

Qualitative methods Delphi methodology

Master en Turismo



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Overview

- Delphi Method is...
- Main Characteristics
- Aim
- Application
- Key questions
- Process
- Strengths and limitations
- Real life examples





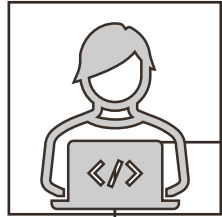
Delphi Methodology

- A structured communication and forecasting technique that relies on a **panel of experts**. It's commonly used in areas like **utures studies, policy planning, technology forecasting, and strategic decision-making..**

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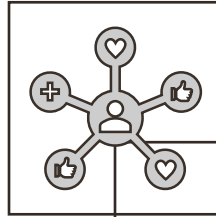


Delphi Methodology – Main Characteristics



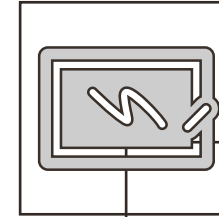
Expert Panel

- The process involves a **group of selected experts** with knowledge in a specific field.
- Experts participate **independently and anonymously**, which reduces bias from dominant individuals or group pressure.



Interactive Rounds

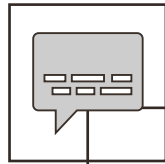
- Conducted in **multiple rounds** (usually 2–4).
- After each round, the responses are summarized and shared (anonymously), allowing experts to **revise their views** based on collective input.



Questionnaires

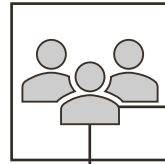
- Experts respond to **structured questionnaires**.
- Questions often include **rating scales, open-ended items, and ranking tasks**.

Delphi Methodology - Main Characteristics (cont.)



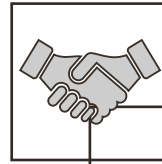
Feedback Mechanism

- After each round, there is a controlled feedback process:
 - Experts receive a summary of the group's responses.
- They can reflect, reconsider, and adjust their own answers.



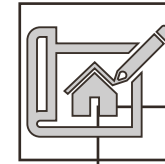
Anonymity

- Responses are anonymous, promoting **freedom of expression** and minimizing influence from status or authority



Convergence Toward Consensus

- The goal is not always full agreement, but rather **refined insights** and a **convergence of opinions**.
- Helps identify both **consensus** and **areas of disagreement**.



Use cases

- Long-term forecasting (e.g., future of education, healthcare)
- Policy development
- Innovation and tech trends
- Strategic planning in uncertain contexts

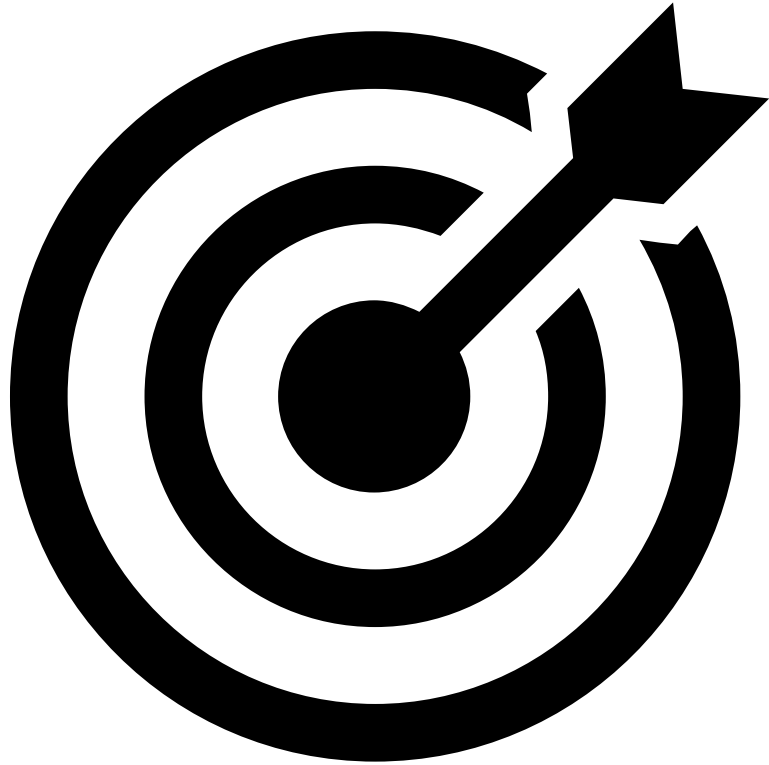
Delphi



The technique consists of a series of questionnaires sent to a pre-selected group of experts.



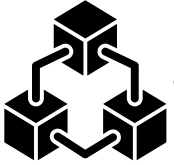
These questionnaires are designed to elicit and develop individual responses to the specific topic and to allow the experts to refine their views as the group progresses through the work, according to the task assigned.



Delphi - aim

- The Delphi method is mainly used to facilitate the formation of a group opinion
- It can be used in forward planning to establish hypotheses about the development of scenarios and their socio-economic implications.
- The method is used to clarify aspects of the evolution of a situation, to identify priorities or to present different prospective scenarios.

Circumstances of application



- The approach tends to be applied in the context of evaluation when there is significant knowledge on the subject



- The method is recommended: if the questions to be asked are simple; for the purpose of estimating the potential quantitative impacts of an isolated intervention; in the context of ex-ante evaluation; to specify the causes and potential effects in the case of more innovative interventions.



- It is a particularly useful method when the analysis covers a vast territorial area, since it does not give rise to expenses directly related to the travelling of experts, only communication costs.



What kind of group communication process is desirable for exploring this issue?



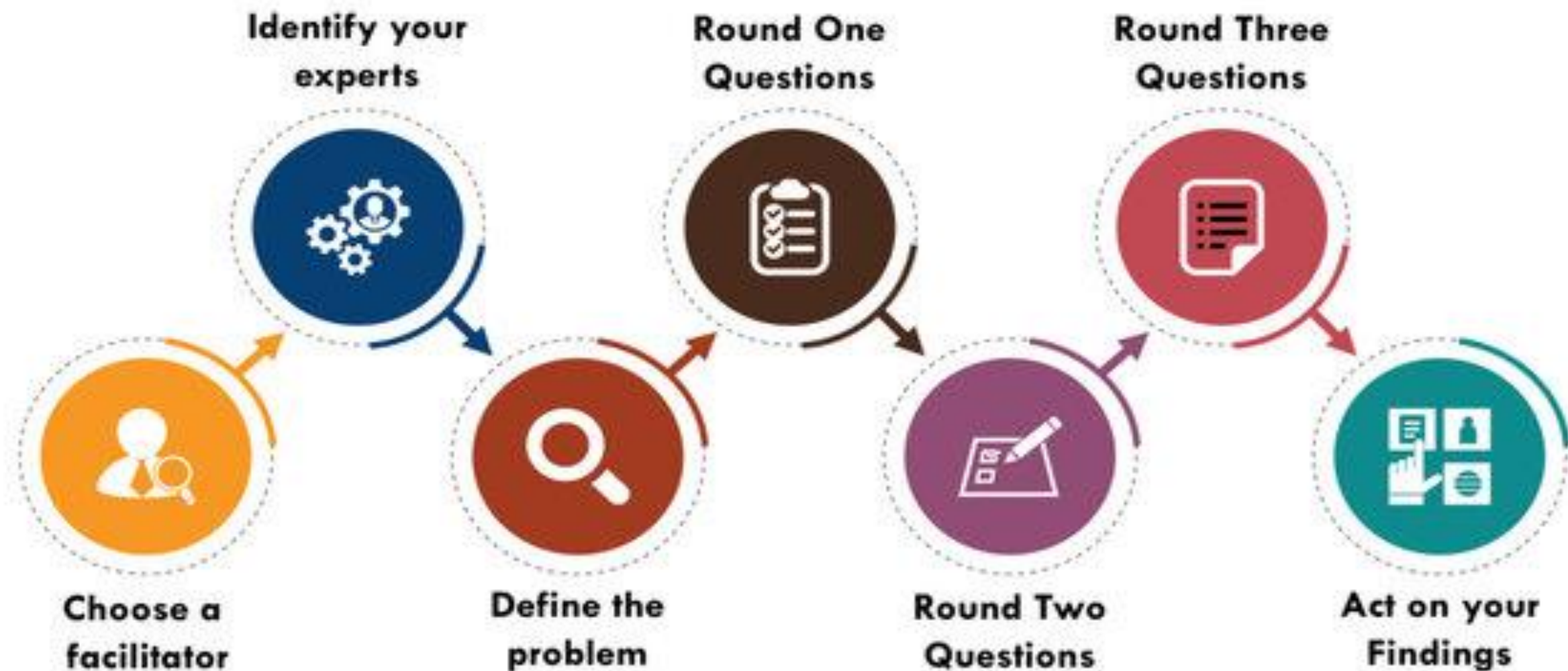
Which people have special knowledge of the issue, and where can they be found?



What alternative techniques are available and what results can be expected from their application?

key questions

Delphi Method Process



strengths and limitations



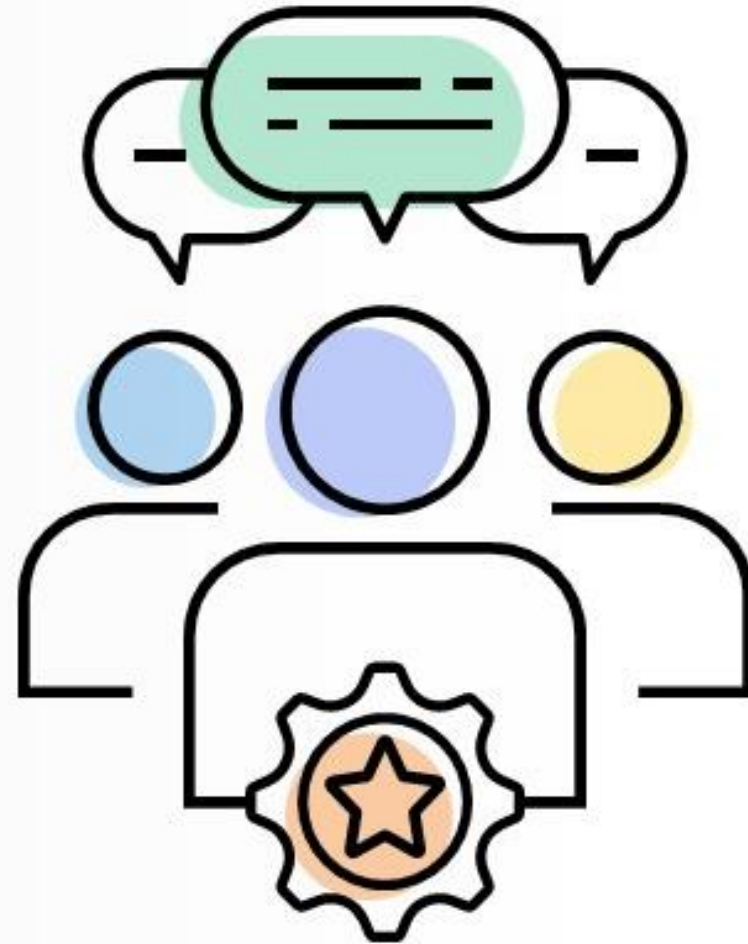
- The main problems pointed out include: poor internal consistency and reliability of opinions among the experts and, therefore, low reproducibility of predictions based on the results obtained; sensitivity of the results to the ambiguity and reactivity of the respondents in the questionnaires used to collect information; difficulty in assessing the degree of knowledge possessed by the participating experts



- Several studies support and advise the Delphi method, suggesting that, in general, the method is useful for exploring and unravelling specific, one-dimensional issues. However, there is less support for its use in complex, multidimensional modelling.

Summary

Delphi studies are a useful contribution to emerging one-dimensional issues as well as to building complex scenarios **when supported by data from other sources.**

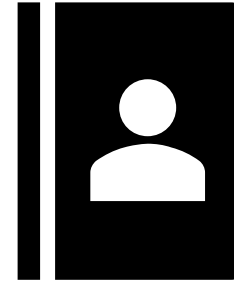


Real life examples

1) Future of Education (UNESCO Project)

Context:

UNESCO used the Delphi method to explore how **education systems** might evolve by 2050.



How it worked:

- A panel of global education experts participated in **3 rounds** of questionnaires.
- Topics included: digital learning, global inequality, AI in education, and lifelong learning.
- Experts revised their views based on anonymized summaries of other responses.

Outcome:

- Key trends and risks were identified (e.g., growing digital divide, importance of personalized learning).
- Helped guide policy recommendations for global education strategies.

Real life examples

2) Technology Forecasting in Healthcare (EU Project)

Context:

The European Commission used the Delphi method to forecast **emerging medical technologies** and their societal impact.

How it worked:

- A panel of researchers, medical professionals, and ethicists contributed.
- Over several rounds, they evaluated technologies like telemedicine, genomics, and AI diagnostics.

Outcome:

- Provided **foresight into technologies likely to transform healthcare** by 2030.
- Informed **investment decisions and ethical guidelines** in EU health policy.



Real life examples

3) Quality in Distance Education

Context:

Brazil/International Distance Education
Research **Network**

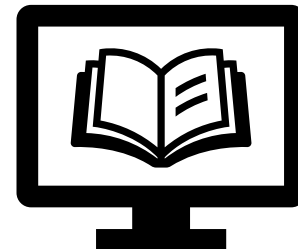
Measuring **quality** in distance learning

How it worked:

- **Multiple rounds** of expert consultation
- **Questionnaires** guided by a critical perspective, articulating **pedagogical, technological, institutional** and **political** dimensions

Outcome:

- Centrality of **active and qualified pedagogical mediation, based on constructivist and participatory methodologies** that favour the personalisation of learning, student autonomy and assessment that is consistent with the principles of the modality



Real life examples

4) Tourism Qualitative Forecasting Scenario Building through the Delphi Technique

Context:

Tourism planning and destination management are increasingly challenged by the **complex, dynamic, and uncertain nature** of the industry. This creates a need for **prospective approaches** that consider multiple viewpoints and allow for the **design of sustainable and adaptive strategies**.

How it worked:

- Multiple rounds of expert consultation . In each round, experts contributed insights on **emerging trends, challenges, and opportunities** shaping the future of tourism.
- Their qualitative responses were analyzed and synthesized to identify **key drivers of change**, and a set of **plausible future scenarios** was developed (e.g., technology, climate, consumer behavior, policy shifts).

Outcome:

Key results included:

- A **deeper understanding** of long-term uncertainties in tourism development.
- The **integration of diverse expert knowledge** to anticipate changes and guide policy and planning.
- Promotion of **territorial foresight** strategies that encourage more flexible, forward-thinking destination management.



thank you!