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**A Theoretical and Experimental Study of Auctions
with Buy-it-now Price**

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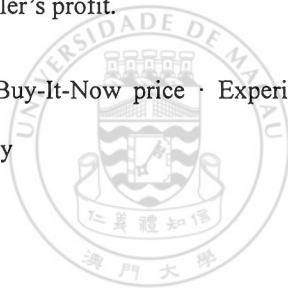
Abstract

Sellers are now using online auctions more frequently as an alternative approach to sell their goods. Online auction sites such as eBay allow sellers to personalize their auctions by setting auction length, Buy-It-Now price, starting price, reserve price, etc. The growing popularity of online auctions has come along with an increasing interest in selling and pricing strategies: fixed price selling, regular auctions, and several innovative inventions such as the Buy-it-now auctions. As a very popular way to auction in eBay, Buy-it-now auction has brought together fixed pricing and second-price auctions by providing the bidders the option of concluding an auction at a certain posted price. This paper studies eBay's Buy-it-now auction and attempts to answer following questions: why would some sellers prefer including Buy-It-Now option? why do some bidders execute the Buy-It-Now option instead of waiting for the last minute of an auction to submit their bids? And how do sellers determine the optimum Buy-it-now price and maximize profit? Answering these questions is of both practical and theoretical importance given the frequent use of Buy-it-now price in auctions. More importantly, understanding how it works would help sellers in choosing appropriate auction format and parameters and thus generate higher revenue. In order to provide a rationale for the popularity of the application of Buy-it-now price and a clear understanding of this selling mechanism, this paper explores and analyzes the structure of this selling mechanism from both analytical and experimental perspective.

This paper first studies the behavior of the participants of auctions including seller and buyers of different valuations by assuming a simple model. It then takes a look at

the different participants' choices and shows that Buy-it-now option would be preferred in any equilibrium. Following these are the introduction and design of our laboratory experiments that replicated the real auction environment. We held experiments of a simple Buy-it-now auction and a regular auction for comparison purpose. Consequently, this article takes a closer look at the results of the experiments to see if Buy-it-now prices affect bidding behavior and increase seller's profit as we predict. The results show that, taking in the Buy-it-now option would help reduce the allocative inefficiency caused by random matching amongst auctions, and more importantly, it increases the seller's profit.

Keyword: Online auctions · Buy-It-Now price · Experimental auctions · Random matching · Allocative efficiency



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Declaration

I declare that this thesis represents my own work and has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

Signed Li Wandong



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