



Delphi method

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AGENDA

- Brief overview of the Delphi method
- Historical background and origin
- Explanation of Delphi method
- Characteristics of the method
- Process of Delphi Method
- Advantages and Disadvantages of Delphi
- Comparison with other research tools
- Conclusion



Source:<https://c0.wallpaperflare.com/preview/194/560/931/greece-delphi-temple.jpg>

Introduction to Delphi Method

- What is Delphi method and why does it call Delphi?

Delphi method was originally conceived in the 1950s by Olaf Helmer and Norman Dalkey of Rand Corp. The name refers to the Oracle of Delphi, a priestess at a temple of Apollo in ancient Greece known for her prophecies. The Delphi method allows experts to work toward a mutual agreement by conducting a circulating series of questionnaires and releasing related feedback to further the discussion with each subsequent round. The experts' responses shift as rounds are completed based on the information brought forth by other experts participating in the analysis



What is Delphi Method?

The Delphi Method is a technique based on a panel of 5 to 10 experts on a complex topic to be discussed in order to obtain qualitative but relatively accurate information and opinions about the future.

Its functionality is to reduce to the maximum the different predictive possibilities or forecasts; that is to say, it simplifies the result of complex work, thanks to the group opinion of experts.

The Delphi technique involves three groups of people. Firstly, there are the experts who must be previously selected strategically and anonymously, and no one can know their identity.

They prepare, distribute, collect, and summarize questionnaires that will be applied to the third group involved, which are the experts on the subject; they must be located in different places to obtain a representative and reliable sample.

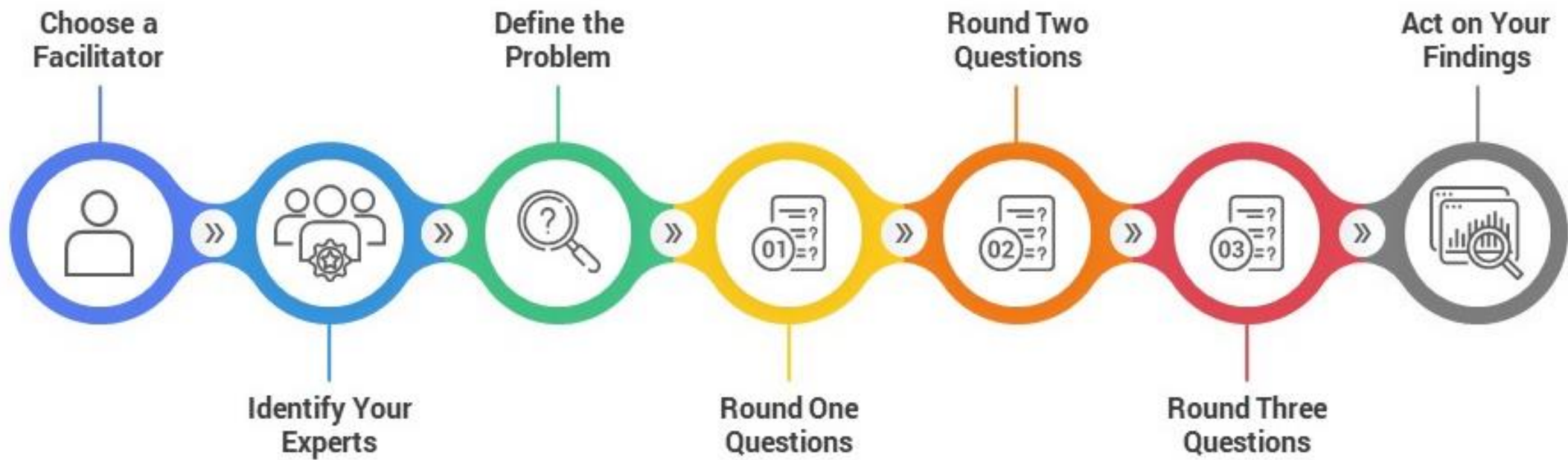
Source:<https://wearetdex.com/wp-content/uploads/2020/12/tdex-dynamics-365-training.jpg>



Characteristics of the Delphi Method

- Anonymous experts, experts may know each other but not identify opinions based on the ideas of the consultation.
- Iteration and controlled feedback: present the same questionnaire several times.
- Responses of the group in a statistical way; the information is the opinion of the experts according to the degree of agreement that has been obtained.
- There is heterogeneity in the panel of experts, i.e., experts from certain branches of activity may participate.

Source:<https://blogger.googleusercontent.com/img/a/=s519>



Source: https://www.engeniuspark.com/images/background/google_adwords.jpg



Source: <https://worldsafety.live/wp-content/uploads/2020/07/lms-hero-facts-300x204.png>

Step 1: Defining the objectives

The first step is to clearly define the objectives and scope of the Delphi study. Determine the specific questions or topics that need expert input and identify the key issues to be addressed. This step lays the foundation for the entire process and ensures that the study remains focused and relevant.

Step 2: Selection of experts

Selecting the right panel of experts is crucial for the success of the Delphi technique. Experts should possess relevant knowledge, expertise, and experience related to the topic under investigation.

The panel should be diverse enough to provide a comprehensive range of perspectives. Depending on the scope and complexity of the study, the number of experts can vary, but it is generally recommended to have at least 10-15 participants.



Source:<https://static2.bigstockphoto.com/8/8/2/large2/288911857.jpg>

Step 3: Elaboration and launching of questionnaires

This step involves creating the questionnaires that will be used to gather input from the experts. The questionnaires can be structured, semi-structured, or open-ended, depending on the objectives of the study. The first-round questionnaire is usually open-ended, allowing participants to freely express their opinions and insights without any influence from others.

Round 1: In the initial round, the open-ended questionnaire is distributed to all experts. Each expert responds independently, providing their insights, predictions, or suggestions related to the defined objectives.

Round 2: After collecting the responses from Round 1, the facilitator summarizes and compiles the expert opinions without revealing individual identities. The summary is then used to create a more focused and structured questionnaire for the next round.

Subsequent rounds (optional): Depending on the level of consensus achieved in each round, additional rounds can be conducted to further refine the opinions. The process may continue until a predefined consensus level is reached or the facilitator decides to end the iterations.



Source: <https://leafbusinessconsulting.com/data-and-analytics.php>

Step 4: Use of the results

Once the Delphi process concludes and a Delphi consensus exercise is reached, the results are analyzed and used for decision-making, forecasting, policy development, or any other purpose defined in the study's objectives. The anonymized nature of the Delphi studies helps ensure that the final outcomes are unbiased and represent the collective wisdom of the experts.



<https://www.protechit.com/wp-content/uploads/2020/10/1The-Most-Important-Connection-e1604602499508.png>

Strengths of the Delphi technique

- A rapid consensus can be achieved
- Participants do not have to be in the same room together to reach agreement
- Individuals are able to express their own opinions as opposed to “Group think”
- Can include a wide range of expertise
- Relatively low cost to administer and analyse
- There is the potential to gain large quantities of data
- Offers a method which can be used where data are lacking

Weaknesses of Delphi technique

- Does not cope well with widely differing opinions or large changes in opinions (paradigm shifts)
- The facilitator's view may dominate in the analysis
- Differing opinions may not be sufficiently investigated
- Can be time-consuming
- Needs high participant motivation
- Success of the method depends on the quality of the participants
- The written response format may be less suitable for some potential respondents



Source: <https://www.templateMonster.com/pl/illustrations-213982.html>

Uses of the Delphi Method

Strategic decision-making

Public opinion analysis

Disaster preparedness and response

Innovation and research prioritization

Forecasting and trend analysis

Market analysis and predictions

Policy development

Risk assessment and management

Technological advancements

Health research planning

Environmental planning

Educational planning and curriculum development

what is the most important difference between delphi and other Methods In Your Opinios?

- Surveys**
- Interviews**
- Case Analysis**
- Focus Groups**

WHAT DO YOU THINK ABOUT

Comparision with other research methods

DELPHI

- Limited interaction, anonymous responses from a panel of experts.
- Iterative process aiming for consensus.
- Qualitative data focused on expert opinions.

SURVEYS

- Minimal interaction, may or may not be anonymous.
- Typically one-time data collection with predefined responses.
- Quantitative data from a broad range of participants.

INTERVIEWS

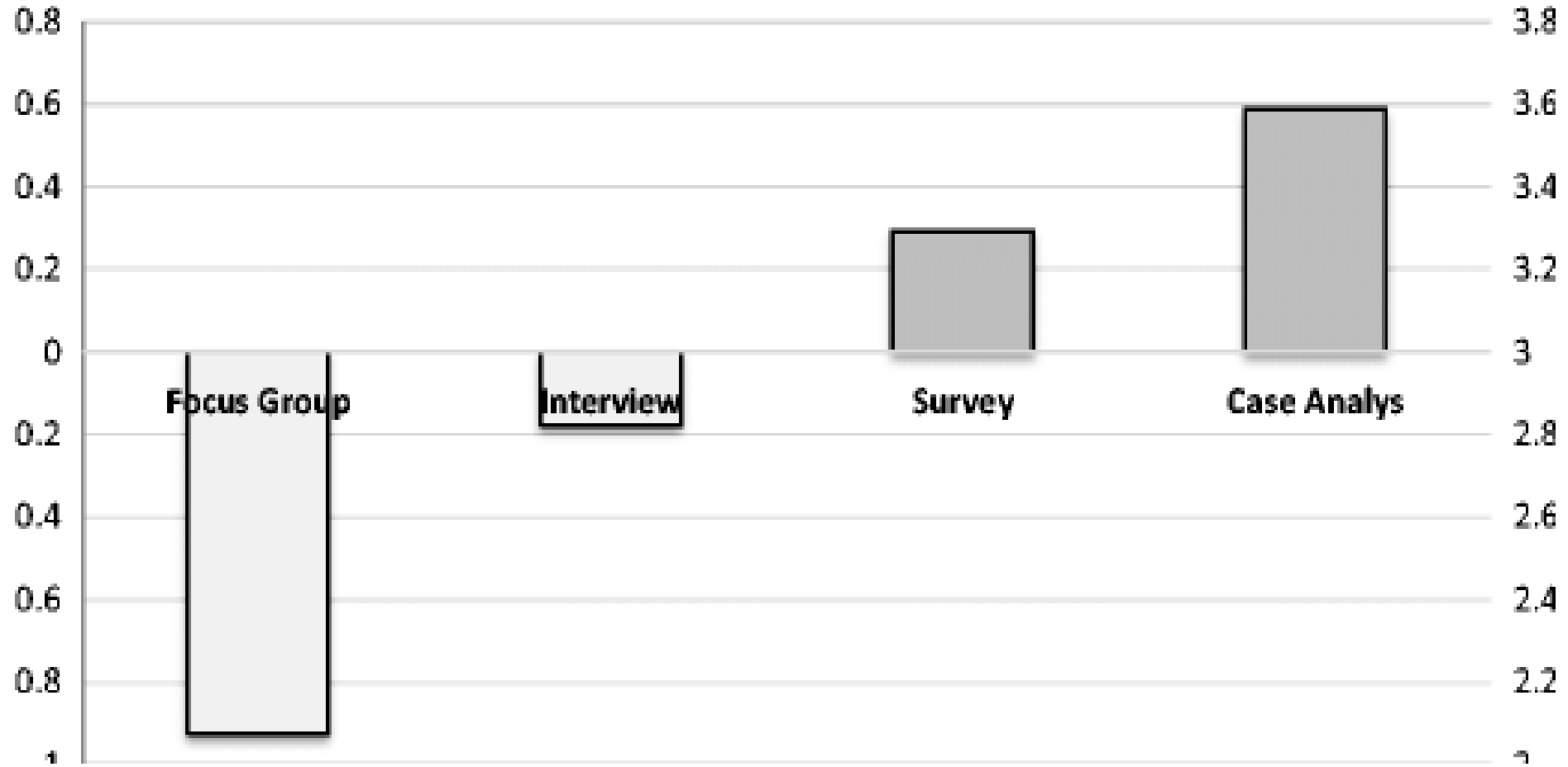
- High interaction, not anonymous.
- In-depth, open-ended conversations for qualitative data.
- Can be time-consuming and resource-intensive.

CASE ANALYSIS

- Limited interaction, no participant involvement.
- Analyzes existing data, often a one-time process.
- Mix of qualitative and quantitative data

FOCUS GROUPS

- Moderate interaction, participants discuss specific topics.
- Qualitative data from group discussions.
- Aims for shared perspectives, may not always achieve consensus.



Source: https://www.researchgate.net/publication/311394694/figure/fig4/AS:963436561326099@1606712584395/Comparing-the-Delphi-method-with-other-methods_W640.jpg

The scale is referred to the Delphi score compared to each method



Source: <https://64.media.tumblr.com/2da50f30b1ca80852b340930990deca7/9b5c28af39016880-fb/s640x960/6a03983a55d07833d6d6d2ced3dd39da335f3c2c.pnj>

Conclusion

The Delphi Method is a powerful and versatile research approach that brings together expert opinions to address complex challenges and uncertainties. While its limitations include the time and resources required, its benefits, including anonymity, expert group consensus, and flexibility, make it an invaluable tool for various applications across different domains.

By understanding the steps involved and their pros and cons, researchers, policymakers, and organizations can effectively leverage the Delphi Method to make well-informed decisions and gain valuable insights into the future.

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