ICA

Can shared data compete with commercial data?

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Business

ICA
- Grocery retailer
- Started 1917
- No 1 on the market
- 30% of the market share
- 1300 stores

APOTEK ICA
- Pharmacy
- No 2 on the market
- 30% of the market share
- 390 stores

ICA Banken
- Bank
- 700 000 customers

Sweden

Estonia
Latvia
Lithuania

Rimi
- Grocery retailer
- 15-20% of the market share
- 260 stores

Data

Data

- Items
- Spend
- Units
- Price

Data

- Items
- Spend
- Units
- Price

- Total spend

- Total discount

Data

- Store
- Date
- Time

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- Loyalty card

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- Loyalty card

- > 500 million receipts each year
- > 50% of spend identified with loyalty card
- 4,2 million households in Sweden
- > 3 million households in our database
- Save the data for two years

Offers to customers

Example 1: My items

- Specific offers to each customer
- Discounts on items the customer use to buy
- Only loyal customers

Example 2: Discount if you use your loyalty card

- Special offers if the customer use the loyalty card

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Analysis

Example 1: Category Management

Effective category management depends on the role of the category

(Dhar et al., 2001, Journal of Retailing)

Example 1: Category Management

- Penetration = number of households that purchase the product

- Frequency = number of times the product is purchased

(Dhar et al., 2001, Journal of Retailing)

Example 1: Category Management

Frequency of Purchase	Percent of Households Buying	
	High Penetration	Low Penetration
High Frequency		
Low Frequency		

Frequency = number of times the product is purchased

Penetration = number of households that purchase the product

(Dhar et al., 2001, Journal of Retailing)

Example 1: Category Management

Frequency of Purchase	Percent of Households Buying	
	High Penetration	Low Penetration
High Frequency	STAPLES - RTE Cereal - Coffee	NICHES - Yogurt - Macaroni & Cheese
Low Frequency	VARIETY ENHANCERS - Pickles - Rice	FILL-INS - Pancake Mix - Syrup

Frequency = number of times the product is purchased

Penetration = number of households that purchase the product

(Dhar et al., 2001, Journal of Retailing)

Example 2: Shopping missions

Shopping missions: An analytical method for the identification of shopper need states

(Sarantopoulus et al., 2016, Journal of Business Research)

Example 2: Shopping missions

Data:

- Transactions from three different store formats
  - Hypermarket
  - Supermarket
  - Convenience store

Transaction ID — Number of categories — Purchase of a category (Yes/No)

(Sarantopoulus et al., 2016, Journal of Business Research)

Example 2: Shopping missions

Results step 1:

- Five groups of transactions found based on number of categories purchases

(Sarantopoulus et al., 2016, Journal of Business Research)

Example 2: Shopping missions

Results step 2:

- Shopping missions only for the middle group, "relatively concrete"

- Seven shopping missions identified:
  1. Breakfast
  2. Meal
  3. Snacks
  4. Cleaning
  5. Dry meals (Rice, pasta etc.)
  6. Cakes and cookies
  7. Snack food before and after meal (Cheese, cold cooked meats etc.)

(Sarantopoulus et al., 2016, Journal of Business Research)

Limitations

Limitations with this data

- Consumers do not always use their loyalty card when they shop. Cannot track all their purchases

- Cannot track consumers purchases outside the company

- Not allowed to save data for more than 2 years. Cannot follow consumers over longer time periods

- Do not have information about all individuals in the household. Can only track the behavior of the individual/individuals having and using a loyalty card

- Do not have information about all products that are sold in our stores. Cannot identify all products that consumers buy
  - Especially a problem for products not having a 13-digit barcode (Fruit and Vegetables, Meat, Bread etc.)

- More than 20 000 different products in assortment. Hard to maintain the data quality

- Special events effecting the purchases are not tracked
  - Special displays in stores, space allocated, promotions, TV-commercials etc.

Tack