

## Smart Consumer Awareness

A transaction costs perspective

Lan Ge, 18 October 2013



## The role of an economist

- “An economist by training thinks of himself as the guardian of rationality, the ascriber of rationality to others, and the prescriber of rationality to the social world”
- “Rationality, after all, has to do with means and ends and their relation. It does not specify what the ends are. It only tries to make us aware of the congruence or dissonance between the two”

- Arrow (1974) *The limits of organization*. New York: W.W. Norton and Co.

## Economics as an 'exact' science

- "...my view is that economics is an 'exact' science. Empirical regularities in human behaviour rival those in the physical sciences"
- "However, it is not the mere recognition of these regularities in human behaviour that makes economics 'exact.' Rather, it is the fact that from a set of **postulates** and **laws** we can derive **hypothesis** which link- and interpret- these seemingly unrelated regularities.

- Steven N.S. Cheung (1983) Economic Explanation

## Evolution in economics

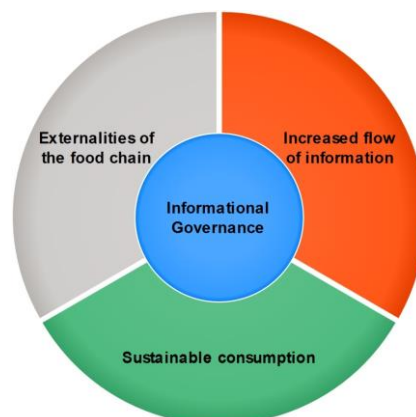
- The extinction of *Homo economicus*
- The recognition of 'Animal Spirits' in human behaviour
  - Satisficer vs. Maximizer
  - Effects of stories
  - Herd behaviour
  - Bounded rationality
- The basic problem and laws of economics remain:
  - Coping with scarcity and competition
  - Law of demand (inverse relationship with price)

## The new institutional economics (NIE)

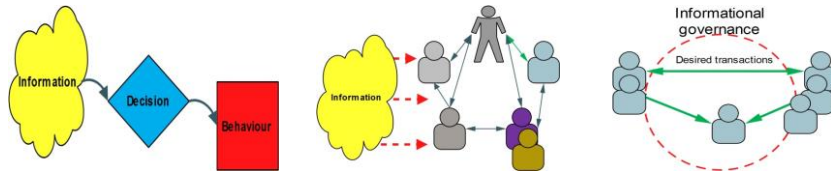
- Fundamental role of institutions in shaping human interactions
  - Informal institutions (e.g. culture)
  - Formal institutions (e.g., government, law)
- Governance can be seen as the institutional arrangements to align economic transactions to their institutional environment
  - Communication
  - Coordination

“Institutions can be defined as humanly devised constraints that structure political, economic and social interaction” –North (1991)

## Informational governance (IG) and sustainable consumption: Context



## Informational governance (IG) and sustainable consumption: conceptual framework



## How informational governance works



**Transactions**  
 Consumer purchasing food products at retail stores

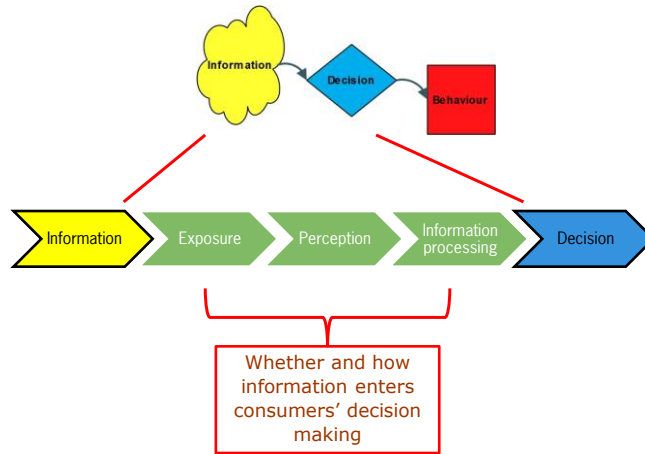


**Mechanism**  
 Providing information on externalities such as environmental impact

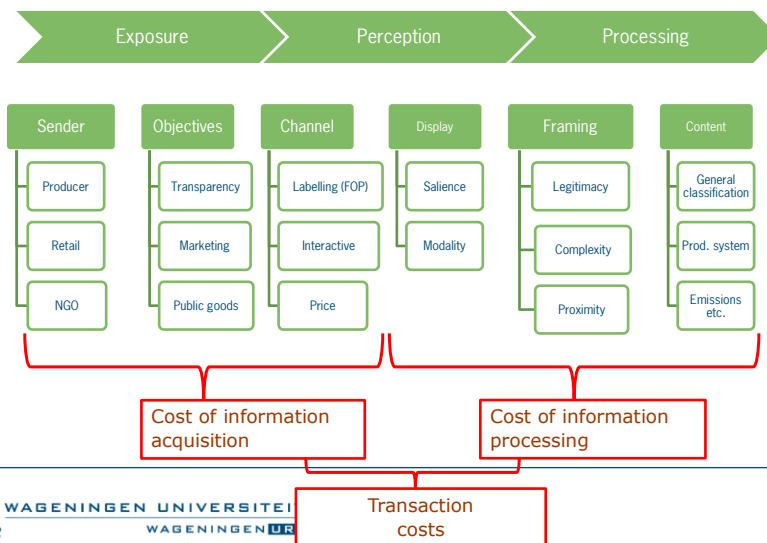


**More consumers purchasing sustainable goods/consumers purchasing more sustainable food products**

## Stages between information and decision



## IG arrangements and consumers' transaction costs





## Hypotheses for the experiment

- High salience and low complexity will increase the effectiveness of the IG arrangement
- Effectiveness of new channels (e.g. app) and proximity is likely to be dependent on consumer characteristics such as:
  - information-seekingness
  - cognitive capacity
  - Ideological preferences

## The virtual supermarket





## Possible 'interventions'

- Labelling (price, other information)
- Presentation (assortment, colour, location, etc.)



## Experimental data

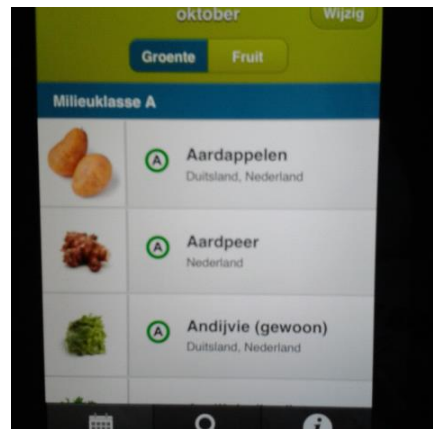
- Purchase data of the virtual products
- Time spent on deciding
- Survey data on consumer characteristics





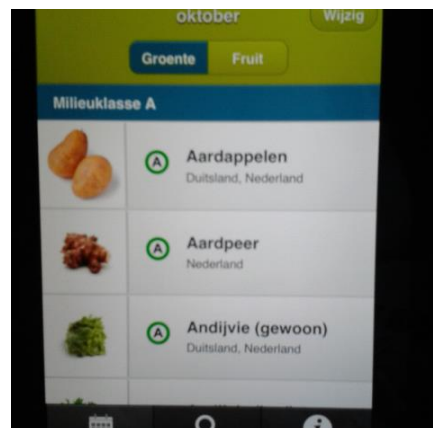
## De Groente- en fruitkalender

- Provided by the Dutch NGO MilieuCentraal
- Classifies vegetables and fruits in each month according to their environmental impact
- Class A is most environmental friendly and Class E is the worst
- Information available for free as leaflet and app

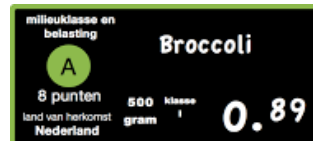


## 'Treatments' in first experiment

- 1) No sustainability information
- 2) Labelling with classification
- 3) Labelling with quantitative information (milieupunten)
- 4) Information provided through the app Groente- en fruitkalender (test version on iPad)

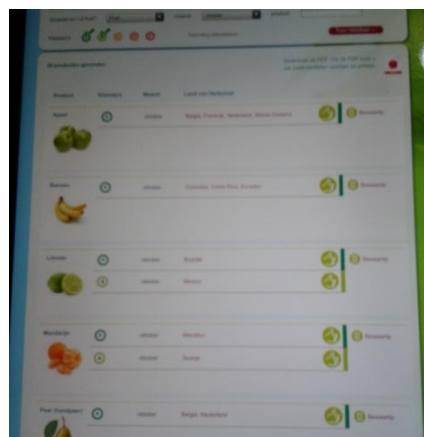


## Labelling



## The new channel (app)

- Test version provided by MilieuCentraal
- Display identical to the original
- 'Tweaked' to have more products in different environmental classes



## 'Field' experiment

- Experiment took place in a retail store (Spar)
- Consumers doing groceries at the retail store were recruited for the experiment
- Experiment lasted three weeks



## Transactions

- Consumers were asked to purchase vegetables and fruits in the virtual supermarket
- Consumers were rewarded with 50% discount on these products in the real supermarket (Spar)



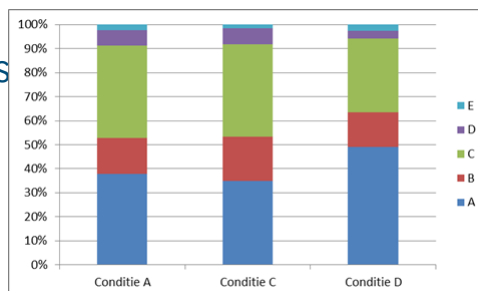
## Preliminary findings

- Many respondents experienced difficulty using the Virtual Supermarket
- Only a few respondents made use of the app
- Labelling with classification information appeared to be preferred



## Testing the hypothesis

- Comparing percentages of A-class products purchased in different treatments
- Relating purchasing behaviour with survey results (information seekingness etc.)



## Further experiments

- Larger supermarkets
- Fram
- True



## More information

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