Proving Services Limited
Cranfield Innovation Centre
University Way, Cranfield
Bedfordshire, MK43 0BT
+44 (0) 1234 756020
www.provingservices.co.uk

Document	Strategic Options Analyser (RC1) *User* Guide
Description	Strategic Options Analyser: User & Administrator Guide
Date	February 2020
Revision	V1.7.1
Restrictions	Licensed Users Only (ADEPT & FHRG Members)
Document Status	Draft, Release Candidate 1 (RC1)

Decision Equipped.

Official Research Partner

Association of Directors of Environment, Economy, Planning & Transport

Strategic Options Analyser™

User & Administrator Guide

Registered in England & Wales
Reg. No. 04320675

Decision Equipped.
proving
Official Research Partner
ADEPT
Association of Directors of Environment, Economy, Planning & Transport

Contents

System Requirements

Strategic Options Analyser™ is a Microsoft Excel-based application and is designed to run within the Microsoft Windows operating environment. The application has the following system requirements:

- Microsoft Windows versions 7, 8, 8.1 or 10 (32 bit or 64 bit).
- Microsoft Excel 365, Excel 2013, Excel 2016 (32 bit), Excel 2019 (32 bit).
    - Desktop editions only.
- 1GHz (or faster) x86- or x64-bit processor with SSE2 instruction set.
    - Intel i5 or better recommended.
- 4GB RAM or more.
    - 6GB RAM recommended.
- Hard drive or Solid-State Disk (SSD) with 5GB available.
- 1280 x 800 or higher resolution monitor.
    - Graphics hardware acceleration requires a DirectX10 graphics card.
- Internet browser.
    - Internet Explorer 10, or 11 or Edge Explorer latest version,
    - Latest version of Mozilla Firefox, Apple Safari or Google Chrome.
- .NET versions 3.5, 4.0, or 4.5.

The application is not compatible with Excel on Apple products or the 64-bit version of Excel on Microsoft Windows.

Introduction

Strategic Options Analyser™ is a powerful, flexible and portable application designed to explore the impact of strategic programmes and the overall strategic portfolio. Strategic Options Analyser™ replaces a number of extant toolkits previously developed by the Proving for the Future Highways Research Group (FHRG):

- Strategy Analyser (last edition v3.3, July 2019).
- Commercial Options Toolkit (last edition v3.6, December 2019)
- Climate Options Assessment Toolkit (last edition v0.6, December 2019)

The application either replicates or extends all previous functionality.

Strategic Options Analyser™

Strategic Options Analyser™ is a Microsoft Excel workbook application developed in Microsoft Visual Basic for Applications. It has been designed to perform three roles:

1. Share strategic “options” (concepts and ideas) between members of the FHRG and ADEPT.
2. Qualify and quantify each option’s costs, benefits and risks using locally sourced data local to enable options to be prioritised and included within a portfolio of proposed strategic initiatives.
3. Analysed the aggregated portfolio of initiatives to assess the affect on the future strategy of the authority, citizens and the environment.

Strategic Options Analyser™ has been designed to support senior stakeholders responsible for strategy formulation and testing. The data demands are minimised for the purposes of exploring alternative strategies and identifying “best fit” programmes. All data elements are optional. Strategic Options Analyser™ is not a programme planning or management tool.

Strategic Options Analyser™ stores option data within the workbook on a hidden sheet (called “Data”). The application manages the dataset automatically. Editing the data directly can damage the integrity of the dataset and the functioning of the application.

License & Warranty

Strategic Options Analyser™ is free to use for all FHRG and ADEPT members. It may not be distributed to any other party without the prior written agreement of Proving Services Limited ("Proving"). Lapsed members of both the FHRG and ADEPT must refrain from any / all future use to tools provided by Proving.

Strategic Options Analyser™ is provided "as is", without warranty of any kind, express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose, title and non-infringement. In no event shall the copyright holders or anyone distributing the software be liable for any damages or other liability, whether in contract, tort or otherwise, arising from, out of or in connection with the software or the use or other dealings in the software.

While significant effort has been invested to ensure that the application works as stated, users may encounter software bugs. If a bug is identified, please report it by email to s.wilson@provingservices.co.uk. Where a solution is identified and implemented, Proving has a policy for turning around software updates within 30 days.

This "How To" Guide provides step-by-step instructions for each of the key functions of Strategic Options Analyser™.

Part 1: Strategic Options Analyser Installation

Before you begin.

1. Ensure that your operating environment supports the application.
    a. Check your hardware and the software version of Excel against minimum system requirements (see System Requirements, above).

Save a "Backup" copy of the application.

1. Ensure you keep a backup copy of *Strategic Options Analyser (v0-19 - RC1).xlsm* in a folder designated by your team leader or network administrator.
2. As new software versions are released, make sure that you retain a backup copy of each version.

Installing the application.

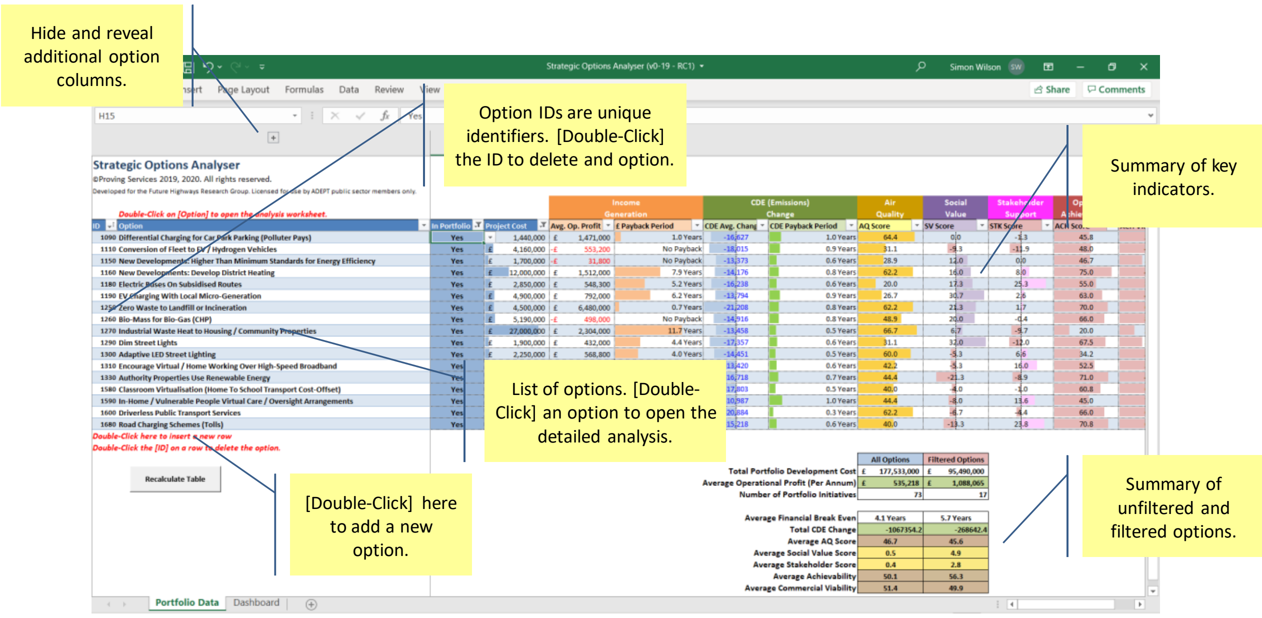
1. Copy the workbook (*Strategic Options Analyser (v0-19 - RC1).xlsm*) to the folder designated by your team leader or network administrator.
    a. Ensure that the copied workbook is not "Read Only" and that all users have the necessary permissions to "open", "read" and "modify".
2. Remember to "Enable Content" and to "Allow Macros" when opening the workbook.
    a. Macros are a core element of application and essential for normal operations.

Part 2: The Portfolio

Strategic Options Analyser™ comes with a pre-loaded database of current options and sample data. The sample data is for illustration purposes only and should be overwritten with locally sourced data.

A summary of the key indicators for each project is shown on the "Portfolio Data" tab of the application workbook.

Figure 1: Portfolio Data Worksheet



The Portfolio Data worksheet comprises:

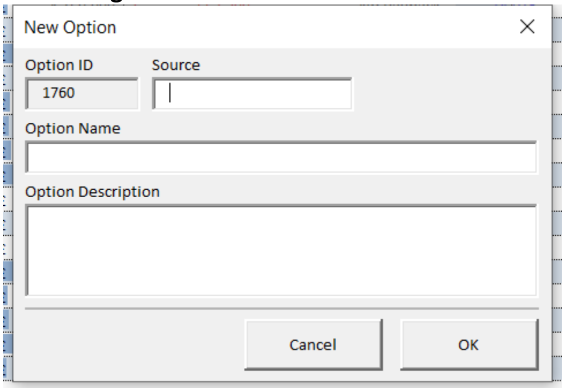
1. The summary table options.
    a. Option ID and description.
    b. "In Portfolio" selector.
    c. Summary of key indicators.
2. Automation hotspots.
    a. Double-click "Double-click here to add an option".
    b. Double-click an option description (in the "Option" column) to open the detailed analysis sheet for the selected option.
    c. Double-click an ID (in the "ID" column) to delete the selected option from the database and the portfolio.
    d. Click the [Recalculate Table] button to refresh the portfolio data.
3. A summary box with averages and totals for both the unfiltered and filtered items in the summary table.

Add a new option.

Administrators and Users are encouraged to add and assess new options; thereby creating a strategic portfolio spanning many service areas and aligned with many strategic drivers.

1. Double-click the text "**Double-click here to add an option.**"
    a. This text is located immediately below the summary table of options.
2. This displays the "New Option" dialog box.

Figure 2: New Option Dialog Box

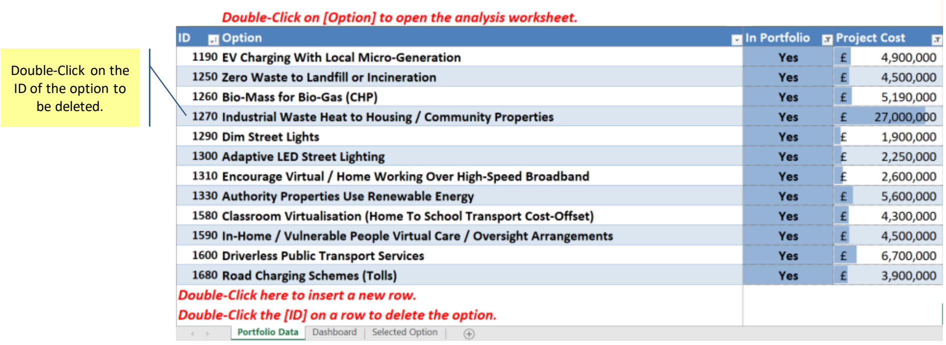


4. The Option ID is automatically assigned and cannot be overwritten.
5. The Source specifies the origin of the option.
    a. Locally sourced options should specify the name of the authority.
    b. The pre-loaded database includes “FotE” (Friends of the Earth) and “Proving” sourced options.
6. The Option Name will be displayed in the summary table.
    a. Choose a name descriptive of the option.
7. The Option Description is only displayed on the Selected Option tab.
    a. Describe the option in the local context.
8. Click the [OK] button to add the option.
    a. The option is added at the bottom of the table.

Delete the selected option.

All options can be deleted. A deleted option is removed from both the portfolio table and the main database.

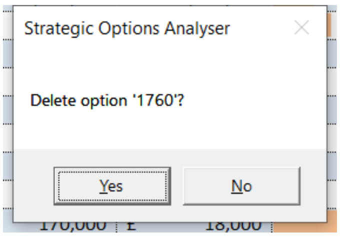
Figure 3: Delete Option



ID	Option	In Portfolio	Project Cost
1190	EV Charging With Local Micro-Generation	Yes	£ 4,900,000
1250	Zero Waste to Landfill or Incineration	Yes	£ 4,500,000
1260	Bio-Mass for Bio-Gas (CHP)	Yes	£ 5,190,000
1270	Industrial Waste Heat to Housing / Community Properties	Yes	£ 27,000,000
1290	Dim Street Lights	Yes	£ 1,900,000
1300	Adaptive LED Street Lighting	Yes	£ 2,250,000
1310	Encourage Virtual / Home Working Over High-Speed Broadband	Yes	£ 2,600,000
1330	Authority Properties Use Renewable Energy	Yes	£ 5,600,000
1580	Classroom Virtualisation (Home To School Transport Cost-Offset)	Yes	£ 4,300,000
1590	In-Home / Vulnerable People Virtual Care / Oversight Arrangements	Yes	£ 4,500,000
1600	Driverless Public Transport Services	Yes	£ 6,700,000
1680	Road Charging Schemes (Tolls)	Yes	£ 3,900,000

1. Double-click the ID (in the ID column) for the option to be deleted.
2. A confirmation message box is displayed.

Figure 4: Delete Option Confirmation



3. Select [Yes] to delete the option.
    a. This operation cannot be undone.

Opening an option.

Opening an option displays the Selected Option tab and the detailed analysis for the selected option.

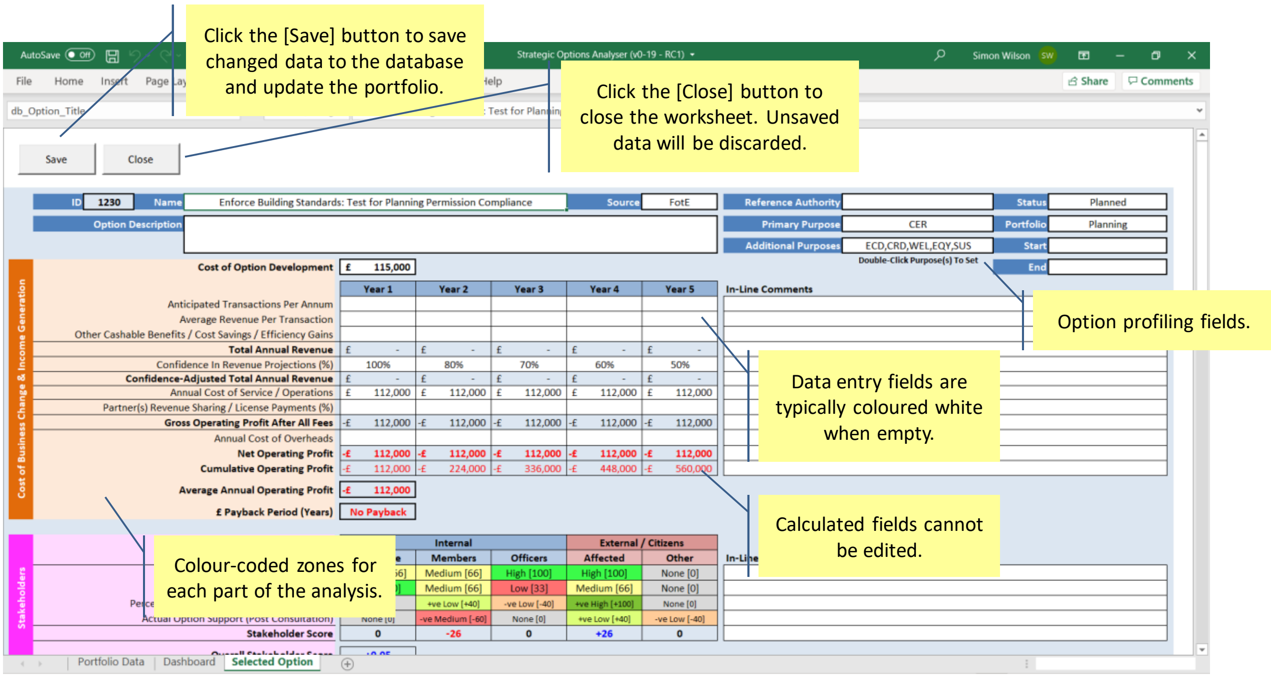
1. Double-click the option description (in the Option column) to open the Selected Option tab and load the detailed analysis data from the database.
2. When finished, click the [Save] and [Close] buttons at the top of the worksheet.

Part 3: Detailed Analysis

The detailed analysis worksheet is accessed by double-clicking an option description (in the option column) in the portfolio table on the Portfolio Data tab.

This displays the Selected Option tab.

Figure 5: Selected Option Tab



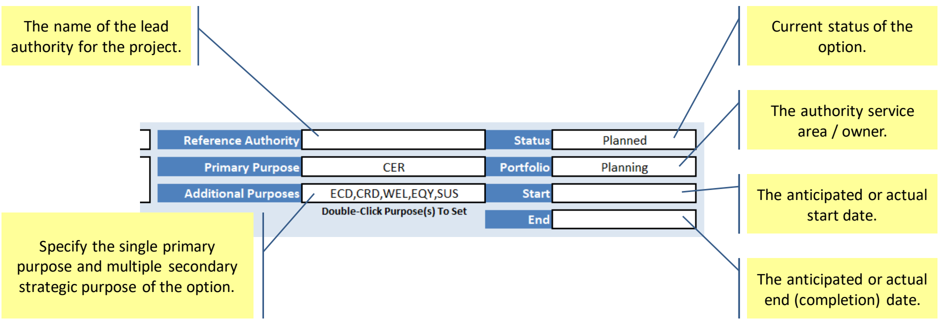
The Selected Option tab is divided into colour coded zones for each element of the analysis:

1. Financial analysis (■), comprising:
    a. The project cost.
    b. The annual costs and revenues for 5 years.
    c. The discounted operating profit / loss per year for five years.
    d. The financial payback period for the project.
2. Stakeholder support assessment (■), by stakeholder group:
    a. Members (councillors).
    b. Executive (as authority senior managers).
    c. Affected citizens (citizens affected by the project).
    d. All other citizens (all other citizens as community stakeholders).
3. CO_2 impact analysis (■).
    a. For developing and implementing the project.
    b. Analysis of emissions for 5 years.
    c. All data stored as Tonnes Carbon Dioxide Equivalent (TCDE)
        i. Enabling the recording of other greenhouse gasses.
    d. The CO_2 payback period for the project.

4. Air quality analysis (■).
    a. Pre- and post-project air quality using the standard COMEAP scales for:
        i. Ozone.
        ii. Nitrogen Dioxide.
        iii. Sulphur Dioxide.
        iv. PM2.5 Particles.
        v. PM10 Particles.
5. The social value implications of the project (■), including:
    a. Wellbeing Change.
    b. Equality Change.
    c. Environmental Sustainability Change.
6. The outline achievability of the project (■).
    a. Sector Readiness.
    b. Authority Readiness.
    c. Technology Readiness.
    d. Political Alignment.
    e. Realisation Risk (Complexity).
    f. Operational Risk.
7. The commercial viability of the project (■) (where applicable).
    a. Market Size.
    b. Market Growth.
    c. Market Profitability.
    d. Market Volatility.
    e. Competitive Intensity.
    f. Competitive Position.

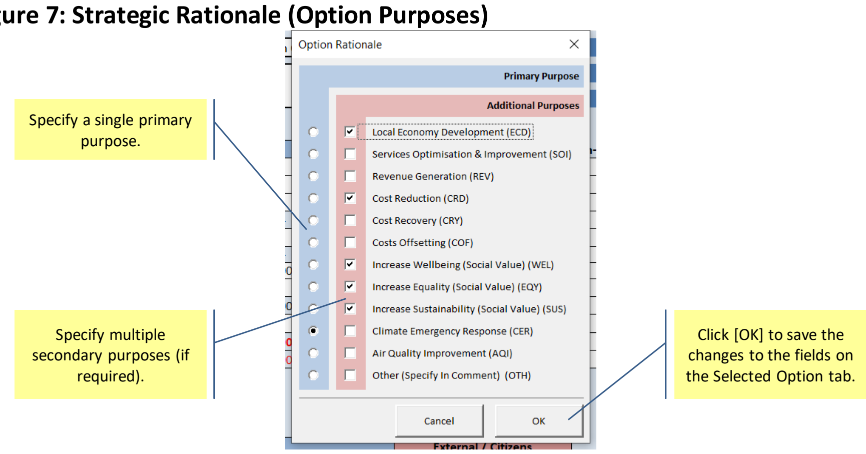
The header comprises several fields used to profile the option:

Figure 6: Header Fields



To specify the Primary and Secondary strategic purposes of the project, double-click either field to display the Option Rationale dialog box.

Figure 7: Strategic Rationale (Option Purposes)



Below the colour-coded zones are free text fields for summarising:

- Additional Comments
- Critical Enablers / Considerations
- Barriers to Implementation
- Key Operational Risks

Saving the analysis.

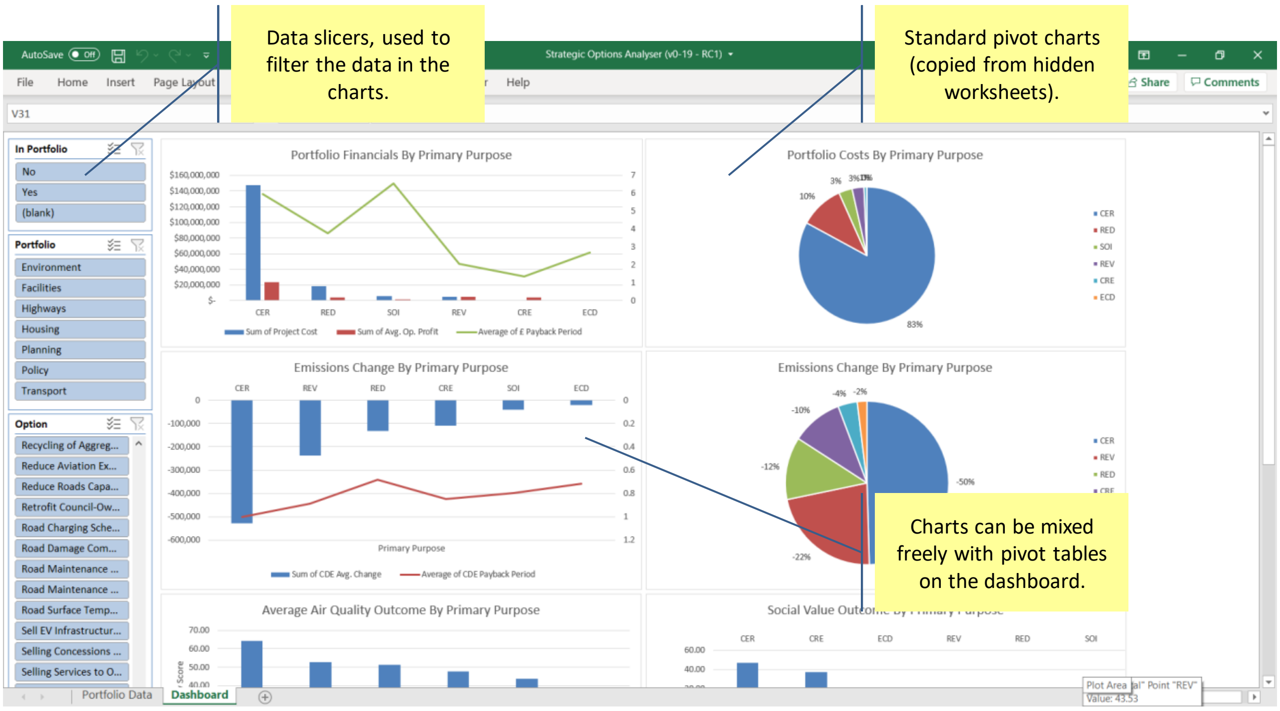
1. To save changes to the analysis, click the [Save] button at the top of the worksheet.
    a. Note that any previously stored data will be overwritten.

Closing the analysis.

1. To close the Selected Data worksheet, click the [Close] button at the top of the worksheet.
    a. Note that any unsaved data will be discarded.

Part 4: Dashboard

The dashboard is used to summarise data found either in the portfolio table on the Portfolio Data tab or data held in the main database on the hidden data tab. The dashboard provided offers a useful starting point for building a dashboard tailored to your local needs and operating environment.



The sample dashboard is constructed using Pivot Charts copied from hidden worksheets within the application workbook. No VBA automation was used to create the dashboard and only a intermediate Excel skill level is required to create, modify and insert new Pivot Charts and Pivot Tables.

All database fields mapped to named ranges on the Selected Option worksheet and are prefixed with “db_”. This allows the user to readily identify the field names and their context in the analysis when designing new reports.

Warning. Changing the name of a range and / or the name of a field in either table will cause the application to crash. Please use the existing field names. Consistency is also required for sharing workbooks between organisations.