

**INTERNATIONAL IT & SOCIETY CONFERENCE 2010**

**8-6 JUN 2010  
KOTA KINABALU, SABAH**

**BUILDING ONLINE TRUST BY MITIGATING PRODUCT  
UNCERTAINTY FOR AGRIBUSINESS WEBSITE**

**NOR FARZANA ABD GHANI  
DR. HUDA HJ IBRAHIM  
UUM CAS**

# **Building Online Trust by Mitigating Product Uncertainty for Agribusiness Website**

By:

**Nor Farzana Abd Ghani  
Dr. Huda Hj Ibrahim**

*Applied Science Division,  
College of Arts and Sciences,  
Universiti Utara Malaysia*



Exchange For Better Price

## **Outline**

- **Introduction**
- Agribusiness - Shortcomings
- Related Work
- Conceptual Framework
- RO, Hypotheses, Methodology
- Conclusion

Exchange For Better Price

## Introduction

- In the 9<sup>th</sup> Malaysian Plan (06-10), agriculture sector was planned to be revitalized into *New Agriculture*
  - 3<sup>rd</sup> engine of economic growth, by 5 % growth
  - Large scale farming, Biotechnology, leverage the ICT, high quality and value added agri product. [1]
- Agribusiness definition [11-14] – produce, distribute, market, transport agri product to generate income
- Dept. of Agriculture (DOA) initiates Agribazaar portal in 2004 [3,4]
  - Developed by MIMOS
  - Upgrade in 2010 into v 2.0 [5]



## A Quick Glimpse of Agribazaar

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## Selling/Buying Agri product online – shortcomings (cont.)

- A study by [5] on evaluating the performance and effectiveness of Agribazaar indicated that:
  - Difficulty in describing the product (**seller**)
    - incompetence
  - Lack of facility to help the user to describe (**developer**)
    - Limited text, static images, video or picture upload
  - Via portal, it maybe difficult to verify the seller's claim on the freshness, until the product is touched, tasted and experience physically (**buyer**)



## Postings in eBay/Sell section

### TRADE OFFERS



[Sell] Buluh Madu  
Offer valid Until: 31-12-2010  
Membekal buluh madu dalam polibag.



[Sell] PAKEJ CILI KULAI  
Offer valid Until: 31-12-2010  
Jualan Benih Cili Kulai secara Pakej Pakej A : 1 Anak Pokok Umur 1 bulan, 1 Set Media/Baja Pol...



[Sell] Benih KELI, PUYU, TI APIA, PATIN, BAUNG Murah & SI GA...  
Offer valid Until: 31-12-2010  
Kami membekalkan benih keli segar dan baka yang sihat & bermutu tinggi kepada para penternak/...



[Biz] KIOSK / FRANCAIS MENJUAL BUAH BERANGAN  
Offer valid Until: 31-05-2010  
KAMI ADA MENYEDIAKAN KIOSK / FRANCAIS MENJUAL BUAH BERANGAN. MODAL RENDAH. PULANGAN YANG LUMAYA...

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## Online Product Desc.

- Information help buyers to reduce customer uncertainty [20] and facilitate decision making [21]
  - Represent seller's integrity and ability to describe product characteristics
- Custom picture, video upload facility, and limited text entry can help to reduce product uncertainty [7]
- In the case of online auctions for example buying car in eBay Motors, product descriptions plays significant role in mitigating product uncertainty and building trust for the buyer to buy the product [6, 8-10].
  - Text and static images can't convey rich information [8]
  - Hard to describe them online [7,23]



## Building Online Trust

- According to [22], buyers, for some reasons have the tendency to infer the product quality and characteristics, when it comes to experience product
  - Regardless what the sellers have described online
- Seller's benevolence may highly depend on
  - how faithfully the seller describes the product quality?



## Building Online Trust (cont.)

- Literature on trust in online environments has emphasized on how to build trust by identifying and testing antecedents of trust (e.g. [28], [29], [30] and [31]).
- The text content and IT artifacts, such as recommending agents of online Web sites help buyers build trust in sellers [31].
- This is due to the fact that textual information on seller descriptions and consumers' past transaction experience can help buyers infer signals of seller trustworthiness [30].



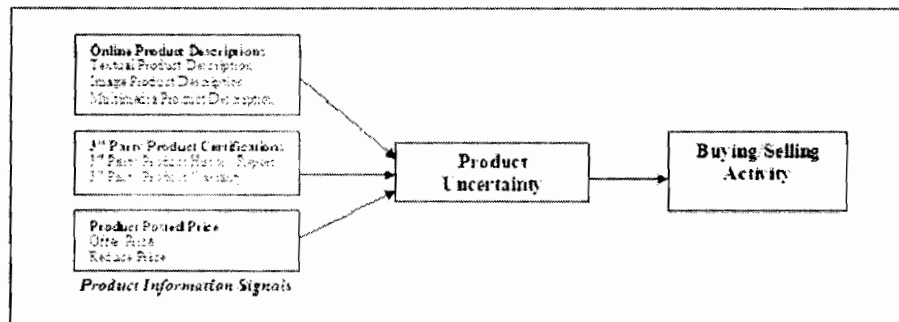
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## Conceptual Framework

- Based from Spence's information signaling theory [32], we propose to mitigate the product uncertainty with a set of product information signals:



## Conceptual Framework (cont.)

- Online product descriptions** is based on
  - Theory of product diagnosticity [33]
  - Product representation [34]
  - Online presentation formats [e.g. 17, 8]
- Research in experiencing shopping in e-Bay suggested that online product descs. are the most effective signals and visual and text are most effective as they are clear and easy to read [6,7]





## Conceptual Framework (cont.)

- **Third party certifications** also needed to be examined as reputable third parties can transfer their trust to other entities.
  - Theory of trusted third parties in certifying the quality of product information is also needed. [37]
- **Product posted price** also need to be studied.
  - Theories on posted price from economics suggested that high price prices signal high product quality [35]
  - buyers associated high prices with product quality [36].



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## **R. Objective and Hypotheses**

- The main objective :
  - to investigate the effects of online product description and other factors to product uncertainty of agricultural product.
- The research hypotheses for the study are as follows:
  - H1: A more diagnostic online product descriptions is negatively associated with product uncertainty
  - H2: Third party certifications are negatively associated with product uncertainty
  - H3: High posted prices are negatively associated with product uncertainty



## **Research Method**

- Agribazaar Portal is chosen
  - availability of publicly-available data for offer, sellers and buyers details.
- A high variation of agricultural product offer on the portal provides an opportunity to
  - test the model on different product category
  - offer a variety of product characteristics



## Research Method (cont.)

- The measurement scales and items are to be adapted from previous researches.
- Additional constructs to be added later
  - special constructs from agriculture domain i.e. determinant of the freshness of the vegetables/farm crops
- Around 300 users will be selected using the non probability sampling technique
  - no definite list of buyers
  - serious about purchasing agricultural product online and
  - likely to carefully read the product description to assess the product and seller quality.



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## Conclusion

- Agribusiness is to open up many opportunities in expanding the market reach by BDD in M'sia
- One challenge is to increase sellers' reputation from the perspective of buyers.
  - the sample, touch and feel of the agri product is important.
  - Hence, buyers' trust in sellers is focused on whether sellers truly describe the product quality.
- Many have suggested ways to improve the way sellers describe the product [e.g. 24-27]
- However, more work is needed to test the generalization of the model in Agriculture product.



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**THANK YOU!**

**Question/Comment?**

