**Optioneer is a cloud-based system that can be used to appraise different choices.  It is particularly beneficial to consultors who wish to demonstrate that they have carefully considered the process of option development and are thus not subject to predetermination.**

**Optioneer can appraise a wide range of choices but is typically used in one or both of the scenarios presented below.**

Option development process (stages two through five=Optioneer)

1. Identification
2. **Weighting**
3. **Scoring**
4. **Calculation**
5. **Testing**
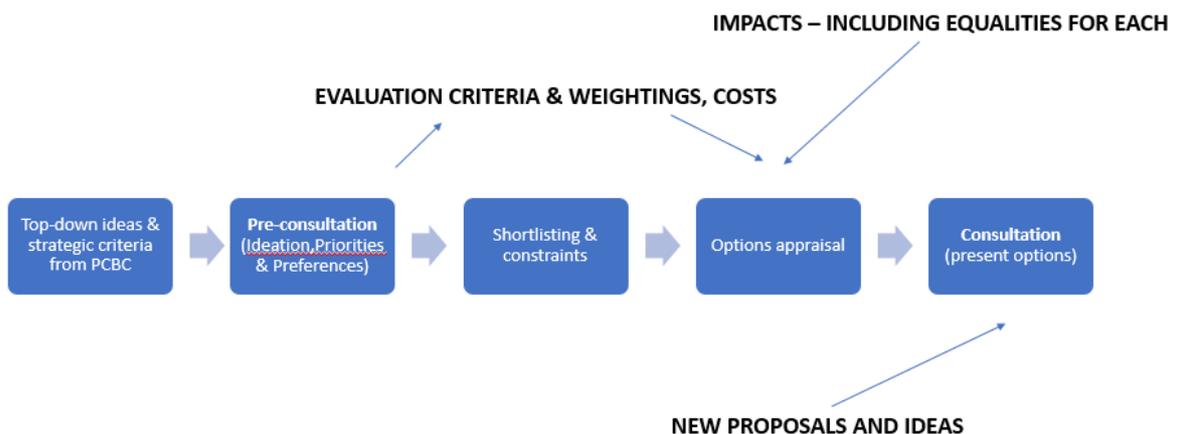
## How it works

Optioneer uses a proven methodology to appraise a number of parallel options.  Consultors must stipulate the criteria on which options are appraised (typically these are derived from pre-consultation activity) and any 'weighting' that should be given to each criterion (alternatively, all criteria can be equally weighted).

*Cost* is never a criterion (an input) but is instead considered at the end of the scoring process to determine the cost-benefits of each option.  Optioneer can be used to specify capital, revenue and savings for each option over a period of time.

## The "grid"

A box is an element of the "options grid" that can be created by this software. There are multiple boxes in a grid, each contain the individual scores received by participants for each option and each criterion.  A total score for each box is calculated by adding the individual sub-score and multiplied by a weighting[1] for each criterion to create a total score for that box.  All the box scores for each option are then added up to create a total score for each option.

Finally, the total scores are compared and divided by the cost for each option to give a cost per unit benefit.

## Use cases

Optioneer can be used in a number of ways, for example: -

- As a back-office tool to test various scenarios and assumptions ("sensitivity testing");
- To record the outcome of an option development workshop;
- To work alongside an option development workshop in the collection of scores or presentation of scores and rapid calculation of results.

## Features (as of 01.01.2020)

- Cloud based
- Scoring by consensus or individually
- Remote collection of scores via mobile phone ('live mode')
- Sensitivity testing
- Automatic results analysis (ranking by score and cost benefits)
- Automatic matrix calculation
- Save, share and restore projects
- High visibility "Workshop mode"
- Forcefield analysis and validity checking
- Finance calculator with Capital, Revenue and Savings figures.
- Semantic anchors provided for scoring
- Unlimited options and criteria per matrix

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[1] The weightings can be set manually by the administrator or created democratically by the participants

## Compatibility

Please note that Optioneering is designed to work with Google Chrome Browser on a desktop or laptop computer only.  The mobile interface is optimised for smartphones.

## Known Limitations

- We do not recommend comparing more than five options in any given grid as the limited screen real-estate can cause formatting problems.

- The number of participants who can score "per grid" has been limited to 20 for the same reasons.

- To save a grid it must be given a unique name.

- Previously saved grids cannot be deleted.

- The design of a grid (e.g. the labels) cannot be changed once a grid has been set-up.

- There is no place for saving a narrative alongside the grid.

## Getting started

You will need to login to Optioneering with your supplied username and password in order to create a new matrix or retrieved saved work.

Browse to: http://optioneering.co.uk/iump-login/ and enter your credentials in the followings screen: -



To log out at any time (foe example, to switch accounts), navigate to "my account" then click "LogOut" as per below
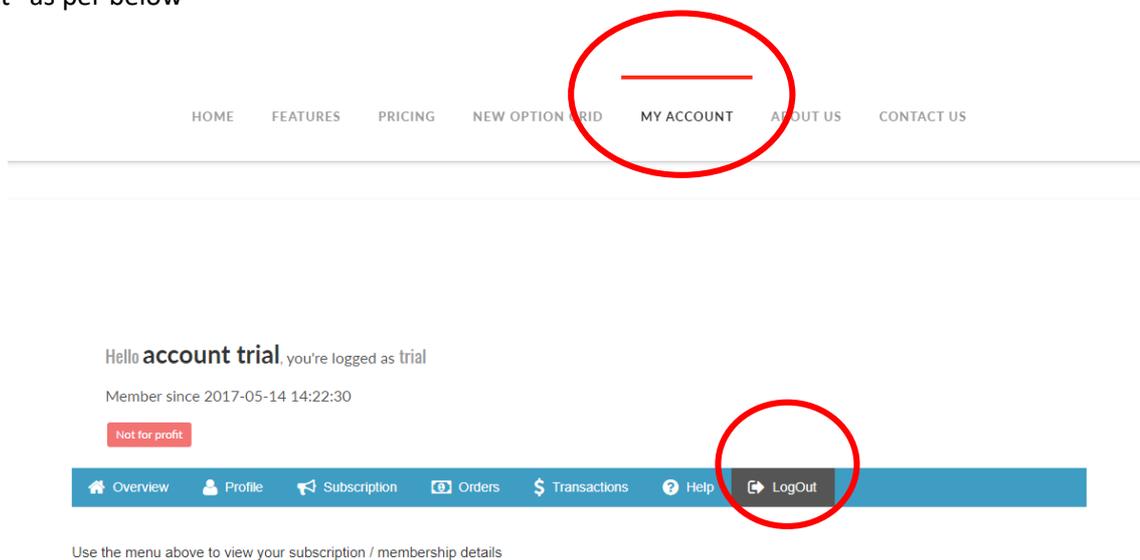




You can return to the main login screen at any time by clicking on "New Option Grid" from the top menu

## Creating a new project (from 1st screen after login)

In Optioneering, projects are called grids or matrices because they are based on a scoring chart. When you first log-in you will see a list of archived projects, a project name and a creation date.
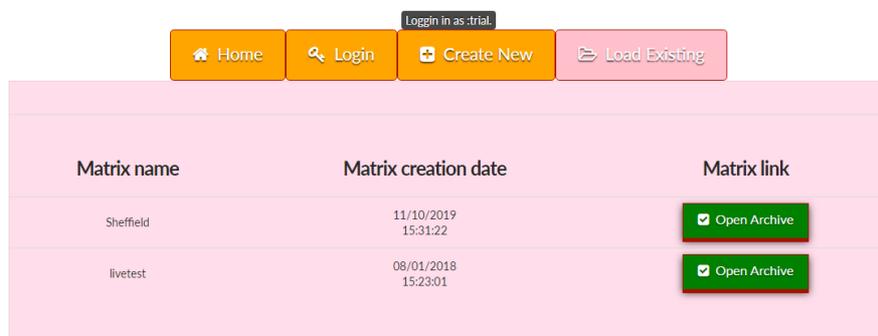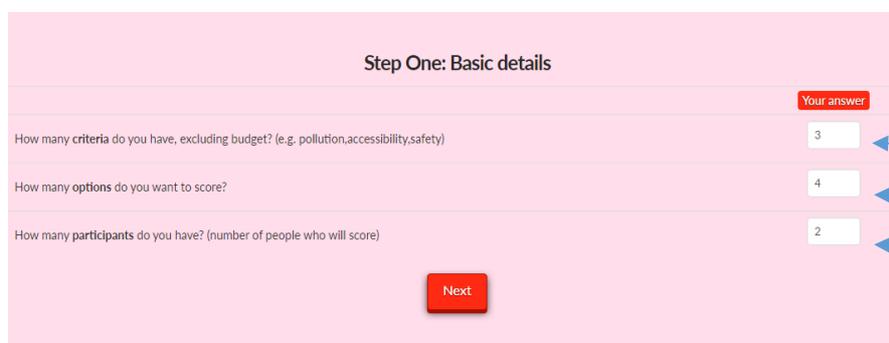


In this section we will show you how to create a new project based on consultation data. First, click on "Create New".



A new screen will appear asking you about the design of your scoring process as per below: -



Specify the number of criteria which each option will be assessed against. For example, this might be 'distance from the city', 'pollution' and 'sustainability' in which case the answer is three. _Please note that COST or AFFORDABILITY is never a criterion, this is dealt with separately._

Secondly, specify the number of options or proposals that you wish to evaluate. _Please note that these will appear horizontally on your scoring grid and subsequently it may be impractical to appraise more than 6-7 per project._

Finally, specify the number of participants involved in Optioneering. This number is the number of people who can cast a vote in the development of _criteria weightings, if applicable_. It does not have to be the same as the number of people involved in the scoring process but it is later the _maximum_ number of individual scores that can be collected for any given box.

In this example, we have used 3 criteria with 4 options and 2 participants.

On the next screen you will be asked for more information and labels for your matrix



On this screen you will need to label your criteria (three as specified). For example, 'distance from the city', 'pollution' and 'sustainability'. Best practice dictates that criteria should be derived or developed during pre-consultation but they may also be taken from business values or aims.

Next, label your options. You could stick with "option 1, option 2…" but we recommend using meaningful names such as "Do Nothing" or "Relocate Hospital". The number of boxes corresponds to the number selected on the previous screen - in this instance it is four.

On the section "how do you want scoring to work" you have two choices. You may want the grid boxes to appear with only one score appearing in them. For example, if you are operating a workshop and want to come to a consensus about the score then select "by consensus/one input". By default, this is set to "by group or individually" as this provides the greatest flexibility. Under this arrangement, you can select how many sub-scores you will collect and add for each option/criterion combination (i.e. each box).

|  Optional (by consensus) |  Default (by group or individually) |
|---|---|

Finally, select the number of inputs for each box. This is the number of individual scores that can be collected and averaged for each option/criterion combination and it reflect the number of groups or individuals who are going to participate in the scoring process.

 In this example there are two inputs to reflect two participants.

To proceed there are two buttons with two different options: -

1. Continue to determine weightings: The weighting for each criterion is determined by a scoring process.  Each participant can score to determine average weightings which are taken forward into the grid.

2. Go straight to grid with equal weightings: A weighting of "1" is applied to each criterion and there is no weighting scoring process.  This means that each criterion has the same weight.

## Weightings screen (forcefield analysis), optional

You will see your _criteria_ in columns and rows to reflect the number of participants selected in the first "basic details" screen.



- ➢ If you want to set equal weightings (or set each criterion with its own weighting) then you will need to enter the score multipliers in the bottom row.  In this example using "1" as a multiplier sets each criterion to have the same weight.  Then click continue.



- ➢ If you want to determine _the average weighting_ for each criterion (i.e. participants should choose this democratically) then follow the instructions below.

Each participant is given 100 points. These points are distributed across the criteria by entering them into the appropriate boxes. More points equate to more importance. When this is done click the "calculate weightings" button.



The number of points given by each participant for should add up to 100 across the criteria. If this is the case, the row "total" indicators will go green. If not, they will be pink.

The avaerga weighting for each criteria will then appeear in these boxes.

The row below will contain the *actual* multiplier used in the system. It should be green to indicate that the sum adds up to 100 but you can adjust the number in this row should the averages not work out neatly.

**The next screen is the scoring matrix.  Orientation: -**

Based on our example, it will look something like this
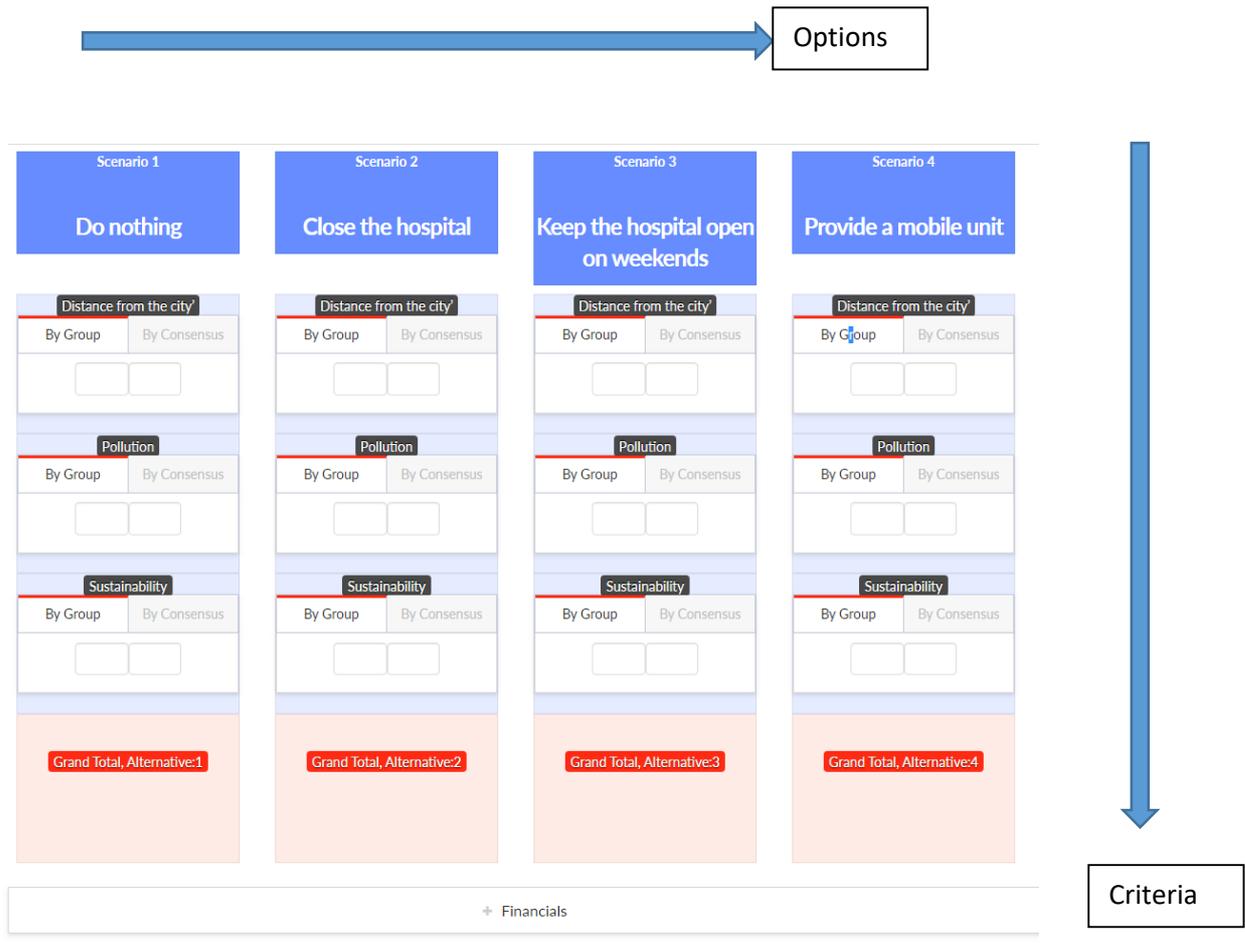


At the top of the screen are the matrix controls.  Click on each section header to see expanded functionality.  Click the section headers again to collapse.

## Entering financial data

Optioneering supports the input of financial data for each option so that cost benefits can be calculated.  Cost data should not be visible to participants during the scoring process so these inputs are hidden behind a collapsible section as per below: -



To calculate the cost benefits, simply specify the capital, revenue and savings estimates for each option in the appropriate column.  To make this accurate, we suggest you think about the cots over a set period of time – perhaps 5 or 10 years.

The "£k (Total)" is automatically populated.  This is the capital cost PLUS the revenue cost MINUS the savings.  If scoring has already occurred then a cost per unit benefit is displayed in the row at the bottom of this section.  The lower this number the better in terms of ranking results.

## Helper tabs

There are three tabs at the top of the screen.  Click on the headings to scroll through these.



- "Weighting adjustments" is used after scoring to test different weighting sets
- "Analyse results" is also used after scoring to automatically rank the options
- "Display anchors" displays a useful graphic to help normalise scoring.  We recommend this is displayed during the scoring process for the benefit of participants.

### Viewing modes (first collapsible tab)

- ➤ **Normal mode.**  This is the standard view.  Use this when working at a desktop computer on a matrix. *Note that if you switch between it and normal mode, all scoring data will be lost!*

- ➤ **Workshop mode**.  This is a high visibility view of the matrix.  The scores and calculations will be easier to see but it can only accommodate one sub-score per box (i.e. is only really suitable for consensus methods). *Note that if you switch between it and normal mode, all scoring data will be lost!*

- ➤ **Live mode.**  This is a form of normal mode where scores can be received by an audience using their mobile phones.

### Collecting scores using 'live mode' and mobile devices
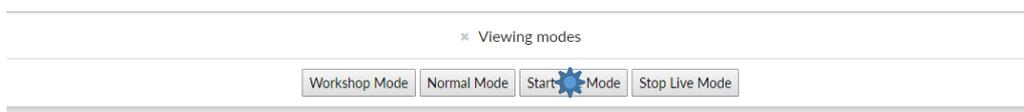


To use this mode, take note of the "session ID" that appears at the *bottom* of the screen when live mode is selected, under the "Financials section".  Each participant needs this for the App and must also be assigned a participant number (incrementally from one onwards).

One approach is to write each possible participant number and ID number on a piece of paper and distribute this to each participant in advance of scoring.  The other approach is to provide voting terminals (e.g. iPads) which are pre-programmed.

In order to collect scores, you must click "start live mode".  You can stop collect by clicking "stop live mode".  When collection is started, scores are refreshed periodically on the grid once each participant submits them. There is a small delay.

A new indicator at the top of the screen will turn yellow when the matrix is live and accepting scores:
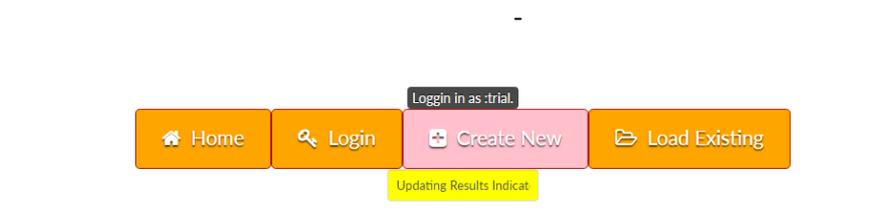


To operate the mobile scoring, participants should navigate to **optioneering.co.uk/start** on their devices.  Next, they should specify the SessionID and participant code.  The SessionID is displayed at the bottom of the screen on your desktop and participant codes start from number 1 and increase to the maximum number of participants.

The mobile user will see each criterion in turn and be able to score them by each option.  When they click "submit" their scores will be transported into the desktop matrix assuming the collection process is running (the "start" button has been pressed on the desktop interface).

## Control panel (second collapsible tab)



The control panel also shows you the number of groups/participants, criteria and options as specified in the design screen.  This cannot be adjusted.

The 'control panel' is used to update the matrix calculations.  If you are scoring "by group" then the matrix will automatically update one a number is entered into a box.  For all other methods, you must click "calculate entire matrix" to calculate the totals.  This is to prevent bias in terms of a total score being revealed during the process of scoring.

Clicking in the "by consensus" tab of any box will reveal the workings for that box for any time as long as the 'calculate entire matrix' button has been pressed.  This is the total of the sub-scores multiplied by the weighting.  For example: -



Consequently, if you click on the "hide workings" button in the control panel then the calculation is hidden, as are all the totals.  The "reveal workings" button undoes this.



For details of "sensitivity test" and "run analysis", see further sections of this document.

## Advanced functions (third collapsible panel)

The advanced functions tab only has one purpose and that is for saving the data in the matrix to file/cloud storage.

All you need to do to save the data is specify a filename and click "archive this matrix". *Please note that once you click to save, the matrix will close and you will need to load it back if you wish to restore it.*
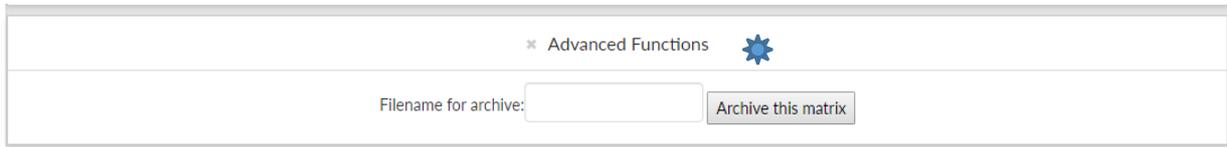


## Weighting adjustments

Optioneer brings forward the weightings for each criterion from the design screen and these cannot be adjusted.  However, Optioneer allows you to specify an alternative/second set of weightings for you to experiment with.  This is useful to see if an alternative view would change the preferred option.

You can recall the default weighting by selecting the weighting adjustments tab and expanding the sensitivity testing section by clicking on the label.
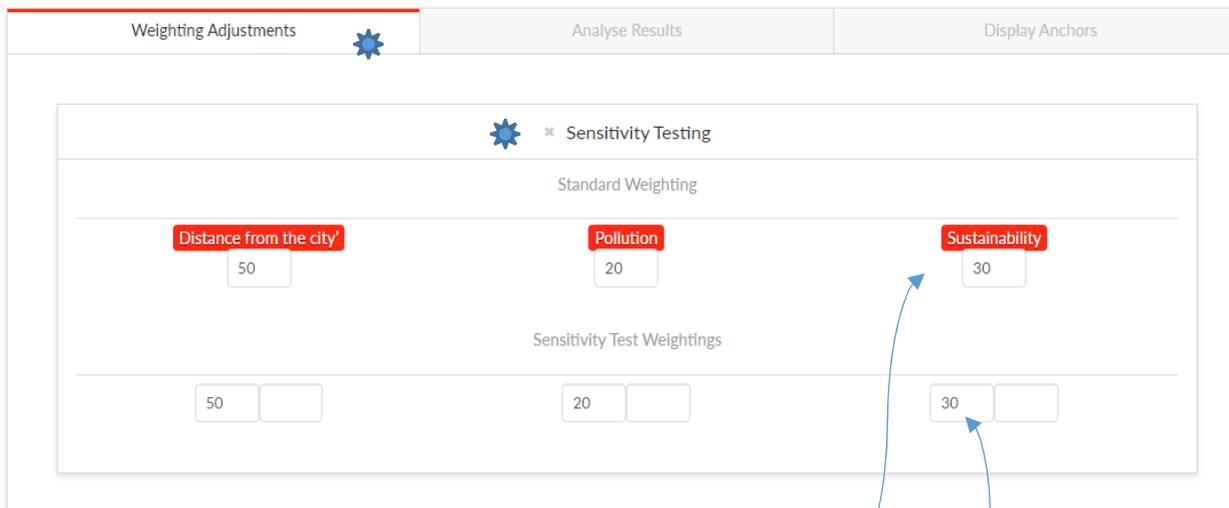


The weightings for each criterion are revealed in the uppermost rows.

To specify alternative weightings, put the corresponding numbers in the lower row for each criterion.  The boxes will go pink if the total weighting does not add up to 100.  They will show green if the total is 100 (as per the original weighting distribution).  You will also be shown the positive or negaitve adustment from the original values in the box adjacent.

To apply the alterantive weightings to the matrix, click the "sensitivity test" button in the control panel.  The grid will go yellow and the new scores wil be applied with the new multipliers.  To switch back to the original weightings, cilck "control panel" "calculate entire matrix".

## Analyse results tab

The analyse results tab can be used to quickly determine the rank (from top to bottom) of options based on both total score and cost benefits.  This is only useful if scoring has taken place.



To get the results you must click "control panel" "run analysis".  *Please note that the ranking wil fluctuate if there is an option with the same score or cost benefits so pressing the 'run analysis' buttno a number of times is recommended to see if this is the case.*

## Draft Plan: Option Scoring Workshop

Consultors must ensure that there is a robust and trustworthy approach to option development. Good practice dictates that Consultees should have an understanding of how alternatives became options, why any viable alternatives were discounted and how options were assessed and subsequently shortlisted or chosen as preferred in preparation for public consultation.

Prerequisites (advance preparation)

- Impact analysis of each presented alternative (including equalities assessment)
- Checking that the initial scoring criteria are definitely output related.
- Confirmation of who is entitled to vote and who is not (observers).
- Materials – overhead projector linked to PC and geographical map showing affected sites if related to service re-design. • Printed copies of semantic anchors for each attendee.
- Pens and paper for each attendee.

Suggested Format

• ½ day

Attendees

• Needs facilitation

• Optimal between 7 and 15 persons

• Senior representatives and those who have knowledge about the issues (e.g. heads of service, policymakers)

• Service user (not mandatory)

• Portfolio holder (not mandatory as political bias may be a concern.  If political bias is a concern then inviting the chair of the scrutiny committee as an observer may help)

Suggested Agenda

It is advisable to tell the attendees that the process is "provisional".  That is, subject to any new proposals or changes which might have impact on it until the consultation is finalised.

1. Build comprehension levels

a) Consult briefly on criteria.  How have they been derived (e.g. from pre-consultation or council agenda setting).  What was the sum of the sentiment from pre-consultation deliberative events?  Do the people in the room agree with them? Should any more be added?

b) Explain what each of the attribute criteria mean.  For example, 'Access' may have a multitude of meanings such as opening hours or physical access.

c) Go through each option and describe what it is and what the anticipated impacts are (from prior research).

2. Determine weightings for each criterion (non-consensus, optional step)

    a) Explain the force field method of determining weighting for each attribute. Allocate 100 points to each person.

    b) Allow individuals to allocate their points by working on each criterion

    c) Display empty grid on screen and take all of the scores

    d) Calculate an average for each

    e) Discuss (look at how they have been ranked)

3. Normalisation - trial run, consensus building

    a. Split attendees into pairs. Explain this is a dummy run.

    b. Display empty scoring grid on screen (no weight at this point).

    c. Ask the pairs to agree on a score the first attribute for each option (i.e. moving horizontally in the grid). Use the 10-point scale and anchors provided.

    d. Collect these up within the group and present them on the grid then calculate totals

    e. Debate any outlier scores (i.e. those with most variation)

    f. Repeat for other attributes

4. Individualised scoring Explain that this is not a dummy run.

    Repeat the process in but allow attendees to score individually across all options and attributes. Collect up the scores from each person and type these into the grid or collect them from the mobile app so the attendees can see how each has scored. Do NOT add up the columns but DO save this information.

5. Comfort break

    At this point the individual scores should be taken off the screen

6. Finalisation

    At this point you can populate the full grid (scores and weight) and present this back to the room. Add in the monetary value if possible and calculate the cost per benefit point. Discuss the outcome, confirm any preferred options and those which are likely to go forward to the consultation paper