

Applying the Grounded Delphi Method to Identify Consensus: Finding Consensus within Sustainability Managers Regarding the Corporate Sustainable Transformation Process

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Abstract

The Grounded Delphi Method is an effective research design for building expert consensus and developing new theoretical insights in situations where knowledge is emergent or fractured. The method is particularly useful when the research seeks to explore complex, ill-defined issues through the structured views, opinions, and perspectives of experts. Unlike traditional Delphi studies, which often focus on forecasting or prioritization, the Grounded Delphi Study integrates principles of Grounded Theory, specifically qualitative coding techniques such as open, axial, and selective coding into the Delphi process. This enables the generation of thematic categories from qualitative data in the first round, which are then refined and validated in subsequent rounds to achieve consensus. This case study details how the Grounded Delphi Method was utilized to build consensus as to sustainability managers' understanding of the corporate sustainable transformation process and their responsibilities and barriers in this process. To achieve this, qualitative data was collected through online questionnaires during two rounds of data collection. Through the discussion of the application of the Grounded Delphi Method, this case details the method's strengths, including its ability to build consensus by fostering deep understanding through iterative engagement; to maintain participant anonymity to reduce bias; and to encourage reflective feedback. However, the method also presents challenges, including combining the subjectivity of qualitative interpretation with the objectivity required to measure consensus. Researchers must also carefully manage sampling, design of data collection rounds, participant retention between rounds, and data analysis to maintain methodological rigor.

Learning Outcomes

Having read this case study, readers should be able to . . .

- Understand when it is appropriate to adopt a Delphi Study.
- Be able to differentiate a Grounded Delphi Study from traditional Delphi studies.
- Appraise the benefits and weaknesses of conducting a Grounded Delphi Study through online questionnaires.
- Evaluate the suitability of adopting a Grounded Delphi Study.

Project Overview and Context

As the effects of climate change worsen and regulatory frameworks evolve, the finance industry will play an increasingly significant role in enabling sustainable transformation. Historically, the financial sector has been ambivalent about sustainability, preferring a ‘business-as-usual’ attitude (Wiek & Weber, 2014). However, the European Green Deal and the Paris Climate Agreement established high sustainability goals, which have had a considerable impact on German financial institutions. These requirements force banks to implement stricter lending criteria and investment policies that prioritize sustainability while also influencing lending conditions with environmental, social, and governance scores, substantially changing their operating strategy (European Commission, 2022). The banking industry, with its substantial financial capability, is critical to promoting long-term transformation in a variety of economic sectors (Park & Kim, 2020; Sani et al., 2024). Banks play a critical role in financing the transition to a green economy by mobilizing private money, balancing supply and demand dynamics, controlling systemic risks, and evaluating projects from both economic and environmental perspectives (Park & Kim, 2020).

Recent advances in Germany’s financial industry demonstrate a growing trend of incorporating environmental, social, and governance criteria into investment and banking operations, as well as the development of new sustainable products. Examples include the use of green bonds and sustainable investment funds. These financial solutions are consistent with global sustainability norms and meet the growing demand from investors seeking ethical investing alternatives (Schaltegger et al., 2023). With the German government’s goal of becoming a global hub for sustainable finance (Bundesfinanzministerium, 2021), Germany is recognized as a leading

example in the development of sustainable finance and the implementation of responsible investing practices (Zhang, 2020). However, structures, procedures, and behaviors must alter for many German financial institutions to embrace the paradigm shift needed for a sustainable future (Fazey et al., 2018). Sustainability managers are essential in directing firms through this corporate sustainable transformation and cultivating a culture that endorses sustainability (Annosi et al., 2024). Their expertise and understanding of sustainability are crucial for the successful implementation of sustainable practices, development, and transformation in financial institutions, even though they are rarely involved in frontline decision-making (Kuhn, 2020). Despite the importance of sustainability managers, there is still a lack of knowledge of their viewpoints and developing responsibilities (Borglund et al., 2023). Additionally, there have been calls within the sustainability literature to further understanding as to how sustainability managers understand and view their roles and responsibilities, and how these relate to organizational priorities (MacDonald et al., 2020). The study undertaken sought to address these gaps by exploring the understanding, responsibilities, and perceived barriers of sustainability managers in the German finance industry concerning corporate sustainable transformation. To achieve this the researchers endeavored to find consensus among sustainability managers working in the German finance industry, to allow for the identification of a shared understanding and set of responsibilities, and the barriers to corporate sustainable transformation.

Section Summary

- The finance sector is increasingly central to driving sustainable transformation.
- Policies like the EU Green Deal and ESG standards are reshaping financial operations.
- Germany aims to lead in sustainable finance but requires internal institutional change.
- Sustainability managers are vital to sustainable transformation, yet their roles and challenges remain underexplored.

Research Design

The research sought to build consensus from experts working as sustainability managers within the German financial industry, as to their understanding, responsibilities, and the barriers to corporate sustainable transformation. To support achieving consensus on these topics through a structured and rigorous data collection and analysis process, a Delphi research design was selected.

The Delphi research design dates to 1950, when Kaplan et al. (1950) termed the research design as 'Delphi' after the ancient Oracle of Delphi, a prophetess whose prophecies influenced decisions in the Hellenic world. The Delphi research design, or method, has been characterized as a strategy for obtaining dependable consensus from a group of experts, using a series of rigorous surveys interleaved with controlled opinion feedback (Kaplan et al., 1950). Through this it can be used to 'predict' or forecast the future, giving rise to the name after the Oracle of Delphi. The Delphi Method can effectively structure group communication to tackle complex problems (Linstone & Turoff, 1975). This encompasses forecasting, policy analysis, and consensus-building, all of which use a regulated, decentralized communication process to answer ambiguous, generally future-oriented concerns (Häder, 2014). The objective is normally to reach an agreement among the experts, which is aided by anonymizing input to prevent typical group dynamics and power imbalances (Häder, 2014). This allows for a systematic exploration of expert judgements, which may then be used to draw strong conclusions and action plans.

The Delphi Method is a questionnaire-based approach that employs numerous rounds of questioning to reach consensus on a set of predefined issues, utilizing questions that are either quantitative, qualitative, or a combination of the two. The researcher develops statements based on the data analysis process, which the participants must agree or disagree with. As a result, the researcher and the experts who agreed on the final consensus statements, reached the same findings based on the evidence collected. The Delphi Method's structured yet flexible framework makes it an ideal choice for idea consolidation, establishment of factual situations, identification of expert opinions, and consensus building (Häder, 2014). Strengths of the Delphi Method align with our goal of developing consensus among sustainability managers, experts in their field, of their understanding of corporate sustainable transformation, and their responsibilities and barriers within the corporate sustainable transformation process.

Once the decision was taken to employ the Delphi Method within the research, decisions had to be made as to whether the questionnaires to be used would seek to elicit quantitative data, qualitative data, or a mix of both. As the researchers sought to develop understanding and new theories as to the sustainability managers' understanding, responsibilities, and barriers to corporate sustainable transformation, it was decided that the questioning should be built on asking open-ended questions and obtaining qualitative data. This supported a decision to utilize a Grounded Delphi approach, which combines the Delphi Method and Grounded Theory to support the

exploratory application of the Delphi Method, which optimizes theory development (Howard, 2018). The Grounded Delphi Method applies Grounded Theory coding principles within the Delphi Method, leading to the application of open, axial, and selective coding in the first round. This round is used to define categories and understand their relationships to each other, and to develop expert statements. It is followed by a second round where the expert statements developed are validated to ensure reliable results. This differs from the traditional Delphi Method, in which the results from the initial round are evaluated qualitatively by the experts in subsequent rounds, to foster a deeper understanding and more nuanced perspectives on the subject matter (Häder, 2014). A central feature of the method is the anonymity of the experts, which minimizes potential group dynamics and provides autonomy to every expert, thereby reducing dropout rates. Anonymity prevents power imbalances and the overdominance of specific views. Thus, a theoretically grounded, practically implementable approach can be developed, assisting organizations in adapting to newly identified future challenges. Qualitative data analysis, especially coding based on grounded theory, offers a structured approach to theory-building. This offers greater understanding of the research subject and understanding of the phenomenon. The Grounded Delphi Method ensures a structured data-collection process that enables evolutionary knowledge development. The required feedback, or rating of consensus statements built after the first round, sharpens understanding and enhances data quality. The diversity of expert opinions enables a profound investigation of the phenomenon. This holistic approach, based on the contributions of various experts with unique perspectives, promises nuanced results. When utilized effectively, the Grounded Delphi Method is a useful tool, particularly for questions coming from an imperfect knowledge of a topic or phenomena (Skulmoski et al., 2007), which was the case for our topic.

Section Summary

- The Delphi Method was selected for its structured, anonymous expert input and consensus-building.
- The Grounded Delphi Method combines the Delphi Method with Grounded Theory coding principles to enable theory development through qualitative coding.
- The Grounded Delphi Method is a powerful tool to question a topic, or phenomenon, where there is limited existing knowledge.

- The Grounded Delphi Method was selected as it could provide consensus among sustainability managers as to their understanding, responsibilities, and barriers, in the corporate sustainable transformation process.

Research Practicalities

The initial step in conducting the research was to choose a sample of participants. As a Grounded Delphi Method requires a panel of subject experts, the sampling criteria is an important issue. The sampling criteria needs to be carefully considered to ensure that the sample selected are ‘experts,’ as defined by the research project and its aim. Given the relative novelty of the sustainability manager role in the German financial industry, a purposive sampling strategy was employed to support the selection of participants with experience as a sustainability manager. This helped ensure that the study participants were experts in their fields and provided rich, contextually relevant data. As a result, for this study, sustainability managers with expertise in corporate sustainable transformation were sought, either now in a responsible role, or having previously held one. The sample consisted of experts from diverse firms, with the goal of obtaining a complete picture of the various experiences and opinions of sustainability managers across organizations in the German financial industry. Participants were identified from the researcher’s network, which allowed for identification of a sample that met the selection criteria. This was a valuable step as it ensured that participants within the sample were qualified to be involved in the research and could provide the insight required to develop reliable results and insight. Given the expert participants’ experience level, it was expected that they would be willing to share their unbiased opinions regardless of their relationship with the researcher, especially since the online questionnaire does not require direct interaction between the participants or with the researcher.

As with other qualitative based research, the depth of responses and quality of sample is often more important than the sample size itself (Pham et al., 2019). The optimal number of participants for a Delphi study is debated, with recommendations ranging from 6 to 40 for qualitative or modified approaches (Häder, 2014). Importantly, a Grounded Delphi study seeks to achieve informational saturation through a Delphi process, so the sample size needs to be big enough to ensure data saturation. Additionally, given the multiple rounds of data collection within a Delphi study, whereby the sample participants should be used, the sample size needs to be big enough to

ensure a good number of respondents within the later stages of data collection. These considerations led to an initial sample size of 28 being recruited for this research.

The research was given ethical approval and followed the principles of anonymity, confidentiality, and informed consent. Informed consent was achieved through the completion of an online form before access was granted to the questionnaire. At this point, each participant was given a code that may be used to withdraw from the research within 30 days if they desired. The research decided to utilize two rounds of data collection. The first round sought to capture participants' views regarding their understanding of corporate sustainable transformation, and their responsibilities and the barriers within the corporate sustainable transformation process. Following on from this, the data collected was analyzed using Grounded Theory principles of open, axial, and selective coding to define categories and identify experts' views and statements on the topic. The statements derived from the analysis of the first round of the study were shared as part of the second round of the study and sought to qualitatively evaluate the experts' views regarding each of these statements to find consensus. The first round of data collection utilized an online questionnaire that asked open questions to collect qualitative data in relation to participants' context, understanding of corporate sustainable transitions, and the responsibilities and barriers to the sustainable transformation process. While online qualitative questionnaires are underutilized, they provide greater anonymity for participants and allow participants to decide where, when, and how they engage with the research (Terry & Braun, 2017). Ensuring anonymity to participants and the involvement of experts who can be busy are essential components for a robust Delphi Study, which led to an online qualitative survey being particularly useful.

Given the grounded, theory development, and qualitative focus of the research, understanding the context of each participant was valuable in supporting deeper understanding of the responses provided and support the creation of interpretation and linkage within the dataset (Warren & Bell, 2022). In line with guidance from the literature, the questionnaire was designed to be clear and relevant to the expert group to prevent misunderstandings and garner valuable responses (Häder, 2014).

The first round of data collection led to 11,662 words of qualitative data being collected from a total of four open questions. Participants were encouraged in the questionnaire guidance to provide as much detail as possible to ensure that the answers provided were clear and fully

communicated their answers. While the answers provided might have been shorter than those that might have been collected in interviews, there can be a misplaced assumption that qualitative questionnaires cannot provide the depth required, when valuable accounts can still be offered by participants who can contribute without the feeling of social pressure (Braun et al., 2021). Once the data was collected it was analyzed using NVivo software to generate codes, which were then used to identify themes. This led to the formulation of statements as to participants' understanding of corporate sustainable transitions, and the responsibilities, and the barriers to the sustainable transformation process based on recurring themes identified within the data set. The data yielded 50 statements in total: 14 about participants' understanding of corporate sustainable transitions, 17 about their roles in the corporate sustainable transformation process, and 19 about their perceived barriers to corporate sustainable transformation.

The second round of the Delphi study used the same expert panel who were involved in the round to qualitatively evaluate the statements developed from the first round, to support the development of consensus statements. In addition, to eliciting responses from participants as to their level of agreement with the statements, participants were asked to explain why they agreed, or disagreed, with the statements. This provides a greater level of understanding as to why there is agreement with the points of consensus, which can be used to support the results. To achieve this another online questionnaire was developed to share the 50 statements developed and receive feedback from the participants. Delphi studies have accepted different levels of consensus to produce their final results detailing the consensus which emerged within the expert panel of participants, ranging from a simple majority (von der Gracht, 2012) to three quarters (75%) of participants agreeing with each statement (Knoche, 2022). Our research followed the latter, requiring a minimum of 75% of participants to agree with each statement to be included in the results as a point of consensus.

The data collected from the second round of data collection was analyzed to identify the statements where there was consensus within the expert panel of participants to produce consensus statements as to participants' understanding of corporate sustainable transitions, and the responsibilities and barriers to the sustainable transformation process. The data collected during the second stage of data collection was also analyzed to determine themes as to why participants agreed on the consensus statements. This served to support and explained why sustainability

managers understood corporate sustainable transformation in the manner that they did, as well as an explanation of their responsibilities and barriers to the process. The final findings revealed 6 consensus statements outlining how corporate sustainability transformation was understood by sustainability managers, 10 consensus statements outlining the responsibilities of sustainability managers, and 6 barriers to the corporate sustainability transformation process.

Section Summary

- 28 experienced sustainability managers were purposively sampled from the German financial sector.
- The study used two Delphi rounds—first to gather views, second to build consensus and understanding of the consensus.
- Round one data was coded using Grounded Theory principles to generate 50 thematic statements.
- Statements needed 75% agreement in round two to be considered consensus statements.

Method in Action

The decision was made to conduct both rounds of data collection using an online questionnaire, however several different data collection methods are possible for the initial round of a Grounded Delphi study. For instance, the first round can be conducted using semi-structured interviews or focus groups to collect qualitative data which can be analyzed to produce statements. An online survey approach was selected as the participants were spread out over Germany making face-to-face data collection methods challenging. Additionally, as the sample was built from sustainability managers who were at senior levels in their organizations, finding time for interviews or focus groups would have been challenging, while an online questionnaire provided flexibility for participants to engage with the study when it suited them. Given that the number of sustainability manager in the German financial industry is relatively small, there was a limited research population, meaning that it was important for this study to be as flexible as possible to accommodate as many participants as possible. Another advantage of adopting an online questionnaire was strengthening the sense and preservation of anonymity within the research. As the participants were sharing their responsibilities and the barriers within their roles, they might have been less willing to have been critical if being directly interviewed or being part of a focus

group. The opportunity to share their responses online with the data provided not being linked directly to them, even if confidentiality was ensured, could lead to more honest and critical answers being given, which was essential for the study. Based on this reasoning, it was decided that collecting data through online questionnaires was the most suitable approach for this research. However, if the sample population had been larger, interviews could have perhaps been scheduled more easily, and if the research topic was less sensitive in nature, a stronger case could have been made to conduct the initial round of data collection through interviews or focus groups, as this would have increased the ability to ask additional follow-up questions and probe deeper into the participants' responses. One potential concern when using online questionnaires to collect qualitative data can be a lack of depth and richness in the data provided, which can be limited by participants' unwillingness to write long answers compared to verbalizing them. This can be compounded further by the lack of synchronous communication when using online questionnaires, limiting the ability to ask additional questions to obtain extra depth when required. The participants information sheet encouraged participants to answer each question and provide enough detail as to allow the researcher to understand the participants view and this was reinforced within the questionnaire. As the participants were engaged and passionate about the topic of sustainability, they were both willing and ready to share their views in detail, this was not an issue with this research. This led to all the questions being completed by each of the 28 participants with a reasonable depth, which allowed the researcher to understand the views and perspectives of the participants. Some participants provided more depth than others, although all those who answered provided answers that allowed the researcher to understand the narrative being presented. However, while an online questionnaire data collection approach might be seen as less time consuming, it is important to consider and ensure that it will collect the depth and richness in the data to allow for the analysis according to qualitative Grounded Theory principles, if conducting a Grounded Delphi study. As an online questionnaire approach was adopted it was particularly important to pilot the questionnaire used in both rounds of data collection, as it would not be possible to support participants to complete the questionnaire, address any misunderstandings, or answer questions. Piloting the questionnaire with two people with experience of sustainability management but who did not fit within the sample, helped to validate the clarity of the questions and better estimate the required time for answering them (Lancaster et al., 2004). This led to the reformulation of one question within the first questionnaire, the inclusion of accurate guidance

being provided to the participants as to how much time would be required to take part in the study and the addition of further encouragement to provide detailed answers to the questions.

Effective participant recruitment and retention is important for a Grounded Delphi study, as ideally, the same participants should be used in all rounds of a Delphi study (Iqbal & Pipon-Young, 2009). This ensures consistency and allows for the iterative feedback process that is central to the Delphi method. Keeping the same panel allows researchers to track and review changes in opinion and identify areas of convergence, or divergence, across rounds. To support recruitment and retention the researcher used their own network of contacts that they had built up from working in the industry. It was hoped that familiarity with the researcher would increase willingness to participate in the research and support the retention of participants between the two rounds of data collection. It was explained up front to the participants that the research involved two rounds of data collection to ensure that participants were willing to engage in the full research project. The first round of the data collection was already prepared before approaching potential participants, so when they indicated that they were willing to participate they were quickly capitalized on and were sent a link to the questionnaire. After the first round of data collection, an email thanking the participants was sent out, which also reminded them of the impending second round of data collection. This follow-up communication was crucial in maintaining a close relationship with the participants and ensuring their engagement for subsequent study phases. The research successfully managed a 100% retention rate between the two rounds of data collection, which was valuable in ensuring a robust sample size.

Due to the nature of the Grounded Delphi Method there is a need to balance subjectivity and objectivity. The character of a Delphi study is to achieve consensus in the data, which is achieved through several rounds of interaction with the participants. The qualitative Grounded Theory coding employed within the method requires rich and resonant data and the expertise to interpret and manage subjectivity. At the same time, to identify consensus within the data requires an element of objectivity; in the case of our research a figure of 75% was used as the consensus threshold. Since the participants composed their own responses in writing, there was a need to interpret their meaning to identify themes and commonalities in the data. This interpretation was supported by peer debriefing within the research team to reinforce the balance between subjectivity and objectivity and increase the trustworthiness and credibility of the data analysis (Creswell, 2014). Then the researcher formulated statements from the analysis of the data from round one,

which the participants need to agree, or disagree on, in the second round. Thus, the conclusions drawn from the data collection were made by both the researcher and the experts who agreed on the final consensus statements. This way, the chosen Delphi study supported the credibility of the drawn conclusion in the qualitative research. Even though the research is based on qualitative research data and participants' subjective views, an element of objective analysis is required to identify consensus. The use of both subjectivity and objectivity could be considered as a strength of the Grounded Delphi Method; however, it is important to ensure that researchers employing such a method are comfortable managing both.

Section Summary

- Online questionnaires were used to collect qualitative data for flexibility, anonymity, and practicality given participants' locations and senior roles.
- The depth and richness of data was maintained despite the online format, as participants were highly engaged in the subject.
- Piloting the questionnaire improved the clarity of the questionnaire and the realistic commitment to participating in the research.
- Recruitment and retention of research participants needs to be carefully managed.
- The Grounded Delphi Method requires engagement with both subjectivity and objectivity.

Practical Lessons Learned

Numerous practical lessons were learned from conducting the research regarding the application of the Grounded Delphi Method. On reflection, the use of an online questionnaire for collecting qualitative data during both data collection rounds was successful. However, there is potential for the depth of data to be limited if participants are not willing, or interested, in providing depth in their answers. In our case, the participants were interested in sharing information and experience about their roles and responsibilities, as they were passionate about sustainability, and were agents within sustainable transformation. Plus, the sample participants were used to presenting, detailing, and explaining their views about corporate sustainable transformation in their roles, and could articulate this without needing to be promoted, or guided. This made the use of an online questionnaire suitable; however, in cases where participants are not motivated to share their views, do not feel confident in sharing their views, or the research is attempting to elicit views and

understanding that may be tacit, such a data collection method is unlikely to be viable (Schmidt et al., 2021). Therefore, it is important to consider the sample carefully and the likelihood that they will provide detailed answers with a high level of depth without any prompts, further questioning, or support, to allow for Grounded Theory coding principles to be applied. If there is any doubt, then the use of interviews during the initial round of data collection is likely to be a safer option.

The retention of participants between the rounds of data collection is a crucial factor within Delphi studies because the same participants should be employed in each round (Iqbal & Pipon-Young, 2009). This means it is important to carefully consider how retention of participants will be managed before starting to recruit participants, because recruiting participants who are unlikely to last the course of the study could make completing the research challenging. There is also value in considering and identifying how many rounds of data collection will be required. Our study conducted only two rounds, which was made possible in part by the amount of data achieved in the first round. This emphasizes again the importance and necessity of assessing the likely quality and depth of data that can be acquired based on the data collection method employed in the initial round of data collection. We found it valuable to set out the expectations and value of the study at the participant recruitment stage and keep participants appraised of the development of research. This helped to keep participants engaged and interested in the study and willing to contribute to it. The time between finishing the first round of data collection and starting the second round was only 3 weeks in our research and keeping this gap short likely helped to keep the retention rate at 100%. This highlights the importance of ensuring robust planning for the data analysis and the next steps in the research process before collecting data.

While the Grounded Delphi Method brings both a lens of subjectivity and objectivity to a piece of research which could be a challenge, it offered a structured path to follow to complete the research and data analysis. Some common research designs, such as case studies, can lack structure in terms of what data to collect, who from, and how it should be analyzed (Bell & Warren, 2023). However, while some choices need to be made when applying the Grounded Delphi Method, such as the sample, number of rounds of data collection, and which data collection method will be used to collect the qualitative data required, the method offers some structure to the research and data analysis process. This can facilitate the timely and organized completion of a research project.

The Grounded Delphi Method offers an effective method for addressing a research aim and answering research questions where a consensus, understanding, or perspective is sought, as was the case with our research. This can make it an effective research design if seeking to explore an understudied topic, or to look into the future to forecast something. However, its focus on seeking consensus can mean that some interesting participant views, or perspectives, can be dropped when consensus is not found. This makes the Grounded Delphi Method not appropriate if, as a researcher, you are interested in breadth of opinion and perspective, and insight from the poles or fringes of a subject. Although it is not uncommon within business and management research to seek common and reoccurring information, as this might be most valuable to a business or industry.

One experience from conducting this study was that the Grounded Delphi Method can be challenging to present the results, due to the rounds of data collection. This can lead to the need to present lots of data, analysis, and interpretation within the write-up of the research. It is important to detail the interpretation and results from the first round before presenting the next round, with the research questions not being explicitly answered until the final round of data analysis. This leads to having to present and explain several steps of data analysis and how they link and inform one another. In our case we found it easiest to present an explanation of the data collection, data analysis, and results from the first round, along with an explanation of the second round of data collection in the Methodology. Following this, the data analysis and results of the second round were presented in a Data Analysis and Results section.

Finally, given the novelty of the Grounded Delphi Method in business and management research, it can be challenging to explain to some researchers in the field. There is also a danger of getting caught in an ideological divide, as Grounded Theory researchers might not like some of the objectivity present in the Grounded Delphi Method, or the use of data collection through questionnaires. However, researchers who are more comfortable with objective research may struggle with the level of interpretation. This means that if using the Grounded Delphi Method, the researcher might benefit from a robust understanding of its potential underpinning philosophy and principles, to be able to explain and defend its use and application.

Section Summary

- Online questionnaires can work for the Grounded Delphi Method if participants are motivated and engaged with the research, but they may limit depth if not.
- Participant retention is vital within the Grounded Delphi Method; clear expectations and short gaps between rounds help maintain engagement.
- The Grounded Delphi Method adds structure but requires careful planning around sampling, data collection rounds, and data analysis.
- The focus on consensus can exclude diverse views, making it less suitable for exploring broad perspectives.
- Presenting results within Grounded Delphi Studies can be complex, and researchers should be ready to justify the method's hybrid use of subjectivity and objectivity.

Conclusion

The Grounded Delphi Method offers a valuable approach for researchers seeking to explore underdeveloped areas, forecast emerging trends, or establish consensus among experts in complex or evolving fields. It is particularly appropriate when clarity is required around concepts that are not yet fully understood, or where expert insight is essential for informing decision-making, theory development, or strategic planning. A key distinction of the Grounded Delphi Study lies in its integration of Grounded Theory coding techniques into the traditional Delphi framework. This hybrid approach allows for qualitative data from the initial round to be systematically analyzed through open, axial, and selective coding, thereby producing meaningful categories and statements for expert evaluation in subsequent rounds. This blending of methodologies supports the development of theory while still maintaining the consensus-seeking structure of the Delphi Method, making it ideal for research in which little prior theory exists, or where the goal is to develop conceptual clarity. In the case of our research, little was known about the roles and experiences of sustainability managers, so the Grounded Delphi Method was useful in building a consensus as to the responsibilities and barriers that sustainability managers face, in the German financial industry. The method brings both strengths and challenges. Its anonymity supports the reduction of groupthink and power dynamics, while its iterative design allows participants to refine their views based on collective input. However, the balance of subjectivity in qualitative coding

with the objectivity needed to establish consensus, can be difficult to manage and requires strong methodological rigor. Furthermore, planning and executing multiple rounds of data collection demands clear organization and participant engagement throughout.

While we found the use of online questionnaires to conduct a Grounded Delphi Study valuable, this introduces additional considerations. Online questionnaires can enhance accessibility, preserve anonymity, and increase flexibility for participants, especially when the expert population is geographically dispersed. However, the use of online questionnaires can also limit the richness of qualitative responses if participants are not motivated or comfortable with written expression. The absence of synchronous interaction may reduce opportunities for clarification and additional questioning and probing, which can impact data depth. Therefore, the choice to use online questionnaires should be carefully assessed in relation to participant characteristics and the nature of the research question. Overall, the Grounded Delphi Method is a robust, flexible research design that supports both the development of new theory and the establishment of expert consensus. When applied thoughtfully, it can generate deep insight, especially in contexts characterized by complexity, change, or limited existing knowledge.

Discussion Questions

1. What types of research questions or problems are best suited to a Delphi Method, and why?
2. In what ways does the structure of a Delphi Study enable the collection of expert opinion differently from other qualitative methods, such as interviews or focus groups?
3. How does a Grounded Delphi Study differ from a traditional Delphi Study in terms of data collection and analysis?
4. What benefits and risks are associated with using online questionnaires for qualitative data collection in Grounded Delphi Studies?
5. What considerations should researchers weigh when deciding whether a Grounded Delphi Study is the best methodological choice?

Multiple Choice Quiz Questions

1. In which of the following situations is a Delphi Study most appropriate?
 - A. When large-scale survey data is needed from the general population
 - B. When forecasting trends or building consensus in areas with limited existing knowledge – **CORRECT**
 - C. When researching topics with well-established theories and extensive prior literature
2. Which of the following best distinguishes a Grounded Delphi Study from a traditional Delphi Study?
 - A. It combines expert panels with statistical regression models
 - B. It integrates qualitative coding techniques such as open, axial, and selective coding - **CORRECT**
 - C. It replaces anonymous input with real-time focus group discussion
3. Which of the following is a key benefit of using online questionnaires in a Grounded Delphi Study?
 - A. Guaranteed depth and clarity in all responses
 - B. Increased flexibility and accessibility for geographically dispersed participants - **CORRECT**
 - C. Eliminates the need for ethical approval due to anonymity
4. Why might a Grounded Delphi Study be unsuitable for some research contexts?
 - A. It is incompatible with qualitative research approaches
 - B. It cannot accommodate expert input
 - C. It excludes minority or fringe perspectives in favor of consensus - **CORRECT**

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Further Reading

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