Master's Thesis- Sustainable Business and Innovation

Using a memetics lens to better understand tailored messages for organizational change toward sustainability

Name: Kenrick Ye - 1666711

Study: Master Sustainable Business and Innovation

Supervisor: Dr. Kristina Bogner

Second reader: Dr. Karlijn van den Broek

Internship company & supervisor: Jacobs Douwe Egberts, Clara Palazzi

Date: 15-12-2023

Word count: 24460

Abstract

Introduction – The famous quote by Peter Drucker, who stated, "culture eats strategy for breakfast" shows that organizational culture can interfere with strategically planned change when it is incongruent with the current culture (Gomez et al., 2020). In this research, organisational change will be viewed through the lens of memes. Memes are as defined by (Voelpel et al., 2005) as any core elements of organizational culture like standards, norms, and symbolic systems that can be transferred by imitation from one human mind to the next (p. 60). According to Pech & Slade (2004), examining memes can give managers insights into the fit of the meme to the existing company's culture and thus stimulate positive memes. Researching the selection, variation, and retention of memes in relation to employees' sustainability memeplexes can lead to memetic engineering to embed positive cultural ideas into the organizational culture.

Theory – Memes are cultural artifacts such as symbols, ideas, that are communicated and replicated between individuals (Dawkins, 1976; Pech, 2003). Kreuter & Skinner (2000) define message tailoring as trying to align a message with individual characteristics and needs instead of targeting group criteria such as education, income, and geography. This study uses the intentional variation of memes by the recombination of ideas to tailor messages.

Methods – A qualitative study is conducted in two phases. For both phases, semi-structured interviews are used to collect data. Using thematic analysis and memetic mapping in the first phase, it is possible to create tailored messages for the second phase. For the second phase, thematic analysis is also used to gain a better understanding of the interrelations of memes and tailored messages.

Results – Results show that 8 out of 14 participants find messages tailored to individual memeplexes more attractive than non-tailored messages. It can be concluded that the tailored messages are found more receptive and that 9 out of the 14 participants find tailored messages more motivating than the non-tailored messages. Participants selected and assimilated memes in the tailored messages that fit their memeplex and regarding non-tailored messages participants selected and assimilated similar memes of that message.

Conclusion – It can be concluded that tailoring messages to individual memeplexes can positively affect the attractiveness, reception of the message, and the adaptation of memeplexes. Results show that messages tailored to individual memeplex are more attractive and can increase adaptation because the message resonates more with the individuals' memeplex.

Executive summary

Problem

Establishing and implementing the sustainability strategy has been a challenging journey. Getting employees on board with the sustainability strategy and embracing the sustainability strategy was very difficult. To change a company, it is important to get employees going and enhance their sustainability engagement to be able to make the transition towards a more sustainable company. Currently, all communication towards employees regarding sustainability is general and communicating what the company finds important. This can decrease the effectiveness of the message because employees do not agree or do not relate to the message. Thus, tailored messages can increase the effectiveness of communication about organisational sustainability.

Proposed solution

To enable a smooth transition and get employees to embrace the sustainability strategy, tailoring messages to individuals' memeplex can be a solution to enhance support for the sustainability strategy. The first step is that the company needs a thorough analysis of what each employee finds important regarding sustainability. The second step is using these employee profiles to create tailored messages that fit the individuals' characteristics and needs. Finally, the company can choose the channels to communicate these tailored messages internally. Tailoring messages to individual's memeplex can be beneficial for the company and its transition to sustainability.

Value

By tailoring messages to individual's memeplex, employees will more likely agree with the message. Especially in an organisational transition towards sustainability, it is important to get as many employees to agree with the sustainability message. This report adds value by showing that tailoring messages results in employees relating more with the company and its message regarding sustainability. Tailoring messages can enhance the alignment of employees with the company's sustainability strategy.

Conclusion

Understanding your employees on an individual level will have benefits. Tailoring communication to the individuals' memeplex will positively affect the attractiveness and reception of the message and in the end, positively affect the adaptation of the employees' memeplex. Firstly, an in-depth analysis of all the employees is needed and profiles should be

created. Using this information it is possible to tailor messages to employees' memeplexes and thus employees will be more likely to resonate with the tailored messages.

Content

1. Introduction

The famous quote by Peter Drucker, who stated, "Culture eats strategy for breakfast" shows the belief that organizational culture can obstruct strategically prepared change when it is incongruent with existing culture (Gomez et al., 2020). Thus, strategy by itself is frequently not powerful if employees do not share a culture alignment with the strategy. This emphasizes that having a mission or vision statement and codes of conduct are not enough and that the motivation of employees is needed to embed sustainability (Collier & Esteban, 2007). Changes in organizational practices toward more sustainable ones are frequently researched (Appelbaum et al., 2016; Delmas et al., 2019; Lozano, 2015). It is argued that change is needed since a completely different way of business procedure is needed when achieving sustainability (Dyllick & Muff, 2016). There are many different ways to change a business and it shows the importance of adapting to sustainability.

The importance of organizational culture as an antecedent of organizational change for sustainability is frequently examined (Alves & Alves, 2015; Appelbaum et al., 2016; Baumgartner, 2009). Organizational culture, therefore, is important to consider when implementing a sustainability strategy. According to Alves & Alves (2015), organizational culture is a selection of collectively shared beliefs, values, and habits. Examining organizational culture can give insights and understand how to shape a sustainable culture. Examining culture can be done in different ways. For example, a study examined Google's organizational culture using memetics (Fesharaki, 2021). It is important to get support from your employees and let them embrace the change toward a more sustainable organization. In this research, organizational change for sustainability is described as intentional actions to shift the current business to a desired more sustainable state (Tipu, 2022). Attempts to change organizations should align the collective values of the employees of the company (Alves & Alves, 2015). Therefore, to make a sustainable transition it is important to align organizational culture to the company's strategy.

The memetic perspective can be an innovative way to look at organizational change and provides novel insights to contribute to research on organizational literature. Memes can provide insights into the ideas employees have within a company and how these influence the collective minds. Dawkins (1976) states that memes are units of cultural replication such as ideas and symbols that can be transferred between individuals actively and inactively. A memetic perspective can provide insights into how ideas spread and are formed. Other studies show the use of memetics in the spreading of ideas such as physical education or the ALS ice

bucket challenge (Schlaile et al., 2018; Tinning, 2012). Taking a memetic perspective can show how ideas of sustainability spread within the company. Research reveals the potential of memetics in the organizational area (Gill, 2012; Price, 1995; Shepherd & McKelvey, 2009; Voelpel et al., 2005; Weeks & Galunic, 2003). Using memetics to examine the ideas of employees, it is possible to analyse the impact of positive and negative memes on organizational strategy and employee mindset and ideas (Pech & Slade, 2004). Therefore, memetics can provide a new perspective that can be used to support organizational change by promoting positive sustainable memes into the existing organizational culture.

The organizational culture can be viewed from the memetics perspective due to the characteristics of memes. Price (1995) mentions that an organization can be conceptualized as an entity with its own memeplex. Due to the aspects of cultural evolution, spreading, and memeplexes, Klein (2016) argues that memes can be suitable for examining organizations. Moreover, Weeks & Galunic (2003) state that organizational culture emerges from the variation, selection, and retention of memes. Variation is about the variety of memes with several combinations of form, fit, and function (Weeks & Galunic, 2003). Variation can result from employees imitating ideas within the organisation but also becoming aware of information outside the company or changes in employees due to the hiring or sacking of employees (Weeks & Galunic, 2003). Furthermore, variation can also occur through recombination where new combinations from existing memes by the movement of memes around the organisation in such a way that it can be combined. Selection occurs when an employee enacts a meme from the different organizational memes within the company (Weeks & Galunic, 2003). Thus, selection can be seen as the adoption of an idea with the purpose of achieving something and selecting this can lead to automatic behaviors. Lastly, retention refers to the fidelity, longevity, and fecundity of memes and thus how they survive and spread (Weeks & Galunic, 2003). This aspect is about how memes survive and diffuse over time. Retention involves the replication of behavior and words within the company and the degree to which they are accurately copied. By considering the aspects of selection, variation, and retention, the evolution of culture within an organisation can be examined (Weeks & Galunic, 2003). Therefore, memetics allows examining organisational memeplexes and how they spread.

Currently, there is a lack of empirical research on memetics (Gill, 2012; Heylighen & Chielens, 2005; Malhorta, 2015; Poulshock, 2001; Roy, 2017; Shepherd & McKelvey, 2009) which remains mostly theoretical. More rigorous concepts should be developed to enhance the literature of memetics. This study focuses on organisational memetics and how this can be used to tailor messages to facilitate change. More research is needed to examine the field of message

tailoring for organizational change (Haumer et al., 2021). Thus, this study contributes to the literature with empirical research.

When examining employee memeplexes, managers can acquire insights into how to tailor messages through the intentional variation of memes. Moreover, gaining a deeper understanding of your employees can positively influence organizational effectiveness (Gandhi & Sachdeva, 2018). Extensive research has been done in health communication research showing the effectiveness of message tailoring to personality traits when the objective is to influence changing individuals' behavior (Hirsh et al., 2012; Lustria et al., 2013; Noar et al., 2009). Ziring et al. (2021) emphasize that tailored communication is needed when organizations are implementing change to enhance successful change. According to Haumer et al. (2021), tailored messages can improve employee engagement for change when the message fits the specific needs of various individuals. Therefore, tailored messages can encourage employees to embrace the sustainability strategy instead of just accepting the strategy. For example, tailored messages are more effective in promoting sun safety for outdoor workers than non-tailored messages and thus this can also be used in other subjects such as sustainability (Fazel et al., 2023). Hirsh et al. (2012) conclude that tailoring a message to each individual's personality can enhance the effectiveness of communication. Intentional variation of memes in the form of tailored messages can be a novel way to examine the effect of tailored messages. Therefore, tailored messages can also be used to effectively communicate sustainability and result in individuals embracing the sustainability strategy of the company.

Memes can be helpful to tailor messages to individual memeplex to affect the attractiveness, selection, assimilation, and adaptation of the memes and the reception of the message. In this research, we see tailored messages through the lens of memetics. The spreading of memes occurs frequently through verbal communication (Pech & Slade, 2004). Researching the selection, variation, and retention of memes in relation to employees' sustainability memeplexes to improve connection with sustainability memes. Moreover, Haumer et al. (2021) encourage future research to consider other concepts to tailor messages to individuals in an organisational context. It is important to learn from different disciplines and examine the advantage of tailored messages within the field of organizational change for sustainability. Thus, looking at communication and memeplexes to tailor messages can help to affect the reception of a message.

Using tailored messages, it is possible to steer a memetic engineering process to create a favourable culture resulting in employees embracing the sustainability strategy. On the other hand, understanding your employees' personal values plays a crucial role in their perception of

sustainability (Cirnu & Kuralt, 2013). Pech & Slade (2004) argue that managers could determine both the fitness and the effect of memes against the current and the desired organizational culture to prevent toxic memes from emerging. This process is called memetic engineering, aimed to alter memes within an organisation. Toxic memes such as individuals trying to take advantage of the company for their own benefit could harm organisations and thus should be replaced with positive memes (Brumar et al., 2012; Pech & Slade, 2004). With this, it is possible to change memes existing in an organisation and thus spread positive ideas to achieve a desired organizational culture such as sustainability. Tailoring messages to employees' memeplex could be used to spread positive ideas and encourage employees to adapt favorable memes. When the right ideas spread, it could encourage employees to embrace the sustainability strategy. Pech & Slade (2004) argue that there is a threat when existing memes or memeplexes in the company have a level of resistance toward change. Using intentional variation of memes, memetic engineering can be achieved to support integrating desirable cultural traits into the minds of employees of an organisation to achieve a favorable culture (Brumar et al., 2012; Pech & Slade, 2004). Thus, using memes to tailor messages and promoting favourable memes are important to get employees to embrace the sustainability strategy.

Therefore, this study focuses on examining the intentional variation of memes to help align the individual and organisational memeplex affecting the attractiveness and thus enabling corporate sustainability transitions. This research will contribute by providing empirical research about memetics and understanding how the intentional variation of memes can be used to tailor messages. Thus, the first research question is formulated.

'How does the intentional variation of memes (in the form of tailoring messages to employees' memeplexes) affect the attractiveness, selection, and assimilation of this meme in the sense of a better reception of this tailored message? How does this affect the adaptation of the employee memeplex?'

To answer the first research question, the following sub-questions should be answered. Firstly, what are the employee memeplexes within the company that relate to sustainability? Secondly, how can messages be tailored to the memes and memeplexes of employees? Answering these sub-questions allows to answer the main research question. Finally, the relationship between memes and the reaction of employees regarding tailored messages is examined.

This study contributes novel insights into tailored messages by combining the concept

of memetics and using it to tailor messages. Instead of tailoring messages to personality, this study explores the intentional variation of memes in the form of message tailoring and assesses the reception of tailored messages. Moreover, this study adds empirical literature to the study of memetics by providing data collection and data analysis of the memes of individuals. Tailored messages can enhance the sustainable transition of a company. This study adds literature on corporate sustainability transition by combining memetics and tailored messages to better understand the opportunities to positively influence sustainability change.

Finally, this study will focus on what can be learned from these results. It is important to understand how this knowledge can be used by companies to be able to persuade their employees to embrace the new sustainability strategy. Memetics can provide an influential perspective that can be used by managers who are trying to influence behavior (Pech & Slade, 2004). Understanding the relationship between individuals' memes and tailoring messages can help to accelerate the sustainable transition and enhance effective communication. A memetic analysis of organizational culture is needed to enable an emerging organizational culture that will cause employees to support organizational change for sustainability. Practical improvements will be suggested to support companies in their organizational change toward sustainability.

2. Theory

In this chapter, the concepts of memes, memeplexes, organisational memetics, organisational change communication, organizational change for sustainability, and tailored messages will be discussed. Literature that is necessary to understand and answer the research question will be presented.

Memetics

According to Dawkins (1976), a meme is a unit of cultural replication. It is an abbreviation of the word 'mimeme' and illustrates cultural artifacts such as symbols, ideas, views, knowledge, and perceptions that are communicated and replicated between individuals (Dawkins, 1976; Pech, 2003). Dawkins (1976) mentions that the replication of cultural phenomena can be compared to genetics and therefore provided the concept of memes to give a similar meaning such as cultural genes.

Dawkins (1976) outlines three characteristics of cultural memes which are fecundity, longevity, and fidelity. According to Dawkins (1976), longevity is the stability and amount of variations of memes. Memes with high longevity are continually reproducing themselves through the actions of individuals since they are repeating social practices (Weeks & Galunic, 2003). Fecundity is the speed of replication of a meme and diffusion. A meme from a manager is more likely to diffuse than from a cleaning lady (Weeks & Galunic, 2003). Lastly, fidelity is the accuracy of replication. By for example using standardized routines and procedures, it is possible to reproduce memes accurately (Weeks & Galunic, 2003).

The concept of memetics is still developing and can be applied in different fields. The literature shows a diverse range of definitions. In this study, memes are mindsets or ideas that are conveyed in conversations or messages (Pech & Slade, 2004). The concept of memes is not only used in the scientific literature but is also known in, for example, music and even social media challenges (Dean, 2020; Schlaile et al., 2018). For example, in the field of advertising the perspective of memes is about getting into the minds of consumers which will lead to consumers adopting certain behaviors (Marsden, 1998). Currently, research has been done regarding the spread of specific pieces of information. An example of a meme is the song 'Seven Nation Army' which gradually spread from football to even political dimension or the spread of the ALS ice bucket challenge and even fairy tales (Dean, 2020; Schlaile et al., 2018; Zipes, 2008). Marsden (1998) mentions that memes are ideas that are infectious and thus spread easily. The fitness of memes shows how easy it is to retain or acquire memes and thus fitter

memes will spread more easily (Heylighen & Chielens, 2015; Tinning, 2012). Therefore, the concept of memes is not about influencing but about verbal units of knowledge.

Memeplex

In this study, the collective idea of sustainability can be seen as a memeplex. Research into memeplexes shows that a memeplex is a complex system of mutually compatible memes (Schlaile et al., 2021). Individual memes can form meme-complexes (memeplexes) which are a collection of memes such as the memeplex Corporate Social Responsibility (CSR) (Cook, 2015). A memeplex is a collection of different supporting memes and thus together form culture or traditions (Heylighen & Chielens, 2009; Pech & Slade, 2004). For example, the memeplex of physical education is established from different memes such as health-based exercise and sports (Tinning, 2012). Tinning (2012) argues that the interactive blend of various memes will cause the survival of a memeplex and as one meme becomes more attractive, a change will emerge. Thus, organizational sustainability can be seen as a memeplex. Therefore, intentional variation of memes can make sustainability memes more attractive so it increases the reception of this particular meme.

There are many critiques about memetics. Some researchers mention that memetic analyses are shallow and uncertain compared to traditional approaches since it is not supported and there are no empirical results (Gill, 2012). Memetics is criticized because the theory can be more robust (Heylighen & Chielens, 2005) Moreover, Poulshock (2001) mentions the unscientific aspects of memetics due to the lack of research supporting the statements that should be backed up with empirical research. Therefore, more empirical research is needed to provide more clarity and precision of memes. Memetics is yet a developing theory and Marsden (1998) argues that memetics can be used as a framework to create memes that spread easily and influence consumer behavior and perception. Thus, this research takes a memetic perspective and will contribute to more empirical research about memes.

Organisational memetics

The concept of memes can provide a valuable perspective for exploring companies and their culture. Some studies have adopted a memetic perspective on organisations resulting in the development of organisational memetics (Fesharaki, 2021; Price, 1995; Schlaile et al., 2021; Shepherd & McKelvey, 2009; Weeks & Galunic, 2003). Due to the aspects of cultural evolution, spreading, and memeplexes, Klein (2016) argues that memetics can be suitable for examining organizations. In this study, it follows the definition of organisational memes as defined by (Voelpel et al., 2005) as any core elements of organizational culture like standards,

norms, and symbolic systems that can be transferred by imitation from one human mind to the next (p. 60). Memetics can be used to analyse whether the current sustainability strategy is reflected in the organisational culture.

It is important to have a clear understanding of what organizational memes entail. Organizational culture can be described as a social phenomenon that emerges from individuals within a group by enacting memes that they captured from the organization (Weeks & Galunic, 2003). Klein (2016) points out that culture does not develop from single actions such as shaking hands but the mutual reinforcing of actions will cause culture to emerge. For example, the reproduction of civilized greetings can be seen as a meme and other examples of organizational memes can be unofficial dress codes, ways of organizing the workplace, and rituals (Klein, 2016; Voelpel et al., 2005). The collection of these mutually reinforcing memes can be seen as a memeplex (Klein, 2016). Imitation within an operationally closed environment such as a memeplex will enable the development of a social system and thus organizational culture (Klein, 2016). Memetics can give a detailed insight into the current organisational culture. Weeks & Galunic (2003) mention that the memes perspective on organisations offers insights into how organisations are gradually formed through the replication of memes. Therefore, viewing the organizational culture from the memetic perspective can be important to examine whether it is aligning with organizational strategy.

Organizational change for sustainability

Organizational shifts toward more sustainable practices have been a subject that is frequently researched (Delmas et al., 2019; Kiesnere & Baumgartner, 2019; Orji, 2019; Sroufe, 2017). The concept of corporate sustainability has been researched and over 33 definitions have been identified (Meuer et al., 2020). In this study, the definition of Figge & Hahn (2004) is followed defining that corporate sustainability is that organisations use resources efficiently contributing to environmental, social, and economic dimensions. Research shows the relevance that organisations need to change to prevent negative impacts on the society and environment (Schaltegger & Wagner, 2011; Shevchenko et al., 2016). Therefore, to achieve corporate sustainability, organisations should change their current way of doing business.

Organisational change in personal and organisational values is needed to achieve corporate sustainability. The current business practices have a negative on the environment and Benn et al. (2014) state that organizational changes are needed to integrate sustainable development within organisations. Furthermore, Hahn et al, (2015) mention different dimensions of change showing that it is needed to fundamentally adapt the current business of

an organization toward sustainability. There are many different definitions of organisational change, for example, Stouten et al. (2018) define it as intentionally managing the activities of an organization from its current state to a desired one. By combining these different meanings, a definition can be created. In this study, organizational change for sustainability is identified as deliberately managing activities to move the current business to a desired more sustainable state (Tipu, 2022). Organizational change for sustainability will be considered when organisations undertake change to achieve sustainability. Drivers of the change are for example organizational culture, resources, communication, or change management (Kiesnere & Baumgartner, 2019; Lozano, 2015; Orji, 2019). Aligning sustainability with corporate strategy shows that the organisation is trying to embed sustainability. Thus, different drivers such as organizational culture or communication can help to embed sustainability in the company.

Organizational change communication

Effective communication plays an important role during organizational change. Communication is a key tool to mitigate employee resistance that frequently occurs when organisations undergo change (Haumer et al., 2021). Change managers frequently use various communication methods to foster relationships, reduce resistance, and establish trust to achieve the change objectives (Lewin, 1947). Much research has been done regarding change communication and the importance of reducing resistance (Elving, 2005; Luo et al., 2016; Saruhan, 2014). However, change communication could interact differently with each employee causing different outcomes between employees and thus organizations frequently fail to get employees to embrace change management objectives (Haumer et al., 2021). Haumer et al. (2021) conclude that tailored messages can increase engagement for organizational change among employees when the messages fit different personalities. Therefore, communication tailored to individual memeplexes is crucial for making the message attractive to the receiver and increasing the likelihood of connecting with the specific individual memeplex. This study focuses on how different employees will react to tailored messages based on their different memes during organizational change for sustainability to examine how organizations can improve their communication with their employees.

Tailored messages

Tailored messages can be used to increase engagement for organizational change among employees. Other studies show the importance and effectiveness of message tailoring. Kreuter & Skinner (2000) define message tailoring as trying to fit a message to meet individual needs and fit their characteristics instead of targeting group criteria such as geography, income, and

education. Much research has been done in health communication research showing the effectiveness of message tailoring when the objective is to influence individuals' behavior (Hirsh et al., 2012; Lustria et al., 2013; Noar et al., 2009). Other examples show the practical use of message tailoring such as Google using tailored advertisements and Netflix providing tailored suggestions for movies (Noar et al., 2009). Moreover, message tailoring is frequently used in health to improve personal relevance and it is shown that tailored messages can motivate individuals to behave correctly (Kessels et al., 2011). Tailoring a message that fits the individual's self-determined motivation can be beneficial (Pelletier & Sharp, 2008). Therefore, tailoring messages can be very effective in motivating individuals to make a transition toward sustainability.

Tailored messages can be effective in communicating change to employees. Kazbare et al. (2010) argue the ineffectiveness of a one-size-fits-all approach and show the importance of tailoring messages to different individuals. A study shows the importance of tailored messages with different arguments to increase effectiveness (Verain et al., 2017). Much research has been done by examining interactions between message tailoring and individual characteristics and showing new insights into communication effectiveness (Dodoo & Wen, 2019; Haumer et al., 2021; Hirsh et al., 2012; Williams-Piehota et al., 2009). The Big Five personality dimensions, which are conscientiousness, extraversion, agreeableness, neuroticism, and openness to experience, are frequently used to tailor messages to fit the personality of an individual (Dodoo & Wen, 2019; Hirsh et al., 2012). It can be concluded that tailoring messages to fit personality traits is important to persuade employees. Haumer et al. (2021) show that tailored messages are needed since change communication could interact differently with each individual resulting in different reactions between individuals and thus the importance of tailoring messages to the individual memeplex can give interesting insights. Fournet et al., (2018), for example, show that different tailored messages can encourage individuals to get vaccinated by addressing different individuals' needs in the COVID-vaccination programs. Therefore, tailored messages can also be used to effectively communicate sustainability and result in individuals embracing the sustainability strategy of the company. Research shows the effectiveness of tailoring messages to personalities and needs, but it is interesting to examine whether tailoring messages to individual ideas and mindsets can increase effectiveness. In this research, this idea of tailoring messages is applied to a novel concept, which is memetics. Currently, there is a lack of research on tailoring messages to individual memeplexes. Therefore, intentional variation of memes in the form of tailored messages can be a novel way to examine the effect of tailored messages.

Relation tailored message and memetics

Memes containing an individual's ideas and views can be used to tailor messages that fit the needs of the individual. As mentioned in the previous paragraphs, frequently the Big Five personalities are used to tailor messages. Research shows that tailoring messages can influence individuals to support specific decisions (Bostrom et al., 2013). Moreover, the importance of sending the right messages to a certain group is found to be important. Bain et al. (2012) conclude that messages with societal benefit content were more effective in motivating sustainable behavior than messages emphasizing threats from the environment. Message content should be adapted and tailored to increase the effectiveness of the message. Literature shows the importance of tailoring messages to individual values to increase the probability of supporting for example sustainable decisions (Bostrom et al., 2013). Most research is done regarding tailoring messages to personality traits in health communications but tailoring messages can also be important for a sustainable transition. Using memetics, it is possible to know what the ideas and perspectives are of an individual and tailor messages to these memeplexes to increase sustainable decisions and practices.

Due to the novel concept of memetics, it is interesting to examine how it can be used within communication studies. López-Paredes et al. (2022) show the use of memetics adapted to communication studies by looking at the spread of political ideas. The study shows the importance of imitation and the selection of information to understand the adaptation of memes (López-Paredes et al., 2022). It is possible to examine how memes spread and how certain memes can be pushed to be adapted. The three aspects of variation, selection, and retention of memes are suitable characteristics to tailor messages to fit an individual memeplex. As discussed earlier this study uses the intentional variation of memes by the recombination of ideas to tailored messages. Especially the characteristic of variation of memes can be used to tailor messages by intentionally combining different ideas.

This study uniquely combines various theories to examine sustainable change within a company, adopting a memetic lens on tailored messages. Memetics can be used as a posteriori psychometric segmentation meaning that the number of segments is based on collected personal data (Kazbare et al., 2010). Thus, memes can be used to segment certain individuals by values to create tailored messages. Van den Broek et al. (2017) conclude that appeals that matched the individuals' values were more persuasive than combined appeals. This study will follow this idea and tailor messages to individuals' memeplexes. Messages are tailored by using the memes identified from individuals since it is possible to examine whether it would fit a person's memeplex. This approach makes it possible to examine how

individuals react to the tailored message and reveal whether the message aligns with their memetic concept of sustainability. Intentional variation of memes is used to affect the attractiveness, selection, and assimilation of preferable memes. In this study, the identified memes of employees will be used to tailor messages to the memeplexes of the employees and examine whether this can increase the reception of this tailored message. This study shows a novel way of tailoring messages to values using memetics.

3. Methods

In the following chapter, the research design that guides this research will be presented. First of all, the research design will be discussed which will be a qualitative design to answer the research question. Secondly, operationalization will give insights into how the different concepts will be measured. Thirdly, the characteristics of the data sample will be discussed and what data sampling strategy is used. Fourthly, the questions of the interview will be discussed to get an understanding of what participants will be asked. Fifthly, the tailored message stimuli will be discussed to explain how the tailored messages are created. Sixthly, data analysis will show how data will be analysed using thematic analysis. Lastly, the reliability, validity, and ethical considerations of this study be discussed.

3.1 Research design

The research design to answer the research question has an exploratory inductive nature. Qualitative research enables to capture an in-depth understanding of individuals' values, beliefs, and thus their memes and memeplexes. Qualitative research allows for revealing the complexities of less researched topics (Bryman, 2006). Different studies show the use of qualitative research to capture memes and tailored messages (Lipsman et al., 2007; Sarradon-Eck et al., 2021; Shepherd & McKelvey, 2009; Skov-Ettrup et al., 2014; Waughtal et al., 2021).

For this study, qualitative data were collected using semi-structured interviews in both phases at the Dutch coffee company Jacobs Douwe Egberts. Semi-structured interviews are a suitable method to collect data to answer the research questions. Using semi-structured interviews, it is possible to ask follow-up questions to elicit memes from employees regarding sustainability and also what they think of the tailored messages. Between March and June 2023, a total of 29 interviews were conducted, each lasting approximately 45 minutes. Nine interviews were conducted via Microsoft Teams, while 20 were face-to-face. To ensure full anonymity, the interviewees are mentioned as participants 1 to 15. To answer the research questions, this study has two phases and thus different steps are taken in this study (see Figure 1).

Firstly, the memes of individuals are analysed. This is accomplished by looking at what aspects have been verbalised as important by participants. A memetic map is created to show and visualise the relationship between memes and present the results in an organized way. The analysis of memes is done using thematic analysis, an approach that has been used in other studies for memetic mapping (Atadil et al., 2017; Fesharaki, 2021; Robertson, 2016). Themes are identified by the repetition of topics and similarities between the transcripts (Bryman,

2006). In this study, memetic mapping is followed as described by (Atadil et al., 2017; Schlaile et al., 2021). This results in a memetic map that shows the relationships among employees' verbalized memes identified in different themes. Following the studies, a memetic map is created based on two criteria which are the co-occurrence of the memes and the frequency of the memes. The co-occurrence of two memes is visualised with a line and the frequency is shown via the thickness of the lines. Memetic mapping consists of undirected but weighted networks based on proximity matrices created in this study from the thematic analysis. A memetic map is created using a software called Gephi. Thematic analysis is conducted using Nvivo. To give insights into the process, table 1 shows two examples of the analysis conducted. The outcome of this first data analysis will be used to create message stimuli for the second data collection/analysis. More information about the message stimuli will be discussed in paragraph 3.6.

Secondly, in the 2nd phase of this study, using the message stimuli of the first phase, it is possible to examine how individuals react to the tailored message. The 2nd phase of the study also uses interviews to collect data. Thematic analysis is used to gain a better understanding of the effect of intentional variation memes on the attractiveness, selection, assimilation, and reception of the message. This is done by identifying certain subjects and themes and looking at patterns. Thus, with the data collected in the 2nd phase using interviews, the effects of the intentional variation of memes can be analysed via thematic analysis.

The structure of this research is as follows. Firstly, interviews are conducted to identify the memes of employees. Secondly, these memes are analysed and identified by using meme mapping. Thirdly, these identified memes can be selected and variated to tailor messages to the memeplex. Fourthly, a second interview is done to present tailored messages and to identify the changed memeplex. Fifthly, thematic analysis of data can show how intentional variation of memes affects the attractiveness, selection, and assimilation of the meme in the sense of a better reception of the message.

Figure 1

The different steps taken for the research approach on design

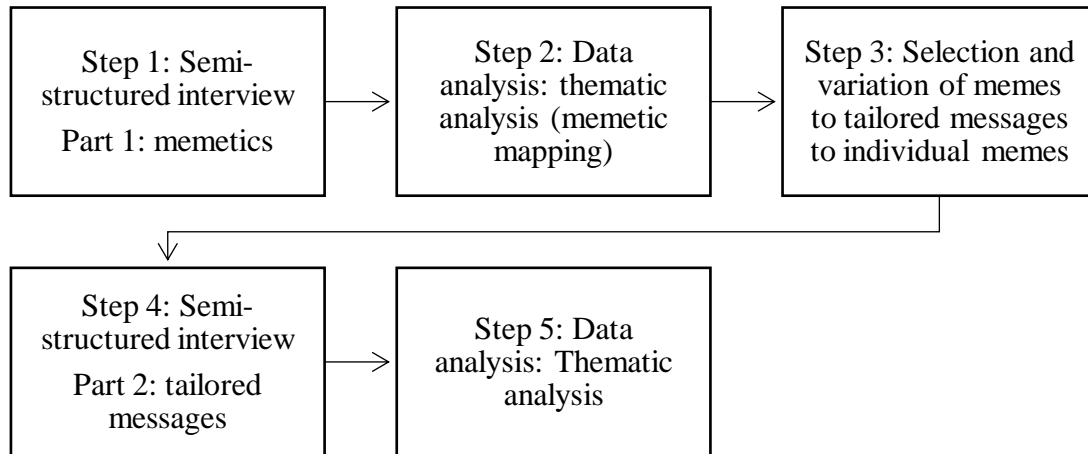| Step 1: Semi-structured interview Part 1: memetics	→	Step 2: Data analysis: thematic analysis (memetic mapping)	→	Step 3: Selection and variation of memes to tailored messages to individual memes
Step 4: Semi-structured interview Part 2: tailored messages	→	Step 5: Data analysis: Thematic analysis		

Table 1

Thematic analysis of transcribed data from interviews with 15 employees about sustainability. Examples of meaning units, condensed meaning units, sub-themes, and themes (Bengtsson, 2016).

Meaning units	Condensed meaning units	Sub-themes	Theme
What I say climate is most important to me because I think climate is key to a lot of other sustainability problems and sustainability challenges that we have in society (authors' translation of participant 2)	Climate change is also causing many other problems	Climate change	Environmental
Look at our Pickwick boxes, most of them have a plastic cover over the cardboard box. There are enough examples of things that are not necessary at all. If you could remove all that plastic from the box, you would already have accomplished a lot. And what does the company do with all the plastic wraps around the coffee trays? (authors' translation of participant 9)	Reducing the use of plastic in packaging and do not use it when it is not needed	Reduction of plastic in packaging	Packaging

3.2 Operationalization

To understand how the different concepts are measured, the operationalization of this study will be discussed. Memes are operationalized as units of information that are transmitted via social learning processes (Schlaile, 2021). Moreover, the spreading of memes is frequently done through verbal communication (Pech & Slade, 2004). Therefore, interviews are used to capture memes since the expression of memes is seen in verbal communication. In this study, these different memes are identified by looking at terms or phrases that are being repeated to be able to capture memes as done in previous studies (Misturelli & Heffernan, 2009). By analysing repeated phrases and terms, it is possible to examine which concepts are easily spread and which are not. Different studies show similar methods to identify memes (Gill, 2012; Lord & Price, 2016; Shepherd & McKelvey, 2009). The process of identification is based on the criteria of longevity, replicability, fecundity, and fidelity as explained in the previous paragraph. To explore this, key themes that are frequently mentioned are identified in all the interviews. This study focused on what ideas are common in the current culture and which ideas are not yet established. Memes are units of knowledge and they can be measured by the expression of participants in a conversation. It is measured as a set of words that can be understood on itself by an individual (Shepherd & McKelvey, 2009). Thus, an individual should understand the meme within a specific context. Moreover, what is expressed by a participant in the interview can be used to measure the different ideas and combinations of words to identify memes (Shepherd & McKelvey, 2009). What is important in this study is the smallest set of words that has a meaningful statement (Shepherd & McKelvey, 2009). An example of this is the different types of organizational memes: routine, template, and mission statement (Shepherd & McKelvey, 2009). These can thus also be identified in a sustainability context where ideas about sustainability will be identified.

Lastly, tailored messages are operationalized by the recurring thoughts and impressions individuals have regarding tailored and non-tailored messages. These will be noted down and analysed to examine the attractiveness, selection, and assimilation of the meme in a sense of a better reception of tailored messages based on other studies (Catellani et al., 2022; Jensen et al., 2012). Attractiveness is measured based on participants' opinions about their feelings toward the message. According to Heylighen & Chielens (2015), assimilation will infect a new host and become a part of the individual's memory. Therefore, assimilation is measured by looking at what parts of the message participants can recall. Selection is determined by identifying which aspects stand out or attract the attention of the participants, as this shows which meme will be most likely to be selected and enacted (Weeks & Galunic, 2003). Another

study applies a similar method to examine which elements of the story are selected by participants (Heylighen & Chielens, 2005). Lastly, adaptation is measured by asking participants whether they feel inclined to embrace the strategy.

Table 2

Operationalisation table

Component of analysis	Parameters
Memes	Recurring phrases or words
Tailored message	Recurring thoughts and impressions

3.3 Data sampling

This research was conducted at Jacobs Douwe Egberts (JDE), an organisation that mainly sells coffee and tea. They are operating in more than 100 countries and their yearly revenue is about 7 billion. In the Netherlands, JDE has 8116 employees. This study took place at the JDE Professional office in Utrecht where around 400 employees work. This is a sub-department of JDE that focuses on the business-to-business market. JDE is currently implementing a sustainability strategy established in 2018 compromising three pillars which are responsible sourcing, minimising footprint, and connecting people. The strategy is relatively new to the employees and JDE is still trying to integrate sustainability in the company. Data collection stops when theoretical saturation is reached (Bryman, 2006). The audio of each interview is used to transcribe the recording.

Participants were selected mainly through a convenience sampling method due to the convenience of accessibility and practicality (Bryman, 2006). Additionally, snowball sampling is used to get in contact with employees from other departments. 15 employees from the company Jacobs Douwe Egberts were interviewed for this study. Purposive sampling was used to achieve a heterogenous group and select participants from various departments: marketing, sales, telesales, finance, operation, account manager, logistics, human resources, innovation, digital, customer service, R&D, tender, sustainability, and external engagement. The criteria to participate in this study are based on the organizational structure, aiming to interview at least one employee from each department. The sample was as heterogeneous as possible to get a broad examination of the company, allowing gaining insights into memes and memeplexes across the organization.

3.4 Interview procedure

When conducting the interviews, the participants are introduced to the study. They are explained that they can withdraw from the study at any time. Moreover, before the study started, the participants needed to sign a consent form. When the consent form is signed, the audio is recorded using a recording device. The interviewer starts with an introductory question asking the participant to tell a bit about themselves and their relation to the company. This enables a comfortable and easy environment and gives space to start the interview relatively relaxed. When the participant feels more at ease, the first question is asked regarding memes. Lastly, two messages are presented to the participants in a second interview. The participants will receive both a tailored message and a non-tailored message based on what is done in other studies (Jensen et al., 2012; Skov-Ettrup et al., 2014). The participants will be asked to read the two messages and questions will be asked. The first question aims to capture the participants' first opinions and feelings regarding the messages. The audio recording is stopped when the participant does not have any other comments and the participant is thanked for their time.

3.5 Materials

Different questions are created to measure memetics and related to tailored messages. The questions asked in the interview are open-ended and try to encourage participants to use their own terms. Firstly, an open question to introduce themselves will be asked to get to know the participant and make the participant feel at ease. First of all, memes will be analysed via the expression of participants. These questions (see Appendix A) are based on similar research and also for example the memetic idea of physical education (Misturelli & Heffernan, 2009; Tinning, 2012). Therefore, it is important to ask open-ended questions and elicit as many ideas as possible. The first question 'What are important aspects for you regarding sustainability?' is asked to identify the memes of employees for sustainability. It is to understand the main ideas employees have about sustainability and which are dominant. These answers can then be compared with other interviews to get a picture of which ideas flow in the company the most. Based on another study (Schlaile et al., 2021), the next question is asked "How would you describe the current organisational culture regarding sustainability?". It can help to understand the current culture regarding sustainability within the company and whether it matches the individuals' ideas. These are examples of questions asked to the participants. The full interview guide can be seen in Appendix A.

To gather data about the reactions of employees regarding tailored messages, various

tailored messages are constructed based on the memes identified in the first data analysis process (see Appendix B). The results of the first phase of the study identified 4 memeplexes that are used to create tailored messages that fit the values of each individual. Thus, the individuals are segmented based on their memeplexes and in total 5 different messages are created of which 4 are tailored and 1 is not tailored. One tailored and one non-tailored message is shown to the participants in a second interview. The tailored message used is based on one of the 4 memeplexes identified that fit the participant. This information is used to adapt the messages accordingly. The different tailored messages (see Appendix A) are presented to the participants and the following questions will be asked based on other studies (Catellani et al., 2022; Jensen et al., 2012). The first question is asking what the participant's first reaction is to the message. The question: "What is your first impression?" is asked to see what the thoughts are of participants of the tailored messages and understand their thoughts. Furthermore, "How attractive is this message to you?" enables to examine the attractiveness of a message. To examine the selection of memes of the message, the question is asked "Which specific aspects of the message stood out to you and captured your attention? Why?". Moreover, the assimilation of the meme is examined by asking "What are the aspects of the message that you can recall?". Lastly, to understand the adaption and reception of the message, the last question is asked "How does this message motivate (or not) you to embrace the company's sustainability strategy? Why does it or why not?".

3.6 Tailored messages stimuli

The messages are adapted based on the identified memeplexes and the company's current communication style. The first step is to understand the current communication message of the company. The tailored messages are created with existing communication materials to closely align with the company's communication strategy. With this knowledge, it is possible to create a basis for tailored messages using different content based on the company's sustainability strategy.

Secondly, a strategy to tailor messages is followed. The data collected during the 1st phase, illustrating the different aspects that participants find important regarding sustainability is used to create tailored sustainability messages. This study used memetics to tailor messages based on other similar studies using personality traits to tailor messages (Dodoo & Wen, 2019; Haumer et al., 2021; Hirsh et al., 2012; Kessels et al., 2011; Kreuter et al., 1999; Kreuter & Wray, 2003). The identification of the social phenomenon of memetics is used to select and vary memes to tailor messages and assess how it affects the reception of tailored messages to

individuals' memes as done by another study (Catellani et al., 2022). The content of the tailored messages was a result of three essential strategies of message creation which are personalization, feedback, and content matching, ensuring that the message fits the individual needs and interests (Hawkins et al., 2008; Kreuter et al., 1999).

Certain principles are followed to create tailored messages. First of all, the message should contain identification such as the participant's name or it should be clear that the message is personalized to them. This is achieved by using their name in the message. Secondly, the message should contain feedback which means acknowledging information that is given by participants. This can be ensured by using the information mentioned by participants in the first interview. This study followed specific steps described in previous studies to tailor messages (Catellani et al., 2022; Kreuter et al., 1999; Waughtal et al., 2021). The most common answers that are given during the first phase of interviews can be used to tailor messages (Kreuter et al., 1999). Thus, the messages are tailored by using their name and segmenting the participants into different groups based on their values to fit the needs of the target audience (French et al., 2020).

Segmentation is done by the intentional variation of memes in the form of tailoring messages to employees' memeplexes. For example, when the participant mentioned that sustainability is about preventing causing damage to the environment this aspect will be used in their tailored messages to ensure the containment of feedback in the message. Other individuals with other ideas such as those mentioning that sustainability is important because it is needed to focus on plastic reduction of packaging, will contain feedback on the message with this aspect. These individuals will be more likely to select the meme that is compatible with their own memeplexes. The messages are segmented and tailored using the identified four memeplexes of the first phase of the study and using the data collected of the first phase where memes that are mentioned by the participants are used as examples in their tailored message. Participants will receive a tailored message that fits with their specific memeplex and include examples identified in the first interview. Using examples from other studies, it is possible to create tailored messages not based on personality traits but on individual memes that are identified using thematic analysis.

3.7 Validity, reliability

Validity and reliability are important to consider to ensure the quality of the study. Within qualitative research, two primary criteria for assessing a qualitative study are trustworthiness and authenticity (Bryman, 2006). Trustworthiness is ensured using criteria by Nowell et al.

(2017) which are credibility, transferability, dependability, and confirmability.

Credibility is ensured by providing a detailed description of all the steps taken in this study is provided and all the themes reflect what has been told by participants. Moreover, all phases of the research process are described or provided such as the selection of the participants, interview transcripts, and data analysis decisions to ensure transparency and dependability. Data is only available to the supervisor to ensure the credibility and integrity of the information.

Furthermore, validity is ensured by comparing the results with existing results and theoretical ideas (Bryman, 2006). Additionally, other similar studies have been used to ensure the right concepts are measured.

3.8 Ethical considerations

Ethical considerations should be discussed to ensure the protection of the participants involved in this study. An informed consent form should be signed to ensure participants understand how data is handled and participation is voluntary. Every participant is allowed to withdraw from the study whenever they feel like stopping. Moreover, data storage and handling are important. Data is processed confidentially and is in line with the GDPR. Different principles of the data privacy handbook are followed provided by Utrecht University. Therefore, only necessary data is processed. The research question is very important to determine whether data is collected with purpose and minimal. Moreover, audio recordings are stored on a secured and encrypted server of the University of Utrecht called storage finder. Audio recordings are only available to the master student and supervisor. To ensure confidentiality and anonymity, personal information such as name, date of birth, and phone number are not asked. Data is anonymized and quotes are used by the anonymized names.

Results

4.1 Results Phase 1

This paper tries to contribute to the literature on memetics with empirical data with one of the very few studies showing empirical data (Gill, 2012; Heylighen & Chielens, 2005; Schlaile et al., 2021; Shepherd & McKelvey, 2009). The results presented in this section identified various memes of employees of Jacobs Douwe Egberts regarding sustainability. Analyzing the company's culture in the context of sustainability is therefore interesting to examine dynamics within the company. Data collected from interviews can provide insights into the different memes that employees have. Thematic analysis is used to identify memes and thus various memes are identified and visualised in the following paragraph (see table 3 and figure 2). The combination of the map and thematic analyses resulted in the identification of four levels that can be used to tailor messages which are *inner value level, working area level, company operational level,* and *global impact level* (see table 3).

Firstly, the inner value level consists of *future generations, environment, and own impact.* Secondly, the working area level contains *waste, reusing, consumption, communication, awareness, durability, food, and building*. Thirdly, the company operational level contains *economic, transport, minimising footprint, packaging, certification, energy, circularity, and CO_2 emission.* Finally, the global impact level consists of *responsible sourcing, traceability coffee, supply chain, and social.* The results show that various memes regarding sustainability are identified within this organization. These memes show what employees find important regarding sustainability. Sustainability can be categorized into four levels within Jacobs Douwe Egberts, ranging from the micro level to the macro level. To give an example, the micro level entails that some employees find sustainability important close to themselves such as the importance of the environment they live in or the future generation (inner value level). The macro level entails the importance of sustainability at a broader level such as looking at the well-being of farmers in origin countries (global impact level). In the following paragraph, an example of each will be given.

Firstly, the inner value level can be explained as a level where memes are grouped based on individuals mentioning that they find sustainability important in their own lives. For example, a participant mentioned that they find sustainability important regarding the climate crisis in which we are. The following statement gives an example: 'What I find important in sustainability is especially the climate crisis that we are in which I see as the biggest challenge

of our time' (authors' translation of participant 2). Moreover, participants find it important for future generations. Many stated 'We take into account that there will be a lot of generations on this earth after us' (authors' translation of participant 9). The inner value level shows that employees find sustainability important which is close to their individual values such as the environment (climate crisis) and future generations.

Secondly, the working area level can be explained as a level where sustainability is important around their own working area where they work every day. They find certain aspects important when they are working at the office. For example, participants state that they find it important to get rid of paper cups 'I am really against paper cups, especially in office locations, so yeah, that keeps me busy' (authors' translation of participant 15) and 'I find it important to use as few cups as possible and use a hard cup or my mug (authors' translation of participant 3). Moreover, participants find it important that the building is sustainable for example 'Really making the building more isolated and a little more sustainable. It is maybe really just our department, but it's cracky and if it is raining or there is wind, you can feel it' (authors' translation of participant 14). Many employees mentioned that they find it important that the surroundings they are working in should be sustainable. It should be visible and tangible for these people. Therefore, these aspects can be grouped into the working area level. It shows the importance of the office they are working in should also be sustainable.

Thirdly, the company operational level explains sustainability is about the business operations and processes. It looks at the company as a whole and manufacturing products with examples given as looking at the energy usage of the building or packaging of a product. What is striking is that many participants mentioned that packaging is an important aspect for them regarding sustainability. Many participants mentioned for example: 'That is of course the packaging material which is a big issue I think. Can it be smaller or can it be more sustainable? (authors' translation of participant 7). Another aspect that has been mentioned by participants is CO_2. Many participants find this important and stated 'I find it important that it is CO_2 related for example so footprint wise. I do as much as possible to keep my CO_2 emission as low as possible.' (authors' translation of participant 10). Moreover, energy is frequently mentioned. Participants mentioned 'Of course, there is a piece of sustainability, but then it is more in the form of energy. This is for example putting solar panels and heat pumps' (authors' translation of participant 7). These aspects identified can be grouped as making the business operations of the company sustainable. Employees mentioned that packaging is important but also that the company uses clean energy to produce the product and thus looks further than just the environment they are working in.

Finally, the global impact level can be explained as employees looking further than what we are doing here locally as a company. It is also about looking into the supply chain and what the company does abroad. For example, participants state that they find it important to source coffee responsibly. 'All farmers: how they are paid, how fairly they are treated and that is sometimes mentioned but we do not really know how transparent that is and how it really comes from bean there to our cup. I think actually in the whole beginning of that supply chain already that there is a very large aspect of sustainability' (authors' translation of participant 14). Moreover, participants find the traceability of the coffee bean very important. Some participants mentioned 'It is clear that is a very important thing to know where we get coffee from and that it is done in a sustainable way.' (authors' translation of participant 4). The global impact level shows the importance of sustainability even in a broader context and seeing coffee farmers also part of the business. Employees find it important that the company is also sustainable in the country of origin. Therefore, sustainability should also be considered further in the supply chain.

Lastly, it is outstanding to identify the sustainability aspect that participants find the most important and urgent. Some memes are seen as more urgent than others. When asking participants what the most needed change regarding sustainability is, several aspects are mentioned. Most participants stated the importance of traceability in the supply chain as something they would like to change. For example, a participant stated 'That's a difficult question. Uh, what would be the most important thing? Well, for me that would be the transparency of the supply chain, where do our beans come from, from which plantations, and which farmers are employed there. That would be the thing where I would have my full focus on.' (authors' translation of participant 3). Moreover, participants mentioned that the coffee bean should be responsibly sourced and they find it important that this should be addressed by the company. Participants mentioned 'I find that very difficult but I think it would be the first pillar of our common grounds strategy, so responsible sourcing. I think we really have a lot to gain from that. So if I were CEO, I would focus a lot on responsible sourcing.' (authors' translation of participant 10). This shows that employees find sustainability on a global impact level very important and urgent.

However, on the other hand, it is striking that some participants find it important to be sustainable in the workplace. They mentioned for example 'We don't work with sustainable cups ourselves, so yes you don't do it internally, how are you going to convey it to the customer so I would really very much work from within the company.' (authors' translation of participant 6). This suggests that some employees want to make it tangible for themselves instead of

something far away from what they are working on. A participant mentioned 'I think it's important to me that it is easy to apply in my daily life because for me the sustainability challenge say is quite big and it always seems very unsolvable.' (authors' translation of participant 13). It can be argued that for some employees sustainability should be easily applicable and others find it important to make a bigger impact. These examples show the different levels of memes. The results show that the aspects employees find important regarding sustainability can vary such as concerns that are close to their immediate work environment to broader concerns such as the impact the company has on the global level.
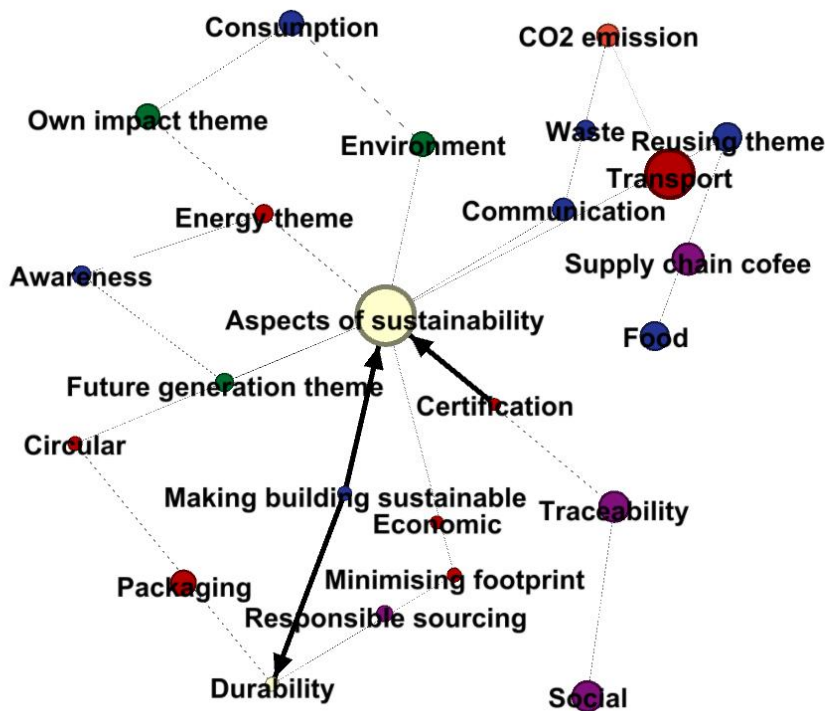
Figure 2

Memetic mapping

Table 3

Memes grouped in different memeplex levels

	Future generation theme	Environment	Own impact
Inner value level			
Working area level	Waste, Communication, Food	Reusing, Awareness, Building	Consumption, Durability
Company operational level	Economic footprint	Transport, Packaging, Certification, CO_2 emission	Minimising, Energy, Circularity
Global impact level	Responsible sourcing chain, Social	Traceability coffee	Supply

Results Culture

Moreover, the company culture has been analysed. To examine the adaption of an employee memeplex, it is needed to understand the current culture. The different cultural memes are explained by participants and identified using thematic analysis (see Appendix C). The different themes identified in the current company's culture regarding sustainability are *awareness, communication, external forces pushing, fluctuating, importance, mindset, minimal effort taken, other aspects important, progress, internal push, resistance, social sustainability, structure hierarchical, sustainable practices, tasks of their function, wait and see attitude, and wrong behavior.* These different aspects are mentioned by participants describing the culture of the company showing what is going on in the company regarding sustainability. It can be seen that participants describe an evolving culture with more sustainability practices, awareness, and communication but also there is resistance, wrong behavior, and minimal effort from the company. For example, participants experienced an increase in sustainability awareness stating 'In terms of the culture within the workforce, I think there are more and more employees who increasingly find sustainability important.' (authors' translation of participant 10). Moreover, participants mentioned there is a more external push for sustainability stating 'we are tendering with a client and they say yes this is our requirement, we want the whole process not to emit so much more than this and otherwise you are not allowed to tender' (authors' translation of participant 12). It can be concluded that the sustainable culture at the company is unique and consists of different memes or memeplexes.

Employees also experience changes in the culture regarding. Even though there is no

longitudinal data on cultural changes, the experiences explained by participants show that the sustainability culture is changing. The main changes experienced by participants and the themes identified are *increasing awareness, increasing interest internally, push external factors, increasing project, targets, and communication* (See Appendix C). For example, when participants were asked about the changes they have experienced regarding the culture of the company around sustainability, they mentioned several changes. Results show for example that employees mentioned increased awareness of sustainability due to the push from external forces such as clients, strict tenders requirements, and regulation push. Some participants stated 'so 10 years ago you barely had sustainability requirements in the tender, now you see it in almost every tender request' (authors' translation of participant 10). Moreover, participants mentioned that the company did not work on sustainability that much but it is increasing over time showing more sustainability projects being initiated. The sustainability projects vary impact-wise and purpose-wise.

It can be seen that memes are constantly evolving partly due to external forces. For example, employees currently state that they find reusable cups important and this has a high relevance because of the regulation the government implemented on the 1st of July banning single-use plastic. One participant stated 'Well, of course the alternative we have with our hard cups. But that's again because of that law. I think, why did we not think of that before?' (authors' translation of participant 14). This regulation increased the relevance and importance of sustainability for employees and keeps being on top of their minds due to the urgency of this topic. Participants experienced changes and new memes evolving that were not there when they started working here. For example, one participant stated 'I think in the past we just did not even deal with sustainability, but now more and more is also asked from our clients' (authors' translation of participant 3). In general, participants say that a lot has changed and sustainability is becoming increasingly important.

To summarize, these results can be used for the second phase of this study. The node size in figure 2 represents the frequency of memes and the most common memes will be used to create four different tailored messages. Using these results, the second phase can be prepared and conducted to analyse how intentional variation of memes in the form of tailored messages is used to affect the attractiveness, selection, and assimilation of this meme.

4.2 Results Phase 2

In this section, the results of the second phase of this study will be presented. Analysis of how intentional variation of memes in the form of tailoring messages to employees' memeplexes will affect the attractiveness, selection, and assimilation of this meme and the reception of the message and lastly how does this affect the adaptation of the memeplex. Thematic analysis is used to examine the interrelationships between memes and the intentional variation of tailored messages and how the different concepts relate to each other. These interrelationships are integrated into a conceptual model explaining how the intentional variation of memes affects the attractiveness, selection, assimilation, reception, and adaption of a message (see figure 3). This figure explains the process and phenomenon of memetics and tailored messages. In the following paragraphs, the results are presented. A summary of the results is given in table 4 and a legend of the table can be found in Appendix D. This is done based on other studies (Halevi Hochwald et al., 2023; Srnka & Koeszegi, 2007)

Figure 3

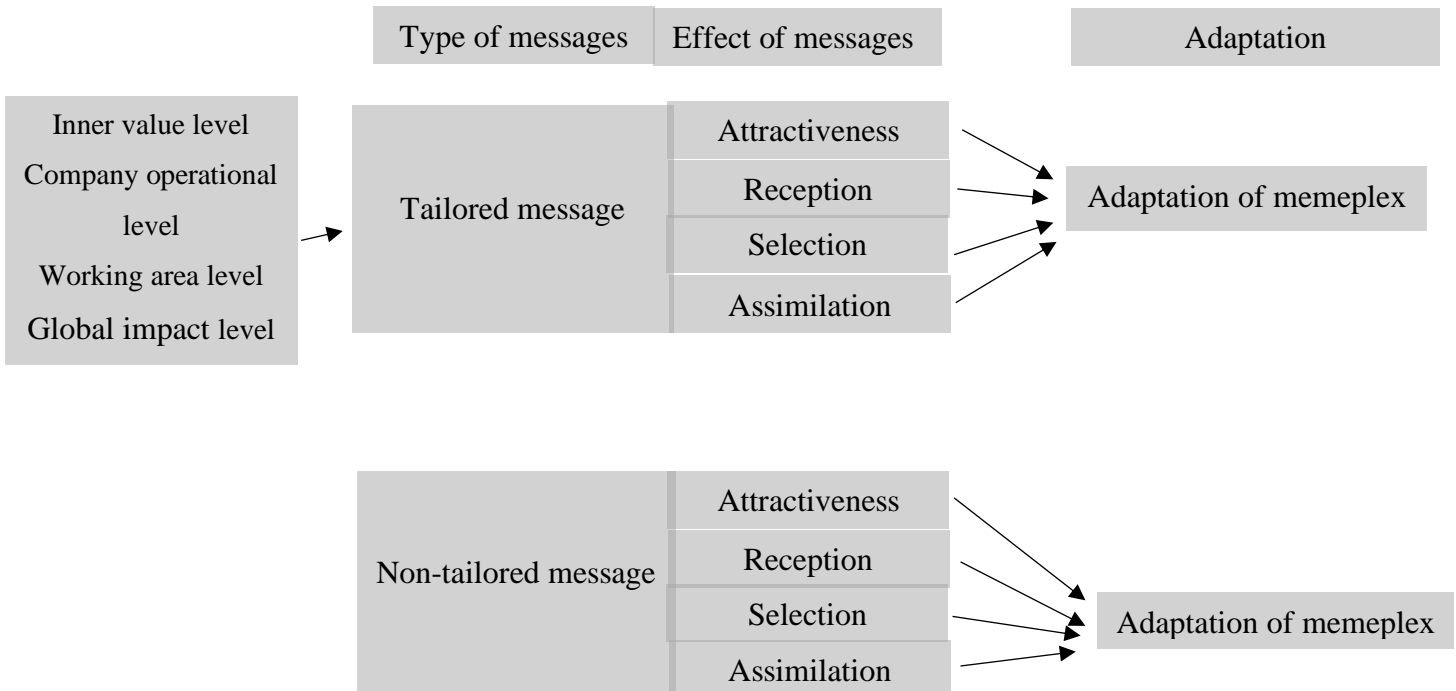*Effects of tailored and non-messages on individuals*

Table 4

Overview results tailored messages

Tailored messages	Attractiveness	Selection	Assimilation	Reception	Adaptation
Participant 1 Company operational level	Low	High	High	Low	Medium
Participant 2 Global impact	Medium	Medium	Medium	Medium	Medium
Participant 3 Working area level	High	Medium	Medium	High	High
Participant 4 Global impact	High	Low	Low	High	Medium
Participant 5 Company operational	High	Low	Medium	High	Medium
Participant 6 Inner value	Low	Low	Low	Low	Low
Participant 7 Working area	Low	Low	Low	Low	Low
Participant 8 Working area	High	Medium	Medium	Medium	Medium
Participant 9 Inner value	High	Low	Low	High	High
Participant 10 Working area	High	Low	Low	High	High
Participant 11 Working area	Low	Medium	Medium	Medium	Low
Participant 12 Global impact	High	Medium	Medium	High	High
Participant 13 Company operational	Low	Medium	Medium	Medium	Low
Participant 14 Inner value	Low	Low	Medium	Low	Low

Non-tailored messages	Attractiveness	Selection	Assimilation	Reception	Adaptation
Participant 1 Company operational level	Medium	High	Medium	High	Medium
Participant 2 Global impact	High	Medium	Medium	High	High
Participant 3 Working area level	Low	Medium	Low	Low	Low
Participant 4 Global impact	Medium	Medium	Low	Low	Low
Participant 5 Company operational	Low	Low	Low	Low	Low
Participant 6 Inner value	N.A	N.A	N.A	N.A	N.A
Participant 7 Working area	Medium	Low	Low	Medium	Low
Participant 8 Working area	Low	Medium	Medium	Low	Medium
Participant 9 Inner value	High	Medium	Medium	High	High
Participant 10 Working area	Low	Low	Low	Low	Low
Participant 11 Working area	Low	Low	Medium	Low	Low
Participant 12 Global impact	Low	Medium	Medium	Low	Low
Participant 13 Company operational	High	Low	Low	High	Low
Participant 14 Inner value	High	Medium	Medium	High	High

4.2.1 Attractiveness

Tailored messages

In total 8 of the 14 participants found the tailored message attractive (see table 4). Participants, associated with different memeplexes have a variety of opinions about the attractiveness of the tailored messages. In the following, each memeplex will be discussed.

Inner value memeplex

Participant 6 with the memes environment, future generation expressed that he/she did not find the message attractive because the examples given are things she does not have an influence on. The aspects mentioned in the message seem too far away and the participant is looking for something that he/she can do that is close to him/her. Participant 9 with the memes environment, future generation mentioned that the message is attractive because it explained the sustainability strategy related to the environment. Lastly, participant 14 with the memes environment, future generation, and own impact mentioned that the message is not attractive because he/she knows the information already. It is surprising because an attractive message is more than just whether the memes fit the memeplex but it is also about the participant who would like to know new information and get in touch with new memes or is looking for memes that he/she has an influence on regarding sustainability.

Working area memeplex

Participant 3 with the memes reusable cups and carpooling mentioned that the messages fit him/her because it is about the office where he/she works and where he has an influence. Participant 8 with the memes canteen, reusable cups, and heating mentioned that the message is attractive because the examples given are things that he/she can relate to and also have an impact on it. For example, the message mentioned reusing cups which sparked the attention to use the hard cup that will be available in the company. The message is attractive because it fits their specific memeplex and emphasizes areas the participant can influence. It is attractive because the message fits the memes about reusable cups and having a vegetarian choice in the canteen which the participant finds important. On the other hand, participant 7 with the memes trash, packaging, and reusing cups mentioned that he/she does not find the message attractive because of the use of difficult words. The participant does not find the text attractive because the words just do not connect with him and easier words could be used. Participant 10 with the meme environment also mentioned the text is attractive because she identifies with the examples and they are close to her. Participant 11 with the memes packaging, energy, and reusable cups mentioned that the message was not very attractive because the content was just

textual. However, the participant did mention that one part of the message was attractive because it mentioned responsible sourcing which the participant is interested in. It can be concluded that most participants found the message attractive because the aspects mentioned in the message were relatable and were things he/she had an influence on.

Company operational memeplex

Participant 1 with the memes CO_2, transport for example said that the message is not attractive because it is a quite general text. The examples mentioned do not feel applicable to him/her because she is not working with these topics. Therefore, it feels like he/she does not have an influence on the topics mentioned. However, participant 5 with the memes CO_2 and transport mentioned that he/she found the message attractive because the aspects that are mentioned as important in the message he/she also found important. Moreover, the participant works on these topics and thus it fits his/her memes which are CO_2 and transport. Participant 13 with the memes packaging, CO_2, and reuse stated that the message is not attractive because these are not things that are close to him/her. These aspects he/she does not have an influence on and thus it does not make the message attractive. It can be concluded that also for the participants with the company operational memeplex, it is important to read aspects that they have an influence on.

Global impact memeplex

Participant 2 with memes traceability, responsible sourcing, and supply chain mentioned that the message is really attractive. The aspects regarding the supply chain and the well-being of farmers fit the interest of the participant. Participant 4 with the memes social, traceability also mentioned the attractiveness of the message because the message mentioned a few benefits such as social aspects and traceability and shows how this fits the sustainability strategy of the company. He/she found the examples given fitting with what he/she finds important. Moreover, participant 12 with the memes social and traceability finds the message attractive because it fits the interests he or she has and is something that fits her role as well. Thus, it shows that participants with the global impact memeplex find the tailored message attractive because the aspects mentioned are also things they find important themselves.

To give an example of participants, they find the messages attractive due to the aspects that are close to their memeplexes.

One participant for example stated 'I find it attractive because it mentioned that we are focusing on the whole supply chain of the coffee' (authors' translation of participant 2 global impact memeplex)

This example shows that the attractiveness of the message is caused by the connectedness of the meme in the message and the participants' memeplex. To conclude, those who did not find the tailored messages attractive mentioned that either it is information they already know or the message is not attractive because of the use of difficult words or there are just no other visuals. On the other hand, those who find the message attractive mentioned that the examples given in the text are relatable and are also things they find important. Thus, the intentional variation of memes of the individuals can increase the attractiveness of the message.

Non-tailored message

Out of 13 participants, 6 found the non-tailored messages attractive. It can be seen that participants with the individual and company operational memeplex tend to find the non-tailored messages attractive.

Inner value memeplex

Participants with the inner value memeplex found the message attractive. Both participants 9 and 14 found the message attractive because they like that the message is talking from the company perspective. It makes the message more convincing to do something for sustainability. They find sustainability important themselves and thus the message convinces them because it shows that the company takes it seriously.

Company operational memeplex

Participant 5 with the memes CO_2 and transport said that the things mentioned in this message did not fit him/her because the message appeared to be mainly aimed at fulfilling the client's interests. However, participant 1 mentioned that the message was more attractive because it highlighted the intrinsic motivation of JDE. Participant 13 also found the message more attractive because it fits what we would send internally and it is talking more from a company perspective. Some find the message attractive because the message feels like it is being sent from the company but some find this part unattractive because it feels like it is written for a client.

Working area memeplex

Participants with the working area memeplexes are looking for aspects that were closely tied to their roles and areas of influence. Participant 13 with the memes social, traceability stated

that the message is less attractive because the social side is less visible. The participant said he/she found the social aspect important and thus it is missing in this text. Participant 11 with the memes packaging, energy, and reusable cups also did not find the message attractive because it felt like the message was made for clients. Participant 8 also mentioned that the message is less attractive because the examples mentioned are things he/she cannot influence. Moreover, participant 3 mentioned that the message is very general and that there is nothing he/she can do him/herself. Thus, participants with the working area memeplexes are looking for aspects that they can influence. The participants with this memeplex connect with the memes containing things that are easy to change at the office which was missing in this message.

Global impact memeplex

Participant 2 found the message attractive because it gives a brand feeling and the message felt like it was being sent from the company. Moreover, he/she likes that the message is about inclusivity and sustainability. Participant 4 for example stated that he/she found the message attractive because the message feels like it is sent from the company, but the text is quite general. On the other hand, participant 12 found the message less attractive because the social aspect was missing in the message. The participant found the social side was very important and thus without it, the message was less attractive. Thus, participants with the global impact memeplex find the message attractive because it gives the feeling that it is sent from the company and they like the company's perspective in the message. The message is less attractive because it misses aspects that fit their memeplex such as the social meme.

To give an example, participants mentioned that the message is attractive because the message is sent from the company stating it is important.

'Yes, I find it more attractive because it is more a message sent from the company stating we find this important.' (authors' translation of participant 3).

In summary, the non-tailored message is attractive to especially participants with an inner value memeplex since the message shows the company's seriousness about sustainability. However, participants with the working area memeplex find the message not attractive because they miss the aspects that they find important regarding the office. The non-tailored message mainly focused on the importance of sustainability for the whole business instead of just focusing on the specific office-related aspects. Therefore, participants did not connect with the non-tailored message and did not find it attractive. In general, most participants found the

tailored messages attractive because they could identify with the content. It is interesting to see that most participants find the tailored messages because the aspects mentioned in the message were also things that they are interested in. It can be concluded that tailoring messages does have a positive effect on attractiveness.

4.2.2 Selection

Tailored message

Participants with various memeplexes tend to focus on different elements of the message. The inner value memeplex will be discussed first.

Inner value memeplex

Participant 6 with the memes environment and future generation mentioned that he/she only selects the sustainability strategy mentioned in the message. Participant 9 also with the memes environment and future generation mentioned that he/she only selects the environmental aspect of the message. Participant 14 with the memes environment, future generation, and own impact also mentioned that he/she only selects the sustainability strategy and particularly the three pillars. It can be concluded that the participants with the inner value memeplex do not have that many aspects of the message that they select.

Working area memeplex

Looking at the participants with working area memeplex, it can be seen that their selection is aligned with their memeplexes. For example, participant 3 with the memes reusable cups and carpooling mentioned that he/she selected the parts of the messages with reusing cups and carpooling. Moreover, participant 8 with the memes canteen, heating, and reusable cups also selected the aspects in the message that fit their memeplex. Participant 10 with the memes food, waste, and building said that he/she only selected the part about turning down the heat. Lastly, participant 11 with the memes packaging, energy, and reusable cups mentioned the selection of electric cars, packaging, and responsible sourcing. It can be concluded that participants with the working area memeplex mostly select memes that are in line with their memeplex.

Company operational memeplex

Participant 1 with the memes CO_2, food, and energy, for example, selected aspects such as electrical cars and packaging. These aspects do relate to the memes the participants have. Another example is participant 5 with the memes CO_2, transport, and minimising footprint select aspects such as packaging, CO_2, and electric cars. Participant 13 with the memes packaging, CO_2, and reuse selects aspects of the message such as CO_2, electric cars, and pillars.

When tailoring messages, participants frequently select the aspects of the messages that are close to their memeplex.

Global impact memeplex

Participant 2 with the memes traceability, responsible sourcing, and supply chain mentions that he/she selected traceability, responsible sourcing, and connecting people. Participant 4 with the memes social and traceability mentioned that he/she selected the responsible sourcing and social aspect. Participant 12 with the memes social and traceability mentioned that he/she selected responsible sourcing and diversity.

To give an insight into what the participant mentioned, for example.

'Traceability caught my attention because I'm thinking, how are we going to do that while, because we're getting coffee from so many different plantations in such large volumes which I find interesting.' (authors' translation of participant 2).'

In general, participant selection from the message varies between the different individuals but the selected memes are mostly closely related to the memeplex of the participant.

Non-tailored message

With the non-tailored message, participants selected mostly the same aspects because the messages are not tailored to the memeplexes of the participants. Firstly, the participants with the inner value, working area, company operational, and global impact memeplex selected all similar aspects. For example, participant 1 with the company operational memeplex selected history, future generation, and brand which are aspects that are standing out. Participant 3 with the working area memeplex also mentioned that history and future generations are standing out. It can be concluded that similar memes were selected by the participants in the tailored messages and that the different memeplexes did not differentiate between what aspects they selected in the non-tailored messages. However, for the tailored messages, it does show that participants select memes that fit their memeplexes. It shows a clear change in what participants select, meaning that tailored messages are effectively fitted to the memeplexes.

4.2.3 Assimilation

Tailored message

Assimilation is analysed by whether the participant retains and remembers the memes mentioned in the message. Recognition of the aspects of the message shows that participants understand and remember the memes.

Inner value memeplex

Participant 6 with the memes environment and future generation mentioned that traceability and farmer well-being are aspects he/she remembered from the message. Participant 9 with the memes environment and future generation stated that he/she could recall the 3 pillars and the environment aspect. Moreover, participant 14 with the meme environment, future generation, and own impact mentioned that the 3 pillars and electric cars are things he/she recalled.

Working area memeplex

Looking at the working area memeplex, participant 3 with the memes reusable cups, carpooling, and communication mentioned that he/she can recall the aspects of less use of cups and efficient use of workspaces. Participant 7 with the memes waste, packaging, and reusing stated that he/she can only recall the sustainability strategy part mentioned in the message. Participant 8 with the memes canteen, reusable cups, and heating recalled aspects similar to his/her meme which are reusable cups, responsible sourcing, canteen, and heating. Participant 10 with the memes food, waste, and building said that the only part recalled was about turning down the heat. Participant 11 with the memes packaging, energy, and reusable cups recalled other aspects which were electrical cars, CO_2, packaging, and responsible sourcing.

Company operational memeplex

Participant 1 with the memes CO_2, food, and energy assimilated the 3 pillars, electric cars and, packaging. Participant 5 with the memes CO_2, transport, and minimizing footprint mentioned that he/she remembered the key aspects of the message which are packaging, electric cars, and CO_2. Participant 13 with the memes packaging, CO_2, and reusing said that packaging, electric cars, pillars, and responsible sourcing are things that he/she recalled.

Global impact memeplex

Participant 2 with the memes traceability, responsible sourcing, and supply chain mentioned that he/she remembered 3 pillars, traceability, and the well-being of farmers. Participant 4 with the memes social and traceability recalled responsible sourcing and social aspects. Participant 12 with the memes social and traceability mentioned that he/she remembered 3 pillars, diversity, and responsible sourcing.

Non-tailored message

Finally, similar to the selection of the memes, for the non-tailored messages mostly the same aspects are assimilated by participants since they are not tailored to the memeplexes of the participants. For example, participant 1 with company operational memeplex with the memes

CO_2, food, and transport with the company operational memeplex recalled the aspect of history and future generation mentioned in the message. Moreover, participant 3 with the working area memeplex with memes reusable, carpooling, and food mentioned he/she recalled the aspects of JDE as a brand and the history aspect. Participant 14 with the inner value memeplex with the meme environment, future generation, and own impact remembered the aspects such as the passion for coffee, cultural heritage, and future generations. Thus, similar aspects are remembered by different memeplexes.

To conclude, participants have assimilated various memes based on their memeplexes and show that the assimilated aspects are closely related to their inner value memeplexes. For non-tailored messages, the memeplex does not affect the assimilation of certain memes.

4.2.4 Reception
The reception of tailored messages differs between the four memeplexes of participants.

Tailored message
Inner value memeplex
Participant 6 mentioned that he/she does not recept the message because it is talking about traceability and responsible sourcing which he/she thinks is not in their line of influence. Participant 9 found it a good message because the sustainability strategy is mentioned and the message was about the environment. Participant 14 did not find it appealing because with his/her function he/she already knows the information mentioned in the message. Moreover, he/she found the message not receptive because of the use of difficult words and he/she does not know how he/she can contribute to sustainability as an employee. The reception of the message differs because participants are looking for specific things that they find receptive.

Working area memeplex
Participant 3 stated a favorable reception of the message because the message mentioned things that he/she could directly influence and made him/her aware it is possible to do something about sustainability. Participant 7 did not think the reception of the message was well because it used difficult words which made the message difficult to understand. Participant 10 for example said that the message is nice because he/she identifies with the things mentioned such as turning down the heat. The reception of the message was good because of the similar memes mentioned in the message. Participant 11 found the message receptive because it is good to know what the company is doing regarding sustainability and a new aspect is mentioned such

as responsible sourcing. Thus, most people find the message receptive because they feel like they can also influence and contribute to sustainability.

Company operational memeplex

Participant 1 stated that the message is generic resulting in that he/she will just read it and put the message away after reading it. Participant 5 mentioned that he/she liked the focus points of the message which he or she found concrete and aligned with his/her personal values. Participant 13 stated that the content of the message was something that was being told quite often and thus found the message not receptive. The message was not receptive because the information was not something new.

Global impact memeplex

Participant 2 stated that the message was informative but fell short in conveying what the company's objectives are. Participant 4 for example mentioned that the message is good because there are concrete examples and the reasons that are given persuaded me why I should help. Participant 12 said that the aspects of connecting people attracted his/her attention and it is good to read about the 3 pillars. The message is receptive because it shows what the company finds important and these are also things that they find important.

To give an example of what participants think about the reception of the tailored message.

> 'A number of reasons are given in the text to contribute to sustainability, so I think that makes it a good text.' (authors' translation of participant 4).

It can be concluded that most participants found the message receptive because aspects mentioned in the message that are close to the participant memeplex do make the message more receptive. It shows the importance of aligning and tailoring messages to the interest of each memeplex to increase the receptiveness of the message. However, some participants do not find the message receptive because the information is something they already know.

Non-tailored message

The reception of non-tailored messages of participants from different memeplexes is also interesting to examine and analyse. The next section will discuss how the message is received by each memeplex.

Inner value memeplex

Participant 9 mentioned that the non-tailored message is a bit better because there are more specific examples about the projects and it is written with a voice aligned with the company's

perspective. Participant 14 said the message is better because the message represents JDE and thus gives more emotion and genuine feeling.

Working area memeplex

Participant 3 said the message was not receptive because it felt like the message was written for a client. Participant 4 found the message difficult to understand due to the use of difficult words and terminology. Participant 8 also thinks the message is written for a client and the message is more explaining the general sustainability strategy and did not mention specific office-related aspects.

Company operational memeplex

Participant 1 found the message good because it is more from the values of JDE. On the other hand, participant 5 said the message is less receptive because he/she does not connect to certain aspects of the message and it feels like it is written for a client. Moreover, he/she found the message too general. However, participant 13 said that it gives more of a feeling and identity because it is talking from a company-oriented perspective.

Global impact memeplex

Participant 2 said the message is more receptive because he/she has more feelings for this message because it aligns with the company's values. On the other hand, participant 4 found the message less receptive because there were no aspects that were important to him/her. The message also felt like it was more written for clients or on a website. Participant 12 found the message less receptive because it was about cultural heritage and he/she did not see the link to the company's mission.

To give an understanding, an example of a participant will be given.

'To understand why we do things regarding sustainability, it is mentioned that we just want to sustain our business and this is in reality maybe the most important reason (authors' translation of participant 9).

However, some participants said the message was less receptive because it felt like the message was written to a client and not to them. A participant for example stated

'It feels like the text is written for a client' (author's translation of participant 5).

It can be concluded that the message participants found the tailored message in general more receptive. The reason can be that participants find the messages more receptive because the

message fits their memeplexes and their memes making the message more recognizable. However, it can be seen that more aspects make the message receptive than just alignment with the memeplex. On the other hand, most participants found the non-tailored message not that receptive because the content did not contain aspects that they could connect to and they even felt like the message was written for a client. What is striking is that participants with the company operational memeplex found the non-tailored message receptive. This is because they found the message is receptive because it is written from the company perspective which fits the company operational memeplex.

4.2.5 Adaptation

Out of the 14 participants, 9 found the tailored message motivating, which can help with the adaptation of memes (see table 4). In the following paragraphs, each memeplex will be discussed.

Tailored message

Inner value memeplex

Within the inner value memeplex, participant 6 mentioned the message did not motivate him/her because he/she wanted to see concrete actions that he/she could do within his/her own reach of influence. Participant 9 says the message motivated him/her because the text mentioned that sustainability entails more than just environmental aspects. However, participant 14 did not find the message motivating because there were no concrete actions he/she could take. Participants missed the concrete actions that they could take and thus found the message not motivating.

Working area memeplex

Participant 3 mentioned that it does motivate him/her because it tackles the problems he/she experiences in the workplace such as reusing cups. It is looking at the sustainability in the surroundings they are working in. On the other hand, participant 7 said the message did not motivate him/her because the words were too difficult and thus the message did not connect with him/her. Participant 8 did find the message motivating but considered the message more as a step to read something more before he/she can embrace the sustainability strategy. Participant 10 mentioned that the message was motivating because it shows that the sustainability efforts of the company were not just motivated due to the needs of the clients but were also internally motivated. Participant 11 said it does not motivate suggesting it needed

more visualization to make the message more engaging. It shows that more aspects make a message receptive and thus not everyone finds the message receptive.

Company operational memeplex

Participant 1 said that the message sparked some motivation and emphasized we need to do something for sustainability. However, he/she felt that it missed specific concrete actions that he/she could do and mentioned it is also not new information so he/she will not embrace the strategy more than he/she already did. Participant 5 said it did motivate because these topics prompted him/her to think about department-specific contributions to sustainability. On the contrary, participant 13 said that it did not motivate him/her because the aspects mentioned were things that were beyond their sphere of influence. Participants with the company operational memeplex found the message are looking for aspects that they can contribute and also can influence regarding sustainability.

Global impact memeplex

Participant 2 stated that the message motivated him/her to embrace the sustainability strategy. However, it would motivate him/her more if the message had practical and tangible action points. Participant 4 mentioned that it did motivate because the examples given in the message fit the company's strategy. Participant 12 said it did motivate because the message mentioned connecting people and diversity which is something really important for him/her. The message did motivate participants because it mentioned aspects that they similarly find important but one participant does miss the concrete and tangible action he/she could do.

The tailored messages motivate participants in several ways. To give an example, one participant mentioned

'In that sense, it does motivate you because you also start looking and thinking of yes, what would be things then for our department to work on?' (authors' translation of participant 5)

It can be concluded that the intentional variation of memes can positively affect the adaptation of memes because participants are motivated to adapt memes. The responses show the importance of tailoring messages to resonate with an inner value memeplex to positively affect the adaption of memes.

Non tailored message

On the other hand, 3 out of the 13 participants found the non-tailored message motivating which means the message would have limited impact on the adaptation of the employee memeplexes.

Inner value memeplex

Participant 9 stated that the message motivated more because it felt closer to him/her because he/she could identify with the values of the company. Participant 14 stated that the message is motivating because he/she likes that the message is sent from a company perspective. It can be concluded that the message is motivating for participants with these memeplex because they find it motivating to hear that the company commits to sustainability because the participants also find it important for the company and being a future-proof company.

Working area memeplex

Participant 3, for example, mentioned that the message did not motivate because there were no examples used that could show how he/she could personally contribute. Participant 7 also mentioned that it did not motivate him/her because the message was too difficult due to the words used. Participant 8 stated that the message was neither motivating nor demotivating but he/she did miss specific concrete actions that he/she could do themselves. Participant 10 said the message did not motivate him/her because it did not have any concrete examples of what he/she could do to contribute to sustainability. Participant 11 also mentioned that the message is not motivating because the aspects used are not inspiring him/her to take action. Many participants with this memeplex found the message not motivating because they are looking for something they can easily contribute and do themselves but this was missing in the message.

Company operational memeplex

Participant 1 mentioned it would not motivate because he/she would see it as an informative text and he/she would not embrace the sustainability strategy more than he/she already did. Participant 5 also mentioned that the message motivates less because the message is written for a client. Moreover, the message did not motivate him/her because it feels like sustainability efforts are driven by money and the needs of clients. Participant 13 also did not find it motivating because a lot of things I cannot influence such as the heating and electric car transition. The message was not motivating because participants found the message was written for clients.

Global impact memeplex

Participant 2 mentioned that the message is motivating because it is talking from the company's perspective and mentioned its history. Participant 4 stated that the message did not motivate him/her because the aspects mentioned did not apply to him/her and that these are things he cannot change. Moreover, he/she mentioned that the message was quite general. Participant 12 said the message is not motivating because the aspects used are less recognizable for him/her. Participants missed aspects that relate to them and wanted to see aspects that they could influence as an individual.

This shows that there are differences between the different memeplexes and how the message motivates. To give an example a participant mentioned

'No, this message does not motivate me because it does not feel sincere and sustainability is only important for business and revenue because our clients want it.' (authors' translation of participant 5)

To summarize, tailored messages motivated most of the participants to adapt certain memes because it resonated with their memeplexes, whereas the non-tailored message had a less motivating effect and thus participants adapted memes less. The intentional variation of memes does have a positive effect on the adaptation of memes. Very few participants found the non-tailored messages motivating because the memes mentioned in the message did not connect to the participant. They state it was not recognizable for them and also there are no aspects that they feel they have an influence on. However, a few participants with the inner value memeplex found the non-tailored message motivating because they liked that the message aligned with the company's values and that it communicated from the brand.

5. Discussion

Both existing literature and the findings of this study show that memetics can provide a valuable empirical approach for identifying and visualizing sustainability memes within a company. This study demonstrates that these identified memes can be used to tailor messages through intentional variation of memes. The results show that memeplexes can be identified at various levels, ranging from micro to macro level showing the wide-ranging meanings of sustainability within a company. This is in line with the stages of sustainability concluded by (Landrum, 2018) ranging from the micro-level compliance to macro-level coevolution. Macro-level are high-level transformations where more than just easy actions are needed while micro-level changes entail minimum efforts to comply with regulations(Landrum, 2018). This study contributes to the literature showing something similar by identifying four levels of memeplexes demonstrating that some employees are interested in tangible and practical actions at the working area level so they can contribute to sustainability whereas others find it important to focus on the global impact level. It can be argued that different employees find sustainability important in different ways. These differences in employee perspectives on sustainability are in line with existing research that highlighted different sustainability levels within an organization mentioning individual, organization, and global sustainability (Lozano, 2018). The findings of this study align with this literature and contribute to the understanding of diverse levels of sustainability within a company. Biedenbach & Manzhynski (2016) conclude that employees who are more knowledgeable and involved in their organisation's brand, also find sustainability of their company more important. These differences are identified into levels showing various levels of sustainability between employees. A study concluded that there are different perspectives employees have on sustainability which can be categorized into four groups: pragmatists, libertarians, housekeepers, and campaigners (Greene et al., 2014). The four levels of memeplexes identified in this study show some similarities to these clusters. It can be argued that pragmatists who are looking for quick wins such as energy-saving measures are similar to the working area memeplex. This memeplex shows that employees prioritize sustainability in their immediate work surroundings. On the other hand, the global impact level corresponds to the campaigners' group, as this group of employees wants to see sustainability on a broader level. This group thinks that the company and everyone else should have more involvement and take radical action to integrate sustainability within the company's strategy (Greene et al., 2014). Thus, the results of this study show similarities to the identified groups of other studies.

As mentioned in the results, what employees find important regarding sustainability can differ over time and with company size. For example, upcoming regulations about CSRD, aimed at larger companies and starting on the 1st of January 2024, will draw more attention from larger companies. Employees will slowly acknowledge the importance of this new regulation and start working on it. Moreover, the different levels of memeplexes can be different depending on the size of the company. Larger companies will face more complicated challenges regarding sustainability than smaller companies and thus other aspects of sustainability will be prioritized by employees. Research shows that larger organisations have more resources and capacity to implement sustainability practices, while smaller organisations frequently rely more on external certification standards (Bager & Lambin, 2020). Thus, it can be argued that companies of different sizes will have different memes of what employees find important regarding sustainability depending on what the companies are capable of. More research is needed to examine the differences between smaller and larger companies to further contribute to the literature.

The results of the second phase of this study add a new perspective to the literature indicating that tailoring messages to memeplexes can have a positive impact on the reception of the message and the adaptation of the memeplex. This study adds to the literature with intentional variation indicating that tailoring messages to the personalities or memeplexes of an individual can be a powerful way to improve the messages' impact (Fazel et al., 2023; Hirsh et al., 2012; Jensen et al., 2012; Skov-Ettrup et al., 2014). The results show that messages tailored to the memeplex are seen as more attractive and receptive than non-tailored messages which can be argued that the intentional variation of memes results in individuals resonating more with the message. It can be argued that this also can positively impact the adaptation of sustainability memeplex and that employees are willing to embrace the sustainability strategy. These results add to the literature with new findings using memetics compared to the studies showing that tailoring messages can influence the motivation of individuals to eat for example more fruit or even quit smoking (Skov-Ettrup et al., 2014; Williams-Piehota et al., 2009). Most participants find tailored messages motivating because it cover aspects that fit their memeplex and thus they are willing to adapt the memeplex.

However, it is important to acknowledge that this study did not consider the various stages of change that individuals go through. This could explain why there are differences between the effects of the message and that not all participants found the message effective in enhancing memeplex adaptation or found the message receptive. According to Pope et al. (2018), individuals process information and make decisions depending on the stage of change

they are in which can be the detection phase, decision phase, and implementation phase. This study did not take into account the different stages of change which can explain why not every participant found the message receptive or effective in enhancing memeplex adaptation. Other studies show the relevance and different impacts of tailoring messages to the different stages of change recommending that messages need to address specific concerns of individuals at each stage of change (Haumer et al., 2021; Pelletier & Sharp, 2008; Pope et al., 2018). For example, someone in the detection phase would like to know more about the problem whereas individuals in the implementation phase want to know the practical details that support them in changing their behavior (Pelletier & Sharp, 2008). It is important to consider the different stages of change which can influence the effectiveness of the message.

Moreover, the difference between employees regarding their function and looking for practical actions could also influence the effectiveness of the message. The different effects of tailored messages can be explained that some employees work more with sustainability and get in touch more with the clients and government who are demanding for sustainability whereas other employees work more on internal processes such as HR. Research shows that messages can be improved by tailoring to what is relevant to employees in their function resulting in an increase in engagement of sustainability at an organisation (Barrett, 2002; Kataria et al., 2013; Welch & Jackson, 2007). Therefore, tailored messages should take into account the job function to get a more comprehensive perspective on the effectiveness of tailoring messages. Additionally, it is important to understand that some individuals like to see concrete actions that they can do to make a change which can encourage employees to incorporate sustainable practices in their work (Barrett, 2002). Thus, it should be acknowledged that other variables also play an important role in the effectiveness of internal communication.

Lastly, the incongruence of messages should be considered. Some participants do not find the tailored message attractive and this can be a result of incongruence between the tailored messages and the participants' memeplex. Many studies show the positive effects of message tailoring but fail to consider when the message is incongruent. The findings in this study provide evidence that message tailoring can also not motivate employees or be less attractive. Haumer et al. (2021) stated that tailored messages could also decrease employee engagement when individuals receive messages that are incongruent with their personality type. This same idea can be seen in the incongruence with the participants' memeplex. Some participants could have felt that the message was incongruent with their memeplex and explained why they found the message not attractive not motivating. Errors in tailored messages to individuals' memeplexes could maybe explain why some participants did not find the message attractive.

6. Limitations and future research

Firstly, due to the relatively novel way of using memetics in this study, the limitations of the studies should be acknowledged. The results of this study are not generalizable since this study only used one company as a case study. This study only gives insight into this specific company and is not intended to make generalizations but rather to show how a memetic perspective can be used to tailor messages. To obtain a more comprehensive understanding, further research is needed to examine this phenomenon in other industries. This is a novel way of examining tailored messages and thus more diverse research with different research methods is needed. While this study contributed to addressing the lack of empirical data through thematic analysis as demonstrated by other studies (Schlaile et al., 2021), other methods such as discourse, ethnography, narrative analysis, and even quantitative methods should be conducted in future research to add to the literature on memetics. It was not possible to analyse the selection and assimilation of memes in greater detail due to time constraints, limiting this study to the verbalized aspects.

Secondly, while this study primarily focused on the intentional variation of memes in the form of tailoring messages to employees' memeplexes, it is important to recognize that certain other variables might have an impact on the reception and attractiveness of the message. Variables such as an individual's preference for text or visuals, their level of sustainability awareness, previous experience, and their role were not considered in this study. It is important to acknowledge that this has implications for the effectiveness of the study and can impact the effectiveness of tailored messages. For example, some participants mentioned they found the message not attractive because they were missing the visual parts or missed practical actions they could take. Additionally, variations in levels of sustainability knowledge and awareness should be taken into account since these can have an impact on the adaptation of the employees' memeplex. Some employees did not feel motivated by the messages because they were already actively working on sustainability or already found it important so they did not feel like they needed to be convinced. In this study, employees with a high level of environmental awareness stated that the message does not increase their motivation to adapt or embrace the sustainability strategy. Thus, as mentioned in the discussion other variables also should be considered when tailoring messages.

Thirdly, identifying memes and the intentional variation of memes in the form of tailored messages is not perfect. As mentioned by (Gill, 2012; Heylighen & Chielens, 2005; Malhorta, 2015), there is a lack of well-established memetic models to empirically analyse

memetics. Identifying memes and especially the selection, assimilation, and adaptation of memes are difficult to capture directly as discussed in other studies (Schlaile et al., 2021; Shepherd & McKelvey, 2009). Although this study tried to capture as much data as possible within its timeframe, there is a lack of longitudinal data as the data captured is just a snapshot of reality. Moreover, the variation of memes is not controllable and can evolve in a short period of time (Shepherd & McKelvey, 2009). Therefore, it is difficult to precisely control intentional variation of memes. The dynamics of organisational memes can change over time in this study, suggesting that during the intentional variation process, the individual memes could have slightly been changed.

Lastly, conducting qualitative research comes with the risk of misinterpretation or misunderstanding of information. The thematic analysis is dependent on subjective interpretations and thus errors such as misunderstanding can occur (Bryman, 2006). Therefore, the transferability and interpretation of the findings in this study may be limited.

Practical limitations

Additionally, the practical limitations should be acknowledged. The 2nd phase of the study mainly focused on tailoring the messages text-wise due to time constraints. In reality, a more comprehensive communication process should entail various other aspects that were not considered in this study. Both messages used in this study can be enhanced by including the previously mentioned variables such as visuals or participants' previous experience. However, during the time period of the study and with limited resources, it was not feasible to address all the other variables. As a result, the data collected and analysed only reflects a limited aspect of reality.

Furthermore, it is important to consider the possibility of bias in this study's sample. Even though different departments are represented in this study, participants who have an affinity for the subject may have been more likely to participate in this study, potentially resulting in bias. This could result in a sample that mainly consists of participants who are interested in sustainability and thus may not represent the company's average employee.

Additionally, missing data should be acknowledged because 1 participant quit the job after the 1st phase of this study and another participant had to leave halfway through the interview in the 2nd phase of this study. However, the number of interviews conducted is sufficient to cover these missing data points.

Future research recommendations

First and most importantly, follow-up research is necessary to reveal and examine more in-depth the selection, assimilation, and adaptation of memes over the long term. Future research should explore the effect of exposure to intentional variation of memes and examine this in the long term to see whether memes were enacted and assimilated by employees over time.

Secondly, future studies should look into the frequency of messages and see whether repeated exposure to a certain meme can drive adaption and retention. This study was limited because the participants encountered the message once but is important to understand how repetitive exposure to certain memes will influence individuals. Literature shows that having frequent and consistent communication that is aligned with employees' values can increase commitment (Kumar & Christodoulopoulou, 2014; Skov-Ettrup et al., 2014). Moreover, Skov-Ettrup et al. (2014) state that message tailoring and frequency are interrelated and that message frequency is associated with behavioral change. Hence, future studies should examine the long-term effects of tailored messages and look at frequent communication.

Thirdly, it is interesting to look more at the bottom-up approach. This research focused mainly on the top-down approach of a sustainability strategy led by a company. However, future research should look into the bottom-up approach as well. According to (Sharp, 2019), individuals can copy specific values to promote collective action and this could influence organizational change. It is interesting to examine how employees can influence the sustainability strategy via bottom-up communication. Research shows the effectiveness of bottom-up communication since it can motivate employees to share important information for decision-making (Zhang et al., 2022). Therefore, future research should investigate the effects of bottom-up communication on organizational change.

To summarize, even though this study contributed to literature, it is crucial to acknowledge the limitations of this study. Addressing and learning from these limitations will enable more comprehensive and effective research in the field of memetics.

7. Conclusion

This study focuses on examining the intentional variation of memes in the form of tailored messages. This research is conducted in two phases. The first phase entails identifying the memes of employees and the second phase involves how these employees react to messages tailored to their memeplexes and non-tailored messages. For both phases, semi-structured interviews are used to collect data. 15 employees from the company Jacobs Douwe Egberts were interviewed for this study. Thematic analysis is used to examine the memeplexes and understand how tailored messages affect the attractiveness of the message. Thus, it is possible to answer the following research question.

'How does the intentional variation of memes (in the form of tailoring messages to employees' memeplexes) affect the attractiveness, selection, and assimilation of this meme in the sense of a better reception of this tailored message? How does this affect the adaptation of the employee memeplex?'

It can be concluded that tailored messages to individual memeplexes can positively affect the attractiveness resulting in a better reception of the message and the adaptation of memeplexes. The results of this study show that tailored messages are more attractive and can increase adaptation because the message resonates more with the individuals' memeplex compared to non-tailored messages. The results show that 8 out of 14 cases examined, found the tailored messages to individual memeplexes more attractive than non-tailored messages because participants connect more with the tailored messages. The participants recognize and relate to the message since these things are also important to them. However, the reception of the message is not entirely dependent on the memeplex alignment. Other aspects, such as the use of words and providing concrete actions, are important regarding the reception of the message.

Finally, the increased reception of the message does positively affect the adaptation of the employees' memeplex. 9 out of the 14 participants stated that the tailored messages motivated them more than non-tailored messages to embrace the sustainability strategy of the company because it fits their memeplex. They are more motivated because they feel that they can also contribute to sustainability and that the aspects mentioned are in line with what they find important. Thus, intentional variation positively affects the adaptation of the employee memeplex. Looking at the selection and assimilation of the tailored messages, it can be concluded that participants select and assimilate memes that are close to their memeplex. When looking at the non-tailored messages, there is not that much difference between the different

memeplexes in what memes are selected and assimilated.

Lastly, it can be concluded that employees have different memeplexes, which can be divided into four levels which are *inner value level, working area level, company operational level,* and *global impact level*. It shows that employees find sustainability important at different levels of the company. Some employees find sustainability important because it is close to their values, some find it important that it is tangible and visible in their working area and some find it important that sustainability is about the impact the company has in the country of origin. The different identified memeplexes show the various aspects that employees recognize as important regarding sustainability. These levels give insights into the company's culture regarding sustainability and show the difference between employees in what they find important regarding sustainability.

Recommendations to company

Understanding your employees on an individual level will have benefits. Tailoring messages to the individuals' memeplex will positively affect the attractiveness and reception of the message and in the end, positively affect the adaptation of the employees' memeplex. An in-depth analysis of all the employees is needed to create profiles of each individual. These profiles offer valuable insights into how companies can tailor messages to individuals to increase the effectiveness of the message. Tailoring messages to individuals can enhance the engagement of employees and alignment with the company's sustainability strategy. It is important that many variables are considered to tailor the message to the individuals' memeplex. Companies can include variables such as visuals to those who prefer visuals, add job function-specific content, and consider the level of sustainability knowledge to tailor messages even more to an individual. Thus, this study proposes a more tailored communication approach instead of a one-size-fits-all approach.

8. Planning

The project timeline of this research can be found in Appendix B. Supervision hours are included to show how the division of hours is made for the supervisor. In case of any delays or problems, the researcher will immediately contact the supervisor to discuss the process.

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Appendix A Interview guide

Interview guide A memetics

This interview will be conducted by asking several questions about the topic of sustainability. Your answers are neither right nor wrong. It is important that you share all your experiences or thoughts. The interview will end with some sustainability statements from your company. I would like to ask for your honest reaction to the different messages. This interview will be recorded and anonymously transcribed. Recordings will be deleted after this research.

Before we start this interview, can you maybe tell me a bit about yourself and your relation to the company?

Memeplex of sustainability

What are important aspects for you regarding sustainability? *And why?*

How would you describe the current organisational culture regarding sustainability? *Can you give an example?*

Do you notice anything changing in the company around sustainability? *If so, can you tell me what you are experiencing?*

Suppose you are the CEO for a day and you get to make all the decisions about sustainability. What would you want to change first regarding sustainability in the company? *And why?*

Is there anything else you would like to add or get rid of that hasn't been discussed yet?

List of interviewers and function

Participant 1: Finance

Participant 2: Marketing

Participant 3: Account manager

Participant 4: Digital

Participant 5: Logistics

Participant 6: Sales

Participant 7: Operations

Participant 8: R&D

Participant 9: Environmental footprint specialist

Participant 10: Account manager

Participant 11: Customer service

Participant 12: HR

Participant 13: Telesales

Participant 14: Tender

Participant 15: External engagement

Interview guide B Tailored messages

This interview will be conducted by asking several questions about the topic of sustainability. Your answers are neither right nor wrong. It is important that you share all your experiences or thoughts. The interview will show some sustainability messages from your company. I would like to ask for your honest reaction to the different messages. This interview will be recorded and anonymously transcribed. Recordings will be deleted after this research. Imagine these messages are communicated internally from JDE. I would like to hear everything that comes to your mind. It is important to give your first impression and unfiltered opinion.

Before we start this interview, can you maybe tell me a bit about the current communication regarding sustainability at JDE?

Hearing this, what is your first impression?

How attractive is this message to you? *Can you explain why you felt like this?*

Which specific aspects of the message stood out to you and captured your attention? *Why?*

What are the aspects of the message that you can recall?

How does this message motivate (or not) you to embrace the company's sustainability strategy? *Why not or why does it?*

Tailored message 1: Working area level

Beste XXXX

Duurzaamheid op kantoor is een belangrijk aspect zoals hergebruik van koffiekopjes, afval scheiden en vegetarisch eten in de kantine. Wij bij JDE vinden het belangrijk om een bijdrage te leveren aan een duurzamere wereld. Daarom willen wij jou informeren over onze duurzaamheidsstrategie.

Onze strategie bestaat uit 3 pilaren namelijk verantwoorde teelt, reduceren van onze ecologisch afdruk en het verbinden van mensen. Met onze strategie proberen wij een transitie te maken om samen een betere wereld te creëren. Daarom zijn we bezig om ons kantoor te verduurzamen door plekken efficiënter te benutten, meer herbruikbare beker met onze hard cup en onze verwarming omlaag zetten op minder drukke dagen. Wij vinden deze veranderingen belangrijk zodat we samen ons bedrijf kunnen verduurzamen.

Duurzaam begint op kantoor, help jij mee?

Tailored message 2: Company operational level

Beste XXXX

Het verduurzamen van ons bedrijfsproces is een belangrijk aspect zoals het reduceren van CO_2 uitstoot, het gebruik van elektrische wagens en het verduurzamen van onze verpakkingen. Wij bij JDE vinden het belangrijk om een bijdrage te leveren aan een duurzamere wereld. Daarom willen wij jou informeren over onze duurzaamheidsstrategie.

Onze strategie bestaat uit 3 pilaren namelijk verantwoorde teelt, reduceren van onze ecologisch afdruk en het verbinden van mensen. Met onze strategie proberen wij een transitie te maken om samen een betere wereld te creëren. Daarom zijn wij bezig om ons bedrijfsproces te verduurzamen door het elektrificeren van onze wagenpark, onze CO_2 uitstoot te verminderen en onze verpakking recyclebaar, composteerbaar en herbruikbaar te maken. Wij vinden deze veranderingen belangrijk zodat we samen ons bedrijf kunnen verduurzamen.

Duurzaam begint bij het bedrijf, help jij mee?

Tailored message 3: Global impact level

Beste XXXX

Duurzaamheid van ons koffie keten is een belangrijk aspect zoals het traceerbaar maken van de koffiebonen, het verantwoord telen van koffiebonen en de transparantie van onze waardeketen. Wij bij JDE vinden het belangrijk om een bijdrage te leveren aan een duurzamere wereld. Daarom willen wij jou informeren over onze duurzaamheidsstrategie.

Onze strategie bestaat uit 3 pilaren namelijk verantwoorde teelt, reduceren van onze ecologisch afdruk en het verbinden van mensen. Met onze strategie proberen wij een transitie te maken om samen een betere wereld te creëren. Daarom zijn wij bezig om onze koffie keten te verduurzamen door te kijken naar de traceerbaarheid van onze koffieboon, de kleine koffie boeren helpen en onze koffie keten te verbeteren. Wij vinden deze veranderingen belangrijk zodat we samen ons bedrijf kunnen verduurzamen.

Duurzaam begint bij de koffiebonen, help jij mee?

Tailored message 4: Inner value level

Beste XXXX

Duurzaamheid voor onze omgeving is een belangrijk aspect zoals het milieu, voor onze toekomstige generatie en voor ons zelf. Wij bij JDE vinden het belangrijk om een bijdrage te leveren aan een duurzamere wereld. Daarom willen wij jou informeren over onze duurzaamheidsstrategie.

Onze strategie bestaat uit 3 pilaren namelijk verantwoorde teelt, reduceren van onze ecologisch afdruk en het verbinden van mensen. Met onze strategie proberen wij een transitie te maken om samen een betere wereld te creëren. Daarom zijn wij bezig om ons bedrijf te verduurzamen door onze voetafdruk op het milieu te verminderen en verantwoord en toekomstbestendig onze koffie te telen. Wij vinden deze veranderingen belangrijk zodat we samen ons bedrijf kunnen verduurzamen.

Duurzaam begint bij het milieu, help jij mee?

**Non-tailored message 5: Sustainability**

Beste XXXX

Bij JDE worden we gedreven door onze passie voor koffie en thee, ons respect voor het milieu en onze zorg voor mensen. We hebben een rijk cultureel erfgoed in koffie en thee van bijna 270 jaar. Om ervoor te zorgen dat er nog generaties lang van onze koffie en thee kan worden genoten, leven we onze missie om samen een betere toekomst te creëren. Deze belofte staat centraal in onze duurzaamheidsstrategie, waarbij we consumenten een volledig duurzaam keuzeaanbod willen bieden dat is afgestemd op de individuele behoeften van de klant.

Onze strategie bestaat uit 3 pilaren namelijk verantwoorde teelt, reduceren van onze ecologisch afdruk en het verbinden van mensen. Bij JDE vinden we het belangrijk om onze verantwoordelijkheid te nemen voor het milieu, onze boeren en hun welzijn. We doen dit zodat onze koffie en thee business nog gezond en duurzaam door kan gaan. Met concrete acties, duurzame producten en innovaties spannen we ons in voor een duurzame koffieketen. Wij bezig om ons bedrijf te verduurzamen door onze koffie bonen verantwoord te telen, onze ecologische voetafdruk te verminderen en focus op diversiteit en inclusiviteit. Wij vinden deze veranderingen belangrijk zodat we samen ons bedrijf kunnen verduurzamen.

Growing together to create a better future

Appendix B Timeline

Thesis timeline
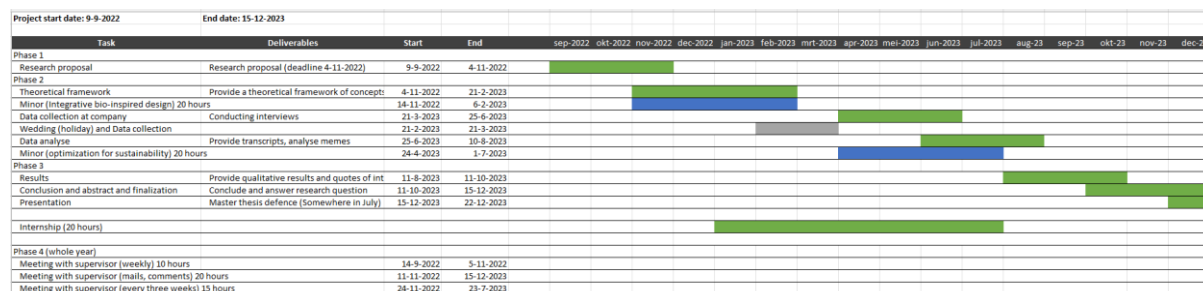
Thesis timeline supervisor

Table 5

Hour division supervisor

Task	Deliverables	Hours
Feedback	Comments of feedback in my word document	15
Online meetings	Discussing different aspects of the thesis and giving advice	20
Sending emails	Answering emails and giving tips, advice, and input for questions during the week	10

Appendix C Data analysis

Table 6

Identified employee memes of sustainability

Code	Description
Aspects of sustainability	
Awareness	Everything about being or making awareness around sustainability
Consumption	The impact of buying products
Communication	Regarding internal and external communication
Certification	Having certification for the company
Circularity	Being circular
Durability	Durability of products and that it should be used as long as possible
Transport	Modes of transport such as train, car and bikes
Energy	Regarding saving energy or using renewable energy
Reusing	Reusing cups or stuff
Social	Everything around social impact such as fair working conditions
Future generation	Being be able to live in the future and protect future generation
Environmental	Everything around damaging the environment such as biodiversity loss, climate change
Minimising footprint	CO_2 emission that has been emitted
Packaging	Making packaging recyclable, reusable or compostable
Waste	Everything regarding waste such as separating waste
Food	Eating vegetarian or having alternative healthy options in canteen
Sustainable building	Making a building more sustainable such as isolation, double glass and efficient use of space
Economic	Providing economic incentives for sustainability
Traceability	Knowing where the coffee is coming from and the supply chain
Own impact	Everything around what you can do yourself and what is affecting you

Table 7

Memes regarding culture

Code	Meaning
Awareness	There is increased awareness of sustainability
Communication	Conversations, internal and external communication regarding sustainability
External forces pushing	Different forces such as clients and governments are pushing the company to be sustainable
Fluctuating	The fluctuation of sustainable awareness and action sometimes being high and sometimes low
Importance	The importance of sustainability is made clear by the company
Mindset	The mindset is not there yet
Minimal effort taken	The company is doing the bare minimum regarding sustainability and is lacking
Other aspects important	More often other aspects are important
Progress	There is a lot of sustainability going on in the company and it is improving
Internal push	There are incentives and promoting sustainable behavior and employees demanding sustainability
Resistance	Resistance of employees who think differently about sustainability
Social sustainability	Social aspects of sustainability
Structure hierarchical	The structure of the company causes hurdles to being sustainable
Sustainable practices	A lot of different sustainable practices are done by the company
Tasks of their function	It is part of the job function
Wait and see attitude	There is an attitude of just wait and see and not being proactive
Wrong behavior	Still quite some unsustainable behavior such as not separating trash

Table 8

Sustainability changes

Code	Meaning
Increasing awareness	More employees are aware of the importance of sustainability.
Increasing interest internally	There is more interest from employees and push from above.
Push external factors	There are external forces pushing sustainability such as regulations, clients, and tenders asking for sustainability.
Increasing project	More projects are started that involve sustainability such as electrifying car fleet, reusable cups, offering plant-based milk, separating trash, turning down heat, and canteen.
Targets	We are getting more sustainability targets in our jobs.
Communication	Communication about sustainability is increasing with more materials, events, and conversations about sustainability.

Appendix D Legend table 4

Attractiveness high: Attractiveness is high when participants find the message attractive.

Attractiveness medium: Attractiveness is medium when participants find the message attractive but mention some negative aspects.

Attractiveness low: Attractiveness is low when participants do not find the message attractive.

Selection high: Selection is high when 5 or more memes are selected.

Selection medium: Selection is medium when 3 or 4 memes are selected.

Selection low: Selection is low when 1 or 2 memes are selected.

Assimilation high: Assimilation is high when 5 or more memes are selected.

Selection medium: Assimilation is medium when 3 or 4 memes are selected.

Selection low: Assimilation is low when 1 or 2 memes are selected.

Reception high: Reception is high when participants mention positive things.

Reception medium: Reception is medium when participants mention both positive and negative things.

Reception low: Reception is low when participants mention negative things.

Adaptation high: Adaptation is high when participants mention they are motivated to act sustainability.

Adaptation medium: Adaptation is medium when participants are not fully convinced to act sustainability.

Adaptation low: Adaptation is low when participants mention they are not motivated to act sustainability.