Business Applications

Conjoint Analysis, Part 3

Embedded Premium Promotion: Why It Works and How to Make It More Effective

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In this paper we define an embedded premium (EP) as an enhancement that involves a social cause added on to a product or service. We characterize EP as a sales promotion strategy and juxtapose it with traditional approaches, such as discounts and rebates. Across three experiments, using a nationwide Internet panel and employing stated measures and model-based inference, we find that at low denominations EP is more effective than an equivalent price discount. We describe how an EP's social association may influence consumer choice quite differently than price promotions and, contrary to the asymmetric price promotion effect documented in the promotions literature, we find that EP benefits an unknown brand more than a known brand. Our hierarchical Bayes approach uncovers heterogeneity in EP effectiveness that can be explained by affinity toward the focal charity, personal motivations, and demographic markers. An identifiable segment of individuals prefer the "other" over "self," suggesting possible EP optimization and segmentation strategies. Two such strategies, customization and coverage, are empirically tested, and the former is shown to be very effective. Our findings have broad implications for brand managers with regard to resource allocation and EP program return on investment (ROI), as well as important social welfare implications.

Key words: embedded premium; sales promotion; consumer choice; hierarchical Bayes; ROI; cause-related marketing
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Choice-Based Conjoint Example

Attribute	Levels
Brand	National Bank, Capital One
Interest rate	9.9% APR, 12.9% APR
Payback percentage	1%, 5%
Payback destination	WHO, WHO & Habitat, charity of choice, cash back

Choice-Based Conjoint
Arora and Henderson 2007

- Respondents indicate their charity preference by selecting one cause from five:
  - American Cancer Society, World Health Organization, Habitat for Humanity, SchoolWise, National Wildlife Federation
- Choice-based conjoint, 16 tasks
- Respondent characteristics
  - Usage, cause affinity, demographics

Example Choice Task

2   *If evaluating a credit card offer with a charitable donation option that lets you decide who receives your money, which one of these five organizations would you choose to support? (click one)

- American Cancer Society
- World Health Organization
- Habitat for Humanity
- SchoolWise (for local schools)
- National Wildlife Federation

⮕ **Capital One Visa**	⮕ **Capital One Visa**	⮕ **National Bank Visa**
⮕ **9.9% Fixed APR**	⮕ **12.9% Fixed APR**	⮕ **9.9% Fixed APR**
⮕ **1% of your monthly charges donated to the World Health Organization and Habitat for Humanity**	⮕ **1% of your monthly charges donated to the charity you selected**	⮕ **5% of your monthly charges credited back to you**
A	B	C

Data Collection

National Internet Survey (n = 495)

- 60% female
- 62% married
- 57% over age 44
- 41% w/ at least bachelor's degree
- 24% w/ household income > $75K

Choice Design Matrix Coding

Nine dummy variables

- Brand [x1] (Capital One = 1)
- Interest rate [x2] (9.9% = 1)
- Level * Payee interaction [x3..x9]

Model Specification

$$U_{ij} = \beta_{1,ij}x_1 + \beta_{2,ij}x_2 + \beta_{3,ij}x_3 +$$

Capital One   9.9% APR   1% Cash

$$\beta_{4,ij}x_4 + \beta_{5,ij}x_5 + \beta_{6,ij}x_6 +$$

5% Cash   5% WHO   1% Both

$$\beta_{7,ij}x_7 + \beta_{8,ij}x_8 + \beta_{9,ij}x_9$$

5% Both   1% Choose   5% Choose