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What is Equity3?

Equity3 is a Multi-Criteria Decision Analysis (MCDA) tool that assists individual decision makers and organisations in obtaining better value-for-money, when allocating limited resources and budgets. It is highly adaptive and can be used to address a variety of problem areas including R&D Investment, Marketing Portfolio Management, Project Prioritisation, Resource Allocation, Capital and Revenue Budgeting Sales Territory Reorganisation and Negotiations. *Equity3* is ideal for use with groups as in Decision Conferences.

How can Equity3 help?

Equity3 is a decision modelling tool which helps you construct your most efficient portfolio of expenditure or investment. Investments can be money, people, time, materials or any other scarce resource. The benefits of undertaking a project can address the viewpoints of all stakeholders, including financial benefits, environmental benefits, and performance requirements. All this can be reported in an open, transparent and auditable manner, to show the entire decision process from beginning to end.

Equity3 also allows for the inclusion of decision criteria where finite base data are not available. Relative preference judgements can be modelled in theoretically robust ways to ensure that no relevant criteria are excluded.

How does Equity3 work?

Equity3 uses world leading MCDA techniques. MCDA has been developed from Decision Theory, which itself is based on a set of principles that describe logical preference. The mathematics that emerges from these accepted principles, guarantees coherence and consistency in the resulting decision.

The science behind MCDA is complex, but analysing decisions with *Equity3* couldn't be easier. You don't have to understand the systems or equations that support decision making in *Equity3*; all you have to do is focus on your business objectives and make judgements about your options. *Equity3*'s structured approach can then be engaged to take the guess work out of decision making.



The main benefits of Equity3...

- Portfolio assessment
- Scenario and sensitivity analyses
- Manage complexity
- Capture conflicting objectives
- Include non-monetary criteria
- Build transparent models
- Easy to use
- Ideal for group workshop decision making
- Flexible
- Based on world-leading academic research



About Catalyze

Catalyze's services are focused on helping our clients make tangibly better operational decisions. Our processes combine decision theory techniques with a strong emphasis on social group dynamics to promote a unified team commitment to the best route forward.

Catalyze assists organisations in making more considered and effective decisions by helping to define the options and set a framework to evaluate them. This process also helps to focus individual judgments into a collective strategy, determining the best use of available budgets and resources.

Our Services include Decision Conferencing, MCDA and Facilitation Training, Process Consulting and Innovation workshops. We provide services and software in the field of Decision Analysis based on applied research and software development at the London School of Economics.

Contact Catalyze on +44 (0)1962 775923 or visit www.catalyze.co.uk

Decision Analysis Using Equity3

Most *Equity3* models are built to best allocate monetary resources to a portfolio of investments. As preparation for *Equity3* modelling, raw data is collated on the costs and outcomes of these projects. These often number in the hundreds, making the task of allocating funds even more complex. Below, you'll find an easy step-by-step guide to creating a model in *Equity3*...

Stage 1: Constructing a Model

Each box represents a potential expenditure. These are then grouped into columns of similar investment options, creating vertical areas that represent different levels of funding for a single project or several discrete projects in an area of activity.

Stage 2: Scoring

Each of the optional projects is now scored against a set of defined criteria. These criteria are grouped into costs and benefits. Monetary and non-monetary criteria can be used. This is especially important for public sector users who do not have the luxury of monetary targets like profit. Scores can be entered into *Equity3* models either numerically or graphically.

Stage 3: Setting Preferences

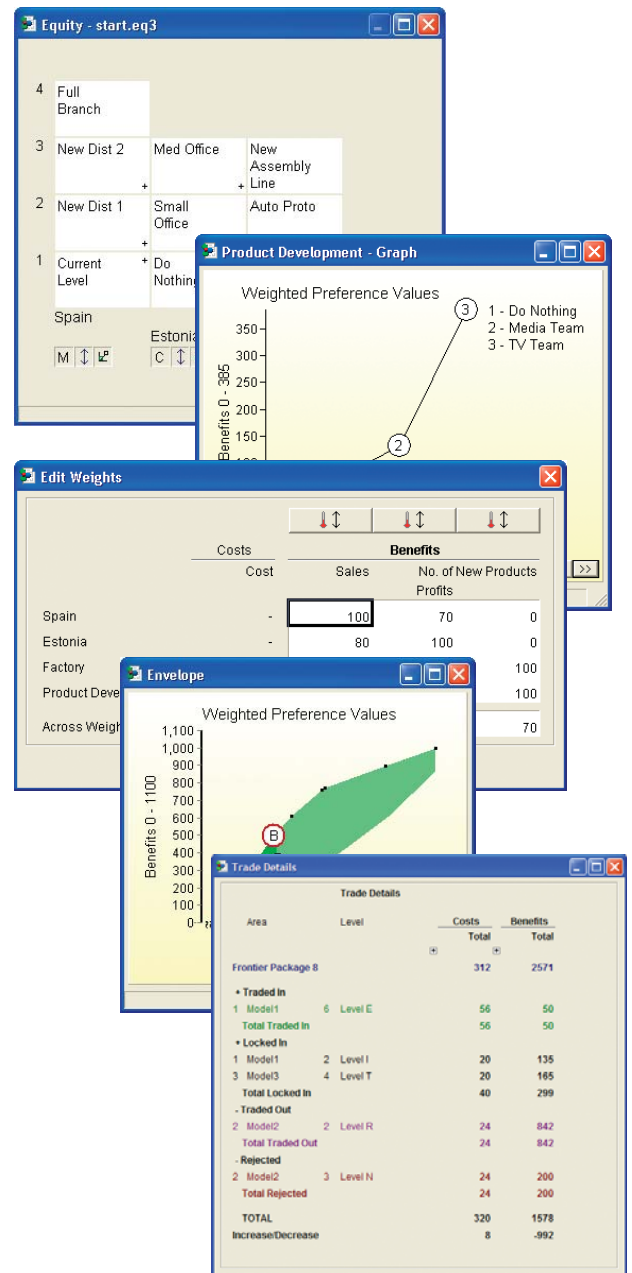
This is the key differentiator of MCDA over other decision analysis techniques. Preferences are set using swing-weighting techniques, which are technically more robust than simply setting the relative importance of criteria.

Stage 4: Analysing the Model

Benefit-Cost Ratio is used to sort all the options within areas. The projects with the highest ratio provide the most benefit for the money invested. *Equity3* graphically displays every possible combination of investments. The upper surface of the graph is termed the Efficient Frontier. This represents the investment portfolios that generate the most benefit for a given cost.

Stage 5: Trade-Off

Having scored, weighted and analysed your model, you can now specify options that must be included in the portfolio. *Equity3* will automatically calculate which options must be dropped to afford the new requirements. If the automatic rejections are not satisfactory, change them for your own, *Equity3* will continue to match your stated budget.



Evaluate Equity3

To see for yourself how *Equity3* can help you to make tangibly better decisions, simply visit the catalyze website and download a free evaluation version of the software. Visit www.catalyze.co.uk to download *Equity3*.

While you're there, why not download our other MCDA application, *Hiview3* or find out more information about our range of decision support services.