

# The three shopping currencies

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## HERB SORENSEN

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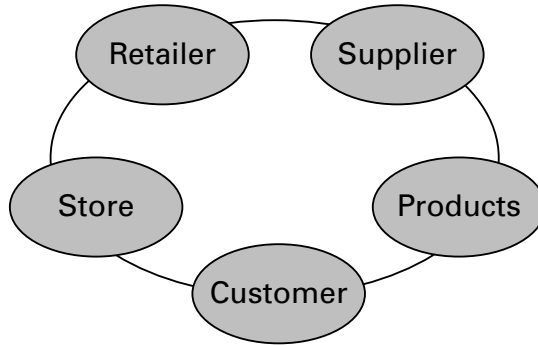
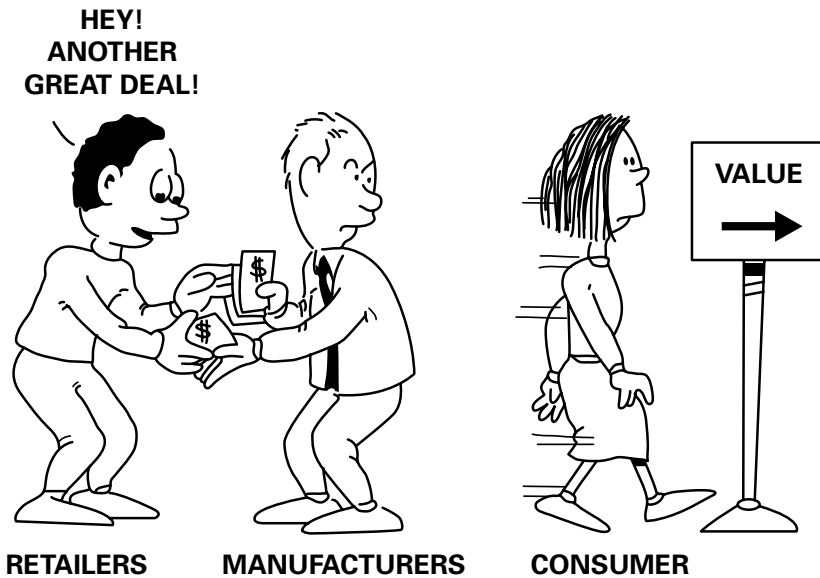
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## Retailing is a relationship business

Retailing is all about bringing people together with the things they want and need. It has always been at the cutting edge of social evolution – and always will be. To really understand retailing, it is helpful to think of it in relationship terms. That is, to think in terms of the variety of relationships that most seriously impact on retail. These are illustrated in Figure 9.1.

For much of retail, the dominant relationship driving the practice is that between the retailer and the product suppliers. This is especially true in a self-service world where the retailer's primary responsibility is (1) to provide a store (2) stocked with merchandise, and the primary responsibility of the supplier is just that – to supply the merchandise with which the store is stocked. This leaves the self-service customers to *self-build* their own relationships, primarily with the store and the product within, the retailer and supplier being remote parties of little interest to or involvement with the customer. Glen Terbeek captured the essence of these relationships in *The Agency Agenda* (Figure 9.2).

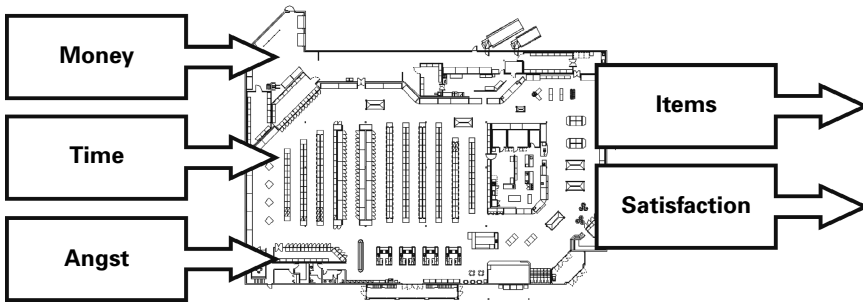
This is the stark reality that drives a good deal of retailing. Retailers and suppliers do seek to have a relationship with shoppers, but their own mutual relationship tends to cause those with the shoppers to pale into insignificance, and to remain somewhat distant, by comparison. This is the reality of self-service retail.

**FIGURE 9.1** Variety of retail relations**FIGURE 9.2** Relationships among retailers, suppliers and shoppers (Terbeek, 1999: 34)

## The 'give – gets' of the shopper in the store

The purpose of this chapter is to examine in more detail the relationships that shoppers develop with the store and the products. For this purpose, we first consider the store in an economic/engineering model of inputs and outputs, relative to the shopper (Figure 9.3). As the chapter's title suggests, there are three shopper inputs to the store, which we refer to as the three currencies. And then there are the two basic outputs of the store. These five

**FIGURE 9.3** ‘Give-gets’ between the shopper and the store.



then are the ‘give-gets’ between the shopper and the store. The shopper *gives* money, time and angst, and *gets* items and satisfaction.

The advent of electronic checkout scanners in the 1970s opened the way for massive and relatively accurate measurement of the money and items, the two most obvious of the shopper’s give-gets. In fact, some of the largest research organizations in the world are based on the business of compiling the counts of these two variables and metering them out to both retailers and suppliers, for a healthy profit. This reinforces the stunting focus of retailers and suppliers on money and products, with shoppers simply seen as serving as a catalyst for the exchange of money for products.

This perspective has encouraged a focus on the laudable task of getting the right products to the right shoppers, none of which requires an understanding of the shopping *process*! Hence, understanding of products and shoppers is widely misconceived as ‘shopper knowledge’. It is an aspect of ‘shopper knowledge’, but it certainly is not ‘shopping knowledge’ – which encompasses the process of shopping.

Further, it is noteworthy that for very many years, great numbers of retailers used scanner data for little more than totalling up the shoppers’ payments at the checkout, and for inventory control: monitoring the flow of goods through the store. It is especially significant that this information is summed up at the store level, and compiled *on a weekly basis*. Weekly totals are hardly the kind of detail that might be required in terms of understanding actual shopper behaviour in the store. That is, these are rough measures, albeit in truckload quantities, that record what goes in and out of the store on a weekly basis but say very little about the *process* that happens inside the store.

This is not to dismiss the value of this input–output information, especially on a competitive basis – channels, chains, categories, brands and even individual items. This has tremendous value, particularly to the supplier, which accounts for massive attention to every slight fluctuation in these numbers. But, again, those fluctuations are not necessarily very revealing about the causes.

## Relating single-item purchases to individual shoppers

In the past decade, there has been tremendous growth in the recognition of the value of transaction data associated with specific shoppers, gathered through shopper loyalty card information, rather than adding up the weekly purchases of the non-discriminated crowd. In fact, what was at the time a very small consultancy, dunnhumby, by looking at the purchases of individual shoppers, linked to their demographic and other characteristics, assisted Tesco's move up to the position of third-largest retailer, globally.

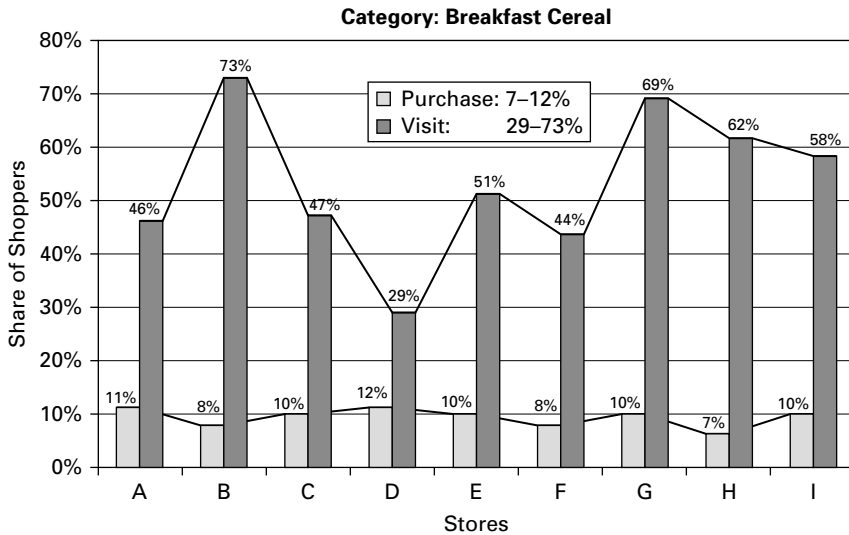
The data for this purpose do not even exist in the weekly roll-ups that are provided by Nielsen and IRI. It is not just shopper identity that is required, but a detailed log of every single shopper's every single shopping trip and every single item purchased on those shopping trips – or at least a very large number of them.

However, salutary as the marriage of transaction log data to demographics and psychographics might be, this is still input–output type information that does not address the actual *process* within the store. If we look at the outputs from the store shown in Figure 9.3, we see that *satisfaction* is also an output. It is interesting that a wide variety of organizations and methods have focused on determining, in more or less systematic ways, customer satisfaction. All of these programmes can have tremendous value in revealing the shoppers' state of mind as they leave the store, or more often, some time after their store experience.

The point here is that, again, this is an output measure, not a process measure. Thus, all three of the common measures of the store *in relationship to the shopper* are inputs and outputs to the store that can, at best, provide only inferential information about what is happening within it. In fact, we submit that, given the lack of direct measurement of behaviour within the store, it is fair to describe the store as more or less a *black box* to all three of the major parties to the store: shopper, supplier *and* retailer. A good deal more objective evidence in support of this assertion could be offered, but that is not the purpose of this chapter. Rather, we seek to shine a bit more light on the store by showing the importance of the other two inputs, time and angst, and outline metrics and their application to retail profits, which should be of great interest.

## Time as the measure of shopping

While counts of items and the money associated with their purchase are the two most crucial measures of outputs and inputs, *time is the most crucial process measure*. That is, money and items measure purchasing, but it is time that measures shopping. This may not seem readily apparent, but in our own work of tracking millions of shopping trips on a second-by-second basis, it has become apparent that it is time that distinguishes a visitor from a shopper.

**FIGURE 9.4** Category: breakfast cereal

Think about it: if you are a supplier that wishes to move merchandise through a retail establishment, it isn't having shoppers in the store that brings you sales, it is having shoppers in the aisle or location where *your* merchandise is. More than this, the key is not just the shopper who is hurrying past your location on their way to somewhere else, but shoppers who are spending at least a modicum of time considering your – and your competitors' – offerings. Traffic in itself never buys anything, it is *traffic investing time* that becomes shopping. Figure 9.4 shows the relationship between the number of baskets with a breakfast cereal purchase, and the number of baskets that *pass*, that is, traffic past the breakfast cereal. Simply, there is no relationship between the two because in most stores the traffic past cereal has little to do with interest in cereal: that aisle is simply a convenient (or not) aisle to somewhere shoppers want to reach. On this point, a study at the Wharton School confirmed that a high percentage of individual shoppers' time is spent moving about the store and not directly involved in acquiring merchandise (Hui, Fader and Bradlow, 2009).

The important point here is that time is the vital ingredient that converted some proportion of these visitors into buyers, and it converted to about the same final rate of purchase in *all* the stores. Clearly we need to understand better the potent power of this second currency, time.

There is a second point here worth noting: Although there is certainly variability from store to store in terms of the proportion of shoppers purchasing a category – cereal in the example – the reality is that the proportion of baskets with a particular category of purchases is *relatively* constant across stores. In the example, about 9 per cent of baskets contain a cereal

purchase across this series of stores across the United States and across chains. To be sure, some sell more and some sell less, but the relative constancy of category sales is a reflection of the constancy of crowds. Although there will be differences, any 100,000 people will behave pretty much as any other 100,000 people will, at least in terms of cereal purchases (and for most other categories, for most of the time).

## Time is opportunity to sell

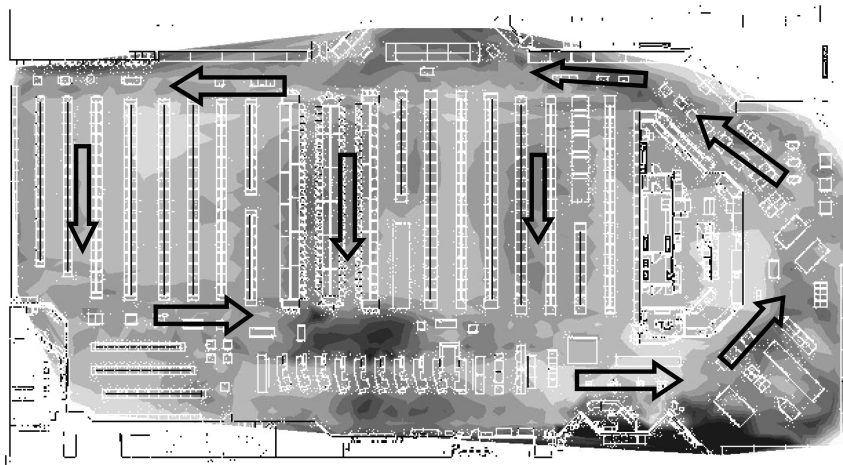
Based on a variety of lines of evidence, it is apparent that it takes about a second for a shopper to actually take note of a stimulus, whether of a package, a product display or some other media. This means that one second of one shopper's time is a pretty good basis for measuring how much shopping is going on. Hence, *shopper-seconds are the basic unit of shopping*.

Another way to look at the shopper-second is to realize that each second a shopper is in the store is another opportunity to sell them something. This is the key to using time as more than just an input measure. Of course, we could measure how long a shopper is in the store, count the money they spend, and determine how many seconds it takes for them to spend a dollar, euro, baht or whatever. In fact, we can measure all the shopper-seconds from all of the shoppers in the store, and compare that with all the money the store takes in, to determine the efficiency of the retailer's use of the shopper's time, as a store performance measure. Why not?

Retailers commonly compute the turnover of cash per square foot or metre. This is certainly a useful and valid measure of the productivity of the real estate. Why wouldn't we want something to tell us the productivity of their use of an asset of great value to the shopper? In fact, it is not too great a stretch to say that many retailers know a good deal more about the management of real estate (and inventory) than they do about the management of shoppers. As mentioned earlier, stores can operate successfully with this knowledge because retailing is *self-service*, and shoppers are expected to manage their own shopping experience.

## Participating with the shopper: 'active retailing'

In order to become actively engaged with shoppers, it is necessary to understand how they spend their time in the store. Or, perhaps understand *where* they spend their time in the store. This would enable us – rather than waiting passively for shoppers to find their way to the merchandise they need – to actively understand their needs and make relevant offers to them to expedite their purchases. This is a crucial concept, because instead of frustrating shoppers by trying to 'build basket size' by holding them in the store longer, hoping they will buy more, we will 'build basket size' by getting more mer-

**FIGURE 9.5** Distribution of shopper-seconds across the store

chandise into their baskets more quickly. The simple fact is that holding them in the store longer, in the long run, will mean that they won't come there so often. Because, in the long run, whether consciously or not, they will come to realize that you are not being as helpful as your competitors.

So let's consider a not unusual shopping trip (shown in Figure 9.5) that begins with the shopper coming through the door, in this case on the right-hand side of the store.

There is very little opportunity to sell the shopper in the lightest grey areas, with much better opportunities in the darker areas, where shoppers spend a more than average amount of time. It has taken me years to stop thinking about how to get shoppers to those lighter areas, and instead to focus on how to sell them more in the darker areas, but this is the very essence of active retailing – focus on the shopper, rather than trying to get the shopper to focus on the merchandise.

Here we see a great amount of shopper-time just inside the entrance, with substantial numbers of shoppers making their way – in a counter-clockwise fashion – around the perimeter of the store. When they get to the back of the store, they are ready to leave, and begin to move through the broad back aisle across the store.

Notice what happens next. When they look down the first aisles on their left, what do they see? The produce and customer service areas where they started their trip. But as they continue across the store, they eventually come to an aisle where the view at the front is *not* merchandise: the first heavily travelled aisle, from the back of the store to the front, is the first aisle that leads to the checkout stands and the exit. This is a pattern that is repeated in store after store. In fact, in general, as shoppers get nearer and nearer the checkout they shop faster and faster – using most of their 'leisure time' at the

beginning of the trip. The phenomenon is so pronounced and regular that we refer to it as ‘the checkout magnet’.

## Understanding shopper behaviour vis-à-vis understanding products

But there is a very important point: this behaviour is *not* driven by the location or arrangement of merchandise! In fact, a very large part of shopper behaviour in the store is not driven simply by the merchandise on display. It is possible to leverage this principle by measuring shoppers’ behaviours across a series of stores with similar centre-of-store aisle grids and finding mathematical patterns in their proclivity to spend time by stopping, shopping and purchasing items at those exact locations, as shown in Figure 9.6. In short, here we see the *pattern* of shoppers spending productive time.

So this grid provides a general guide to how products will perform, based on their location within the centre-of-store aisles. As we noted before, only a minority of the shoppers’ time is actually spent in the direct acquisition of merchandise. The role of active retailing is to identify the time that is not economically productive, and to do more selling during that time. Simply attempting to increase shopper time in the store is counter-productive, as it leads to fewer shopping trips, of shorter duration.

Another way to look at this is that, instead of trying to lure shoppers to where they are not, instead learn where they are (and where they are going) and merchandize to that. But of course, this active retailing must begin with knowledge of just where the shoppers are spending their time. It is shopper knowledge rather than product knowledge that can produce *outsized* sales and profits. (Product knowledge is the specialty of most retailers and their suppliers.)

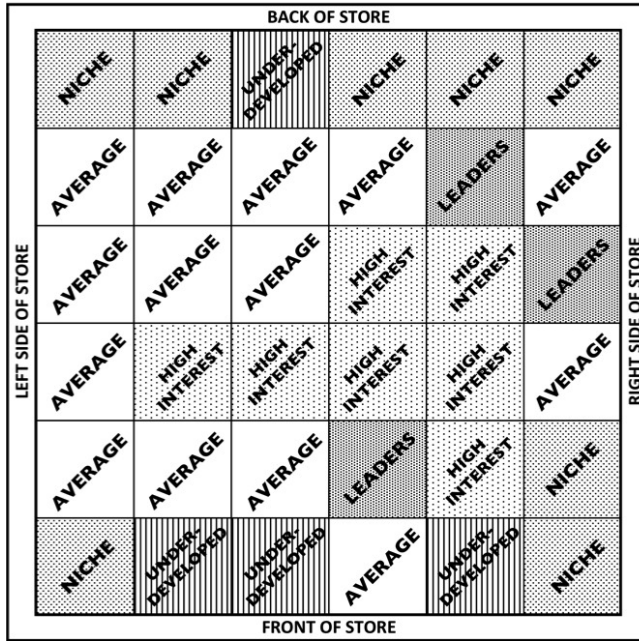
Lest it be thought that the importance of time is only relevant to supermarkets, these principles have been validated across a great number of retail establishments, from full-size shopping malls to closet-like convenience stores. Using shopper-seconds as a standard metric brings retailers into closer alignment with the second currency of great concern to shoppers: time. The significance of this will be further illustrated in our discussion of the third currency: angst.

## Angst: a vague unpleasant emotion

The third currency of shopping is easy to understand, but difficult to measure. It’s a psychic, emotional deficit that can involve anything from a long checkout line to an out-of-stock item. Although it may be difficult to measure, this doesn’t mean that the effects are slight or inconsequential. For our discussion here we want to focus on two major drivers of angst, both of which are related to the matter of choice.



**FIGURE 9.6** Shoppers' time being converted to salesSource: Suher and Sorensen, 2010.



**LEADERS:** Good at stopping the traffic; as well as closing the sale  
**NICHE:** Not good at stopping traffic; but good at closing the sale  
**AVERAGE:** Moderate stopping power; moderate closing power  
**HIGH INTEREST:** Good stopping power; poor closing power  
**UNDERDEVELOPED:** Poor stopping power; poor closing power

Sheena Iyengar, author of *The Art of Choosing*, conducted an experiment that involved product demonstrations in matched stores (Iyengar, 2010: 177–215). Barry Schwartz reported earlier on this as follows:

In one condition of the study, six varieties of the jam were available for tasting. In another, 24 varieties were available. In either case, the entire set of 24 varieties was available for purchase. The large array of jams attracted more people to the table than the small array, though in both cases people tasted about the same number of jams on average. When it came to buying, however, a huge difference became evident. *Thirty percent of the people exposed to the small array of jams actually bought a jar; only 3 percent of those exposed to the large array of jams did so.*

As Dr Schwartz notes: ‘A large array of options may discourage consumers because it forces an increase in the effort that goes into making a decision. So consumers decide not to decide, and don’t buy the product’

(Schwartz, 2004: 19, 20). In this case, fewer choices led to *ten times as much purchase!*

Generally speaking, people fall into one of two camps on this issue, described as ‘satisficers’ and ‘optimizers’. When shopping, the satisficer uses an inner standard, a hurdle, and any product meeting or exceeding the standard will be accepted as satisfying, and no further consideration is needed. However, many shoppers are optimizers, for whom no level is satisfying *if there may be a better option*. And just what is ‘better’ can be a complex matter, involving personal tastes, price, objective quality, image and so on. But the bottom line is that more choices may create massive angst, leading to non-purchase, even when there is considerable motivation to buy.

## Choices, choices, choices

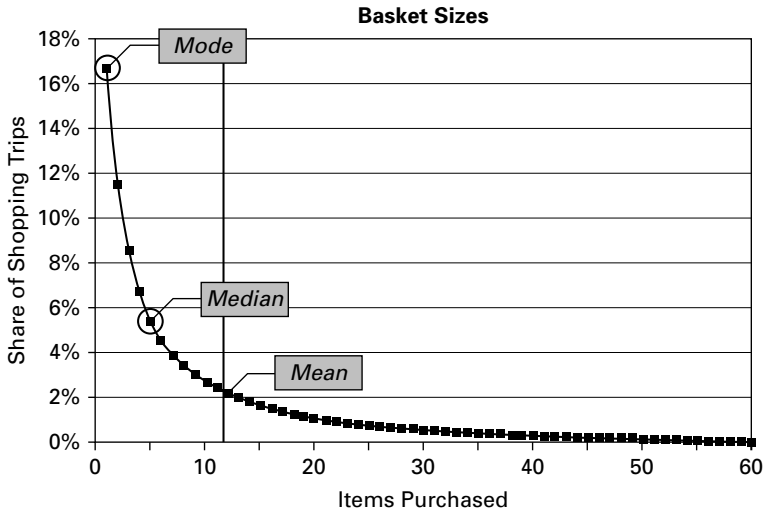
Putting this into market context for fast-moving consumer goods, a retailer begins with inventory choices from more than a *million* individual items (SKUs – stock keeping units) in various supplier warehouses. From these, something like 30–40,000 items are selected to offer to shoppers in a supermarket. However, individual households only purchase 300–400 different items *in an entire year!* And only about half of those are purchased regularly, month-in and month-out, throughout the year.

When we look at individual shopping trips, the picture becomes even more shocking and angst-producing (for the shopper.) Half of *all* supermarket shopping trips result in five or fewer items purchased! These numbers are as solid and factual as anything could be in retail, having been validated (so far) on every continent except Africa and Antarctica (Figure 9.7).

The fact is that most shopping baskets will contain only *one single item*, as seen in the transaction logs of major retailers around the world. And yet retailers are often focused on ‘the stock-up shopper’. It is true that those baskets with 20 or more items have a lot of economic value to the retailer, but what about the people bringing those baskets to the checkouts? These very same ‘stock-up shoppers’ are virtually ignored, strategically, for the vast majority of their trips to the store, during which they acquire one or a few items. When buying only one item, they are still ‘stock-up shoppers’, just on a different trip. Is it any wonder that an entire industry grew up to service the quick-trippers? Convenience stores are an illustration of what ‘stock-up shoppers’ do when they are not welcomed in their usual establishments for those quick fill-in trips. Figure 9.8 shows the type of retail establishments where single item purchases dominate!

But how about stock-up shoppers, when they are on a stock-up trip? Supermarkets in America typically have sales of \$10–20 million per year. The very good stores may hit \$30–50 million per year. However, one chain manages stores that regularly push *\$100 million per year*: that is, sell twice to ten times as much as its competitors, per store. Managers of those stores cite premium customer service as a major factor in their success. It is certainly

**FIGURE 9.7** Basket sizes in supermarkets



**FIGURE 9.8** The types of stores where single-item purchases dominate



a factor, but is unlikely to account for the outstanding performance of the stores. There are three other factors, two of which relate to *choice*, that need to be considered.

The first of these is that the stores offer shoppers only 2,000 items from which to make their selections. Is that enough to generate 10 times more sales than its competitors? Well, it constitutes about 10 times more items than the typical household will regularly buy. Think of it this way: 2,000 items, properly selected, can provide 10 *options* for every item shoppers typically purchase. Even given the diversity of tastes in a major metropolitan area, there are probably not many people who wouldn't find their needs met at a Stew Leonard's (the chain cited here.) More importantly, think of the massive reduction in angst when the shopper does not have to wade through those other 35,000 items to find just those they need (Sorensen, 2011). So Stew Leonard makes massive choices *for shoppers*, and shoppers reward the reduction in angst with massive purchases (See *Stew Leonard: My story*, 2009: 224–225).

The second choice issue addressed at Stew Leonard relates to navigation of the store. There is no question that part of the angst issue in most stores is, 'where is the...?' This problem is greatly alleviated at Stew Leonard by *eliminating navigation!* How is this done? Simple, there is only one aisle in the store! That is, the store mostly consists of one wide aisle that snakes its way through the store, so that as shoppers traverse this one aisle they are exposed to all the merchandise in the store. Of course, that's only 2,000 items (plenty), but it's all there, everything the typical household needs – and 10 times more. This means the shoppers don't have to spend any time wondering where this or that is, but simply devote 100 per cent of their time to assessing the moveable feast that passes effortlessly past them as they move along with the comforting crowd of fellow shoppers, all enjoying the same angst-limited shopping trip. (This is true *social marketing*, and not of the virtual variety.)

The third factor (beyond customer service) is the very large amount of fresh goods. At its core, Stew Leonard is, as advertised, a *dairy* store, and the business has its roots in that business. So even though it is a full grocery business, it does have a strong focus on fresh produce.

None of this is intended to hold up Stew Leonard as a model for the entire industry, but rather as one successful entrepreneur's focus on the three currencies that the shopper pays in the store: money, time and angst. It is certainly possible to achieve outside sales and profits using Stew Leonard's principles in a more conventional supermarket

The key to retailer profits – and massive customer satisfaction to go with massive amounts of merchandise removed from the store – is to deliver those goods with an *optimum* of time, angst and money. This is the crux of the matter: what is the optimum? The reality is that money, time and angst are themselves interrelated, so there is not a single optimum.

To illustrate this point, consider an experience at Campbell's Soup years ago, when it was recognized that soup, with all those little cans and large

number of varieties, represented some real challenges for the shoppers attempting to find the specific item(s) they wanted. So in a carefully controlled matched-store test, the soup was alphabetized (just like spices are). Sure enough, shoppers could find their targeted variety more readily – reduced angst – but they also bought less soup, presumably because they were not impulse buying varieties they just happened to come across while looking for their target varieties (Drèze, Hoch and Purk, 1994).

This illustrates what we have long observed: any rule of rational retailing can be profitably violated. We could multiply examples of this, but these profitable violations do not invalidate the principles behind the rules, and retailers who understand those principles can measure the impact of this or that retail practice in relation to the rules.

In spite of the extraordinary success of Stew Leonard, there are valid reasons why the industry hasn't stampeded to that retail model. These include the economics of the retailer–supplier relation, as well as competitive supplier–supplier relations. What is referred to as 'SKU proliferation' is not an altogether irrational free-market response, providing genuine shopper benefits. But there are perhaps many players in the game with little understanding of the costs. It is our goal to shed some light on this through the use of metrics.

A full discussion of current and likely future trends is not practical here, but we will consider some strong players who are taking effective action. This is not intended to be a broad survey but just two examples:

- HEB's central market in Plano, Texas, appears to incorporate some of the same elements extolled above, in particular a serpentine path through a full-sized store, with lots of fresh merchandise. There are currently eight stores, twice as many as Stew Leonard's, but they are backed by a much larger regional chain. Although we are not privy to the economic performance of either chain, the growth of this concept shows a lot of promise.
- Tesco's Fresh & Easy in the American south-west clearly targets fresh merchandise, but is also focused on large numbers of quick trips. The navigation angst is minimized by the small stores, which offer only 3,500 items. However, the stores retain the typical grocery store 'warehouse'-type aisles, albeit with lower shelf height, which gives them a generally more open atmosphere.

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