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# Dynamics in Chains and Networks

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## SALES PROMOTION ARRANGEMENTS IN THE FMCG CHANNEL

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## ABSTRACT

Sales promotions in FMCG involve some form of coordination/cooperation between manufacturer and retailer. The result is a sales promotion agreement (SPA). First, we examine which elements are agreed upon in SPAs (e.g. goals, budgets, etc.). Second, we explain the differences in SPAs (e.g. the characteristics of the parties and of the product). Third, we will study the success of sales promotions (for the manufacturer, the retailer and the channel) and how this success is related to the nature of the agreement. The present paper deals with the first issue, and contains some preliminary findings with respect to the second issue.

Keywords: agreements, promotions, relationship, channels

## **1. INTRODUCTION**

Sales promotions are a diverse collection of incentive tools designed to stimulate faster and/or larger purchases of products or services by consumers or traders (Kotler, 2000). In this paper we focus on sales promotion businesses within grocery channels, because of:

- The high frequency of sales promotions in this industry.
- The existence of promotion efficiencies and inefficiencies (e.g. Drèze and Bell, 2003). Current sales promotions often do not meet the objectives of the parties involved.

In order to improve sales promotions, it is important to have more insight into the driving forces and success of sales promotions. Our perspective is the sales promotions offered to consumers in grocery stores. These promotions can be initiated by the:

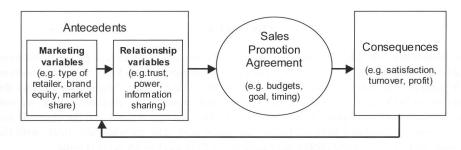
- Manufacturer, e.g. coupons on the package.
- Retailer, e.g. price discounts, feature advertising, contests, displays, etc.
- Manufacturer and retailer together, as a joint activity.

Increasing attention has been given to the interaction between retailers and manufacturers with respect to the coordination of sales and/or brand-driven activities. The channel literature shows that with coordination satisfying results can be obtained for both retailer and manufacturer (e.g. Mulhern and Leone, 1991). However, achieving coordination is difficult, because each party has an incentive that prevents it from achieving the channel optimum (Jeuland and Shugan, 1983). The suboptimality problem in channels has been demonstrated for sales promotions in grocery channels (Wierenga and Soethoudt, 2002). Therefore, it is interesting to study how and why a manufacturer and retailer coordinate their promotional activities in actual sales promotion arrangements. The most important form of interaction between a manufacturer and a retailer is the 'annual meeting', which takes place at the end of the year. In these meetings the parties negotiate the terms of trade, and set the sales promotion agreement (SPA) for the coming year. This agreement is the focus of our study:

What types of SPAs are made, what are the antecedents (marketing variables and relationships), and what are the consequences (profits and satisfaction) of these agreements?

## 2. CONCEPTUAL FRAMEWORK AND RESEARCH QUESTIONS

Figure 1 depicts the framework underlying our research. Antecedents (marketing and relationship variables) influence the SPA that will result in certain actions and consequences, and in turn influence the antecedents of subsequent agreements.





#### **Sales Promotion Agreement**

First, we concentrate on the nature of SPAs, e.g. the circle in Figure 1. Our first question with regard to SPAs is:

• What are the characteristics of SPAs as they actually occur in practice?

## Antecedents

Characteristics of the product and parties can cause differences in SPAs. Effects can be distinguished for:

- The retailer (e.g. type of retailer, number of stores, private label share and market share);
- The manufacturer (e.g. brand equity and market share in the product group);
- The product (e.g. product benefits, shelf-life, buying frequency, promotional intensity).

For example, large manufacturers are expected to agree more with monitoring, and a small retailer needs to allow for more monitoring. Also, we expect that parties involved with fresh produce will agree more on the timing of sales promotions than parties involved with dry groceries, because it is more difficult for manufacturers of fresh produce to adapt their supply and production than for manufacturers of dry groceries.

The study of SPAs should be performed within the context of the manufacturer-retailer relationship, because the extent to which activities are co-ordinated depends largely on the relation between the channel actors (Murry and Heide, 1998). Therefore, we need to take into account effects of the relationship (e.g. on power Frazier and Rody, 1991, and trust Geyskens *et al.*, 1998).

An interesting question is whether marketing and relationship variables have different effects on the SPA. Therefore, we formulate the following research question:

• To what extent do marketing and relationship variables influence SPAs?

#### Consequences

Insight has been gained into the effectiveness, efficiency and satisfaction of sales promotions (e.g. Blattberg *et al.*, 1995; Neslin, 2002). Our research questions are as follows:

• What are the effects of differences in SPA on the consequences, and what type of SPA contributes most to success?

## **3. RESEARCH DESIGN**

In order to provide answers to the research questions, we carried out a survey using a questionnaire, which enabled us to study SPAs from a broad perspective. The questionnaire consisted of the following elements:

- The sales promotion agreement and its outcomes: respondents were asked to indicate which items were agreed upon in the SPA for the year 2003. The following list of items had been compiled based on preliminary interviews with retail/ manufacturer managers and from the literature:
  - Common goal (about the contribution of sales promotions to turnover and brand/store image);
  - Budget of the manufacturer;
  - Budget of the retailer;
  - Type of promotions;
  - Promotion period (timing of sales promotions in the year);
  - Payment method (settling of the discount);
  - Incentive (an additional ex-post discount for the retailer, for example, when a previously established sales target was achieved);
  - Monitoring (of the store environment by the manufacturer);
  - Advertisement (in the retailer magazine);
  - Evaluation.
- Decision making around SPAs (ideas, content, initiative, and timing);
- Interaction processes: frequency of face-to-face contact, type of relationship;
- Characteristics of the parties: private label share, store area (m<sup>2)</sup>, type of store formula, brand type, market share;
- Relationship variables: trust (Kumar *et al.*, 1995), power (Frazier and Rody, 1991) and satisfaction (Geyskens and Steenkamp, 2000).

The questionnaire was sent to category managers of retailers of four product groups: dairy desserts, ketchup/mayonnaise, carbonated beverages, and margarine. The data collection took place from June 2003 until November 2003. Of the questionnaires sent out, 26 were returned from each of two manufacturers; thus we have information from 52 SPAs. The 26 questionnaires returned imply a response rate of 51%.

## 4. EMPIRICAL ANALYSIS

## **Sales Promotion Agreements Defined**

In the questionnaire, the respondents were asked to indicate which of the ten preselected items were agreed upon in the SPA, and whether each had been agreed upon definitively (AD), with reservation (AR), or not at all ( $\overline{A}$ ). If the parties agreed on an item definitively (AD), no negotiations took place about the item for the rest of the year. If the parties agreed on an item with reservation (AR), the agreement was conditional and fle for both parties.

As can be seen from Table 1, items with high scores of AD were budget of manufacturer (39 cases - 81%), and common goal and payment method (both 30 cases - 63

In contrast, items with low scores of AD were budget of the retailer, promotion portype of promotion, and evaluation. Interestingly, the budget of the manufacturer was a upon definitively in most SPAs, whereas the budget of the retailer was agreed definitively in a minority only of the SPAs (8%). Some asymmetry was expected, as it is common for retailers to demand promotion allowances (e.g. Mulhern and Leone, 1991).

Items with high scores on AR were type of promotion in (30 cases - 63%) promotion period (28 cases - 58%). These items are particularly relevant in the ta completion of the SPAs, and through this type of agreement the parties are still in the portor react to market circumstances. Apparently, the type of promotion, promotion period incentives, and evaluation are agreed on per sales promotion, rather than for the full period.

Table 1 Frequency and percentage an item is agreed upon definitively (AD), with reserv (AR), and at all (AD and AR combined) in a SPA. The item score expresses the externation which an item is agreed upon in an SPA (n=48).

	Item	score				1.0111	C Digitized
Item	AD		A	R		AD	+AR
Common Goal	30	63 %	100001	7	35 %	47	98 %
Budget Manufacturer	39	81 %	of Invose	3	17 %	47	98 %
Budget Retailer	4	8 %	1	9	40 %	23	48 %
Type Promotion	8	17 %	3	0	63 %	38	79 %
Promotion Period	6	13%	2	8	58 %	34	71 %
Payment Method	30	63 %	1	2	25 %	42	87 %
Incentive	0	0	2	3	48 %	23	48 %
Monitoring	21	44 %	3581409-4	7	14 %	28	58 %
Advertisement	23	48 %	1	4	29 %	37	77 %
Evaluation	8	17 %	2	3	48 %	31	65 %

In addition to discovering what items are included in SPAs, it is also of interest to any structure can be identified in these agreements. For this purpose, two analyses performed on the SPAs:

- First, for the identification of possible underlying dimensions, a factor analysis was performed.
- Second, we wanted to see if agreement on particular items is necessary to make agreements on other items, i.e. whether there is a hierarchical structure in the items. For this purpose, a Guttman analysis was performed (Guttman, 1944).

Correlation coefficients were computed as input for the factor analysis that result the loadings as depicted in Table 2. For the calculation a new variable was created: 3 = agdefinitively (AD); 2 = agreed with reservation (AR); and 1 = not agreed ( $\overline{A}$ ). The component (variance explained = 44%) characterises SPAs. Apparently, the extent to w the financial implication for the retailer is agreed upon is a pivotal element in SPAs. financial well-being of the manufacturer is a less important characteristic of S represented in component 2.

Component	such an end provide accord		
Component			
1	2	3	alar iyool ayal aya ayaa asalaa ahiin ahiin ahiin
0.720	0.145	-0.018	
0.199	0.767	0.273	
0.838	0.069	0.099	
-0.046	0.128	0.945	
0.421	0.704	0.103	
0.086	0.893	0.188	
0.722	0.193	0.410	
0.405	0.236	0.411	
0.515	0.595	-0.014	
0.533	0.293	0.643	
44%	14%	11%	
	0.199 <b>0.838</b> -0.046 0.421 0.086 <b>0.722</b> 0.405 0.515 0.533	0.720 0.145   0.199 0.767   0.838 0.069   -0.046 0.128   0.421 0.704   0.086 0.893   0.722 0.193   0.405 0.236   0.515 0.595   0.533 0.293	0.720 0.145 -0.018   0.199 0.767 0.273   0.838 0.069 0.099   -0.046 0.128 0.945   0.421 0.704 0.103   0.086 0.893 0.188   0.722 0.193 0.410   0.405 0.236 0.411   0.515 0.595 -0.014   0.533 0.293 0.643

Table 2. Rotated component matrix, loadings of the items in SPAs on the three components.

The variables are scored as follows: 3=AD; 2=AR; 1=Ā.

Cut-off for loadings >.70 (.75 in a sample of 50, Hair et al., 1998)

For identification of a hierarchy between items in SPAs, the Guttman analysis was performed. The analysis implies the presence of hierarchy of a criterion (agreement on an item) in a set of cases, e.g. an item is agreed upon if a successive item is also agreed upon. The response categories used were in the form of yes/no answers (Yes = AD+AR; No =  $\overline{A}$ ). The scaling coefficients (Hij coefficients) for the items were then calculated (Mokken, 1971). Table 3 depicts these coefficients for the items included in SPAs. The final row summarises the frequency that an item is dominant over another item. For example, type of promotion is agreed upon when budget of the manufacturer, common goal, and payment are also agreed upon.

Table 3. Scaling coefficients (Hij's) for items in SPAs. Per column the coefficient indicates the extent to which the criterion (agreement on the item) for the item in the column is more difficult to fulfil than for the row item. Hij scores  $\geq 0.4$  are marked italic and bold, except for circular values (H=0.21).

Hij	Cogoal	Budgmf	Турерр	Period	Paymen	Monito	Advert	Evalua	1	
		Budgrt			Incent					
Cogoal		1	1	1	1	1	1	1	1	1
Budgmf 1		1	1	1	1	1	1	1	1	
Budgrt	0.0	0.0		0.0	0.3	0.1	0.7	0.2	0.2	0.3
Турерр	0.0	0.0	0.0		0.0	0.1	0.0	0.0	0.0	0.0
Period	0.1	0.1	<b>0.</b> 7	0.1		0.4	1.0	0.4	0.4	0.7
Paymen	0.1	0.1	0.4	0.4	0.5		0.8	0.2	0.3	0.7
Incent	0.0	0.0	0.7	0.0	0.4	0.2		0.2	0.3	0.5
Monito	0.0	0.0	0.4	0.0	0.2	0.1	0.4		0.2	0.4
Advert	0.1	0.1	0.6	0.1	0.6	0.3	1.0	0.5		0.7
Evalua	0.0	0.0	0.5	0.0	0.5	0.4	1.0	0.5	0.4	
Total			7	3	4	2	7	5	2	5

The response categories used were in the form of yes/no answers (Yes = AD+AR; No =  $\overline{A}$ ).

Clearly, the budget of the retailer and incentives, both seven dominant coefficients, are most difficult to agree upon. Therefore these items have the highest position in the hierarchy: these are the key elements in SPAs. In a study by Murry and Heide (1998) several factors were raised for attractive SPAs for the retailer. In that study as well, incentives appeared to be very important.

Hierarchical structure in SPAs:

High Budget Retailer / Incentive Evaluation Monitoring Period Type of Promotion Payment / Advertisement Budget Manufacturer / Common Goal Low

## **Determinants of Sales Promotion Agreements**

A preliminary analysis of the effects of product-group characteristics on the ten items of SPAs was performed. Table 4 depicts the significant relations. Differences in product-groups have an effect on agreement of the budget of the manufacturer (F=3.55, p<0.05), promotion period (F=6.54, p<0.05), and incentive (F=5.41, p<0.05). For beverages, the parties make significantly more agreements on these items, than they do for desserts. The manufacturers of beverages are global and wealthy players compared to the manufactures of dairy desserts. This makes it easier for the retailer to obtain a promotion budget from the manufacturers of beverages. However, these manufacturers can enforce agreement on more items, apparently the promotion period, which is advantageous for the manufacturer.

Table	4.	Relation	between	product-group	(dairy	desserts,	carbonated	beverages,
ketchuj	p/mc	ayonnaise,	and marga	rine) and an item	agreed	upon in the	e SPA.	

	F	Sig.	Product-group	Mean	Std. Error
Budget of manufacturer	3.55	.022	Desserts	2.53	.103
andury21 (Yey/b/			Beverages	3.00	.118
			Ketchup	2.88	.107
			Margarine	3.00	.301
Promotion period	6.54	.001	Desserts	1.47	.131
and Pass. For the Menseland			Beverages	2.08	.150
			Ketchup	1.88	.135
			Margarine	3.00	.383
Incentives	5.41	.003	Desserts	1.24	.108
			Beverages	1.85	.124
			Ketchup	1.50	.111
			Margarine	1.00	.315

p<0.05

#### 5. CONCLUSIONS

This paper presented the items that are agreed upon in SPAs, from a retailer perspective. Asymmetry is present in agreement on the budgets of the parties. The extent to which the financial implications for the retailer are agreed upon is a pivotal element in SPAs, and also the most difficult item as it is not agreed upon before there is agreement on the other items. This result could be caused by the fact that the analysis is performed from the perspective of the retailer. Therefore it would be interesting to know if the same patterns emerge from a manufacturer perspective.

#### REFERENCES

Blattberg, R. C., R. Briesch and E. J. Fox, 1995. How Promotions Work. Marketing Science. 3, 122-132.

Drèze, X. and D.R. Bell, 2003. Creating Win-Win Trade Promotions: Theory and Empirical Analysis of Scan-Back Trade Deals. Marketing Science. 1, 16-39.

Frazier, G. L. and R.C. Rody, 1991. The Use of Influence Strategies in Interfirm Strategies in Interfirm Relationships in Industrial Product Channels. Journal of Marketing. 55, 52-69.

Geyskens, I., J.E.M.Steenkamp and N. Kumar, 1998. Generalizations about trust in marketing channel relationships using meta-analysis. International Journal of Marketing, 15, 223-248.

Geyskens, I. and J.E.M. Steenkamp, 2000. Economic and Social Satisfaction: Measurement and Relevance to Marketing Channel Relationships. Journal of Retailing. 1, 11-32.

Guttman, L., 1944. A basis for scaling qualitative data. American Sociological Review. 9, 139-150. (reprinted in G.F. Summers (ed.), 1970. Attitude Measurement. Chicago: Rand McNally, 174-186.

Hair, J.F., R.E. Anderson, R. L. Tatham and W.C. Black, 1998. Multivariate data analysis with readings Prentice-Hall International Inc. Fifth edition.

Jeuland, A.P. and S.M. Shugan 1983. Managing Channel Profits. Marketing Science. 3, 239-272.

Kotler, P., 2000. Designing Direct-marketing, Sales Promotion en PR Programs. Marketing Management: Analysis, planning, implementation and control. Englewood Cliffs, New York: Prentice-Hall, Inc.

Kumar, N., L.K. Scheer and J.E.M. Steenkamp, 1995. The Effects of Supplier Fairness on Vulnerable Resellers. Journal of Marketing Research. 32, 54-65.

Mokken, R.J., 1971. A Theory and Procedure of Scale Analysis. The Hague; Mouton; Berlin: De Gruyter.

Mulhern, F. J. and R.P. Leone, 1991. Implicit Price Bundling of Retail Products: a Multiproduct Approach to Maximizing Store Profitability. Journal of Marketing, 55, 63-76.

Murry, J. P. and J.B.Heide, 1998. Managing Promotion Program Participation with Manufacturer-Retailer Relationships. Journal of Marketing, 62, 58-68.

Neslin, S.A. 2002. Sales Promotion. Relevant Knowledge Series. Marketing Science Institute, Cambridge, Massachusetts.

Wierenga, B. and J.M. Soethoudt, 2002. Suboptimality of Sales Promotions and Improvement through Channel Coordination. Erasmus Research Institute of Management (ERIM). Report Series Research in Management.

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