

# Manual

## Discrete Choice Experiment Tool

### Collective Power

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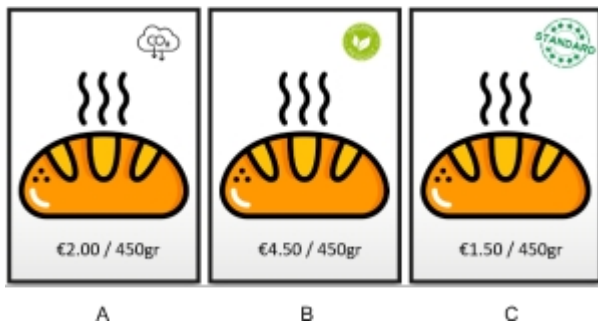
# 1. The Discrete Choice Experiment explained

## 1.1 Introduction

A Discrete Choice Experiment [DKE] is a tool for measuring preferences that would otherwise remain hidden. Participants in the experiment are presented with a number of scenarios in which they have to choose between two or more hypothetical options. These could be anything: products, organisations, policies, medicines, etc. These options have different characteristics such as price and quality. The advantage of a DKE over a survey is that participants have to answer fewer questions, while we can draw more conclusions from the data! In addition, people generally find it easier to give their preference between 2 options with different characteristics, rather than indicating how important they consider each individual characteristic to be. Choosing between membership of different organisations is also quite realistic.

## 1.2 Example 1

For example, a choice may be presented about bread:



The characteristics of the three options are *price per 450 grams* with the choices 2 euros, 4.50 euros and 1.50 euros and the *type of flour* used with the choices (1) low CO<sub>2</sub> emission flour, (2) organic flour, or (3) standard flour. With the next choice presented, the prices for each type of flour may be different. By letting participants choose which option they prefer, we can find out how much participants are willing to pay for a certain type of flour, and which flour they prefer (perhaps regardless of price).

In a DKE, the properties of options are called *attributes*. In this example, price per 450 grams and flour type are the two attributes. The options within these attributes are the *attribute levels*. In this case, the attribute levels of price are 2 euros, 4.50 euros and 1.50 euros, and the attribute levels of flour type are low CO<sub>2</sub> emission flour, organic flour and standard flour.

### 1.3 Example 2

An example that fits better with Collective Strength is the following example where two organisations are compared, and participants are asked which one they prefer.

The first choice presented is the one below, with the attributes participation, voting rights, impact and evolution and growth and the attribute levels [possible, not possible], [one member one vote, voting rights proportional to number of shares], [focus on social impact and members, focus only on members], and [focus on small and local, focus on expansion and growth].

Attributen	Organisatie A	Organisatie B
Participatie de consument in de besluitvorming	Mogelijk	Mogelijk
Stemrecht in de besluitvorming	Één lid één stem	Stemrecht in verhouding tot aantal aandelen
Impact	Focus op maatschappelijke impact en leden	Focus alleen op leden
Evolutie en groei	Focus op klein en lokaal	Focus op uitbreiding en groei

The second choice presented is almost identical to the first, with some variation in the attribute levels of the two organisations.

Attributen	Organisatie A	Organisatie B
Participatie de consument in de besluitvorming	Niet mogelijk	Mogelijk
Stemrecht in de besluitvorming	Één lid één stem	Stemrecht in verhouding tot aantal aandelen
Impact	Focus alleen op leden	Focus alleen op leden
Evolutie en groei	Focus op klein en lokaal	Focus op klein en lokaal

By presenting participants with 10 to 14 of these choices, each time requiring them to indicate which organisation they prefer, we find out how important they consider the different attributes to be in relation to each other.

## 2. Applying for a DKE

The infographic below briefly explains the benefits of a DKE, and the steps to be taken. A more detailed explanation of each step in the process can be read in the rest of this chapter.



### 2.1 Step 1: The intake

The first step in doing a DKE survey is going through the intake. The intake is a survey on Qualtrics to be completed by one person on behalf of the citizen collective - the person who wants to conduct the survey among the members of the collective, often someone from the board of the collective (the 'applicant'). Of course, this is done in consultation with other members of the board, but the intake should only be completed once. The link to the intake is: [https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV\\_3UxuyC9IwywzA8e](https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_3UxuyC9IwywzA8e)

In the intake survey, the applicant answers some questions about the citizen collective, such as the name, the number of members, the number of members expected to participate in the survey, and the type of citizen collective (energy, food, healthcare, other). A minimum of 100 members should be expected to participate, to get enough data in the survey - with less data, the results are not reliable. The more members participate, the better.

It is important that the applicant knows how a DKE works, and what it can and cannot do. The DKE tool offered by Collective Force is a generic tool that can be adapted to a certain extent to suit the applicant's needs - but it cannot be completely changed to suit the applicant's needs.

### **2.1.1 Choosing attributes**

In the intake survey, the applicant has to make choices between which attributes they would like to see in their DKE. Depending on the type of citizen collective, the applicant is presented with attributes. Some attributes are always in the DKE, and some attributes can be chosen by the applicant. The applicant chooses among the optional attributes so that a maximum of 8 attributes are eventually selected. All attributes are properties of organisations, such as ability to participate in the decision-making process, the type of voting rights members have, and the organisation's focus on growth or staying local. The attributes that are finally selected will appear in the DKE which is presented to the members of the collective in the survey, as shown in Example 2.

### **2.1.2 Choosing additional survey questions**

After choosing the attributes, the applicant can choose which further questions to include in the survey - in the post-experimental survey. The post-experimental survey is a short survey presented to participants of the DKE study (the members of the citizen collective) after making the DKE choices. The survey serves to ask additional questions about the participants: age, gender, income, living environment, etc. This information can be used to find out who the members are, what their preferences are for organisational traits, and whether the preferences differ by demographic trait.

### **2.1.3 The DKE survey is made**

After the intake is completed, the data reaches Collective Force researchers. Based on the applicant's answers, the researchers create a DKE for the applicant. Once this is finished, the applicant receives a Qualtrics link to the online DKE survey. This link can then be distributed to members of the citizen collective via the applicant.

## 2.2 Step 2: The invitation

After the researchers provide a link to an online DKE survey, this link should be sent among the members of the citizen collective. It is important that a representative proportion of the members of the citizens' collective participate in the survey. So the link should not be sent to a specific selection of members. It is best if the link can be sent to all members at the same time, in, for example, a newsletter or a separately prepared invitation. If there are too many members to invite at once (tens of thousands), a randomised group of members should be selected of 1,000 members at a time. In this way, the survey can be rolled out slowly and eventually all members can be reached.

The invitation itself should contain enough information to get members interested in the survey, but not so much information that the design of the survey is given away. An example of an invitation to members might be the following:

*"We invite our members to take part in a scientific study by Erasmus University Rotterdam in cooperation with [citizencollective]. Through a simple choice game, we measure the preferences of members of cooperatives like [citizencollective].*

*In the choice game, you have to make 14 choices, each time between two companies/organisations with different characteristics. It takes about 12 minutes and is completely anonymous.*

*The results help the researchers and [Citizens' Collective] to know and understand the motivations and preferences of cooperators. This will enable us to improve our operations and policies and further grow the citizen movement.*

*If you start the survey and change your mind later, just close your tab. Incomplete surveys will not be processed.*

*Thank you very much for your participation!"*

It is important to indicate that the survey will not take long, and that the survey can help identify member preferences. It is also important to indicate that the survey is completely anonymous, and can be stopped at any time.



### **2.3 Step 3: The results**

Once members take part in the survey, the data reaches the Collective Force researchers. If there are not enough respondents after a week or two, a follow-up e-mail may be sent to members, reminding them of the survey invitation.

If enough data is obtained - at least 100 members have participated, but ideally more than 500 - a decision can be made in consultation between the researchers and the applicant to complete the data collection. Once data collection is complete, the process of data analysis can begin.

The analysis of the data will result in a research report for the citizens' collective, showing descriptive results about the members who participated in the survey, and the results of the members' preferences for the specific attributes that appeared in the DKE. This report will be sent to the citizens' collective as soon as the researchers finish it.

In collaboration between the research team and the citizen collective, the results can also be processed into a news article, which can be of value to both Collective Force and the members of the citizen collective.

Collective Force researchers may also use the collected data to write a scientific article. Whether the identity of the citizen collective will be disclosed in the scientific article will be decided in consultation with the citizen collective.

## Licence

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