


# Pricing Innovative Products

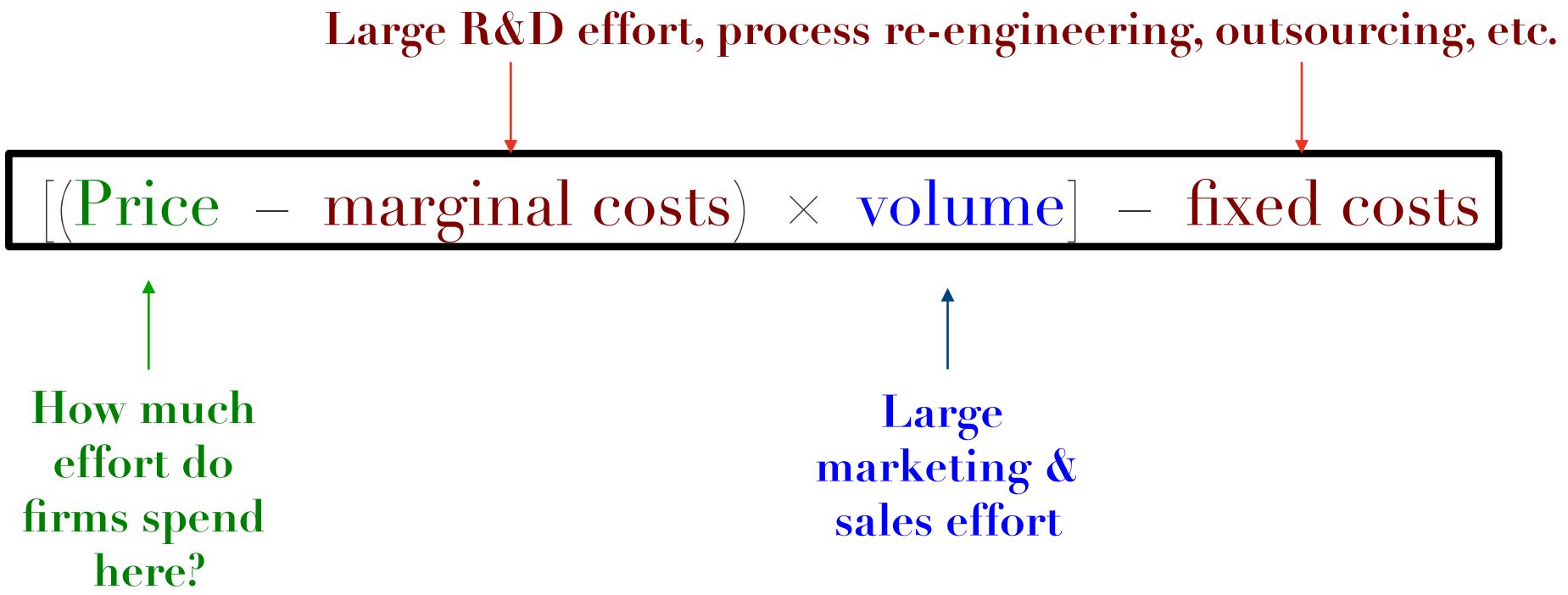

## Pr. Luc Wathieu

Georgetown University McDonough School of Business


## TiasNimbas Business School
## Innovation Challenges 2011

# LESSONS FROM THE CASE

## Pricing is Often an Afterthought



# … But it Beats All Other Profit Levers

| | *Profit Driver* | | *Profit* | | |
|---|---|---|---|---|---|
| | Old | New | Old | New | |
| **Price** | €100 | €110 | €10m | €20m |  +100% |
| **Variable unit cost** | €60 | | | | |
| **Sales volume** | 1m | | | | |
| **Fixed costs** | €30m | | | | |

Dolan, R.J. and H. Simon (1996), *Power Pricing*

# … But it Beats All Other Profit Levers

| | *Profit Driver* | | *Profit* | | |
|---|---|---|---|---|---|
| | Old | New | Old | New | |
| **Price** | €100 | €110 | €10m | €20m |  +100% |
| **Variable unit cost** | €60 | €54 | €10m | €16m |  +60% |
| **Sales volume** | 1m | 1.1m | €10m | €14m |  +40% |
| **Fixed costs** | €30m | €27m | €10m | €13m |  +30% |

Dolan, R.J. and H. Simon (1996), *Power Pricing*

# THE STORY OF KATHON MWX



# Industrial biocide





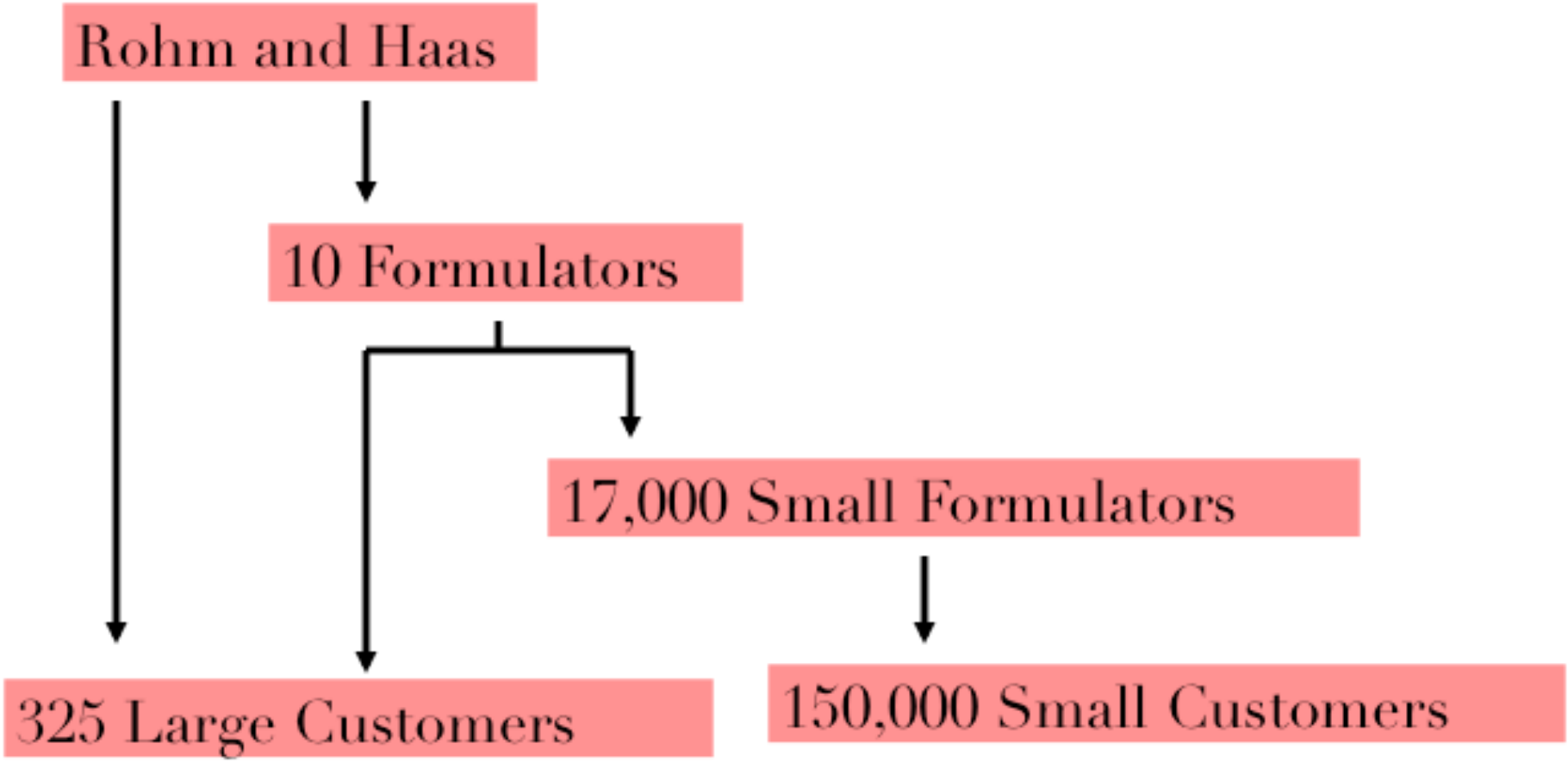
ROHM AND HAAS

# Kathon MWX




- Safe and easy to use on small metalworking fluid tanks
- Will extend metalworking fluid lifetime
- One teabag can extend the life of a 200 liter tank by 50%
- Manufacturing cost
  = 50 cents




Rohm and Haas
10 Formulators
17,000 Small Formulators
325 Large Customers
150,000 Small Customers

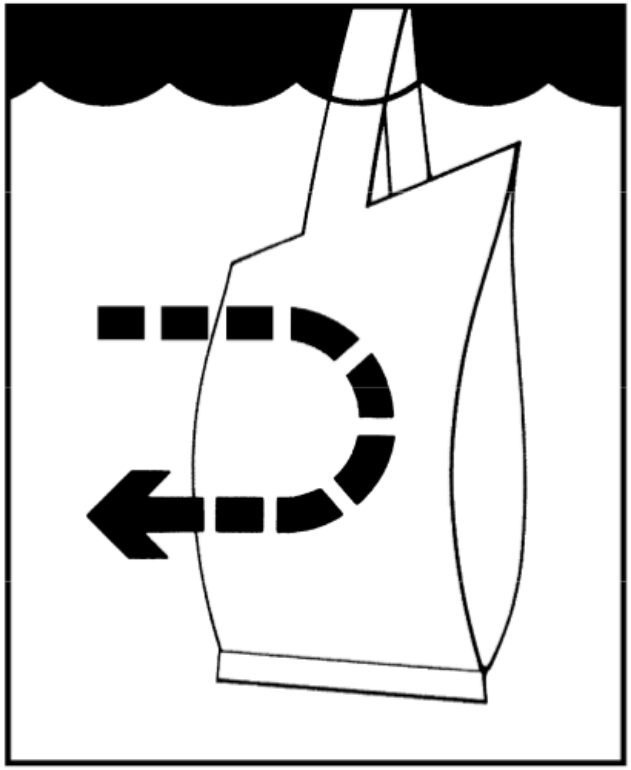





KOMATSU
22 8:35PM

# Marketing Plan

- 150 teabags in a pack
- Sold through 10 largest distributors
- Branded Kathon MWX
  (no private label)
- Price to customer is $2 per teabag
- Advert. in 40 specialized journals
- Coupon for sample, datasheet, flyer



**RESULT: 70 packs sold in six months, 200 requests for sample**

# What's Wrong?

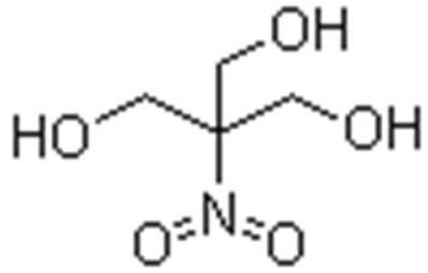
Do you want to know more about…

- competitors?

-distributors?

-customers?

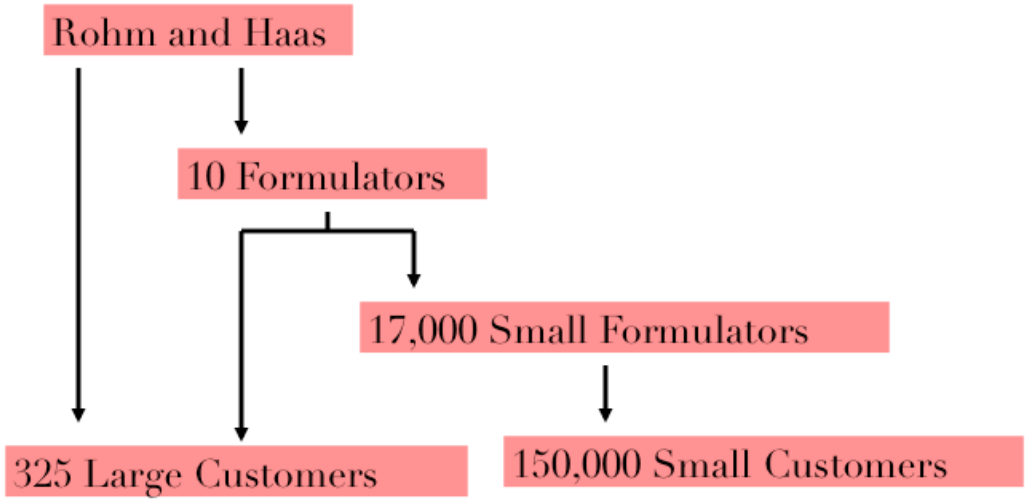
# Competition






- Tris-Nitro Tablets
- 9 tablets do the same work as one Kathon teabag
- Each tablet is sold for $1

# Distribution




- fluid is replaced 6 times a year instead of 12 times a year thanks to Kathon MWX
- loss of $70 revenue for every small customer
- compensated by $2 x 12 = $72 in biocide revenue….

*NO INCENTIVE TO SELL*
*UNLESS THE PRICE IS AT LEAST $6!*

# Value for the Customer

**Benefit**

- Saving the cost of buying new metalworking fluid

  (7 cents per liter)

**Value created by each teabag**

- $7

# Value for the Customer

**Benefit**

- Saving the cost of buying new metalworking fluid

  (7 cents per liter)

- Saving the cost of disposing spoiled metalworking fluid

  (34 cents per liter)

**Value created by each teabag**

- $7

# Value for the Customer

**Benefit**

- Saving the cost of buying new metalworking fluid

  (7 cents per liter)

- Saving the cost of disposing spoiled metalworking fluid

  (34 cents per liter)

**Value created by each teabag**

- $7



- $34

# What Happened?

# LESSONS FROM THE CASE

"The prices we charge should cover full unit costs and enable us to earn the desired rate of return"





# But…

The most common pricing method (approx. 60% of firms) is to mark up average total unit cost by some constant $m$ !

*Why?*

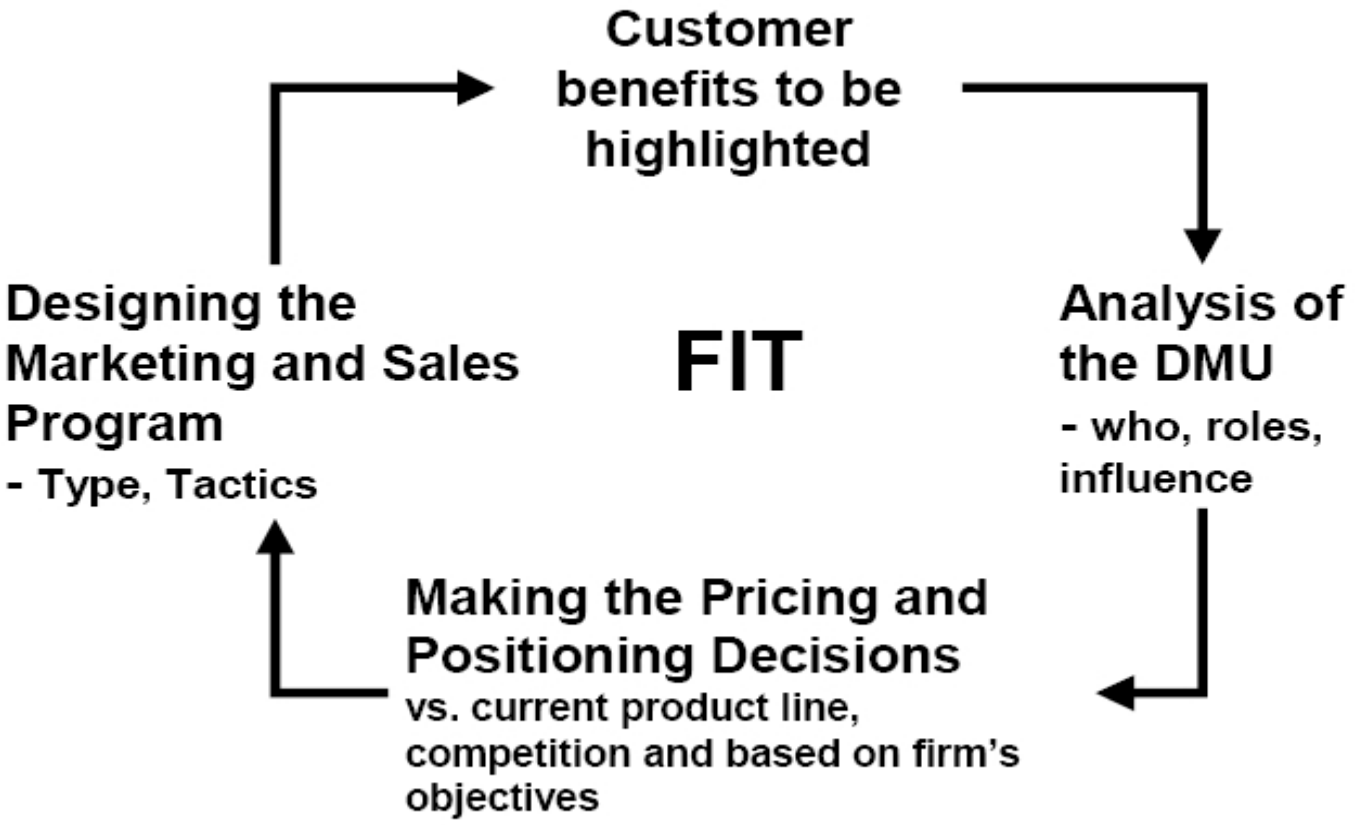
"Measuring costs is easy, measuring demand is hard"

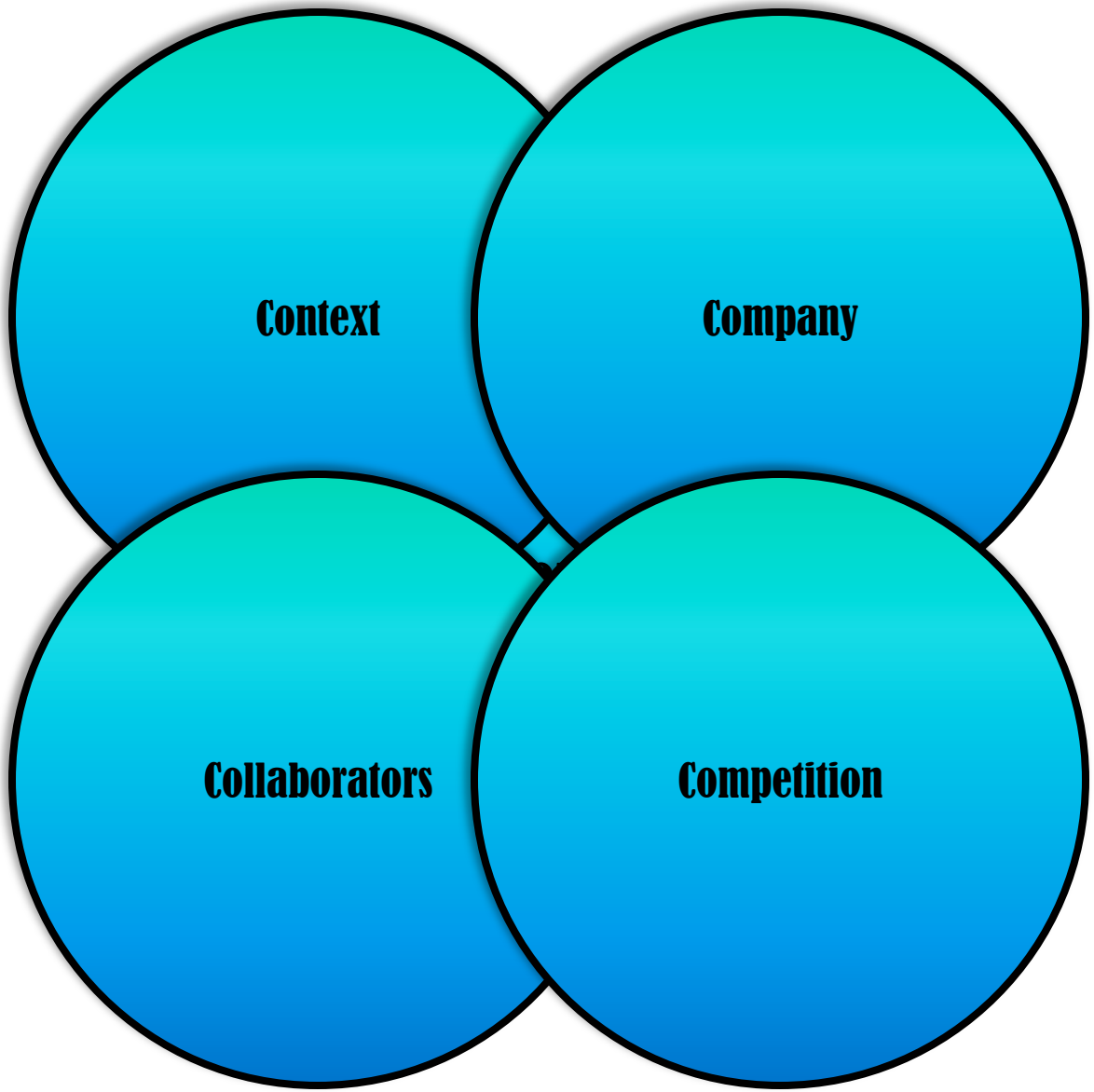
"Costs are real, demand is ambiguous"

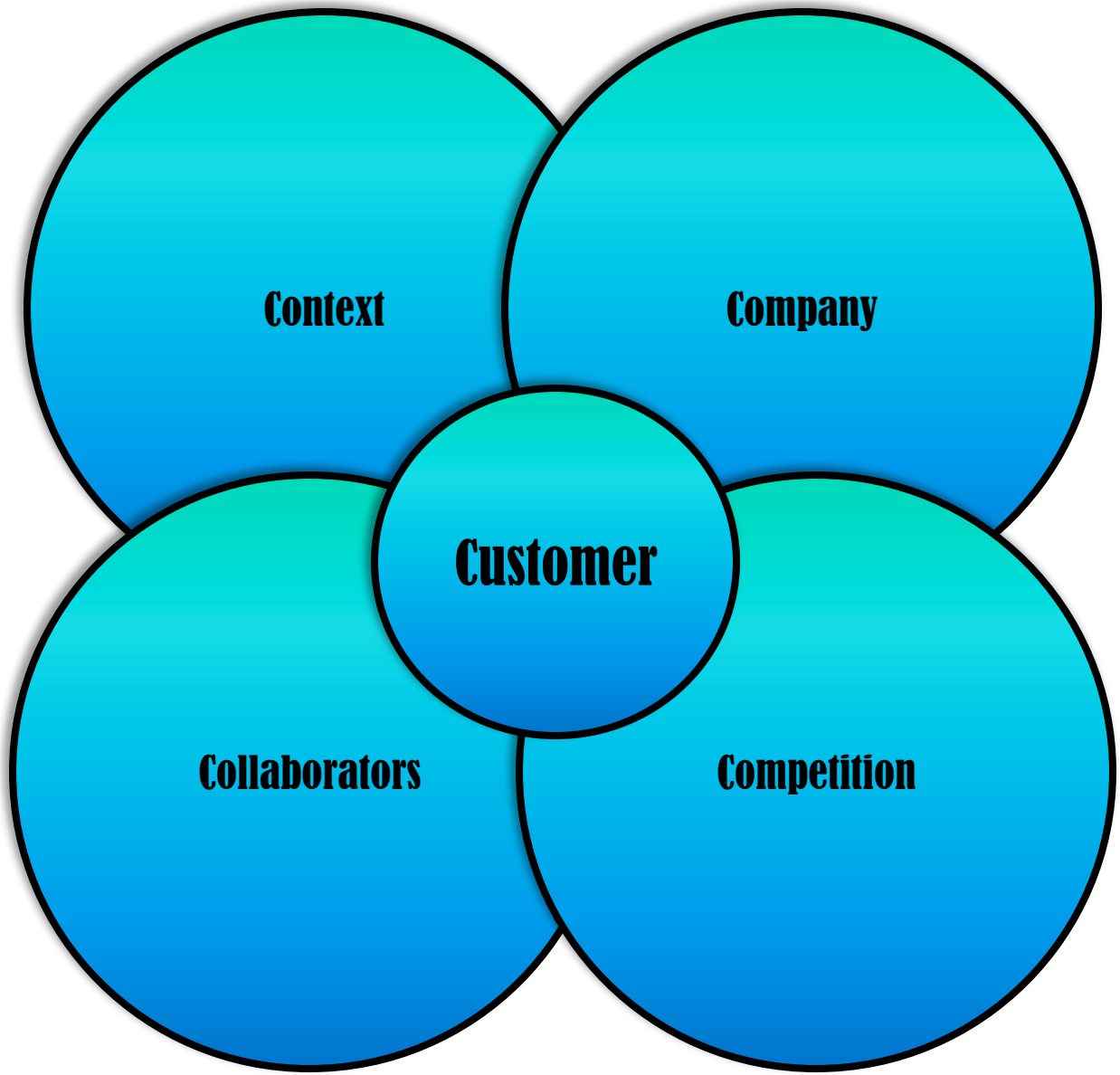
"Keeps the competition off my back"

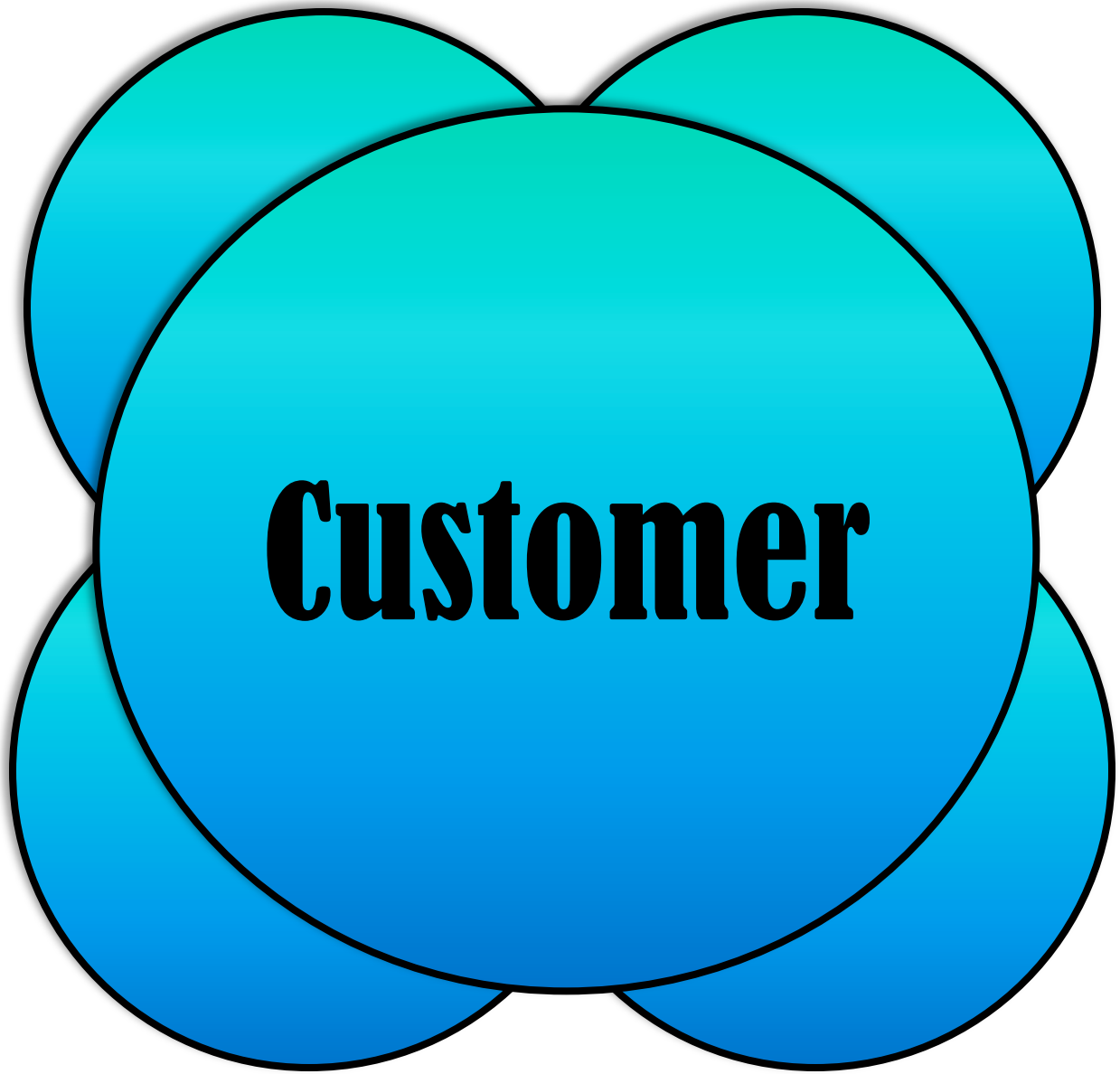
"Keeps the boss off my back"

# It's More Complicated

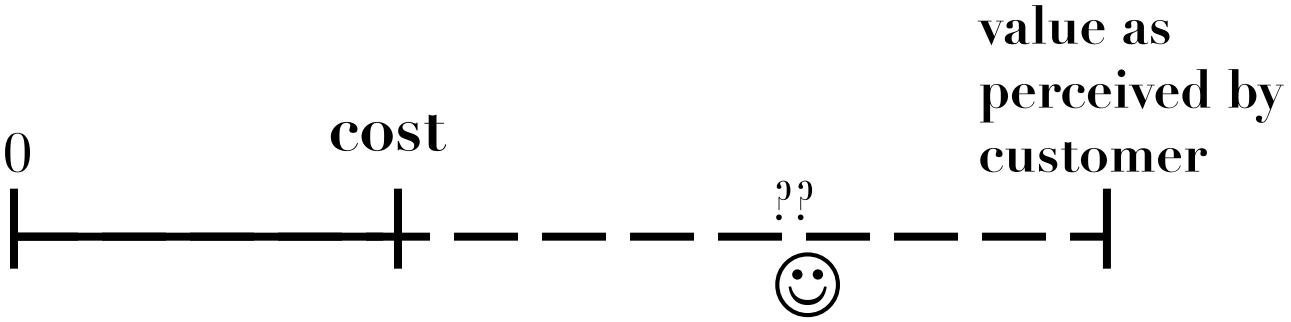



Context
Company
Collaborators
Competition


Context
Company
Customer
Collaborators
Competition


Customer

# The Marketing Approach To Pricing

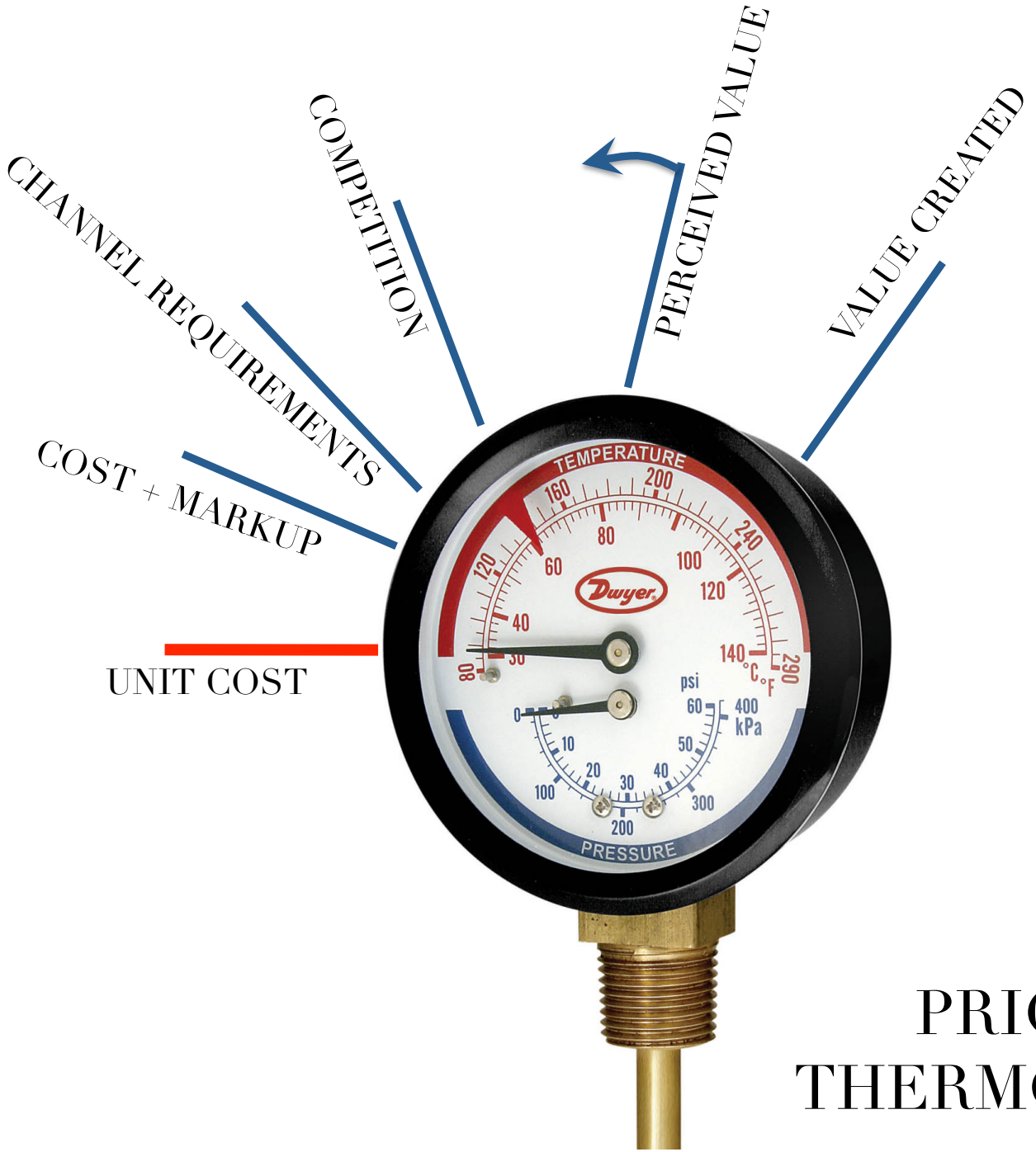



*VALUE PRICING*

*1. Create value*

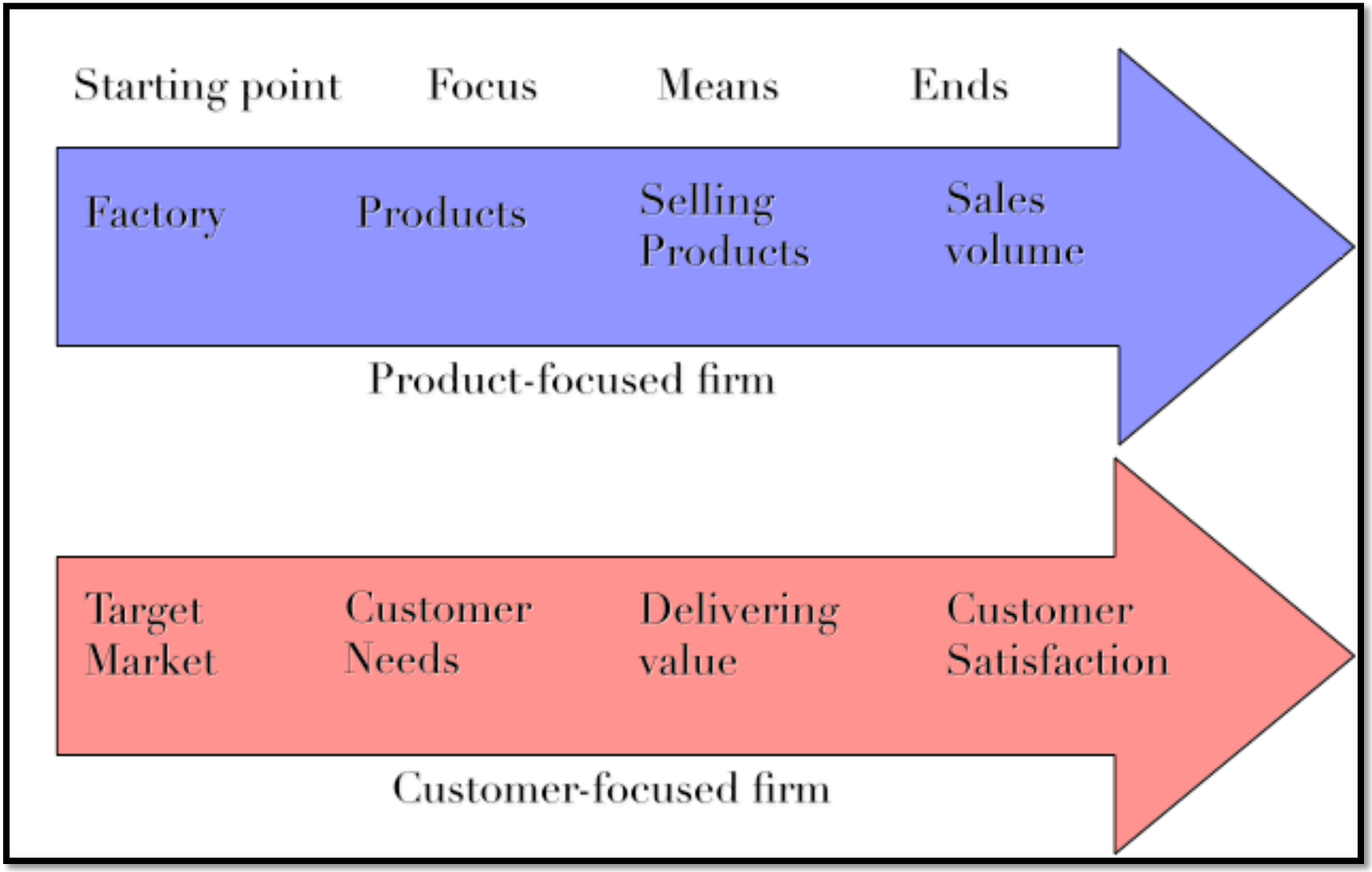
*2. Raise awareness of value*

*3. Commit to an acceptable sharing point as close to perceived value as possible*




# PRICING THERMOMETER

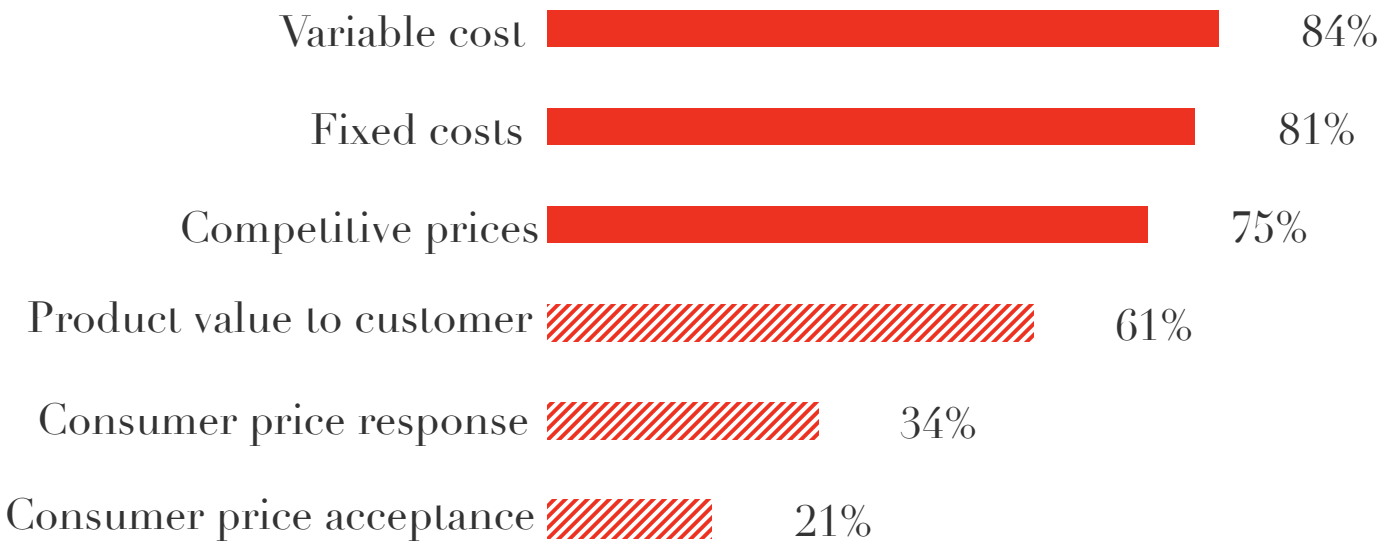
# The Logic of Customer Focus



# TOOLBOX: ASSESSING VALUE CREATED AND PERCEIVED VALUE



*Percentage of marketing managers who think they are well informed on . . .*



# Assessing Economic Value (1)

**"Laddering"**



- Take Baseline Competition
- Identify Differentiating Feature
- Understand the Underlying Benefit Associated with that Feature
- Research the Consumer Cost Attached to that Benefit

# DeWalt Power Tool




*"What do you think is so different about DeWalt tools?"*

Yellow color

Repair Plan

# DeWalt Power Tool




"Why do you care for that?"

Be respected

Make a living

Stands out, visible

"Why is that important?"

Always on the job

"What do you think is so different about DeWalt tools?"

Yellow color

Repair Plan

# DeWalt Power Tool




$$$$$$ ??

$$$$$$ ??

Stands out, visible

Always on the job

"Why is that important?"

"What do you think is so different about DeWalt tools?"

Yellow color

Repair Plan

# Assessing Economic Value (2)

## "Van Westendorp's Price Sensitivity Meter"

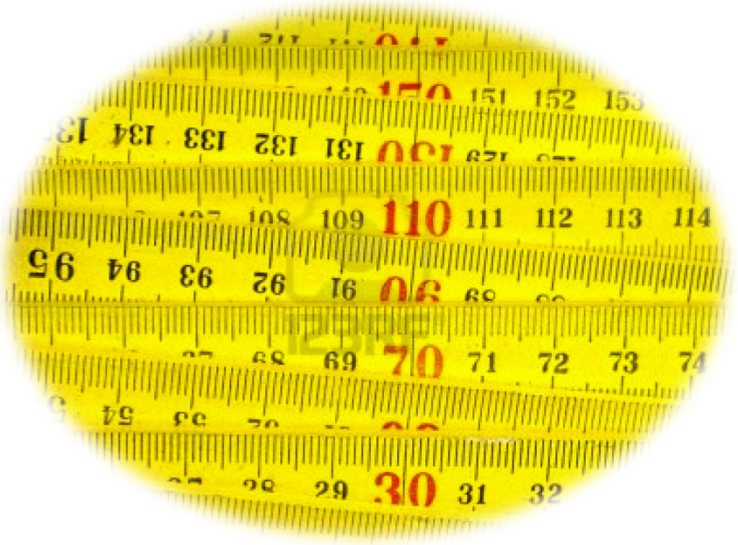
"What price for this product would you consider…

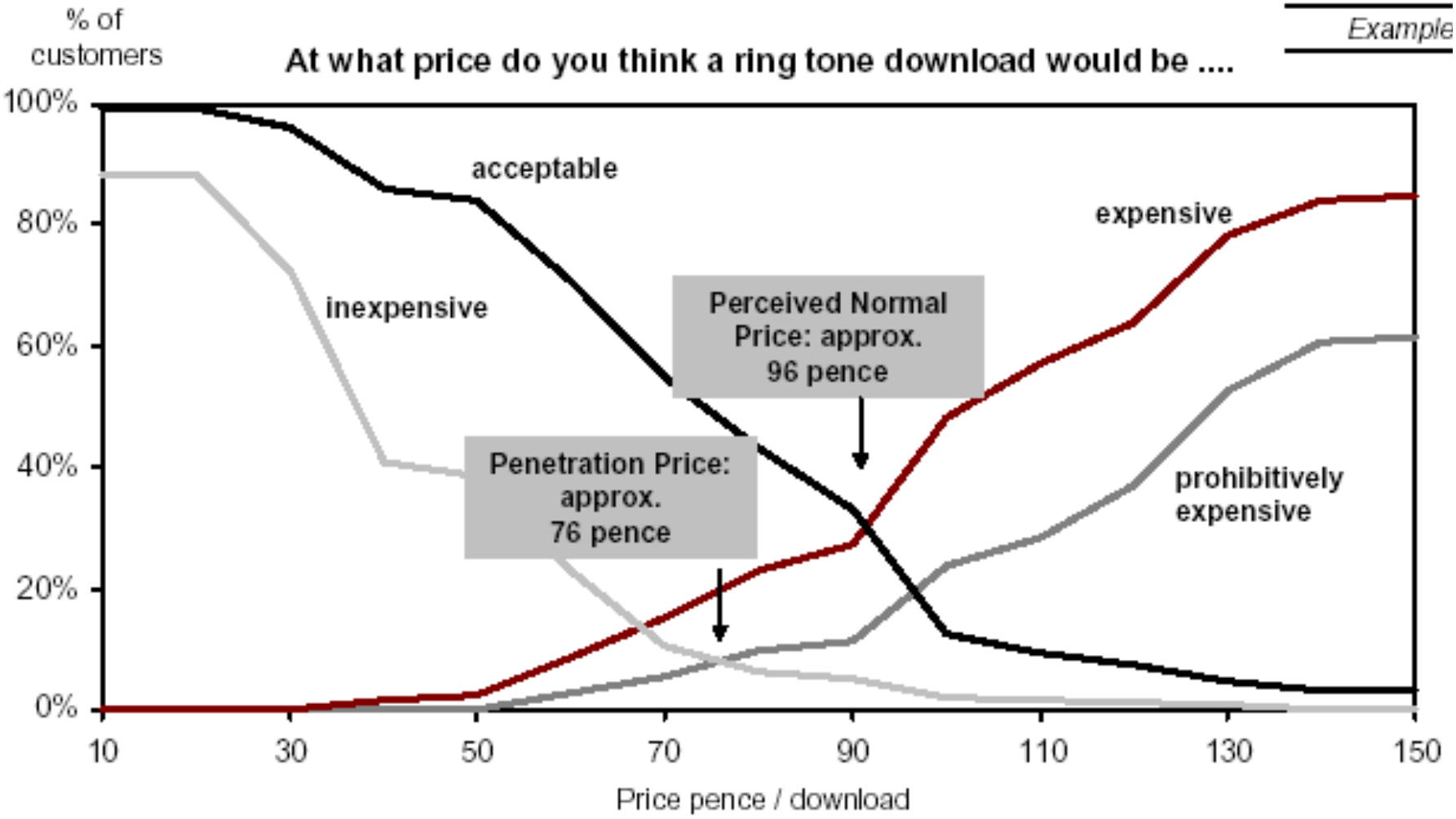
Inexpensive?

Acceptable?

Expensive?

Prohibitively Expensive?"




Example
% of customers
At what price do you think a ring tone download would be ....
100%
80%
60%
40%
20%
0%
acceptable
inexpensive
expensive
prohibitively expensive
Perceived Normal Price: approx. 96 pence
Penetration Price: approx. 76 pence
10
30
50
70
90
110
130
150
Price pence / download

# Eliciting Perceived Value (1)



**What is your willingness to pay W?**

# Eliciting Perceived Value (1)



## The BDM Willingness To Pay Elicitation Method

(Becker-DeGroote-Marschak or BDM method of willingness to pay elicitation http://en.wikipedia.org/wiki/Becker_DeGroot_Marschak_method)

"You have a chance to buy {our product} without spending more money than you truly want to. The buying price, P, will be drawn at random in the range {price range}

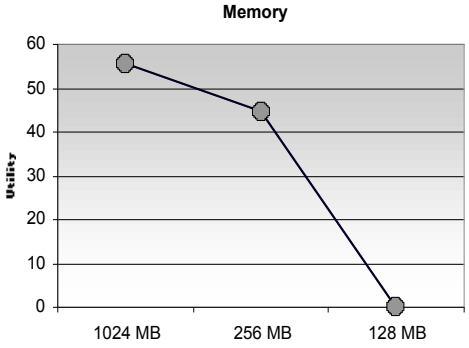
**What is your willingness to pay W? Knowing that…**

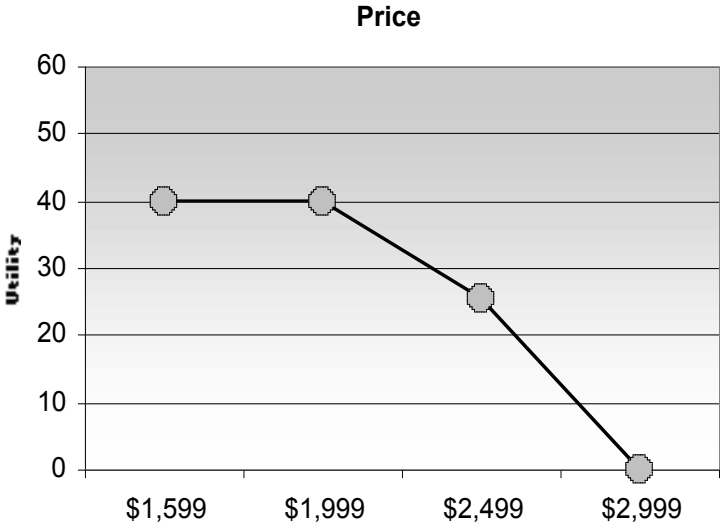
If $P \leq W$; then you will need to buy the product and pay price P

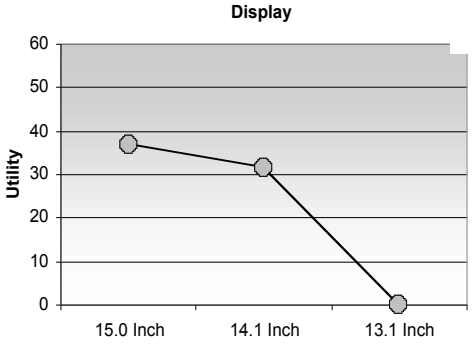
If $P \geq W$; then you can't buy the product

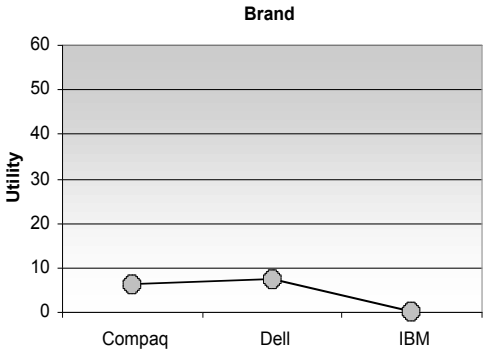
# Eliciting Perceived Value (2)

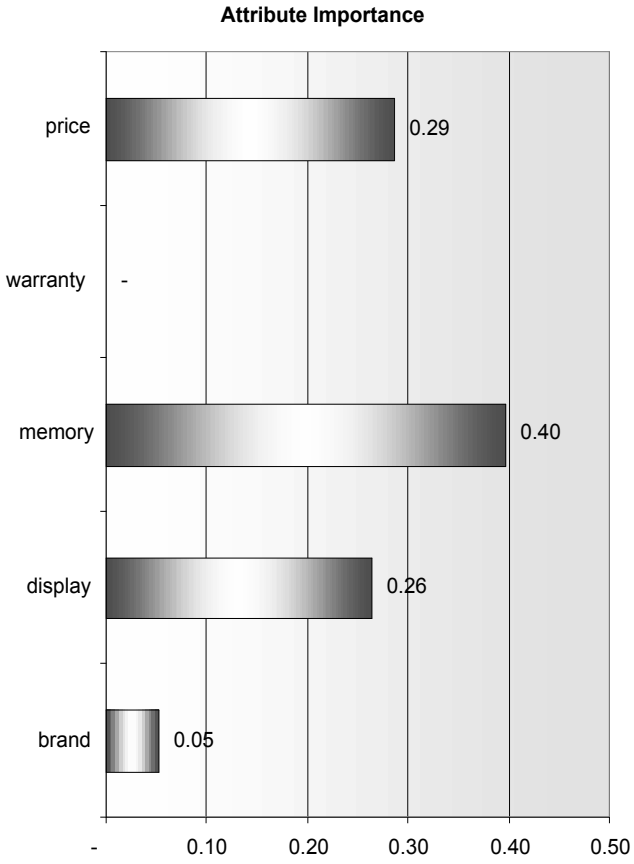
## Conjoint Analysis




(c) Luc Wathieu

# POWER OF CONJOINT ANALYSIS

| Job Attribute | What MBA's Said... | Rank Based on Conjoint |
|---|---|---|
| Salary | 6th | 1st |
| Region of US | 2nd | 2nd |
| Job Location | 5th | 3rd |
| People/Culture | 1st | 4th |
| Functional Area | 3rd | 5th |
| Firm Growth | 7th | 6th |
| Business Travel | 8th | 7th |
| Opp. to Advance | 4th | 8th |

# PSYCHOLOGY OF PRICING: WHAT MAKES A PRICE ACCEPTABLE?




| | Index |
|---|---|
| Large Supermarket | 100 |
| Grocery Store | 108 |
| Bakery | 125 |
| Vending Machine - Campus | 141 |
| Gas Station | 188 |
| Vending Machine - Street | 243 |
| Newsstand - Street | 250 |
| Newsstand - Airport | 312 |
| Newsstand - Station | 344 |







“Coca-Cola is a product whose utility varies from moment to moment. In a final summer championship, when people meet in a stadium to have fun, the utility of a cold Coca-Cola is very high. So it is fair that it should be more expensive. The machine will simply make this process automatic.”

Douglas Ivester, Coca-Cola Chairman and CEO1999

# PSYCHOLOGY OF PRICING: CAN WE REDUCE CONSUMER FOCUS ON PRICE?

***Consumer Choice "in Theory"***



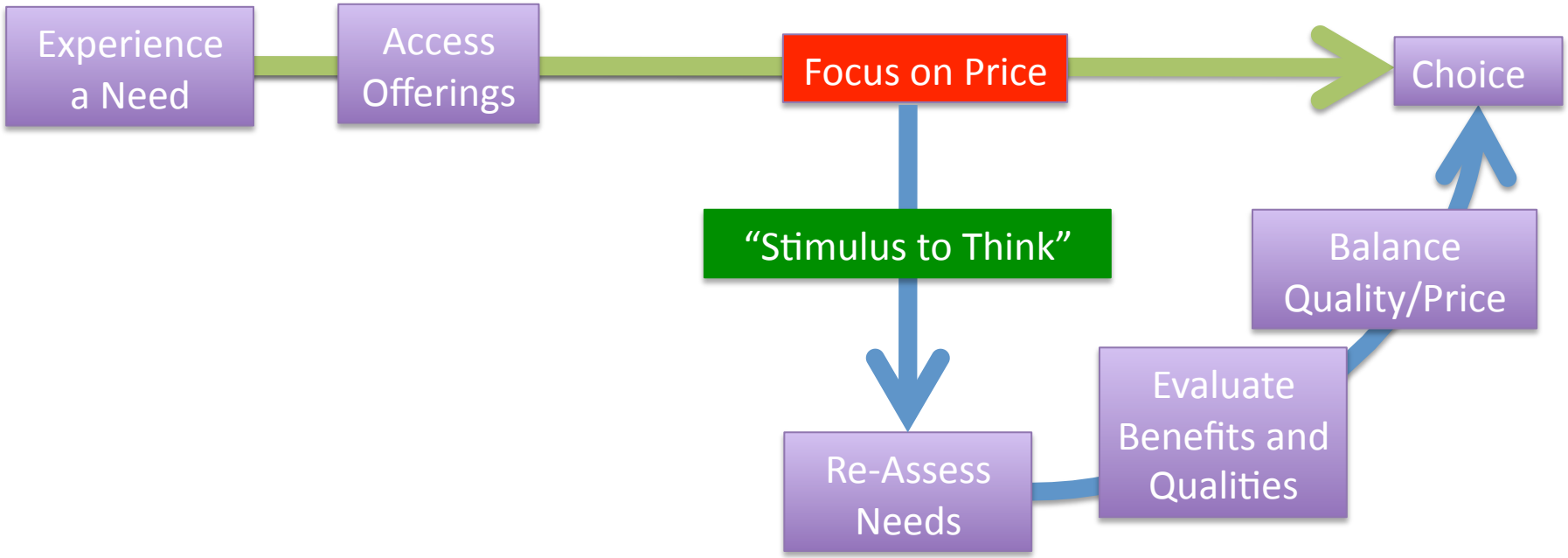
# PSYCHOLOGY OF PRICING: CAN WE REDUCE CONSUMER FOCUS ON PRICE?

***Consumer Choice*** ***"in Reality"***

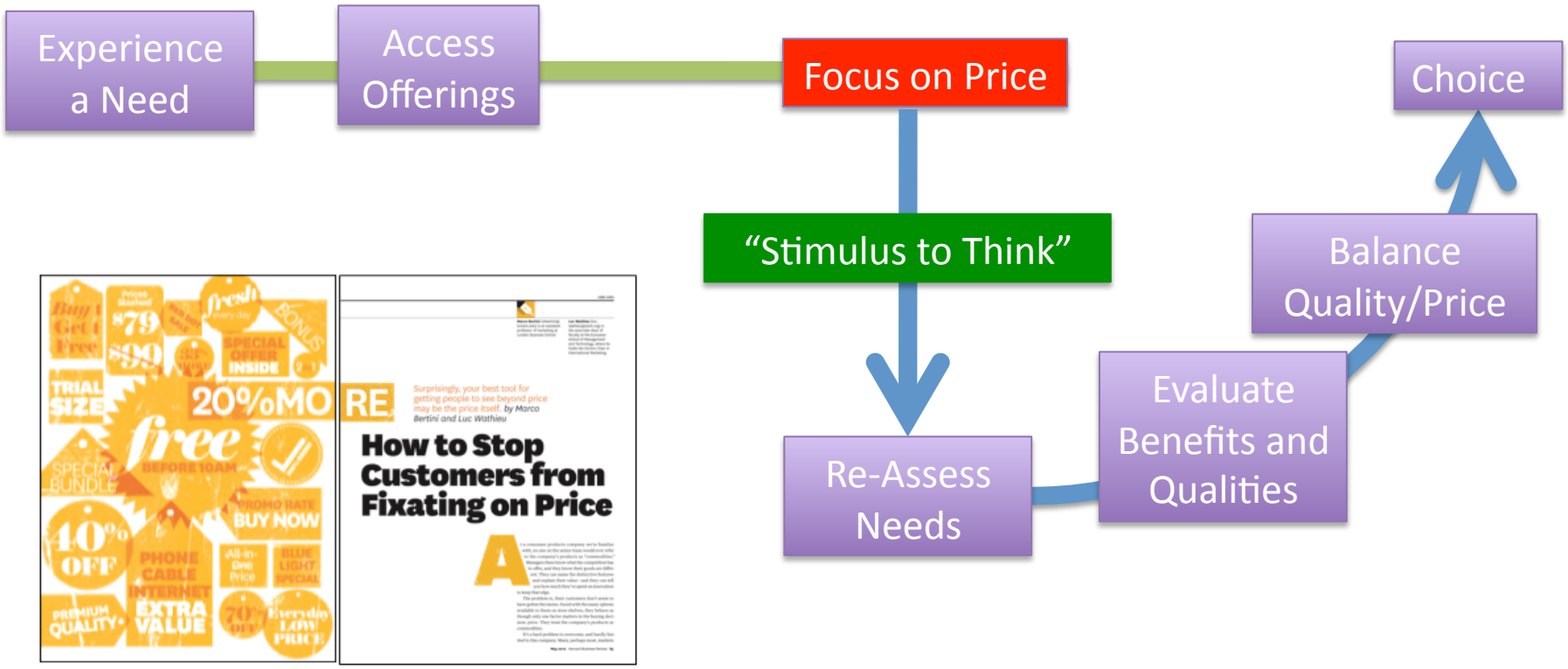


# PSYCHOLOGY OF PRICING: CAN WE REDUCE CONSUMER FOCUS ON PRICE?

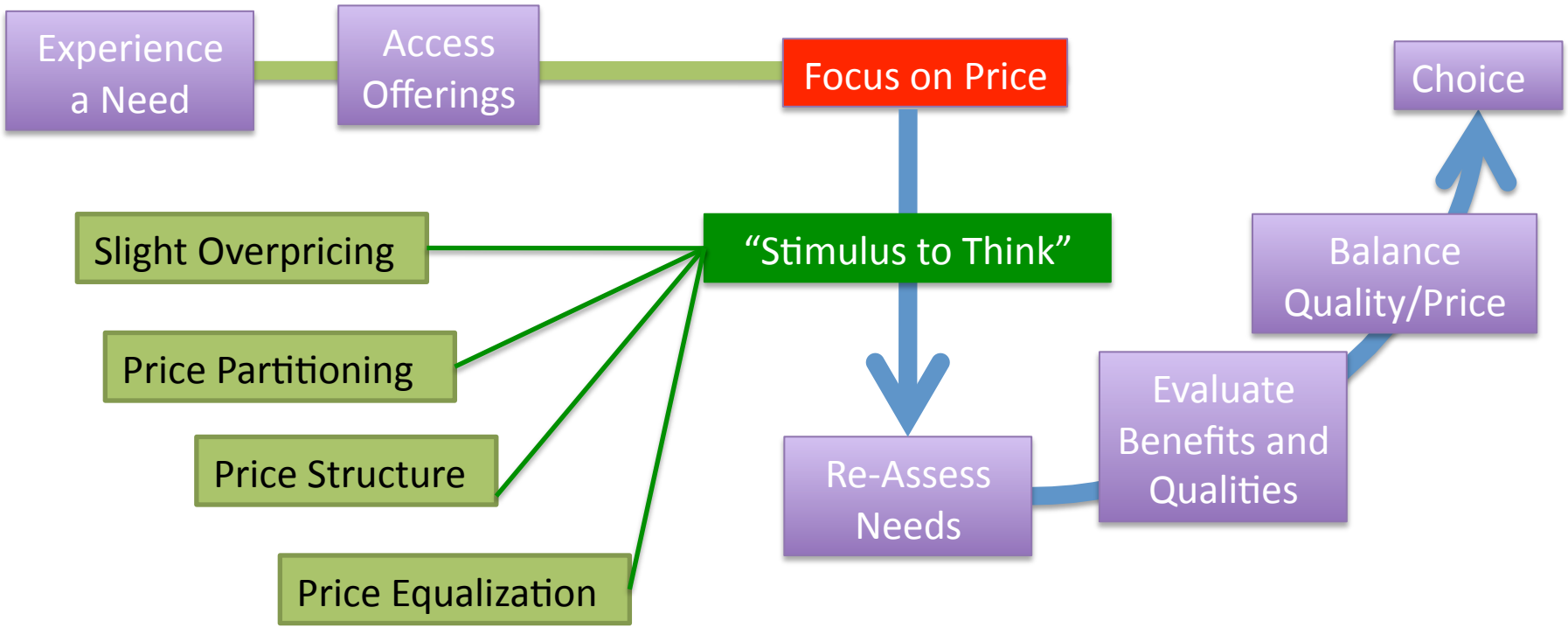
***Contemporary Marketing Challenge: Engaging the Customer***



# *Contemporary Marketing Challenge: Engaging the Customer*



## *Contemporary Marketing Challenge: Engaging the Customer*



ORGANIC LETTUCE (10-ounce bag)








$2.49 $2.59 $2.59 $2.54 $2.79 (C1)

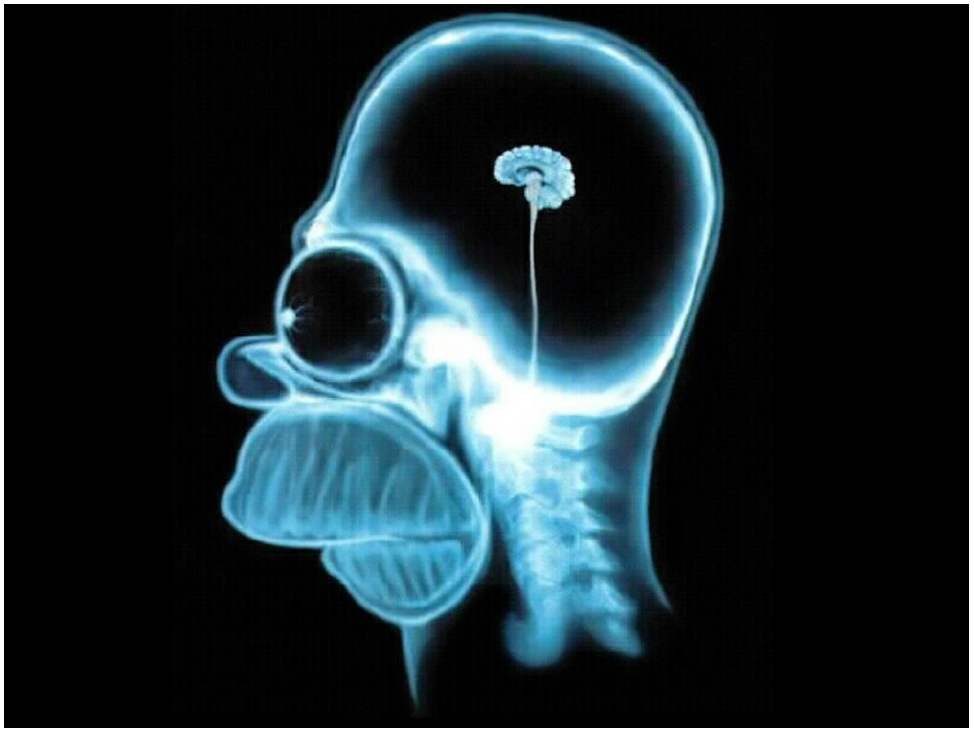
$4.59 (C2)

$6.39 (C3)

| WHEN THE PRICE PREMIUM WAS... | 10% | 50%–80% | 190%–250% |
|---|---|---|---|
| Recall of label information was... | DECENT | EXCELLENT | MINIMAL |
| Sense of personal relevance was... | NOTICED | PRONOUNCED | NOTICED |
| Willingness to pay was... | MODERATE | GREATEST | MODERATE+ |

# Can High Prices Make Us Smarter?



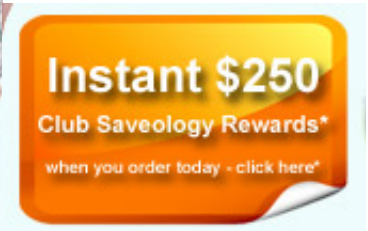
# How Discounts Can Hurt

BASE PACK

OR

MAX PACK?








**How many customers chose some version of the "max pack"?**

**27.6%**

OF THOSE WHO SAW A PRICE PROMOTION

**53.3%**

OF THOSE WHO DID NOT SEE A PRICE PROMOTION

**How many customers chose the cheapest version of the "base pack"?**

**31%**

OF THOSE WHO SAW A PRICE PROMOTION

**6.7%**

OF THOSE WHO DID NOT SEE A PRICE PROMOTION

# “Magic” of Price Partitioning



**Airline A**

Boston – San Juan

1 stop

7 hours, 49 minutes

-

-

$165



**Airline B**

Boston – San Juan

non-stop

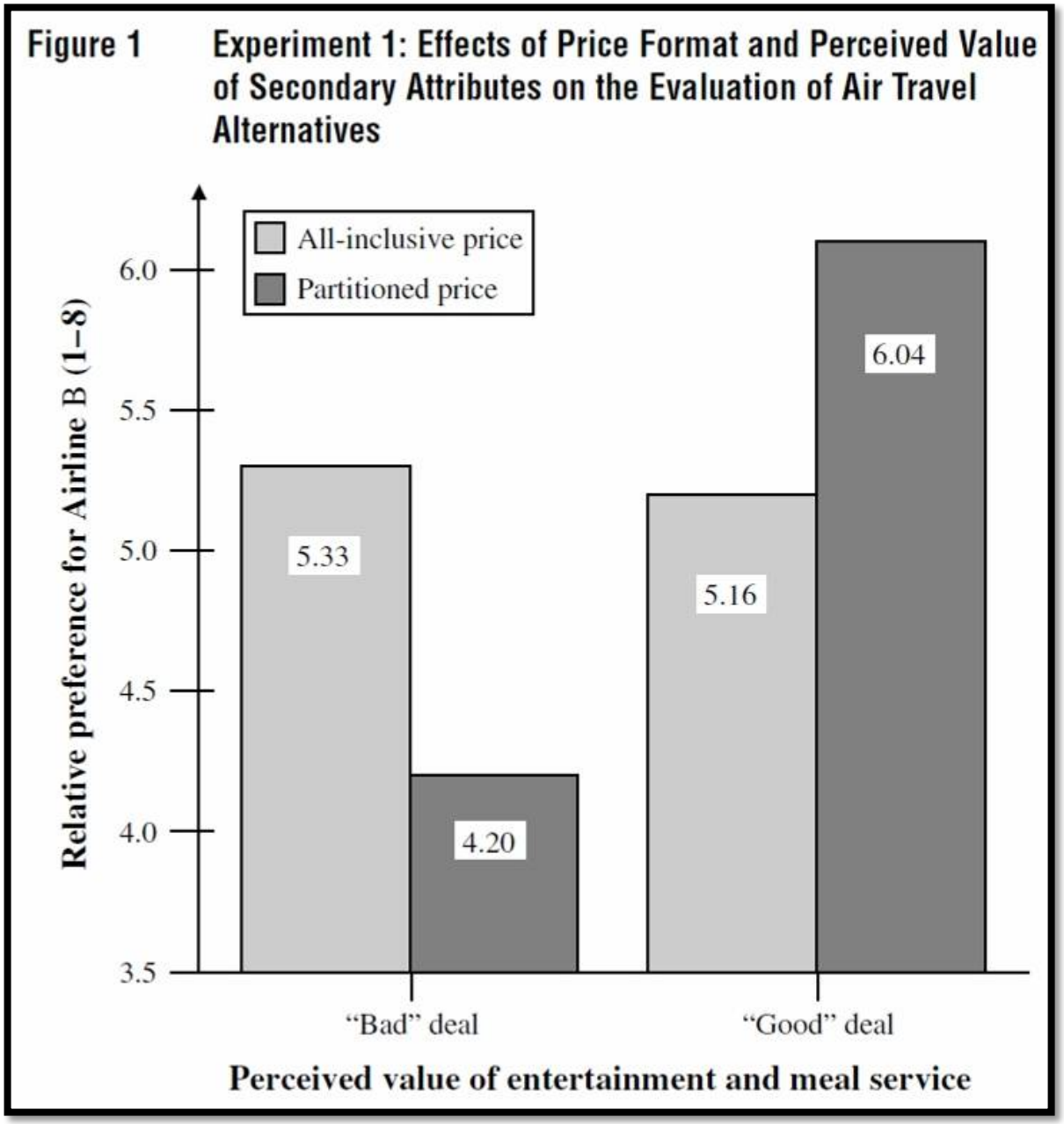
4 hours, 15 minutes

in-flight entertainment

meal service

**$215** or **$205 + $10**

Bertini, M. and L. Wathieu (2008), *Attention Arousal through Price Partitioning*




Bertini, M. and L. Wathieu (2008), *Attention Arousal through Price Partitioning*

# Price Structure:
# Price What You Sell!




ORICA

ROG™
Orica Blast Based Services

Rock On Ground™ (ROG™) offers a complete rock extraction and delivery service, committing Orica to deliver a reliable supply of rock, ready to feed the haulage stage, at a predictable cost, while meeting safety and environmental requirements.

For our Customers ROG™ has the potential to provide:

- Improved safety through strict process control, the latest survey and measurement systems, and access to dedicated blasting professionals;
- Optimised drilling and blasting service, delivering lower costs;
- Improved productivity and efficiency;
- Improved consistency of rock size;
- Certainty of costs, guaranteed price for rock delivery;
- A single supplier for multiple processes;
- Reliable supply of rock on time.



# “Magic” of Price Equalization

Music › Classical › Kiri Te Kanawa & St. Paul's Cathedral Choir




$9.99 Buy Album

Genre: Classical
Released: Jan 17, 1985
℗ 1984 Universal International Music B.V.

**Customer Ratings**

Rate this

We have not received enough ratings to display an average for this album.

## Kiri Te Kanawa: Ave Maria

| | Name | Artist | Time | Popularity | Price |
|---|---|---|---|---|---|
| 1. | Repentir (O Divine Redeemer) | Barry Rose, English Chamber Orchestra | 6:01 | | $0.99 BUY |
| 2. | Vesperae Solennes De Confessor... | Barry Rose, English Chamber Orchestra | 3:59 | | $0.99 BUY |
| 3. | "Bist Du Bei Mir", BWV 508 Aria | Christopher Bowers-Broadbent, Kiri Te I | 2:48 | | $0.99 BUY |
| 4. | Herz Und Mund Und Tat Und Lebe... | Barry Rose, English Chamber Orchestra | 3:11 | | $0.99 BUY |
| 5. | Messe Solennelle De Ste. Cécile: ... | Barry Rose, English Chamber Orchestra | 5:32 | | $0.99 BUY |
| 6. | Auf Flügeln Des Gesanges, Op.34, ... | Barry Rose, English Chamber Orchestra | 2:40 | | $0.99 BUY |
| 7. | Panis Angelicus | Barry Rose, English Chamber Orchestra | 3:36 | | $0.99 BUY |
| 8. | Ave Verum Corpus, K.618 | Barry Rose, English Chamber Orchestra | 3:26 | | $0.99 BUY |
| 9. | Ave Maria, "Ellens Gesang III", D839 | Barry Rose, English Chamber Orchestra | 3:31 | | $0.99 BUY |
| 10. | Trumpet Tune "The Cebell" | Barry Rose, Crispian Steele-Perkins, En | 2:40 | | $0.99 BUY |
| 11. | Samson HWV 57: Let the Bright Se... | Barry Rose, Crispian Steele-Perkins, En | 5:52 | | $0.99 BUY |
| 12. | Samson HWV 57: Let Their Celesti... | Barry Rose, English Chamber Orchestra | 3:14 | | $0.99 BUY |

Preview All

Total: 12 Songs

# A Single Price Point Cures "Price Shopping"

PHONE
CABLE
INTERNET
EXTRA VALUE

When would-be customers were asked to project music downloads they would buy under two pricing scenarios, this was the result:

| | VARYING PRICES $0.89–$1.29 | UNIFORM PRICE $1.29 |
|---|---|---|
| LIKELIHOOD OF PURCHASE (ON A SCALE OF 1–7) | 2.75 | 3.65 |
| SONGS PER MONTH | 5.28 | 7.68 |
| IMPLIED ANNUAL REVENUE | $66 | $95 |



# Summary: How Simple Pricing Tactics Can Change the Mindset of the Customer



PRICE

"What's the cheapest deal Available?"

Change What You Price

Change Your Price Format

Change Your Price Level

Change the Scope of Your Price





"What am I paying for?"

"What are the underlying benefits?"

"How valuable is this to me"

"Which model suits me best?"

BENEFITS & QUALITY

NEEDS & REQUIREMENTS

# Conclusions



Pricing is MORE CENTRAL than we think. It is at the CORE of the marketing strategy and the KEY profit lever.



Pricing is about EXTRACTING the economic value that our innovations generate



There is a SCIENCE aspect: evaluating **economic value and perceived value**



There is an ART aspect: **influencing perception of value and fairness**, making sure **customers think about the product more than its price**.