Тема 2. “Сигналы качества» в маркетинге

1. Асимметрия информации и проблема неблагоприятного отбора
2. Сигналы качества: проблема достоверности
3. Маркетинговые исследования «сигналов качества»

Литература для изучения темы

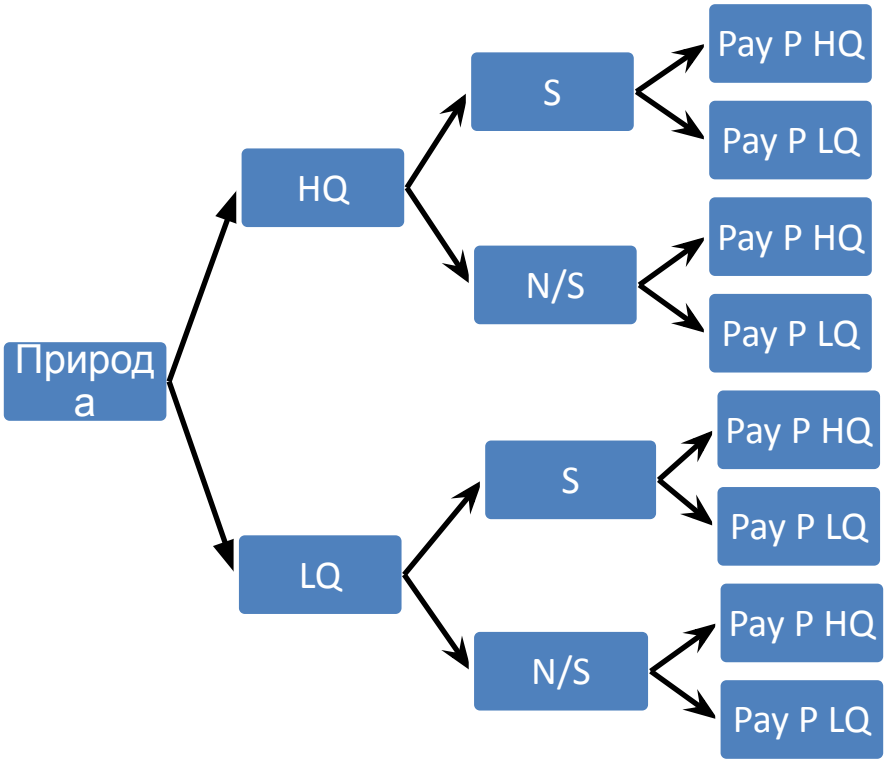
- Church & Ware. Industrial Organization: A Strategic Approach, ch. 6. Market Power and Product Quality
- Kirmani A., Rao A.R. No Pain No Gain; A Critical Review of the Literature on Signalling Unobservable Quality. Journal of Marketing, 2000, vol. 64, No 2
- Авдашева С. Спрос на сертификацию: теория и данные о модернизации российских предприятий. Вопросы экономики, 2009, № 11.
- Материалы презентации

Асимметрия информации о качестве

Akerlof, 1970. Неблагоприятный отбор.

- Два пути выявления информации:
- Сканирующие контракты (скрининг), исходит от принципала
- Сигналы качества, исходят от агента с продуктом высокого качества.
- Возможности идентификации качества с помощью «сигналов» (Spence, 1973). Образование как сигнал качества.
- Равновесие Байеса-Нэша.
- Разделяющее vs. объединяющее равновесие
- Пусть далее везде
- HQ – высокое качество
- LQ - низкое качество
- cH , cL – издержки производства товара высокого и низкого качества соответственно cH > cL

Последовательность игры в условиях неполноты информации. Какое правило позволит *пересмотреть* вероятность принадлежности агента к типу HQ?



Пересмотр оценок вероятности типа агента по правилу Байеса в зависимости от его хода

Условие разделяющего равновесия:

$\rho(HQ|S) = 1$

А для этого:

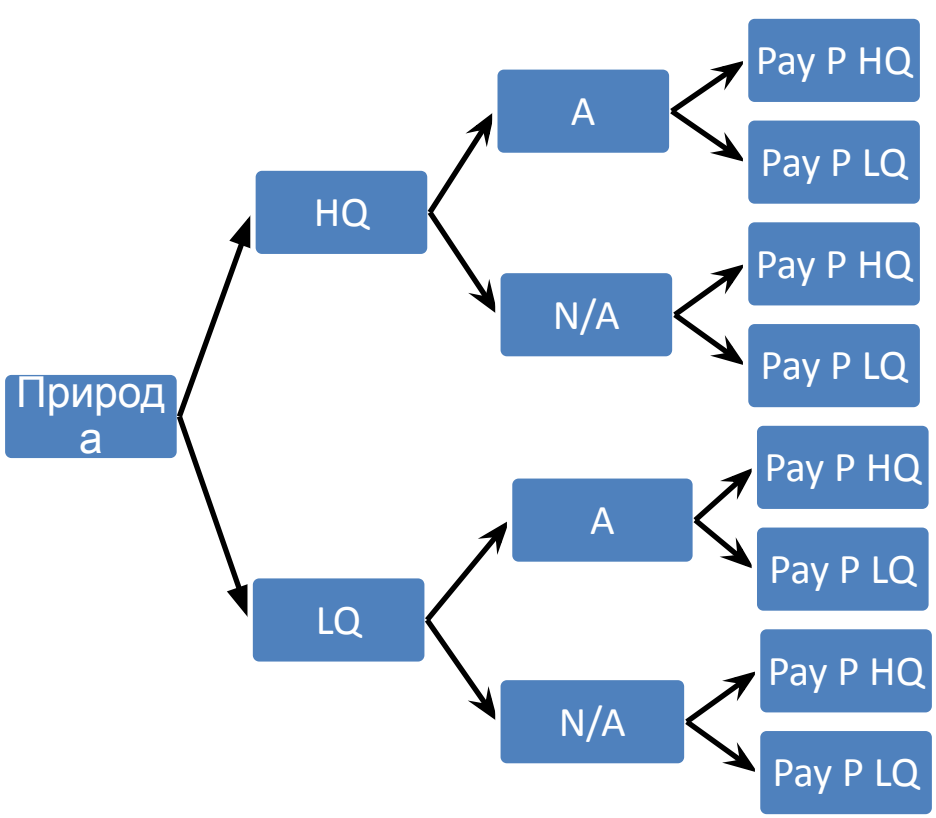
(1) Продавцу товара высокого качества выгодно предоставлять сигнал;

(2) Продавцу товара низкого качества невыгодно предоставлять сигнал

Реклама как сигнал качества

- Реклама - «расточительные расходы»?
- Не может ли реклама быть «сигналом качества»? Если да, то при каких условиях?
- Формулировка и смысл ограничения совместимости стимулов и ограничения участия
- Единичный спрос одного покупателя
- Θ – готовность платить за товар высокого качества
- 0 – готовность платить за товар низкого качества
- c_H , c_L – издержки производства товара высокого и низкого качества соответственно $c_H > c_L$
- A - сумма расходов на рекламу
- $A \geq (\Theta - c_L)$ – ограничение совместимости стимулов («A достаточно высоки»)
- $A \leq (\Theta - c_H) + \delta(\Theta - c_H)$ - ограничение участия
- Для выполнения ограничения участия необходимы повторные покупки! Хотя бы 2 периода
- $(\Theta - c_H) + \delta(\Theta - c_H) \geq (\Theta - c_L)$
- $\delta \geq (c_H - c_L)/(\Theta - c_H)$

Если сигналом является реклама: структура выигрышей (*указаны выигрыши только для продавца)



$\Theta - c_H - A + \delta(\Theta - c_H); \ldots$
$\Theta - c_H + \delta(\Theta - c_H); \ldots$
$\Theta - c_L - A; \ldots$
0: 0

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TABLE 1
Characteristics of Signals

	Default-Independent Signals		Default-Contingent Signals	
	Sale-Independent	Sale-Contingent	Revenue-Risking	Cost-Risking
Examples	Advertising Brand name Retailer investment in reputation	Low introductory price Coupons Slotting allowances	High price Brand vulnerability	Warranties Money-back guarantees
Characteristic	Publicly visible expenditures before sale	Private expenditures during sales transaction	Future revenues at risk	Future costs at risk
Repeat purchase	Is important	Is important	Is important	Irrelevant
Monetary loss	Fixed	Variable or semi-variable	In the future	In the future
Secondary benefits	Buyer does not receive direct utility	Buyer receives direct utility	Buyer does not receive direct utility	Buyer receives direct utility
Appropriate when	Buyer cannot be identified easily	Buyer can be identified easily	Frequently purchased nondurables	Durables
Potential for abuse by consumer	None	High	None	High

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TABLE 2
A Sampling of Empirical Signaling Research

Authors	Type of Signal	Context	Findings
Sale-Independent Default-Independent Signals			
Archibald, Haulman, and Moody (1983)	Advertising	Analysis of secondary data correlating actual prices and objective advertising with published ratings of quality.	Advertising signals a better buy after quality ratings are published.
Caves and Greene (1996)	Advertising and high price	Analysis of secondary data correlating actual prices and advertising outlays with *Consumer Reports* ratings of quality.	Advertising is a source of information rather than a signal of quality. Price is a signal of quality for convenience goods.
Erdem (1998)	Umbrella branding	Analysis of scanner panel data for toothpaste and toothbrushes.	Umbrella brand extensions are expected to have the quality of the parent brand. Low-quality extensions have negative spillover effects on the parent brand.
Erdem and Swait (1998)	Brand name/equity	Survey data from undergraduate students analyzed by LISREL for two categories (jeans and juice).	The consistency and clarity of the brand signal are positively related to signal credibility. Signal credibility is positively related to perceived quality.
Kirmani and Wright (1989)	Advertising	Multiple experiments using university staff as subjects.	High-advertising expense leads to higher quality perceptions, but this belief can be undermined.
Kirmani (1990)	Advertising	Experiment manipulating advertisement size with university staff as subjects.	High-advertising expenditure and quality perceptions display an inverted U relationship as extremely high levels of expenditure suggest that the firm is desperate.

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Kirmani (1997)	Advertising	Experiment varying ad repetition and color using student subjects.	There is an inverted U relationship between repetition and perceived quality for color but not black-and-white advertisements.
Mizuno and Odagiri (1989)	Advertising	Computer simulation.	Signaling predictions hold in the presence of consumer learning.
Rotfeld and Rotzoll (1976)	Advertising	Analysis of secondary data correlating actual advertising outlays with published ratings of quality.	Advertising is correlated with quality when the sample contains all brands but not when the sample contains only nationally advertised brands.
Sale-Contingent Default-Independent Signals			
Dawar and Sarvary (1997)	Low introductory price	Experiment manipulating separating, pooling, and ambiguous equilibria with low and high introductory prices using student subjects.	Purchase intentions are consistent with signaling theory, but quality judgments are not.
Rao and Mahi (2000)	Slotting allowances	Survey of grocery store buyers' tendency to charge slotting allowances for stocking new products.	Slotting allowances do not signal manufacturers' confidence in new product demand but are charged by large retailers to relatively small manufacturers.
Revenue-Risking Default-Contingent Signals			
Gerstner (1985)	High price	Analysis of secondary data correlating product category prices with *Consumer Reports* ratings.	Price–quality correlations vary considerably across product categories.
Rao, Qu, and Ruekert (1999)	Brand names	Multiple experiments on mall-intercept shoppers' perceptions in a brand alliance context.	Brands can signal quality on the basis of their investments in reputation as well as their vulnerability to future sanctions, even when they lack a reputation.

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Authors	Type of Signal	Context	Findings
Tellis and Wernerfelt (1987)	High price	Meta-analysis of existing studies that report price–quality correlations.	Price–quality correlations tend to be higher for durable products because consumers are more quality-sensitive for such products.
Cost-Risking Default-Contingent Signals			
Boulding and Kirmani (1993)	Warranties	Three-factor experimental test of the impact of warranties for reputable and reputation-less computers on MBA student sample.	Warranties signal unobservable quality when they are enforceable.
Kelley (1988)	Warranties	Analysis of secondary data correlating warranties with *Consumer Reports* ratings of quality.	Warranties are positively correlated with quality.
Wiener (1985)	Warranties	Analysis of secondary data correlating warranties with *Consumer Reports* ratings of quality.	Warranties are an accurate signal of product reliability.