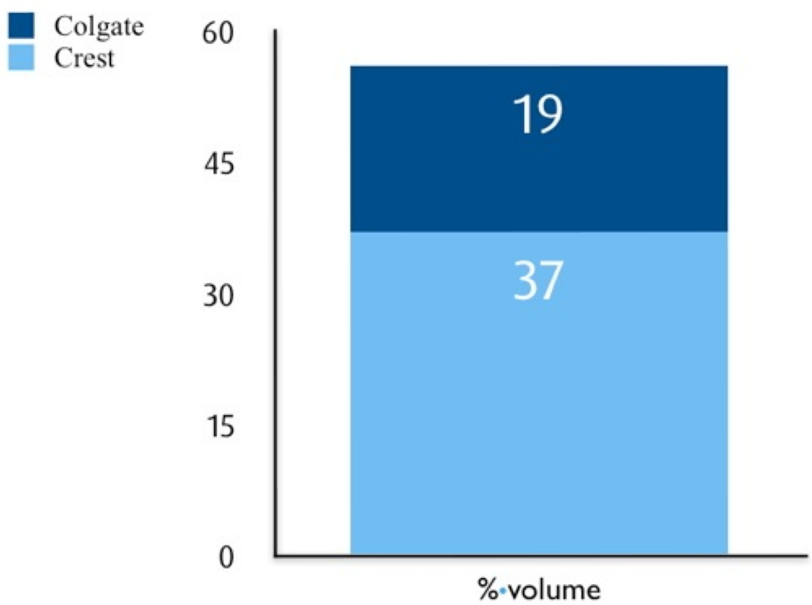
Chapter 1:
Evidence-based Marketing

Byron Sharp

Imagine you are the Insights Director of Colgate Palmolive. Margaret, the Senior Category Manager for toothpaste, is standing at your office door and she is obviously distressed. She is waving a recently received report from your global market research supplier, and this is what it shows:[1,2]

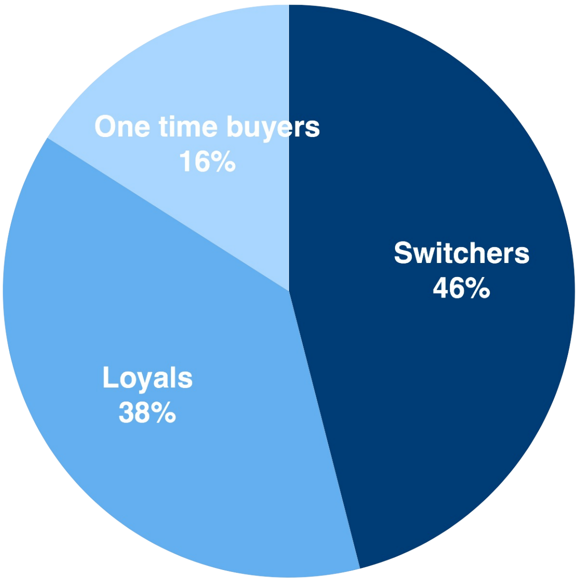
Figure 1.1: Toothpaste brands: US market shares (volume)



Data source: Spaeth & Hess 1989.

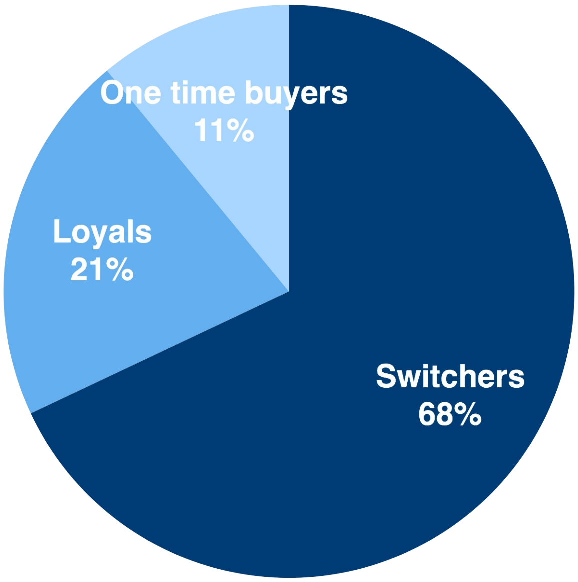
The market research shows that Procter & Gamble's Crest brand of toothpaste has double the market share of Colgate in the US. However, this has long been known and is not the reason why Margaret is upset. It's the next couple of graphs that have her worried (see Figures 1.2 and 1.3).

Figure 1.2: Crest consumer base



Data source: Spaeth & Hess 1989.

Figure 1.3: Colgate consumer base



Data source: Spaeth & Hess 1989.

These charts decompose the sales volume of each rival brand according to the recent repeat-buying behaviour of their consumers.

The percentage of Colgate's sales that came from loyal customers is almost half that of Crest's loyals ('loyals' being people who bought the brand for the majority of their toothpaste purchasing during the analysis period). Colgate's sales come much more from 'switchers' – people who bought Colgate at least once in the analysis period, although most of their buying was of other brands.

be tempting to ignore them. But when these light buyers deliver around half your sales, do you still want to ignore them? Marketing's Pareto law is important, but the ratio isn't 80/20 and the traditional implications are incorrect.

Normally the Pareto law is used to justify a strategy that concentrates on the brand's heaviest buyers (e.g. Koch 1999). The (misplaced) logic being that these buyers are worth more, and marketers can justify spending more per buyer. But making them the dominant focus of marketing activity is not wise. Ignoring light and non-buyers of a brand is no recipe for growth (as we saw in the Chapters 2 and 3). Besides the logic is flawed, what matters is not so much the weight of a buyer as their propensity to change in reaction to marketing. And how many of these customers there are; what they are worth in total?

Buyers aren't always what they seem

The logic of targeting heavy buyers is undermined further by the fact that the *future* sales potential of individuals is different than their current buying suggests. This is true even when you have perfectly reliable sales data on your individual buyers, and even when there is no real change in their behaviour. Non-buyers and light buyers are heavier buyers than you think, and heavy buyers are lighter. This is neatly illustrated in a two-year analysis of a leading brand of tomato sauce in the US using IRI and Nielsen panel data (Anschuetz 2002). Although the brand was stationary (not growing or losing sales volume), 14% of its sales came from households that did not buy it at all in the year before; in other words, from people who the brand's marketing team would have considered were non-buyers of the brand. While the small group (9%) of heavy buying households delivered 34% of volume, this was less than the 43% they delivered in Year 1. Table 4.4 shows that over time the heavier buyers get lighter, and the non-buyers and light buyers get heavier.

The way the lightest buyers became heavier and the heaviest buyers became lighter is a 'regression to the mean' phenomenon. This law (which we'll call 'the law of buyer moderation')[24] applies to all brands and can be precisely predicted from the known distribution of buying frequencies.

Table 4.4: Sales volumes from different buyer groups one year later

Buyer group	% of total sample	Buying frequency in year 1	Representing brand sales volume Year 1	Year 2
Non-buyers	44	0	0%	14%
Light buyers	22	1	14%	16%
Moderate buyers	25	2 - 4	43%	36%

Heavy buyers	9	5+	43%	34%
Total	**100**		**100**	**100**

Source: Anschuetz, 2002; US IRI panel data.

In fact, few of these buyers are actually changing, which can seem rather mysterious, and is widely misunderstood. Most people don't know about the law of buyer moderation. This law undermines marketers' strategies to target heavy buyers of a brand and ignore light buyers (and the great deal of sales potential that they offer).

The law of buyer moderation occurs because of variation in the timing of individuals' purchasing. Some years buyers purchase the brand once, other years they buy it twice as much – this isn't real change; there is simply a (predictable) degree of wobble even around a stable ongoing buying rate. This wobble means that some of the households that were called 'non-buyers of the brand' weren't really – they just hadn't bought in the particular base year and so were misclassified as non-buyers. Just as some buyers were misclassified as light buyers when they really were heavier. Other customers were misclassified as heavy buyers because they bought the brand a bit more often than usual in the year the analyst chose to classify them (perhaps relatives came to visit so one year they had to buy extra). This phenomenon is much worse over short periods (a month or a quarter) than over a year, though it still occurs in annual data, and even for a big brand, as Table 4.4 above shows.

Remember people wobble/vary in both the amount they buy from the category and how they distribute their buying within their repertoire – due to thousands of things like the weather, getting caught in traffic, having a party to go to, having someone to stay, taking a different path through the supermarket and so on. It's easy for a person to go from buying a brand twice in one year to four times in the next, and the other way round, *without any change in that person's loyalties* (see Sharp et al 2012). For many brands random wobble like this can move a consumer from being a light buyer (bottom 80%) to being a heavy buyer (top 20%) because most buyers buy less than twice a year – see Figures 4.1, 4.2, 4.3.

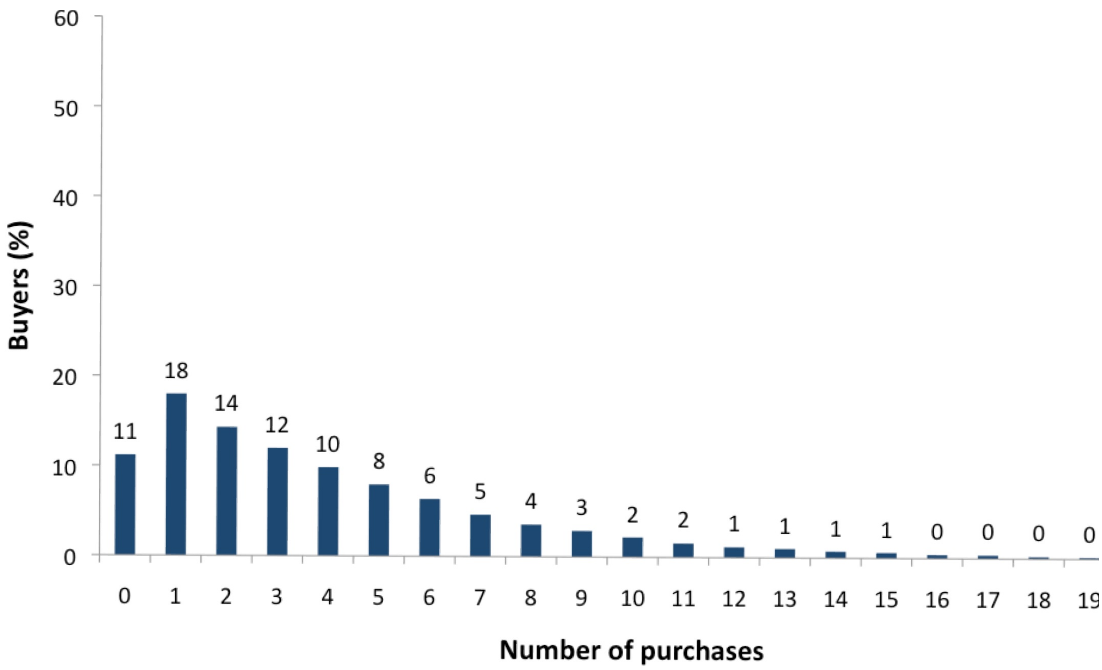
So we have three key facts about marketing's Pareto law:

1. It is law-like and applies across brands and categories.
2. It's not as severe as 80/20.
3. The analytical time period affects Pareto metrics and messes up attempts to target based on customer value. Put simply, next period your heaviest

they simply move from one weight of this distribution to another. Put another way, changes in sales come from buying propensities changing across the entire market – from heavy to light and non-buyers of the brand. Every buyer group (or weight) changes[25]. When marketing is successful in delivering more sales and market share, it does so by giving the brand more heavy buyers, more medium buyers and a lot more light buyers. This means that for maintenance or growth, a brand's marketing has to somehow, at least over time, reach all the buyers in a category.

Even if a brand gained 100% market share, which would mean it had 100% penetration and perfect loyalty, it would still have many light buyers because category buying also shows a skewed distribution. For example, Figure 4.4 shows the distribution of buying for the toothpaste category - one where we would hope there was rather regular buying. Yet is seems rather rare for a UK household to buy toothpaste more than six times a year. Most bought three times or less, indeed 11% did not buy toothpaste that year.

Figure 4.4: Toothpaste category buying distribution



Source: data kindly provided by Kantar, UK, 2007.

Of course, for an individual toothpaste brand these figures are even lighter, less frequent, because a brand's uses also buy other brands. See Figure 4.5 which shows the buying distribution for Colgate in the same market in the same year. Now 86% of shoppers bought three times or less, with 59% not buying Colgate that year.

Figure 4.5: Colgate buyer distribution

significance. No sensible marketer would alter their marketing strategy based on this data. Also, around 40% of every brand's customer base is aged between 35 and 54 years old; this percentage is 47% for Access NatWest – but again, this is a small difference that has no practical significance.

Table 5.4: Demographic profiles of credit card brands, UK

Credit card	Gender (%)		Age (years) (%)						
	Male	Female	15-19	20-24	25-34	35-44	45-54	55-64	65+
Barclaycard Visa	51	49	1	4	17	23	22	18	14
TSB Trust card	51	49	1	3	18	20	21	19	19
Access NatWest	54	47	1	2	16	24	23	21	14
Access Midlands	52	48	1	3	18	24	21	20	13
Barclays MasterCard	60	40	1	3	15	21	23	20	17
Access Lloyds	54	46	2	3	18	22	22	20	13
Bank of Scotland Visa	56	44	1	2	17	21	26	19	14
Midland Visa	53	48	1	2	15	24	24	19	15
TSB MasterCard	56	45	1	6	18	20	21	18	16
Co-op Bank Visa	56	44	2	2	17	17	23	20	20
Average brand	**54**	**46**	**1**	**3**	**17**	**22**	**22**	**19**	**16**

Source: TGI.

These sorts of minor difference – some simply due to random sampling variation – were the norm in all the research studies. This is illustrated in Table 5.5, which shows the average size of the average deviation from the brand norm in more than 40 product/service categories summarised by Dr Rachel Kennedy (see Kennedy & Ehrenberg 2000).

Table 5.5: Deviation from the brand norm

Category	Demo	Media	Values	Average
Cigarettes	4	4	6	6
Cat food	3	1	4	4
Mints	3	1	3	3
Toothbrushes	3	1	3	3
Private health insurance	4	2	3	3

Sweets	3	1	2	3
Crisps	3	1	3	3
Toilet soap	3	1	2	3
Package holidays	3	1	3	3
Dry batteries	3	1	2	3
Other chocolate	3	1	2	2
Kitchen rolls	3	1	3	2
Nuts	3	1	2	2
Chocolate bars	3	1	2	2
Toothpaste	2	1	2	2
Toilet paper	2	1	2	2
Computers	3	2	2	2
Record shops	3	1	1	2
Store retail cards	3	1	2	2
Computer games	3	1	2	2
Vitamins	3	1	2	2
Liquid detergent	3	1	2	2
Grocers	3	1	2	2
Yogurt	3	1	2	2
Light bulbs	2	1	2	2
Car tyres	2	1	2	2
Stain removers	2	1	2	2
Car insurance	3	1	1	2
Coffee	2	1	2	2
Home contents	2	1	1	2
Paint	3	1	1	2
Shampoo	2	1	2	2

Airlines	2	1	1	1
Camera film	2	1	1	1
Headache tablets	2	1	1	1
Cars	2	1	1	1
Credit cards	2	1	1	1
Mortgages	2	1	1	1
Fuel	2	1	1	1
Retailers	1	1	1	1
Average	**3**	**1**	**2**	**2**

Source: Kennedy & Ehrenberg 2000; Data courtesy of TGI.

The categories are ranked by size of the deviation, but as you can see there isn't great variation between them. In each of these categories the typical deviation is small, apart from some rather obvious differences, such as:

- Scottish newspapers have more readers in Scotland than the average newspaper brand.
- Children's television channels have more children viewers than the average television channel (though still almost half the viewers of these channels are adults).
- Very expensive brands have fewer poor people in their customer base.

Large exceptions are worthy of management attention, but of course they are undoubtedly well known (e.g. that's why we use names like 'children's channels').

Extreme targeting

Maybe the real-world looks like this because marketers haven't targeted special audiences. Maybe if they tried harder reality might match textbook theory? But the two following case studies suggest that even when marketers try, in very overt ways, to target special audiences, they end up with normal-looking customer bases (so long as they are successful in winning market share). By definition, the more market share they gain, the more normal their customer base becomes.[26]

No girls

Table 5.6 shows that the demographic breakdown fluctuates across Yorkie varieties, partly due to random sampling variation, but the obvious pattern is that a lot of women buy Yorkie – they make up about half of its customer base.

And now a more serious example…

Table 5.4 showed that, like other categories, there is little difference in the user profile for different credit cards. But one financial institution said, “Our brand is different”, and they seemed to have a case. This Australian credit card gives a small donation to a local maternity hospital for every dollar that users spend on the card. It even features a picture of a baby on the card itself.

It is obvious that this card would have a customer base skewed towards women. Not just because the card would appeal to women but also because it wouldn’t appeal to groups like young men (and maybe even young women). The marketing department told us this must be the case. But then the data came in (see Table 5.7). Cardholders are ever slightly more likely to be female than non-cardholders; but they are also more likely to be single and no more likely to have children. It appears that you don’t have to be a mother to value this credit card.

Table 5.7: Cardholds c.f. non-cardholders

	Male (%)	Female (%)	Single (%)	Couple with no kids (%)	Family with kids (%)	Other (%)

Cardholders	37	63	15	32	52	1
Non-cardholder customers	42	58	12	34	53	1

Source: A telephone survey based on customer lists provided by the credit card provider; see Sharp, Tolo & Giannopoulos 2001.

I love my Mum (and you love yours)

What about differences in how a brand's buyers perceive the world? As previously explained, a brand's buyers hold much the same values as buyers of other brands (see Table 5.8); but what about the buyer's attitudes towards your brand?

Table 5.8: Percentage point deviations from the brand norm: values held by brand users

Credit card brand	Children should express themselves freely	I am happy with my standard of living	I can't bear untidiness	I try to keep up with technology	I always look for special offers
Barclaycard Visa	0	-1	0	0	-1
TSB Trust card	0	-2	2	-4	2
Access Natwest	1	0	1	0	-2
Access Midlands	-1	0	1	0	-3
Access Lloyds	1	1	1	1	1
Bank of Scotland Visa	2	2	0	2	-2

Adapted from Kennedy and Ehrenberg (2000), "Brand user profiles seldom differ," Report 7 for Corporate Members: Ehrenberg-Bass Institute for Marketing Science.

There is one obvious way that buyers of one brand vary from another: their brand buying. This affects their attitude to brands and their brand knowledge. People tend to have opinions about the brands they buy, and not think or know much about brands they don't use. Behaviour is a powerful driver of awareness, perceptions and attitudes – something that both academic and market researchers have a tendency to forget.[30]

Attitudes reflect how much a buyer buys the brand, that is, they reflect loyalty. We know that loyalty metrics don't vary a lot between brands. Consequently, the buyers of brand A have the same opinion of brand A as buyers of brand B have of brand B. I call this the 'my mum' phenomenon: my own mother is the best mum in the world, she's lovely, but she can also be rather annoying sometimes. Does that sound like your mum?

Another lovely example of this was a global survey of tourists conducted by

As you can see, a high proportion of each brand's buyers also bought Coca-Cola, and this proportion varies little between the different brands – it's always about two-thirds of their customer base[34]. This empirical evidence counters Kotler's idea that individual brands sell to distinctly different segments of buyers – brands share customers. Several of the brands are even marketed by the Coca-Cola company; these brands share their customers with Coca-Cola as much as rival company's brands do.

Customer-sharing data gives insight into who competes against whom. If brands are close rivals, then they should be in the repertoires of the same people, that is, they share customers [35]. Logically, brands that are direct competitors within a product category should show higher levels of sharing, and brands that target different segments should share fewer customers.

Duplication of purchase analysis

The extraordinary fact about the sharing analysis is not that Pepsi buyers also buy Coca-Cola (although this surprises some people), but that each brand shares a near identical proportion of its customer base with Coca-Cola.

The exact degree of sharing depends on the period of analysis. If it is long enough, then nearly all of a brand's customers will have also bought Coca-Cola, whereas over a very short time period a smaller proportion of a brand's customers will have also bought Coca-Cola. However, the length of time affects all brands equally, so it doesn't affect inter-brand comparisons. Irrespective of the time period, each brand of soft drink shares a similar proportion of its consumers with Coca-Cola.

This suggests that all the brands compete *equally closely* with Coca-Cola, and that none of them sell to special discrete segments of buyers. Perhaps this is because Coca-Cola is so large. Perhaps no soft drink brand can get away from competing with Coke. But how do brands compete with less ubiquitous brands? Let's now expand the analysis to consider all brands in a category.

A 'duplication of purchase' table[36] shows the degree to which brands within a category share their buyers with each of the other brands in the category (i.e. what proportion of their customers also bought another particular brand during the period). Table 6.2 is a duplication of purchase table with no data.

Table 6.2: Duplication of purchase, a table without data

	Percentage of buyers who also bought brand			
	A	**B**	**C**	**D**

Buyers of brand				
A	100%			
B		100%		
C			100%	
D				100%

The 100% cells are a brand's level of customer overlap with itself, which logically must always be 100%. In terms of the presentation of the data, it's good practice to blank out these cells because they are not needed.

Duplication of purchase tables refer to a particular time period, for example, the people during the year who bought brand A who also bought brand B. Note that a buyer of brand A needs to only make one purchase of brand B to be counted. Consequently, duplication analyses that apply to very long periods can be misleading, because every brand may show very high levels of sharing with every other brand, which obscures who competes more or less closely. At the other end of the time spectrum, in very short time periods there is often no duplication (because many customers have only bought the category once), which is also misleading. The analyst should choose a period long enough to capture a degree of repeated purchase, that is, a period long enough to allow most people to have bought multiple brands. Readers of duplication tables need to note that they refer to a particular period, there is never an absolute metric; one can't simply say, '70% of Pepsi buyers drink Coke' – it's 70% ***in a year***.

The duplication of purchase law

Let's look at a duplication of purchase table for ice-cream brands (see Table 6.3).

Table 6.3: Duplication of purchase – ice-cream, 2005

	Percentage of buyers who also bought brand						
Buyers of brand:	**(Walls) Carte D'Or**	**Walls Dessert**	**Ben & Jerry's**	**Häagen Dazs**	**Nestle**	**Walls**	**Mars**
(Walls) Cart D'Or	-	15	8	8	9	5	4
Walls Dessert	34	-	7	8	9	4	3
Ben & Jerry's	38	14	-	26	13	7	8

Chapter12:
Mental and Physical Availability

Byron Sharp

The key marketing task is to make a brand always easy to buy for every buyer; this requires building mental and physical availability. Everything else is secondary. Brands largely compete in terms of physical and mental (brand salience) availability. Even product innovation largely works, when it works, through enhancing mental availability and gaining further distribution. Building mental availability requires reach, distinctiveness (clear branding) and consistency. The brand is seen/noticed, recognised and recalled more often. Building physical availability requires breadth and depth of distribution in space and in time. Together, mental and physical availability make a brand easier to buy for more people, in more situations.

A new theory of competition for sales

We have a collection of scientific laws of marketing – law-like patterns that hold very widely and under known conditions (see the complete list of marketing laws on pages vii-viii). These laws can be used to predict and explain marketing patterns, but it would also be useful to have a theory that could weave these laws into a memorable, overarching story that can guide our marketing strategy.

Table 12.1: The new consumer behavior model

Consumer Behavior						
Past World View	Attitude Drives Behavior	Brand Loyals	Brand Switchers	Deeply Committed Buyers	Involvement	Rational Involved Viewers
New World View	Behavior Drives Attitude	Loyal Switchers	Loyal Switchers	Uncaring Cognitive Misers	Heuristics	Emotional Distracted Viewers

Table 12.2: The new brand performance model

Brand Performance						
Past World View	Growth Through Targeting Brand Loyals	Unpredictable Confusing Brand Metrics	Price Promotions Win New	Target Marketing	We Compete on Positioning	Differentiation

			Customers			
New World View	Growth Through Penetration	Predictable Meaningful Brand Metrics	Price Promotions Existing Loyal Customers	Sophisticated Mass Marketing	Heuristics	Distinctiveness

Table 12.3: The new advertising model

Advertising						
Past World View	Positioning	Message Comprehension	Unique Selling Propositions	Persuasion	Teaching	Campaign Bursts
New World View	Salience	Getting Noticed, Emotional Response	Relevant Associations	Refreshing & Building Memory Structures	Reaching	Continuos Presence

This theory has to be a new replacement for the twentieth century Kotlerian view of marketing. According to Kotler, competition for sales is about creating differentiated brands that carve off sections of market share by addressing the heterogeneity between consumers. Thus, competing brands sell to different types of consumers; brands have substantially different images; and brand loyalty varies considerably. This view also holds that many brands are niche brands; and that considerable growth is possible by becoming even more niche and selling more to a brand's most loyal customers.

This worldview was partly responsible for the very large (and low return) investments in loyalty programs and customer relationship management (CRM) that occurred towards the end of the twentieth century. [81] On a less visible level, this worldview was also responsible for millions of misguided and productivity-sapping marketing plans. Some marketers got lucky and succeeded in spite of their plan [82], through implementation 'mistakes' or from competitors getting it even more wrong. But many misplaced plans did their bit to erode their brand's customer franchise.

However, this twentieth century view of marketing is not completely wrong. It just describes a limited part of the competition for sales. It more aptly describes the competition between product categories than the competition between brands within a category (yet, even in this case it is often an exaggeration). The Kotlerian view doesn't fit the facts of branded competition; it fails the most basic test of scientific theories: it does not lead to empirical laws. In some cases, it even clashes with these empirical laws (i.e. it predicts different patterns). For example, strong differentiation and differences in brand user profiles would destroy the laws of double jeopardy and duplication of purchase. Yet in the real world we find only minor deviations from these laws. The Kotlerian worldview is not the opposite of reality, but it is a very poor representation of it. It's similar to the view that the world is flat – it isn't, though there are flat-ish parts (much of Australia, for instance).