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Who do You Really Compete with?

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KEY POINTS [1]

- Brands compete practically head-on with other brands in their category.
- Customer base overlap (sharing of customers) depends on relative brand sizes, i.e. your customer base overlaps more with larger market-share brands. This is the Duplication of Purchase Law. Deviations from the law reveal market partitions, where brands compete more or less closely. Partitions are often weaker than marketers expect.
- The law can be used to discover category boundaries (based on real buying behaviour) and to predict where a new brand/SKU will steal its sales from.

Textbooks have condemned mass marketing to a premature grave. This is what Philip Kotler and co-authors have written about mass marketing and how brands compete with one another:

> Marketing has passed through three stages:
> 1 Mass marketing. [Here] the seller mass produces, mass distributes and mass promotes one product to all buyers. At one time, Coca-Cola produced only one drink for the whole market, hoping it would appeal to everyone. The argument for mass marketing is that it should lead to the lowest costs and prices and create the largest potential market.
> 2 Product-variety marketing. Here, the seller produces two or more products that have different features, styles, quality, sizes and so on. Later, Coca-Cola produced several soft-drinks packaged in different sizes and containers. They were designed to offer variety to buyers rather than to appeal to different segments. The argument for product-variety marketing is that consumers have different tastes that change over time. Consumers seek variety and change.
> 3 Target marketing. Here, the seller identifies market segments, selects one or more of them, and develops products and marketing mixes tailored to each. For example, Coca-Cola now produces soft-drinks for the sugared-cola segment, the diet segment, the no-caffeine segment and the non-cola segment. Sellers can develop the right product for each target market and adjust their prices, distribution channels and advertising to reach the target market efficiently. Instead of scattering their marketing efforts (the 'shotgun' approach), they can focus on the buyers who have greater purchase interest (the 'rifle' approach).
>
> Source: Kotler et al., 1998

According to Kotler et al., brands are supposed to target segments of the market, which would severely limit the number of other brands they compete with.

While this may sound logical and straightforward, there are a number of problems with this strategy. It's difficult to think of a real-world example of mass marketing that fits this extreme definition: few, if any, firms have only one product, with one price. It is also unclear how the examples of target marketing differ from the less sophisticated 'product-variety marketing'. Yes, Coca-Cola now markets many brands of soft-drink, but is this to satisfy the distinct needs of particular groups of buyers, or to satisfy individuals' demand for variety, or a bit of both? Oddly, according to Kotler, offering containers of different sizes caters for variety seeking, but different flavours cater for different people!

Simply naming a segment does not make it exist. We could similarly create 'segment' names to match Kotler's product-variety strategy (e.g. the high quality seeking segment, the large pack economy oriented segment, and so on). However, for this to have any meaning there would need to be empirical evidence that each of Coca-Cola's brands really do sell to different people. Kotler presents no such data to ground his claims.

Table 1 shows that various soft-drink brands share their customer base with Coca-Cola; that is, the table shows what proportion of each soft-drink brand's customers also bought Coca-Cola during the analysis period. The data is from the TNS Impulse Panel (UK), which I have specifically chosen because it covers individual consumers buying for their personal use. Therefore, the repertoire of brand buying shown in the table is not due to different brands being bought by different people in the same household.

As you can see, a high proportion of each brand's buyers also bought Coca-Cola, and this proportion varies little between the differ-

Table 1: Sharing of customers

Buyers of X during the analysis period	Percentage of X buyers who also bought (regular) Coca-Cola during the period
Diet Coke	65
Fanta	70
Lilt	67
Pepsi	72
Average	69

Source: TNS Impulse Panel (UK).

1. This report is based on a chapter in the book "How Brands Grow", Oxford University Press, 2010.

ent brands—it's always about two-thirds of their customer base[2]. 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 who. If brands are close rivals, then they should be in the repertoires of the same people, i.e. they share customers[3]. Logically, brands 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 marketers), 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 a brand's customers will have also bought Coca-Cola. However, the length of time affects all brands equally, so it doesn't affect interbrand comparisons. Irrespective of the time period, each brand of softdrink should share 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[4] 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 2 is a duplication of purchase table with no data.

Table 2: Duplication of purchase

Buyers of brand	Percentage of buyers who also bought brand			
	A	B	C	D
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, i.e. 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 3). There are three striking patterns in the table:

1. Every brand shares much more of its customer base with the largest brand, Carte D'Or, than with Mars, the brand with the smallest market share.
2. There is similarity in the degree of sharing with any particular brand. For example, all brands share 40% of their customers (+ or – only a few percentage points) with Carte D'Or during the period of analysis.
3. There are a few deviations to the above two patterns. For example, Ben & Jerry's shares more than expected with Häargen Dazs.

The first two patterns reflect what is known as the duplication of purchase law. This law says that all brands,

Table 3: Duplication of purchase—ice-cream

Buyers of brand	Percentage of buyers who also bought brand						
	Walls Carte D'Or	Walls Dessert	Ben & Jerry's	Häargen Dazs	Nestlé	Walls	Mars
(Walls) Carte 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
Häargen Dazs	37	17	26	–	8	7	8
Nestlé	39	17	12	7	–	8	9
Walls	37	14	12	11	15	–	11
Mars	41	12	18	17	22	13	–
Average	38	15	14	13	13	7	7

Source: TNS Superpanel, 2005.

2. Of course, the actual number of customers shared with Coca-Cola depends on the size of the brand and on how many customers they have to share.

3. If they are complementary products (e.g. taco shells and refried beans) then we'd expect high levels of sharing. But complementary products are easy to identify prior to any customer sharing analysis. Brands within a product/service category are nearly always rivals not complementary. They share customers because they compete with one another as alternatives.

4. Also sometimes called a brand switching table, but the term switching is clumsy, it implies defection from one brand and up-take of a new (to the buyer) brand, which is an exaggeration. Just because I bought Fanta this time when I more often buy Coke doesn't mean anything has changed about my Coca-Cola buying, I just occasionally buy Fanta. Duplication of purchase tables reflect how people hold repertoires of brands, i.e. divided polygamous loyalty.

within a category, share their customer base with other brands in line with the size of those other brands. In other words, everyone shares a lot with big brands and a little with small brands.

The duplication of purchase law would not hold if several brands successfully targeted exclusive customer bases[5], or particular types of people who are different from the buyers of other brands. However, as we saw in Report 7, rival brands sell to very similar customer bases.

In Table 3 the brands are ranked in market share order, both across columns and rows, so you can easily see that duplication of customers declines in line with this rank. Every brand shares most with Carte D'Or because it is the largest brand—it has about three times the penetration of most of the other brands in the table.

Armed with knowledge of the duplication of purchase law, it is possible to spot market partitions: clusters of brands whose customer bases overlap more than expected. The law can also be used to spot brands that show unusually low overlap in their customer bases.

The ice-cream buying data covers premium and not-so-premium brands, brands only sold in large tubs and brands only sold as bars/cones. This affects their distribution as some outlets only stock large tubs and some only stock small bars/cones. Given these notable functional differences we should expect a partitioned market. The real surprise is how unpartitioned it is; in other words, the market is not far off being one mass market. Now that is an insight.

The only obvious partition is Ben & Jerry's and Häargen Dazs sharing with each other almost double the amount of customers that they share with other brands; though it is worth observing that Ben & Jerry's customers are still more likely to buy Carte D'Or than Häargen Dazs. However, the duplication of purchase law has been bent a little rather, than broken.

Marketers often fall into the trap of underestimating how broadly their brand really competes. Segmentation studies overstate very small differences, and it's assumed that brands with different features (e.g. price levels) must sell to very different people, or for very different buying situations. These assumptions are often unrealistic or exaggerated. It is useful to start the duplication of purchase analysis with a very broad market definition, then if partitions appear, undertake separate duplication analyses, for example, a separate premium ice-cream category and an everyday ice-cream category.

Potential uses

The duplication of purchase law can be used to find partitions and, therefore, to understand the structure of a market. The law can provide a consumer-buying based guide to define the product category. This can be extremely useful, if only to reduce the debates between managers about category definition. Importantly, it can help prevent the blinkered, production-oriented vision that comes from category definitions based on product features or production processes. These are rife, and are typically too narrow. For example, the chocolate market can be divided into dozens of sub-markets (block, bars, pieces, individually wrapped, candy coated, chocolate coated candy, and so on). These product-based category definitions can blind managers to their true competitors and prevent them from understanding how customers actually buy.

Ehrenberg–Bass Institute researcher John Bound tells a lovely story about when he was a market research manager for Quaker Oats in the UK. At the time research suppliers thought there was a hot breakfast cereal category and a cold breakfast cereal category (among others). Then one day someone pointed out that the cold breakfast cereals still sold well in the middle of (a very cold English) winter. Researchers were immediately sent out into the field to investigate what was going on; they discovered the naughty consumers were putting hot milk on their cold breakfast cereal![6] This example shows that product-oriented category definitions isolate brand managers from real buying behaviour.

Even consumption situation based category definitions (e.g. for snacking, for sharing, for gifting) commonly result in artificial overly narrow category definitions. The reality is that few brands are exclusively bought for specific consumption situations, and which brands are bought for which situation varies between consumers and over time.

Narrow category definitions lull brand managers into a false sense of security and can result in unduly conservative growth targets. Brand managers prefer category definitions that make their brand appear to have a substantial market share—no one like to be ranked seventeenth. So narrow category definitions are commonly adopted. These also make growth potential, particularly penetration potential, appear more limited than it really is.

In addition to giving guidance regarding category definition, and showing which brands compete with which, the duplication of purchase law can also be used to predict where new brands will steal sales from (and so can estimate cannibalisation of sales of sister brands). This is essential for planning the launch of a new product.

The duplication of purchase law also shows up in customer defection and acquisition. A brand will gain most of its new customers from the largest brands, and will also lose more of its customers to larger brands. Therefore, the law can be used as benchmark for customer defection and acquisition to and from each of a brand's competitors. For example, if a brand is losing more customers to another brand than you would expect given that brand's size, then this indicates some unusual overlap in marketing strategy. (Perhaps the competing brand has opened a store close by?)

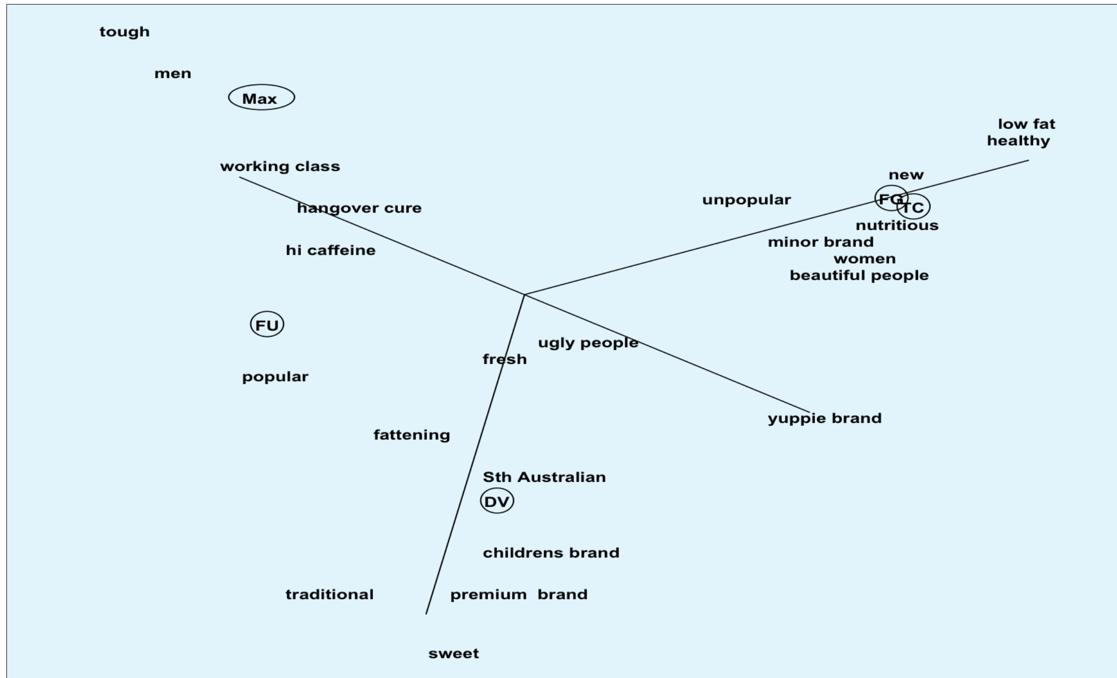
Marketing strategy insight

Duplication of purchase analysis does more than show who competes against who. The fact that there is such a natural law (that describes sharing in most categories rather well) tells us about how brands compete in general. We live and work in a world of mass markets. Ben & Jerry's and Häargen Dazs, while they are close competitors, also compete against all other ice-cream brands, especially large ones like Carte D'Or. Such patterns hold around the world and in different product/service categories. For example, customer gains for BMW in France come more from large non-premium brands like Renault, Citroën and Peugeot than from

5. Some brands might successfully target a particular usage or occasion rather than type of person. For Example, ice-creams to eat at the movies. Yet this still might be expected to produce demographic differences in customer baes, and deviations from the duplicatin of purchase law.

6. Consumers often behave as if they haven't read the marketing plans for the brands they buy.

Figure 1 - Perceptual map



smaller luxury brands like Mercedes and Audi (Ehrenberg and Bound 1999).

Partitions exist in markets; premium quality/price partitions are particularly common. But it is sensible to think of these divisions as sub-markets (partitions) rather than as entirely separate markets.

Table 4: Duplication of purchase—flavoured milk

Buyers of brand	Percentage of buyers who also bought brand				
	Farmers' Union	Dairy Vale	Take Care	Max	Feel Good
Farmers' Union		21	8	6	5
Dairy Vale	43		5	5	5
Take Care	52	16		0	20
Max	45	20	0		0
Feel Good	53	27	33	0	
Average	48	21	12	3	8

Source: Sharp, Sharp and Redford 2003

Positioning and partitioning

This story of customer overlap is at odds with the picture provided by perceptual maps (and other brand image analyses). The story is usually of some brands competing closely with each other, and very indirectly with other brands in the competitive set; a typical perceptual map might look like Figure 1 (the brands are marked in circles).

This perceptual map for flavoured milk (iced coffee) in Australia implies there are very significant market partitions. The brand Max is for working-class males; Farmers' Union is mainstream and devoid of a brand 'image'; Dairy Vale is a children's brand, or perhaps is sweet and luxurious; while Feel Good and Take Care are new, healthy brands for women. However, duplication of purchase analyses have shown that market partitions are generally due to substantial functional differences and similarities between brands, factors like where or when they are physically available, rather than their brand images.

Table 4 is a duplication of purchase analysis for the same flavoured milk brands based on the actual buying of the same consumers who provided the data for the perceptual map.

The main evident pattern is the duplication of purchase law. The brands are ordered according to market share and it is easy to see that every brand shares about half their customers, during this period, with the largest brand: Farmers' Union. There is very little customer overlap with the smallest brands: Max and Feel Good.

As far as evident market partitions, there is one clear partition involving Take Care and Feel Good. These brands share customers to a far higher degree than the duplication of purchase law would predict (see the numbers in bold in Table 4). The Take Care and Feel Good products both have zero sugar and low fat—as suggested by their names. These functional differences show up both in duplication of purchase and in the perceptual map.

The perceptual map correctly shows that Take Care and Feel Good are close competitors, but it exaggerates the degree to which these brands are isolated from competition from the other brands. Both these brands still share more customers with the large brand Farmers' Union than they do with each other—many consumers buy both. In general, perceptual maps often suggest more market segmentation than really exists (Sharp and Sharp 1997). This is partly due to the underlying statistical methods, which are designed to highlight differences; these methods are also sensitive to outliers in the data set.

Implications for brand portfolio management

Should marketers worry if their company has several similar brands? Should these brands be collapsed together, should some be dropped, or should marketers strive to position them differently? In general, the answer is don't worry.

Companies often have similar brands that sell to similar populations. Coke has Diet Coke and Coke Zero (and Regular Coke). Mars have the Mars Bar and Snickers. P&G has Tampax and Always. General Motors has Saturn Astra and Chevy Aveo. This isn't something to worry about. It's normal for brands in a category to compete against one another and to sell to near identical customer bases. Even brands that are obviously quite different (e.g. KFC and McDonalds, Visa and AmEX) still directly compete.

Heinz doesn't worry that it offers tomato soup as well as vegetable soup. Similarly a marketer shouldn't worry about their company having similar brands. If a new soft-drink company could choose to own and market any

two global brands, should it choose Coke and Fanta? No, it should choose Coke and Pepsi, because these are the biggest brands globally, with the most valuable market-based assets.

What marketers should worry about is whether or not their brands are distinctive. Are they easy to recognise and distinguish from others? If they are not, the brand's advertising won't work— and consumers won't see the product on the shelf. So brands should look different (this is what branding is about) even if they don't compete as differentiated brands (this is discussed in Ehrenberg-Bass Institute Report 17 for sponsors).

Marketers should also worry about the total portfolio effects of price promotions. When one of a company's brands is on special, this not only takes full-priced sales that would have happened anyway, it also steals full-priced sales from the company's other brands.

If brands grow they will always steal from the other brands in the same product category. The exact amount of cannibalisation that will occur between brands can be predicted by the duplication of purchase law. What you need to watch out for is excessive cannibalisation. Companies tend to be good at stealing sales from themselves because their brands go through the same sales force, the same distributors, etc. Marketers need to acknowledge and accept this, but to also be on the look-out for excessive cannibalisation.

Finally, the decision to drop, phase-out or sell brands should be based on viability, cost and operating issues and not on how similar the brand is to another of the company's brands. This is especially true if the brands are well established with substantial market-based assets.

Modern sophisticated mass marketing

Markets are usually a little fragmented, but within common-sense definitions they still largely function as mass markets[7]. The small degree of fragmentation is often catered for by brand variants, which leaves marketers still needing to know how to compete in a mass market. This is Kotler's 'product variety marketing', which is a type of mass marketing.

Toothpaste is often used as an example of segment marketing where marketers have broken the market into many sub-markets. For example, Colgate provides numerous varieties, each of which is supposed to successfully target and meet the needs of a specific segment of the market. '… these include 'normal' toothpaste, gel toothpaste, children's toothpaste, tooth whitening toothpastes, anti-bacterial, tartar control, toothpaste for sensitive teeth, and toothpaste with extra strong fluoride' (Kotler, Armstrong, Brown and Adam 1998). However, there is little evidence that Colgate actually targets specific market segments. To say there is a tartar control segment as evidenced by the tarter control toothpaste is circular logic. Kotler et al. (1998, p. 296) tell us that segment marketers 'develop the right product for each target market and adjust their prices, distribution channels and advertising to reach the target market efficiently'. But this does not hold up to scrutiny in the Colgate example (and for Coca-Cola discussed earlier). Colgate does not use different distribution channels for their tartar control product, in fact their products are all on the same shelf, in the same stores, put there by the same merchandisers. The products' prices are often within cents of one another and while there might be different ads for some products (alongside much corporate brand advertising), these ads typically appear in the same [mass] media—television ads in particular are known for their wide, unsegmented reach. The difference in each product's marketing mix is limited to the difference that exists between each product variant. The role of advertising is only to 'bring to public notice' that different products exist and are available. These marketing practices fit perfectly Kotler's definition of mass, product-variety marketing – which is exactly the marketing situation that most firms find themselves in.

Therefore, brand managers need to be cognisant of all their competitors. They should be wary of thinking that their brand is partitioned/positioned away from other brands. It might be fashionable for a brand manager to call themself a target marketer, but it's best to think like a sophisticated mass marketer. This means being aware of the considerable heterogeneity within the mass market; for example, in purchase frequency and in the brands that individuals buy. Within the mass market there are lots of different buyers. Sophisticated mass marketers cleverly react to this heterogeneity (e.g. by marketing multiple brands and variants, by using multiple media and distribution channels), and rather than trying to hem their brands into niches, they are always looking for avenues for broad reach.

Further Reading

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7. Even brand variants (SKUs) largely sell to similar customer bases.