

Electronic Multi-Dimensional Auctions: Prototype and Experiments

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Project Description

In this project a prototype of an electronic multi-dimensional auction is developed. The prototype is based on CommercePack, which is a software program to build web-based applications. CommercePack software offers the possibilities to develop and test the prototype. Experiments were carried out to analyze the performance of the multi-dimensional auctions under various conditions.

The prototype is a business-to-business model for selling products through auctions based on the following dimensions: price, quality, and delivery time. The prototype shows the potentials for multi-dimensional auctions for businesses all over the world.

Lessons Learned

- The prototype gives much more in-depth understanding of the bidding behavior and value creation/distribution in three-dimensional auctions compared with a one-dimensional auction
- The developed prototype is easily extendible with more dimensions.
- Prototyping and experimenting can be used by major companies to test bidding behavior, before implementing and executing these type of auctions.

References

- Koppius, O.R. 2002. "Information Architecture and Electronic Market Performance in Multidimensional Auctions" in O.R. Koppius, Information Architecture and Electronic Market Performance, PhD Dissertation, Erasmus University Rotterdam, Chapter 5, p.59-93, May 2002.