environment [1], but have only gained relevance for industry in recent years. For instance, according to McKinsey [2], the global extended reality market will grow by almost a quarter by 2035. This is due to the constant technological advances and the correspondingly increasing industrial application areas along the entire value chain. This presents companies with the question of where which XR solution could be ideally used and how the implementation of such a system could be successful in the long run. Where applies to the possible areas of application and use cases in selected departments such as maintenance or production, and which refers to the XR hardware (e.g. mobile device or head mounted device) and software combination that is to be used.

XR technologies are used to simplify everyday work by making information available in a content-oriented, local and timely manner [3]. XR solutions thus represent assistance technologies for humans. However, this poses a double challenge in implementation. On the one hand, the focus is on the application itself, i.e. the added value and benefits that it generates for the user (e.g. for the person responsible for change management or the XR implementation) in terms of content. On the other hand, usability is a possible challenge that must be addressed during the implementation process. These aspects are part of technology acceptance research. The aim of this scientific discipline is to determine the factors influencing human acceptance of new technologies. The most common approach is based on the research of Venkatesh & Davis (2000) who developed the technology acceptance model. According to this, there is a willingness to use the respective technology if it is seen as useful and easy to use by the user. Also they derived some influencing factors on the perceived usefulness and perceived ease of use such as job relevance, experience or output quality [4]. The model represents a generic approach that does not distinguish between different technology directions. For the area of XR, further relevant influencing variables were determined in a qualitative supplementary study. Protected learning opportunities, data protection and the strategic anchoring of the technology play an important role [5].

Also from the perspective of change management, a strategic framework and a high commitment are decisive for an efficient and successful change [6, 7]. Especially the commitment of employees is crucial. It has been scientifically proven that resistance from employees is the main reason why implementation projects fail [8, 9]. To deal with that, Krüger postulates a strong employee involvement right from the beginning of the implementation process. A high level of active participation leads to a better understanding for the change and respectively to a higher acceptance for the new solution [7].

The present paper contributes to this initial situation. As part of a funded collective research project, a stakeholder analysis tool was developed together with companies. The aim was to systematically localize the people crucial to an XR implementation based on an XR strategy, to group them according to their degree of participation and to derive group-specific communication and participation plans. Within this paper, the development process is described in detail and insights on the tool developed are given.

## 2 STAKEHOLDER MANAGEMENT FOR XR-PROJECTS

Changes caused by the technology implementation often faces underestimated or not considered challenges. Reasons are a missing commitment of the management, barley to no communication about the project, fear towards the technology or in transparent reasons why the change is necessary [10]. The main aspects of technology acceptance have already been highlighted in the introduction. It is therefore possible to deduce that varying needs of the affected individuals subsequently lead to a differentiated set of measures. This to ensure a high level of technology acceptance.

Not taking these factors into account could lead to negative effects within the project from missing deadlines to fail in achieving the set targets up to abortion of the project. In any case the company has to deal with wasted resources, lost synergies and missing benefits from the XR technology [11].

In this respect it is crucial to identify the affected stakeholders already at the beginning of the planned implementation [12]. Stakeholders are interest groups or individuals who have a special motivation for the development of a company, project or process [13]. In the context of an XR implementation, internal (e.g. future key users, IT department, process engineers) and external (such as provider hardware/software, consultants, government and regulations, to name a few) stakeholders need to be considered [14, 15]. These stakeholders differ not only in terms of whether they are crucial to the content of the XR project or not. Also the position within the company is different, e.g., through their hierarchical level and the associated decision-making power or/and through their collegial reputation in the company. Those differences also affect the influence and importance of the stakeholder, in the project. The areas of influence include resource decisions concerning time and budget, but also social influence in the sense of a multiplier role [16].

Thus, it is relevant, to know all important stakeholders (on professional and social side) to realize a XR implementation successfully. In this respect it is crucial not only to identify the stakeholders but also to gather information about their opinion and their attitude towards the change. Based on this information, specific measures can be taken in terms of communication and participation [17]. Those measures address different causes of resistance such as fears of job loss or of the technology itself, technical and functional concerns, or personal bad experiences with projects of this kind. The aim is to support the stakeholder and help them to overcome the outlined individual change barriers. Furthermore, through ongoing communication synergies can be detected in terms of expertise or relevant information regarding the planned change [18].

In this respect it becomes clear why industrial companies should increasingly focus on actively managing their stakeholders by providing each of them with appropriate information about the project, the opportunity for feedback and actively participate in the change. These aspects will be discussed in more detail in the following.

#### 3 CHANGE COMMUNICATION AND PARTICIPATION

This chapter deals with the relevance of communication and participation during a change process. The communication and participation during a change process constitute key components of the concept described within this paper.

Information (e.g. facts or data) is a component of communication and can be enhanced through participation. Thus, the terms information, communication and participation cannot be used synonymously. Concerning the realization in operative business, these three differ significantly. While simply forwarding information unidirectional via mail requires few resources, communication is bi- or multidirectional and allows the participants to re-question and discuss the information [19]. Involving all crucial stakeholders in the project demands

even more resources to realize different participation methods [20].

By consistently and systematically involving the stakeholders, it is possible to achieve significant advantages and synergies [21]:

- Gaining understanding and acceptance: Fears and concerns can be reduced through involvement in the project. Better knowledge about the new technology leads to an increase in technology acceptance.
- Encourage early improvement: Employees can express concerns and problems at an early stage, so that possible obstacles can be detected in advance and solutions can be developed.
- **Increasing efficiency:** Getting to know the technology before implementation supports the individual learning curve of the users, which means that work can be done more efficiently as soon as the productive phase begins.
- **Increasing motivation:** By participating in the implementation process of new technologies and feeling that their opinions and ideas are being heard, employees feel more motivated and are more committed.

Taking systematic actions in the field of communication and participation that are tailored to the needs of the stakeholders, ensures resource efficiency as well as the effectiveness of the measures taken. It is important to address detected crucial stakeholders and especially those who are collaborators of the new solution [7]. Measures therefore can be in terms of communication (such as discussions or face to face meetings) and participation (e.g. workshops or taskforces) [22].

The arguments raised above, underline the necessity for industrial companies to plan an XR implementation knowing their stakeholders and to be able to take appropriate measures for them to successfully contribute to the project.

The findings from a comprehensive literature research showed that there is currently no generic tool for identifying and assigning stakeholders in XR change processes and providing support for users with suitable measures for execution. Accordingly, the contribution described within this paper tends to fill the current gaps in literature. The developed tool should offer the possibility to record and categorize all stakeholders and provide a catalogue of suitable measures. The aim is to support XR project managers to obtain an overview of possible communication and participation opportunities, based on their stakeholders.

#### 4 METHODOLOGY

The methodological approach is divided into four phases as shown in Fig. 1: literature research, prototyping phase, evaluation in practice, and derivation of the final concept.



Figure 1 Methodology

These stages are listed chronologically and explained in detail in this chapter.

#### 4.1 Literature Research

Starting with a literature research was necessary to build up fundamental knowledge in addressed areas such as technology acceptance, stakeholder management, and ways to communicate and participate effectively. Basic findings on these areas were covered and explained in the previous chapters. Aggregating the insights, two significant questions arose:

- 1. Who are the relevant stakeholders for the XR implementation?
- 2. How must these stakeholders be served in terms of information, communication, and participation?

These questions are considered guiding questions for the development of the stakeholder tool. Together with the elaborated content, they form the basis for the development of the prototype.

# 4.2 Prototyping Phase

To systematically work on those questions, an Excel tool was developed to conduct a stakeholder analysis. Based on this result a communication and participation concept was designed targeting different types of stakeholders and taking their individual role within the change process into account.

The **Stakeholder analysis** of change relevant stakeholders was realized by a VBA (Visual Basic Application) Excel tool. The Stakeholder analysis is divided into four parts:

- General information: When working with a tool, some introduction and general information is important to support the understanding of the tool and point out some important aspects when working with the tool. Thus, general information about the tool and the definitions used can be found in the first register. In this respect, ensuring a common understanding of the three dimensions project relevance, impact and attitude are most crucial. The term project relevance is used to evaluate the importance of the stakeholder for the project. An example of this is a developer for the XR application, who may not have much influence on other stakeholders, but plays an important role in the implementation of the XR project. Influence references to social influence through status, reputation, or other aspects. An employee who has been with the company for 20 years usually has his or her personal network within the company and thus may enjoy greater social influence than one who is part of the company only a short period of time. The term attitude represents the opinion and mindset of the stakeholder towards the upcoming XR launch. This dimension can take three forms: A-positive, B-neutral, or C-negative as shown in
- 2) Categorization: The first step is to think about which types of stakeholders could be crucial for the planned

- XR implementation. Therefore, the first tab of the tool distinguishes between internal and external stakeholders. Within this differentiation, stakeholder groups are formulated, depending on the corporate environment, and setting. Internal stakeholder groups could be key accounts, departments or management and external stakeholder groups could be suppliers or customers.
- 3) Stakeholder identification: Based on the predefined stakeholder-groups/categories, the actual people representing project-relevant stakeholders are recorded. In addition, the stakeholders are evaluated based on the aforementioned criteria project relevance, influence, and attitude towards the XR-implementation. The result is a list of change-relevant stakeholders that have been assessed in relation to the XR implementation project. It should be noted here that the result of every stakeholder regarding the three dimensions can change during the implementation process. For this reason, a stakeholder analysis must be carried out continuously during the XR implementation.
- 4) Visualization using a stakeholder map: In the last tab, the collected information is processed to a stakeholder matrix using a VBA macro as shown in Fig. 2. This macro organizes stakeholders anonymously according to the three dimensions outlined. Anonymity is guaranteed by assigning abbreviations (i for international or e for external) and by adding individual IDs. In this way, only the creator of the matrix can assign the numbers to the stakeholders.

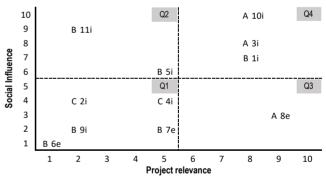


Figure 2 Stakeholder Matrix with eleven identified Stakeholders

This matrix forms the starting point for targeted communication and participation during the XR change process. To give a clearer idea of the evaluation in the in the intended application, here is an example: the stakeholder with the ID "A 10i" is classified in Q4 due to his position in the company (project relevance e.g. IT department) and renown among the employees (social influence). This stakeholder is open to XR technology and interested in driving change, hence the letter A. The number ten signifies that he was the tenth recorded stakeholder and i means that this person belongs to the staff of the company (internal).

Depending on the position of the stakeholder in the matrix, different measures for efficient communication and participation are recommended. These actions are explained addressing the second question: *How must these stakeholders* 

be served in terms of information, communication, and participation?



Figure 3 Participation Building Kit

The second part of the tool, the Information, Communication and Participation Plan provides suggestions for activating the detected stakeholders. According literature. the boundary between communication and participation is difficult to determine. Communication functions without participation, but participation only with communication [23]. For clarity and to make companies aware of this difference the Participation Building Kit was developed (Fig. 3). This kit consists of various elements (so called drawers within the model) that reference different forms of information, communication, or participation. Every drawer contains measures for addressing the stakeholders in a targeted manner suitable for the individual positions within the change process. Thus, the Participation Building Kit is a toolbox consisting of five levels: information, explanation, consultation, discussion, and participation, with the three middle levels representing the communication level.

Based on this construction kit, measures were worked out that can be applied within these drawers. The concept of information, communication and participation is therefore divided into the following areas:

- General overview of communication and participation options
- Catalog of actions
- Detailed consideration of linked norm strategies.

These areas are discussed in detail in chapter 5, which also shows the results using a use case example.

## 4.3 Evaluation in Practice

To ensure not only scientific quality but also take the requirements of companies into account, the developed prototype was evaluated with industrial companies from different sectors. This was done in a twostep approach. The first step was to gather remarks from as many different companies as possible on a more general level. Whereas the aim of the second step was to get detailed information about

the tool from individual companies. Subsequently, a brief explanation of how the two steps were carried out is given next.

At the first step, the macro-based Excel stakeholder tool was presented at a user group meeting as part of the aforementioned funded research project. After giving a short overview of the tool in general the company representatives from industry were asked to give feedback on the tool from different perspectives. Those were, for example content, usability or clarity. All remarks were collected in a list. Afterwards, they were evaluated according to their relevance for the tool, the number of mentions and the feasibility (limitation due resources). The handling of all remarks (whether incorporated, relevant for later development or not relevant) was documented. Subsequently, the remarks were used to adapt the tool as part of the feedback process. In total, 17 representatives from different companies participated in this evaluation.

At the second step, three companies from different branches were asked to work with the stakeholder tool evaluating a XR implementation project they are working on within their companies. The participants were first informed and trained on how to use the tool. Afterwards, they were able to use the tool on their own and test it. The evaluation focused primarily on the ease of use, practicality in the industry and comprehensiveness of the functions. The results of the evaluation were discussed individually with the companies. Practical suggestions for improvement were collected and subsequently integrated into the concept.

# 4.4 Derivation of Final Results

This chapter deals with the aggregation of the results from the evaluation steps. Feedback mentioned at the user group meeting was integrated during the final improvement phase. One example of an adaptation by the feedbacks was that the stakeholders in the matrix were anonymized (combination of numbers and letters) instead of listed names to prevent conflict potential in the organization. The same applies to the proposed measures in connection with target group-oriented communication and participation discussed with the chosen companies of the second evaluation step.

The result of this phase is a practical concept to reduce change resistant. This concept includes a company-specific stakeholder analysis accompanied by a communication and participation concept, whereby fears and resistance decreases, and technology acceptance increases. The results are shown in detail in the next chapter using a case study example.

## 5 RESULTS

The described methodological approach is realized in the year 2022 as one of the main results of the funded research project. As the project is still going on till end of 2023, this paper can only provide exemplary results and no actual data from one of the project partners. Presenting a real practical example will be part of a separate publication expected till end of the year.

#### 5.1 Stakeholder Analysis Tool

As first step, the stakeholder needs to be classified either as internal or external stakeholder and added to the tool. As use case example in this respect, the category "XR Key User" is created, which represents an internal stakeholder (Fig. 4).

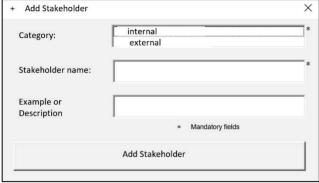


Figure 4 Userform: Add Stakeholder Category

This is followed by allocating the stakeholder to a real instance. In this step, contact information of the stakeholder is recorded and an evaluation is given regarding the three dimensions project relevance, influence, and attitude towards the upcoming implementation of XR (Fig. 5).

Evaluate Stakeholder		×
Musterfrau Mayer Internal Key User		
Other information:		
Social influence		
C 1 - niedrig C 2 C 3	C4 @ 5 C 6 C 7 C 8	○ 9 ○ 10 - hoch
Project relevance		
C 1 - niedrig C 2 C 3	○4 ●5 ○6 ○7 ○8	○ 9 ○ 10 - hoch
Attitude		
СА	® B	СС
Go back		Continue

Figure 5 Userform: Evaluate Stakeholder

The result of the stakeholder analysis is a stakeholder matrix that shows the stakeholders relevant to the project according to their assessment (Fig. 2). The position of the stakeholders in the matrix forms the starting point for a target group-addressed application of the communication and participation concept.

As a second example a stakeholder with a high social influence, a low project relevance and a neutral attitude is assumed (B 5i in Fig. 6).

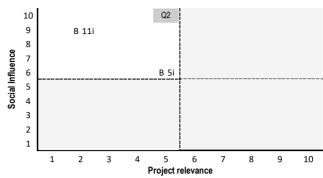


Figure 6 Stakeholder in Q2 with a neutral attitude

In this case, these dimension characteristics represent the works council at the beginning of the change process. Since the works council has a neutral attitude towards XR in general, it also has a low relevance to the project. However, if an employee seeks support because the XR-application is not data protection-compliant, the attitude and thus also the project relevance can change to the negative side during the change. If the stakeholder analysis is only carried out in the beginning of the change, potential implementation barriers would remain unseen and can increase resistance. This issue underlines the significance of the regular use of a stakeholder analysis.

#### 5.2 Information, Communication and Participation Concept

The collected and classified stakeholders now need to be addressed with individual measures using an information, communication and participation concept. In total 12 norm strategies have been derived based on combining the three dimensions.

ID	Actions of information, communication, and participation		
General actions			
IN-01	Electronic circulars (e-mails, newsletters,)		
IN-02	Notices (Blackboard, bulletin board, posters, posters,)		
IN-03	Intranet (posts on the intranet, posts in forums,)		
DI-04	Events		
Special actions			
EV VE	Holodook (for acciptance with the VD application)		

Figure 7 Excerpt of norm strategy Q2 with a neutral attitude

At the beginning of the concept a general overview is given, in which the measures are structured according to the *Participation Building Kit*. As shown in the second case, the stakeholder's position is in quadrant Q2, and the stakeholder has a neutral attitude. This quadrant represents stakeholders with low project relevance and high social influence. Based on the positioning, the detailed description of the norm strategies is opened, which provides information about which levels of the *Participation Building Kit* can be used to serve this stakeholder group properly (Fig. 7). In addition, based on

the kit, the abbreviations for the measures were also chosen. The first two letters in combination with a number form the shortcut for a clearly assignable measure (e.g. IN for Information or DI for Discussion).

The detailed examination of the norm strategies provides recommendations as to which measures are suitable for efficient information, communication, or participation because of their positioning in the stakeholder matrix. This clarifies 'How' these stakeholders need to be served. But, the implementation of these measures is not described in detail, because of the individual requirements of the company using the tool. Nevertheless, within the catalogue of measures, further literature on the proposed measure is cited to facilitate realization. The detailed consideration of the norm strategies granulates the "What" by adding the categories "Description", "Goal", "Frequency" and "Measures".

In general, the recommendations for action are differentiated into "General actions" and "Special actions". General measures represent activities to which all employees of the company are usually invited. Special measures are defined as media that are explicitly recommended for the implementation of XR. Following the measures of Fig. 7, the following Fig. 8 shows how this further information is provided to the companies.

ID	Туре	Actions	Further literature of the realization
IN	Information	One-sided information transmission, which does not expect any reaction from the receiving party.	
IN-01	Information	Electronic circulars (e-mails, newsletters, posts in various internal company channels, protocol mailing,)	Newsletter:   The Content Marketing Handbook – Step by Step to Innovative Marketing!   Newsletter!   Mail: und E-Newsletter-Campaigns3
IN-02	Information	Notice board (blackboard, bulletin board, team board, posters,)	Posters: design a scientific poster <sup>6</sup>
IN-03	Information	Intranet (posts on the intranet,	Intranet: The intranet challenge – between information dis- semination, discussion culture and knowledge manage-

Figure 8 Excerpt of the catalogue for actions

At this point it is crucial to mention once more the necessary framework conditions for a successful support of the tool. A one-time implementation as well as a one-time setting of measures is not sufficient to guarantee efficient information, communication, and participation for the stakeholders. Rather, this tool must be applied continuously. Furthermore, the measurement of results is essential, because only this way can verify the impact of the measures taken.

## 6 DISCUSSION AND CONCLUSION

The developed tool fills the previously mentioned gap in the literature. Now industrial companies have the possibility to track record of their relevant stakeholders within a change process in general and particularly in a XR change process. The aim is to prioritize them according to project relevance, social influence, and attitude and to set appropriate measures. On the one hand, the stakeholder matrix provides an overview of relevant stakeholders within the planned change process. On the other hand, the extensive and detailed catalogue of measures gives responsible people ideas how to increase the acceptance of the stakeholders and enables the people in charge without background knowledge in the areas of communication and participation to acquire the necessary know-how through self-study. In this way, the developed

approach represents a comprehensive tool for designing and implementing XR projects in the future to minimize resistance and to identify challenges at an early stage. This systematic approach ensures that all stakeholders are involved, and that the effectiveness of the measures can be evaluated.

Despite this, the developed tool is not a cure-all for assuring a positive change, but rather provides a proprietary support tool to systematically support the process of achieving a successful change. A successful change also requires considering the company-wide strategy and the associated overall orientation of the company. This is because XR implementations require both anchoring in the strategy and the commitment of management to create and provide the required resources. It is therefore advisable to use the stakeholder tool in combination with an XR strategy in order to assure not only a systematic, but also a holistic approach that aligns the XR strategy with the company's strategy and contributes to the achievement of its goals.

Furthermore, it should be mentioned here in the sense of the critical attitude towards new technologies - XR is not primarily a technology that is intended to replace human workplaces, but rather functions as an assistance technology to make working activities easier, to achieve more diversity (e. g. supporting people with disabilities) and improving the overall productivity. At the end of the day, how the technology is used and the extent to which it interferes in the workplace of employees depends, of course, on the decisions of management.

# 7 REFERENCES

- Sutherland, I. E. (1968). A head-mounted three dimensional display. *Proceedings of AFIPS 68*, 757-764. https://doi.org/10.1145/1476589.1476686
- [2] McKinsey (2022). McKinsey Technology Trends Outlook 2022. Immersive-reality technologies. mckinsey-tech-trendsoutlook-2022-immersive-reality.pdf
- [3] Peddie, J. (2017). Augmented Reality. Where we will all live. Springer. https://doi.org/10.1007/978-3-319-54502-8
- [4] Venkatesh, V. & Davis, F. D. (2000). Theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926
- [5] Sorko, S. R. & Komar, J. (2020). Qualitative Acceptance Model of Augmented Reality from the perspective of personalists. *Tehnički glasnik*, 14(3), 352-359. https://doi.org/10.31803/tq-20200719183209
- [6] Ertl, C., Herzfeldt, A., Kapadia, A., Floerecke, S., & Kremar, H. (2019). Entwicklung eines Vorgehensmodells zur Einführung mobiler IT-Lösungen bei Instandhaltungsprozessen. HMD Praxis Der Wirtschaftsinformatik, 56, 647-659. https://doi.org/10.1365/s40702-019-00496-8
- [7] Krüger, W. (2006). Excellence in Change: Wege zur strategischen Erneuerung (3<sup>rd</sup> ed.). Wiesbaden: Gabler.
- [8] Wiesinger, F. & Thiessen, T. (2016). Mittelstand im digitalem Wandel: Bedarfs- und Trendanalyse zu Führungskultur und Veränderungsmanagement. Retrieved from https://kommunik ation-mittelstand.digital/content/uploads/2017/06/Studie-Bedarfs-und-Trendanalyse-Veraenderungsmanagement.pdf
- 9] Widmann, A., Gerlach, P., & Stuska, T. (2017). An Astronaut's Guide to Change. https://www.moonroc.de/fileadmin/user

- upload/content/research/MOONROC\_An\_Astronauts\_Guide\_ To Change.pdf
- [10] Weilbacher, J. (2023). Warum Change häufig scheitert. changement! 1/2023, 14. https://www-1wiso-2net-1de-1onud93th028d.perm.fh-joanneum.at/document/CHGM\_\_\_6bb7ecd764654ce332f76f80d5b0b3a1e877aeca
- [11] Theißen, S. (2022). Wie Sie die 5 häufigsten Gründe für das Scheitern von Projekten vermeiden. Projektmagazin. https://www.projektmagazin.de/artikel/warum-projektescheitern.
- [12] Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L. & de Colle, S. (2010). Stakeholder Theory: The State of the Art. The Academy of Management Annals, 3(1), 403-445. https://doi.org/10.1017/CBO9780511815768
- [13] Sutterfield, J. S., Friday-Stroud, S. S. & Shivers-Blackwell, S. L. (2006). A Case Study of Project and Stakeholder Management Failures: Lessons Learned. *Project Management Journal*, 37(5), 26-33. https://doi.org/10.1177/875697280603700504
- [14] Fleig, J. (2022, 30.05). Was sind Stakeholder und was bedeutet der Stakeholder-Ansatz? Stakeholder erkennen und analysieren. https://www.business-wissen.de/hb/was-sindstakeholder-und-was-bedeutet-der-stakeholder-ansatz/
- [15] Dalton, J. (2021). Reality Check: How Immersive Technologies Can Transform Your Business. United Kingdom: Kogan Page.
- [16] Ali, F. & Haapasalo, H. (2023). Development levels of stakeholder relationships in collaborative projects: challenges and preconditions. *International Journal of Managing Projects* in Business, 16(8), 58-76. https://doi.org/10.1108/iimpb-03-2022-0066
- [17] IAMP. (o. D.). Stakeholder: Definition und Relevanz für Projekte. iapm International Association of PROJECT MANAGERS. Called on: 22.02.2023 of https://www.iapm.net/ de/blog/stakeholder/
- [18] Nienkerke-Springer, A. (2022). Change: Veränderung oder Anpassung? wissensmanagement, 4/2022, 20-22. https://www-1wiso-2net-1de-1onud93th0294.perm.fh-joanneum.at/ document/WIM\_42218a85b335f28ac04e1a57276d38840402 1e20
- [19] Alter, U. (2018). Grundlagen der Kommunikation für Führungskräfte: Mitarbeitende informieren und Führungsgespräche erfolgreich durchführen. Deutschland: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-21680-1
- [20] Nauheimer, H. (2012). The Change Management Toolbook: A collection of tools, methods and strategies. The Change Management Toolbook. https://www.yumpu.com/en/ document/read/56273503/change-management-toolbook
- [21] Schwedler, C. (2022). Speed-Dating mit der Arbeit von morgen. changement!, 5/2022, 10. https://www-1wiso-2net-1de-1onud93th0294.perm.fh-joanneum.at/document/ CHGM\_6faeded5091d4e8924629ee997d9caae410cf240
- [22] Galbraith, M. (2018). Don't just tell Employees Organizational Changes Are Coming Explain Why. Harvard Business Review. https://hbr.org/2018/10/dont-just-tell-employees-organizational-changes-are-coming-explain-why
- [23] Yardley, J. (2018). Communication and Engagement: What's the Difference? https://www.communica.ca/post/communication-and-engagement-whats-the-difference

#### Authors' contacts:

#### Lena Sophie Leitenbauer, DI

(Corresponding author)
Institute Industrial Management,
FH JOANNEUM University of Applied Sciences,
Werk-VI-Straße 46a, 8605 Kapfenberg, Austria
Tel.: +43 316 5453 6356, e-mail: lena.leitenbauer@fh-joanneum.at

# $\textbf{Sabrina Romina Sorko}, \, \textbf{MMag. Dr}.$

Institute Industrial Management, FH JOANNEUM University of Applied Sciences, Werk-VI-Strasse 46a, 8605 Kapfenberg, Austria Tel.: +43 316 5453 8309, e-mail: sabrinaromina.sorko@fh-joanneum.at

#### Miriam Lutz. BSc

Institute Industrial Management, FH JOANNEUM University of Applied Sciences, Werk-VI-Straße 46a, 8605 Kapfenberg, Austria e-mail: miriam.lutz@edu.fh-joanneum.at