

Supplier ranking by multi-alternative proposal analysis for agile projects



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KEYWORDS

- Multi-alternative proposals
- Agile
- Tendering

Article Highlight:

This paper presents a way of analysing bids following tenders where the bidders can each submit several proposals with different trade-offs in cost-benefit potentials; so-called multi-alternative proposals.

What does the paper cover?

When tendering for a new IT project, bidders are usually required to submit their proposals according to specifications that have been defined by the client. Bidders present their proposals in detail, including functional aspects and budgetary issues, in what is meant to be a clear and unambiguous format.

Despite clear definitions in both the tender specifications and the bidders' proposals, specifications and schedules often change during the course of a project.

Studies on IT project success show significant discrepancies in many projects' functionality, schedule and budget. These, in turn, have led to the development of a wide range of software engineering and management methods which differ from 'traditional' ones. One such new method is agile, which assumes that clients' needs and requirements are likely to change during the course of a project.

Agile projects nevertheless use traditional evaluation methods at the tender and contract stages that do not take into account the uncertainty of cost-benefit trade-offs, assuming instead that this is known from the outset. The authors argue that this assumption is counter to the agile manifesto.

The multi-alternative proposal analysis

The authors of this paper set out a method of analysing bids where each potential supplier can submit a variety of proposals. The method is referred to as the multi-alternative proposal analysis and allows clients to rank the suppliers rather than individual bids.

It builds on already developed graphical cost-benefit approaches and is not designed to replace them.

The authors suggest a simple index, called the Area Under Cost-Benefit Curve (AUCB), for ranking the various suppliers and identifying the one who offers the most attractive set of alternatives for various situations which may occur during the course of a project.

By using this method, clients can rank the various suppliers without the need for the alternative bids to be identical.

The aim is to mirror the flexibility of agile concepts in the tender and contract stages, to create a better fit between formal contracts and reality.

Methodology:

The ideas behind the paper came from a mixture of agile and data mining concepts, and from approaches that allow for suppliers who provide multi-alternative proposals to be ranked in an objective manner, subject to the necessary inputs.

Conclusions:

By adopting a method that allows each supplier to submit bids with alternative cost-benefit trade-offs, clients are better able to select the best bid for their circumstances, and ultimately achieve a successful outcome of their project.

Comments from authors:

The authors of the original article have seen this summary and have agreed to its publication.

Complete article

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Glossary:

Multi-alternative proposal

When bidding for a contract that has been tendered, a supplier can propose several alternatives reflecting diverse potential trade-offs in cost-benefit.

Agile

A method of project management that is flexible until the last stages of the project, continually adapting to new developments and needs.



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