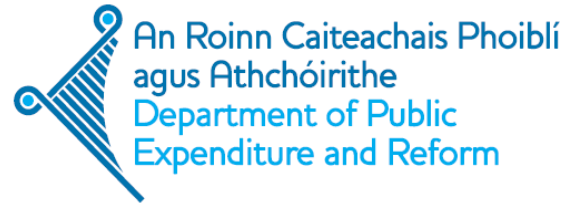




Irish Government Economic & Evaluation Service



## **Behavioural Economics**

# **What Project Should we Choose? Assessment Guidelines for Stage 1 Behavioural Economics Projects**

**February, 2017**

**Karl Purcell  
D/PER IGEES Unit  
Department of Public Expenditure and Reform**

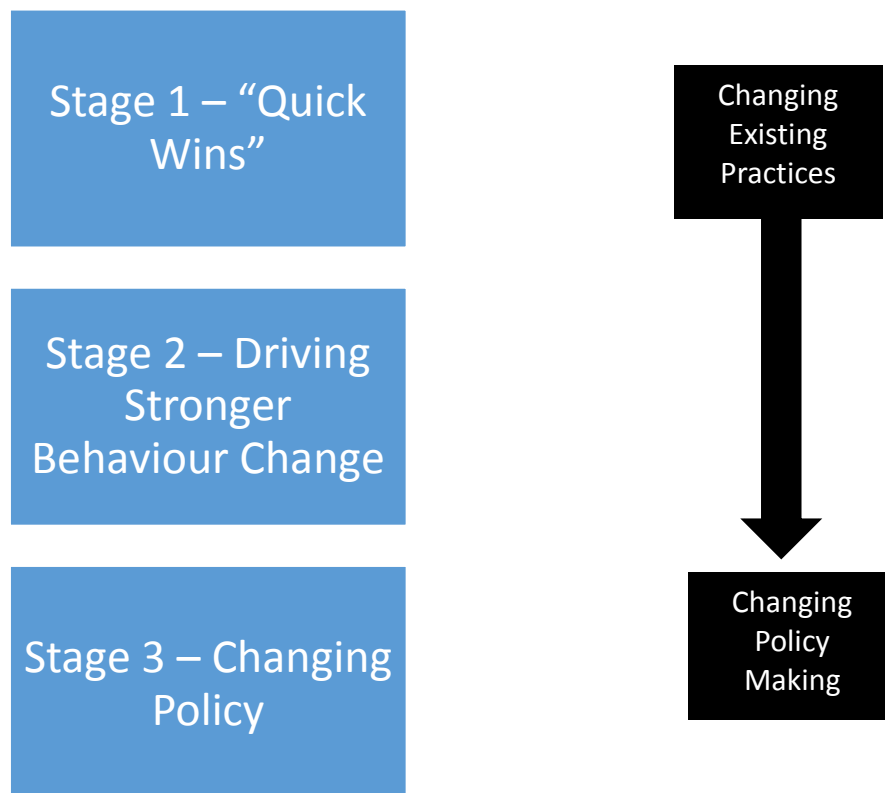
This paper has been prepared by a member of the Irish Government Economic and Evaluation Service. It does not necessarily reflect the policy position of the Minister for Public Expenditure and Reform or the Government.

## Introduction

In line with its strategy of promoting a culture of evidence-based policy making, IGEES has been active in supporting Departments seeking to conduct projects applying behavioural learnings to public policy. Behavioural economics is a vehicle which can support innovation, improve outcomes and increase efficiencies and value for money. The insights that can be gained from behavioural economics allow policy makers to identify why the outcomes of a given policy initiative differ from the intended outcomes. Where such insights are incorporated into the policy making process the result is more efficient and more effective policy outcomes, which are tailored to meet the needs of the target cohort while also representing better value for money.

The purpose of this paper is to provide guidance for departments seeking to identify areas where they could achieve quick wins from behavioural insights, which are categorised as stage one projects. The three distinct categories of behavioural economic projects are illustrated in figure 1 below, and described in further detail in the next section of this paper. The paper outlines a number of criteria against which project proposals should be ranked to ascertain their suitability as stage one behavioural economics projects.

**Figure 1: From “Quick Wins” to Long Term Behaviour Change**



## Prioritising Areas for Behavioural Economics Trials

A number of criteria are outlined below which can be used to rank project proposals. Each criteria is accompanied by a brief description and ranking scale. Completing each question can be a useful way to think through potential projects. The higher the score, the more likely the project is a stage one project. The highest possible score is 72. Please use the scorecard to calculate projects' scores.

Stage one projects usually consist of small changes to existing operations or communications. Stage one projects are used where the aim of the department is to identify and test a number of quick win solutions to build capacity for applying behavioural economics and using randomised control trials. Stage two and three projects tend to be slightly more complicated interventions.

Stage two projects are those which involve changing behaviours in a more sensitive area where there is likely to be a reasonable amount of complexity in designing and implementing the intervention. For example, changing the default on e-prescribing systems from the branded version to the generic version of the drug to increase prescribing rates of generics. This of course would involve the need for ethical review, and may involve a sizeable amount of work to implement in terms of reconfiguring e-prescribing systems and ensuring that the process does not impact on hospital operations.

Stage three projects are those which change policy. Often, stage three interventions involve changing the mind-set of policy makers in a certain area. A good example of a stage three project would be the introduction of auto-enrolment for private work place pensions in the UK. This is a system wide change with significant changes to legislation required as well significant planning in terms of implementation and roll-out. Stage three projects often have the largest impact on people's behaviour.

**Note: It should be noted that these criteria focus on providing guidance on choosing potential stage one projects only. These scales should be used to give an indication as to which projects are likely to be more complicated. They were designed to help identify stage one<sup>1</sup> projects Project selection should always be guided by cost-benefit analysis.**

---

<sup>1</sup> Stage one projects usually consist of small changes to existing operations or communications. Stage two and three projects may be more complicated but may offer greater cost benefit ratios. Please contact the [D/PER IGEES Unit](#) for more guidance.

## Scalability

- How easy is it to scale the project?
- Is there an opportunity to trial a possible solution on a sub set of the 'population<sup>2</sup>' which can then be rolled out to the entire 'population?'
- How easy will it be to roll out the solution to all those who it affects?

The easier it is to scale the project and the greater number of citizens that will ultimately benefit from the project, the greater the rating of the project.

## Ease of Scalability

| 1              | 2         | 3      | 4    | 5         |
|----------------|-----------|--------|------|-----------|
| Very difficult | Difficult | Normal | Easy | Very Easy |

## Opportunity to Scale

| 1          | 2     | 3        | 4    | 5         |
|------------|-------|----------|------|-----------|
| Very small | Small | Moderate | High | Very High |

---

<sup>2</sup> The term population here does not literally mean the entire population of Ireland. It refers to the entire population enacting the behaviour we are trying to change. For example, if you are trying to increase the number of motor fines paid, the entire 'population' would be everyone in Ireland who has an unpaid motor fine.

## Data Availability

- Is the data necessary to carry out the intervention already available?
- Is baseline data available to determine how prevalent the behaviour is/was currently/previously?
- Is any additional work necessary to ready the data for randomisation and to implement the intervention?
- Are there pieces of the data set missing that require data collection?
- Is the data current and accurate?

## Data Availability

| 1                          | 2                             | 3                      | 4                             | 5                                       |
|----------------------------|-------------------------------|------------------------|-------------------------------|---|
| All data must be collected | Some data collection required | Data requires updating | Data requires simple checking | Data is ready for use and randomisation |

### Ease of randomisation

- How easy is it to randomise clients/citizens/participants to the various experimental groups?
- Are there certain eligibility requirements which citizens must meet to avail of the service/programme/scheme?
- Are the eligibility requirements strictly adhered to?
- Are the groups of people involved belonging to a particularly vulnerable group?
- Will the randomisation need to be done on an ongoing basis as citizens avail of services or can citizens be randomised all at once?
- Does the randomisation take place at an individual level or a group level<sup>3</sup>?

### Frequency of randomisation

| 1         | 2          | 3          | 4         | 5    |
|-----------|------------|------------|-----------|------|
| Every Day | Every Week | Each Month | 2-3 times | Once |

### Eligibility criteria<sup>4</sup>

| 1                                     | 2                               | 3                         | 4                         | 5                       |
|---------------------------------------|---------------------------------|---------------------------|---------------------------|-------------------------|
| Many conflicting eligibility criteria | Many Clear Eligibility Criteria | Some eligibility criteria | One Eligibility criterion | No eligibility criteria |

### Method of randomisation

| 1                  | 2          |
|--------------------|------------|
| Group <sup>5</sup> | Individual |

---

<sup>3</sup> Randomisation at the individual level means that each citizen can be randomly assigned to one of the possible solutions or the control group without consideration being given to, for example, which school they go to. However, sometimes randomisation must be performed at the group level, for example each school would be randomised to receive either the control or the treatment, and all of the children in the treatment school receive the treatment, while all of the children in the control school receive the control.

<sup>4</sup>The existence of eligibility criteria will not always be a disadvantage. Indeed, sometimes eligibility criteria can be used to create a counterfactual for carrying out a counterfactual impact evaluation such as in a regression discontinuity design.

<sup>5</sup> While individual level randomisation is often simpler from a practical and statistical analysis stand point, it may not always be appropriate. The [D/PER IGEES Unit](#) should be contacted for further advice.

## Likely impact

- What is the likely impact of the intervention?
- Is the impact of the intervention a direct or indirect impact?

The higher the likely impact, the higher the rating the project should receive. It is worth noting that the likely impact of an intervention is dependent on the problem being tackled, the solution being trialled, and the implementation of that solution.

Often with interventions in the Behavioural Sciences, direct impacts can be relatively low. However, these impacts can be very cost efficient, especially when scaled. For example, the typical impact of changes to letter based communications is between 1 and 5 percentage points.

## Likely Impact

| 1  | 2   | 3   | 4   | 5  |
|--|---|---|---|--|
| Very low impact<br>(0.01 – 0.05<br>percentage<br>points) | Low Impact<br>(0.06 – 0.09<br>percentage<br>points) | Some Impact<br>(1 – 2 percentage<br>points) | High Impact<br>(3 – 4 Percentage<br>points) | Very High Impact<br>(5 – 6 percentage<br>points) |

## Cost Savings

The higher the cost saving, the higher the project should be rated.

- What are the cost savings the intervention will produce?
- Are they direct savings (increased fine payment)?
- Are they indirect savings (reduction in need for enforcement -> reduction in enforcement charges)?
- What cost savings will the intervention provide when scaled up?

## Cost Savings

| 1                           | 2                      | 3                    | 4                 | 5                         |
|-----------------------------|------------------------|----------------------|-------------------|---------------------------|
| Very Little Cost<br>Savings | Little Cost<br>savings | Some Cost<br>Savings | High Cost Savings | Very High Cost<br>Savings |

## Length of time until outcome

- How long must you wait to determine the whether or not the intervention was successful?

## Length of Time until Outcome?

| 1     | 2      | 3      | 4                    | 5               |
|-------|--------|--------|----------------------|-----------------|
| Years | A Year | Months | Weeks (<3<br>months) | Days (<3 weeks) |

### Ease of measurement of outcome

- How easy is it to determine whether or not the intervention was successful?
- Is data already being collected on the behaviour you are trying to change?
- How is a successful outcome determined?
- Is the outcome self-reported by the individual or objectively measured?

For example, in an intervention to encourage people to eat more healthy food with the aim of losing weight, there are two main outcomes. 1. The ratio of healthy food to unhealthy food the person ate. 2. The weight of the person at the beginning and end of the intervention.

The first outcome in this example can be difficult to measure. One relatively reliable way to do this would be to ask the participant to keep a food diary of all of the foods he/she ate. However, this places a large burden on the participant, relies on them being honest, relies on the person not forgetting to enter information or losing the food diary etc. However, the second outcome, the person's actual weight can be measured objectively using various measurement tools such as a weighing scales which can give a more objective outcome measure.

### Ease of collection

| 1                          | 2                          | 3                                  | 4   | 5  |
|----------------------------|----------------------------|------------------------------------|---|--|
| Manual repeated collection | Once off manual collection | Design automatic collection system | Existing collecting system with need for reformatting | Collected by Existing System in Correct format |

### Objectivity of Measure

| 1                   | 2                     | 3                              | 4                                       | 5   |
|---------------------|-----------------------|--------------------------------|---|---|
| Delayed Self Report | Momentary Self Report | Self-report with corroboration | Self-administered objective measurement | Standardised & objective measurement tool |



### Likely attrition rate

- How likely are people to drop out of the intervention?

This is less likely to be a problem in stage one interventions as many of the changes will be to communications which may not offer the chance to drop out of the intervention. This is more likely in interventions that last a long time and place some burden on the participant, for example, long term weight loss interventions.

### Likely Attrition Rate

| 1                            | 2                       | 3                       | 4                         | 5                              |
|------------------------------|-------------------------|-------------------------|---------------------------|--------------------------------|
| Very high chance of drop out | High chance of drop out | Some chance of drop out | Little chance of drop out | Very little chance of drop out |

### Applicability in other areas

- Is the intervention likely to be applicable in other Departments/situations so that it can be replicated?

### Applicability to other areas

| 1                                      | 2  | 3  | 4   | 5  |
|--|--|--|---|--|
| No application outside current project | Very small application outside current project | Some application outside current project | Many applications outside current project | Many applications across various Departments outside current project |

## Cost of intervention<sup>6</sup>

- How costly is the intervention?
- If the intervention is adopted as the new standard, would costs be continually accrued?

### Cost of Intervention

| 1              | 2         | 3         | 4           | 5                |
|----------------|-----------|-----------|-------------|------------------|
| Very High Cost | High Cost | Some Cost | Little Cost | Very Little Cost |

## Number of other actors/agencies needed to complete intervention

- Are many actors/agencies required to cooperate to deliver the intervention?
- Have the actors/agencies worked together before?
- What is the relationship between the actors/agencies like?
- Are there competing goals between the various agencies/Departments involved?

It should be noted that cross agency/cross Department projects can often yield the greatest results and so while the scale below suggests that projects are simpler when carried out by a Department/agency in isolation, this may not always be preferable.

### Number of Agencies Involved

| 1                             | 2                             | 3                             | 4                             | 5                           |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------------------|
| >5                            | 3 - 5                         | 2 - 3                         | 2                             | 1                           |
| agencies/Departments involved | agencies/Departments involved | agencies/Departments involved | agencies/Departments involved | agency/Departments involved |

## Appropriateness of Behavioural Science/Insights to tackle problem

Some problems may require a stronger level of intervention such as introducing regulation, changing legislation, introducing a tax/subsidy, banning goods/services. Please contact the D/PER IGEES Unit for more guidance in this area.

## Quality of proposal

Finally, the quality of the proposal itself should be considered in determining which projects should be selected for trialling.

- Has the problem been scoped in depth?
- Has the problem been specified in a sufficient level of detail?
- Have statistics and figures about the problem behaviour to be addressed been presented?
- Is there evidence that the person who submitted the project has carried out a literature review?
- Have they given consideration to possible barriers?

---

<sup>6</sup> Costs and benefits should always be considered together during project selection, and projects with higher benefit:cost ratios should be preferred over those with lower benefit:cost ratios.