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Sticky Labels on Fresh Fruit: Marketing Sense or 'Nonsense'?

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The notion of branding is better understood than its economics or its marketing rationale. In the absence of specific preconditions, branding may be pointless or, worse, dysfunctional. In this paper research is reported which was designed to identify and evaluate the reasons provoking Australian apple producers to apply brand names to individual items of fruit. The hypothesis that the decision to apply sticky labels was naive is confirmed. However, other reasons for applying labels have been identified which complicate the issue.

Introduction

There has been a significant increase in Australia over the past year in the number of orchardists' co-operatives which attach adhesive labels to individual items of fruit. These labels convey nutritional information, storage or preparation information, or identify the brand and/or variety of the fruit. To some this would seem to be unexceptional, even belated, since most products carry some sort of label. The cost, at considerably less than one cent per item, is not great. The rationale for such branding is not apparent, however.

In this paper the prerequisites for branding to be meaningful are considered and the extent to which apples, as a prominent example, satisfy these prerequisites is discussed. As well, the rationale underlying the decision to brand is identified.

The Value of Branding

Branding, at best, has the effect of reducing all product attributes to search attributes. Sighting the brand allows the customer to infer that the product to which it is attached possesses relevant attributes. This reduces the risk perceived by the customer that they might make a 'bad buy', acquiring a product which does not meet their needs. This risk, and the value of branding, is greater the more the presence of relevant attributes is difficult to detect by personal inspection of the product prior to purchase. Taste and texture qualities of apples are good examples of such attributes. Australian research indicates that, in 1990, 54% of Australian consumers had difficulty in detecting the poor internal quality of fruit which externally to them *looked good* (HRDC 1990). Consumers' reactions to risk have

been well documented with studies by Sheth and Venkatesan (1968), Roselius (1971), Lutz and Reilly (1974), and Taylor (1974) all concluding that when consumers perceive risk they:

- seek information;
- become brand-loyal; and
- stick to well-known brands.

Among the key characteristics which indicate risk to consumers is *inexperience with the product*.

Plainly, a brand fails to have value if relevant attributes vary under it. A brand should be reliable; it should have 'integrity'.

Too, a brand should be persistently available, to minimise the chances that the customer will forget it, and it should appear on a product where choice exists. In the case of fresh foods which are subject to seasonality in production, satisfying the joint requirements of integrity and availability is difficult. A poor production season can itself threaten a brand's image for quality guarantee. When product is stored to provide continuity of supply, and storage leads to some quality deterioration, brand integrity is at risk. Some consumers may be poor judges of quality in consumption, or have wide tolerance of quality variation, but as such would be unlikely to rely on brands in the first place. They would not value the quality guarantee.

One option for packers may be improved quality control throughout the entire growing and controlled atmosphere (CA) storage processes. The returns to such effort are, ultimately, unknown. A *cost* of weak quality control is the threat to brand integrity.

One implication of the requirement for 'persistent availability' is that packers of branded apples should have access to supply of a given variety twelve months of the year. This presumes, though, that brand and variety are, jointly, the key focus. Maintaining brand awareness and brand image does not require that the packer provide the same variety of apple to the market year-round. The marketing of labelled, poor quality CA apples attests to possible confusion in the minds of packers of the role of the brand. Branding need not be variety-specific. Other options are family branding and combined company/product branding.

Limitations to production or acquisition capacity may have focused packers' minds in the past on providing a single branded variety to the market. This narrow focus may have threatened brand integrity. There is evidence, however, that packers are brand labelling an increasing number of varieties of apples under the same brand name. Of the sixteen brands of apples sighted during the survey reported in this paper, nine brands were marketed with more than one variety, while one of the two leading brands marketed six, and the other seven, varieties.

The conflict between year-round availability and brand integrity implies that conscious decisions will have to be made by packers on the positioning of their products in the market. Year-round availability of a particular variety will achieve 'persistent availability' of the product but is unlikely to be consistent with the provision of quality products. Company/product branding (brand name/variety name), however, provides the opportunity for packers to satisfy the competing requirements of 'persistent availability' and a 'quality guarantee' by offering in-season varieties under the brand name.

Quality maintenance or brand integrity is likely to be a problem with apples but a more basic problem is the usual purchase context. If only one brand or non-brand is available at the point of purchase, the customer will have to be the architect of choice. Specifically, they will need to so value a brand as to choose retail outlets on the basis of whether or not they stock a particular brand. If retailers carry only one brand, choice can be created only by the customer choosing brands by choosing stores. In marketing terms this amounts to apples, in this case, being 'shopping goods'; a product which the consumer will seek out even if this involves going to a number of different retailers. For many customers, we would suggest, apples are 'convenience goods': whatever brand is available will be purchased. If this is the case, logic would suggest that branding of apples will need to guarantee quality differences amongst brands of a variety of apple which matter enough to customers, and are guaranteed with sufficient reliability, to encourage customers to invest the extra purchasing effort involved in reclassifying them as shopping goods.

Considering the variety of foods purchased normally at the same time as apples it seems optimistic to contemplate customers investing such effort or, as an option, routinely patronising a retailer because a particular brand of apple is stocked there. More likely, customers will patronise retailers because of the mix of goods they stock, convenience considerations, and so on. To the extent that this is the case, it would appear to be more appropriate for producers to target the retailer than the final customer. This would not

naturally require the branding of individual product items, only cartons of them. This, of course, requires that a push strategy be adopted.

Getting With It

On the basis of the above reasoning, it seemed possible that apple producers may have begun labelling product because it is 'the thing to do'. Sadly, converting commodities to differentiated products requires more than the will to do so. Branding is a natural offspring of meaningful, and reliable, differentiation. It does not create it. A suspicion we had was that some producers may not understand this. Branding can make one feel that differentiation has been achieved but, alone, it may achieve nothing or worse. In our research we have encountered apples which have what seem to be worms' holes immediately beside the brand label, labels the adhesive of which cannot be removed from the apple (leading to a process of 'carving with the teeth', rather than eating, the apple) and labelled apples whose eating quality was dreadful by any standard. The value of branding in these cases is that it teaches customers which brands to avoid. If quality control is a problem, it is better to keep quiet about the product's origins.

Bettman's (1979) hypothesis that *consumer estimates of perceived risk may be influenced by various judgemental heuristics including availability* was tested by Folkes (1988). Bettman defined availability as *the ease with which one can bring to mind exemplars of an event*. Folkes hypothesised that consumers' estimates of the risk of product failure may be determined by how easy it is to recall past bad experiences. Her results indicate that atypical brand names do indeed increase the availability of distinctive incidents. This increased availability led to a bias in the estimate of product failure where availability of bad experiences were heightened by atypical brand names. This is a clear message to packers of branded fruit: to the extent that a brand name is memorable, bad product experiences will lead to disproportionately large negative impacts on demand.

A further expectation we had was that producers may not have reflected on the purchasing context. When customers are confronted with choice amongst varieties and sizes of apples, but not brands, what does a label mean apart from the fact that eating the apple involves the extra step of removing the label?

The prime motivation for any marketing activity undertaken by an apple packer could reasonably be expressed as being:

to increase or at least maintain over time the real returns from apple growing/packing activities.

The marketing means by which apple packers might reasonably achieve this objective includes converting apples from a commodity to a product. This allows them the option of varying strategy on a continuum, with push strategies at one extremity, and pull strategies at the other. If pull strategies are to be incorporated in any meaningful way into the marketing management of apple packers, a mutually effective means of identification of the product by both consumer and retailer is necessary. Branding is one acknowledged method of creating effective communication in a market (Bagozzi 1986).

The Survey

Our research was designed to assess what motivated producers to label product and what the impact seems to be in the marketplace.

We decided against an aggregate economic investigation of the wholesale prices and turnover of both brand-labelled and non-labelled apples. Australian marketing authority data does not differentiate between brand-labelled and non-labelled apples. More pertinent perhaps, brand labelling as a key component of branding has its sphere of influence at the retail:consumer interface. Budgetary constraints precluded the use of panel data or a consumer survey. It was therefore decided to survey apple retailers focusing on their buying and promotion behaviour and on the level of marketing sophistication of apple packers as evidenced by characteristics of their interaction with retailers. In addition, retail outlets were observed and data relevant to the marketing of brand-labelled and non-labelled apples collected.

Fifty six retail outlets were visited in the city of Newcastle, NSW, Australia. The two leading Australian supermarket chains and a third substantial regional chain were included in the sample. Thirteen of the outlets visited were members of these three chains. A total of 429 apple displays were observed in these retail outlets with three organic displays discarded for the purposes of analysis.

Label incidence

The incidence of labelling of apples in NSW is impossible to define in terms of proportion of apples sold. In the survey the occurrence of labelled and non-labelled apples in retail outlets in Newcastle was identified (see below). The number of different brands available in Australia are listed in Table 1.

Table 1

Apple brands marketed in Australia

Brand number	Brand name
1.	Batlow
2.	Nightingale Bros.
3.	Top - Qual Tasmania
4.	Black Diamond
5.	Pickworth's Finest
6.	Clemar
7.	Joyson
8.	Montague
9.	The Apple Orange
10.	Ellimatta Orchards - South Australia
11.	R.J Armstrong P/L
12.	Mountain Fresh - Inglewood
13.	Jef Tompson
14.	Red Rich Orchards
15.	Ladybird - Eastfield Orchards
16.	Manjimup Archway Orchards
17.	Super Froot - Orange N.S.W.

Compiled by the authors.

Other brand-management activity

The observable packer activities, other than application of brand labels, considered to be relevant to branding were those packer activities at the retail level consistent with a pull strategy, such as:

- 1 the employment of sales representatives;
- 2 the provision of point of sale brand specific promotion;
- 3 the provision of storewide brand specific promotion; and
- 4 the creation by the packer of a means of recourse by the consumer for defective product.

Item one was addressed by asking retailers how many times the most frequently visiting apple brand representative called on them in the last twelve months. Only two respondents recalled ever having seen a representative of an apple packer in their outlets, and this had not occurred in the last twelve months. The owner of two large Sydney fruit and vegetable outlets not included in the survey, commented that direct packer/retail interaction was non-existent (Sept. 93, pers. comm). While the size of the packing operation will be a self evident limitation to the extension of the packer/retailer interface, it is difficult to understand the lack of activity in this area by the larger packers. By brand labelling, packers have *prima facie* incorporated pull strategies in their marketing plans.

There were nine outlets which had brand-specific apple display promotion material together with an apple display. Some of this promotion material was homemade. Generally, it was packing material from apple cartons which retailers had adapted so as to exhibit the brand name on the apple display. Professional apple display brand-specific promotion material was provided by only one apple packer. This apple packer was one of two packers considered by the researchers to be the market leaders in the surveyed market area.

Storewide brand-specific promotion material such as posters advertising a brand of apples were sighted in 19 of the outlets visited. No brand-specific promotion material was sighted in any of the supermarkets. If supermarket outlets are counted as three, the number of supermarket chains rather than outlets visited, the sample size of retail outlets is reduced to 46. Of those 46 another four outlets claimed to have had storewide brand-specific promotion material sometime in the last twelve months. The sample is almost evenly split on this item. The evidence is, however, that some apple packers do provide brand-specific

storewide promotion material, evidently via wholesalers, and about half the retail outlets in the sample use that material.

Retailers were also asked if they were aware of any apple packers who had communicated to consumers the existence of a brand-consumer information network. A consumer hot-line was used as an example. The responses from retailers were at times comical with all responding negatively.

Retailer response

Of interest also to packers is the acceptance of brand labelled apples by retailers. If, for instance, the number of retail outlets which do not carry brand labelled apples is relatively high, apple packers would have to reassess the acceptance of brand labelled apples by the retail section of their channels of distribution. Even if retailers carry brand labelled apples, the proportion of brand labelled apple displays in their outlets will give some indication of the value they place on the marketability of those apples. Of course this is not to say that the reason retailers stock brand labelled apples is predominantly because of the labels. It could be that retailers are indifferent to labels. If this were the case, however, it is argued that retailers would be unlikely to separate their apples into single brand label displays. The survey tested the aggregate occurrences of the various categories of displays to establish the occurrence on an industry wide basis of brand labelled, and non-brand labelled, apple displays.

One result of the survey was that there was not a single apple retail outlet that did not carry brand labelled apples. The behaviour of apple retailers should reflect their beliefs or at least their best available response to those beliefs. If apple retailers are indifferent to brand labels on apples then they should be indifferent as to how they display those labelled apples. That is, do they display one brand of labelled apples mixed with other brands of labelled apples? Do they mix brand labelled and non-labelled apples into the one display? If the apples are pre-packed, do they pack labelled and non-labelled apples in the same pack? Moreover, how prevalent is this behaviour as a percentage of all displays for the industry and what proportion of displays on an individual retailer basis are of this nature? While these indicators are not definitive they form a package of behaviours which should give some indication of the behaviour of the industry, and by implication, the regard apple retailers have for brand labelled product.

The quite conclusive results are detailed in Figures 1, 2 and 3 and are summarised in Table 2. Table 2, which follows immediately, defines the terms used to categorise the apple displays.

Table 2
Definitions of survey terms

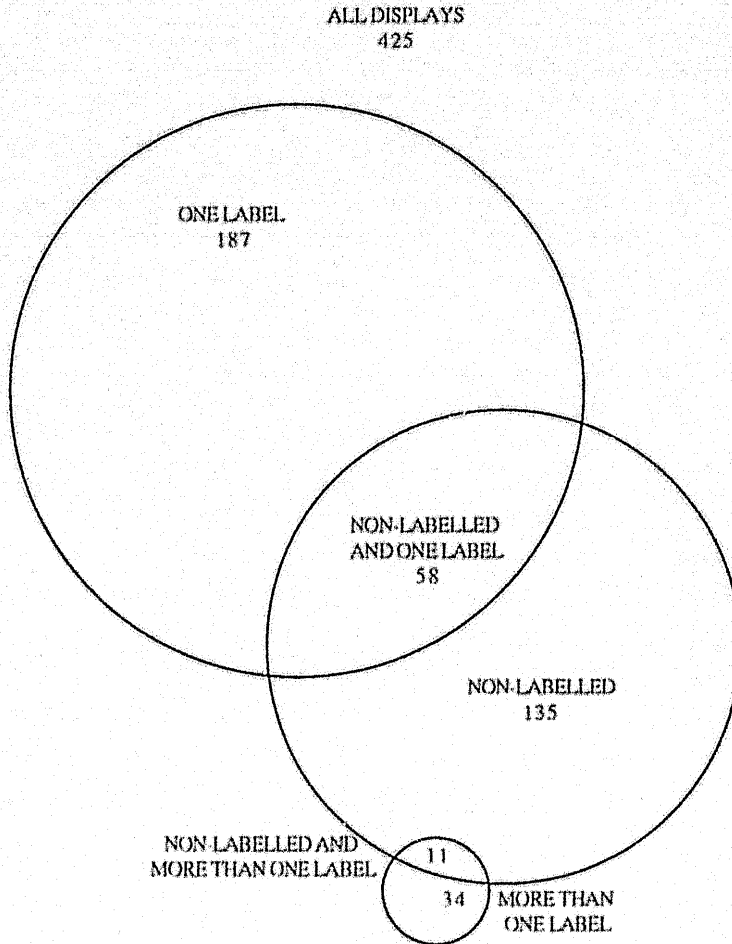
Term	Definition
<i>non-labelled display</i>	the display consists entirely of apples with no adhesive brand labels on them.
<i>one-only-label display</i>	the display consists of apples all of which have an identical adhesive brand label on them.
<i>single-brand display</i>	the display consists of apples all of which have an identical adhesive brand label on them.
<i>more-than-one-label display</i>	the display consists of apples of different brands all of which have adhesive brand labels on them.
<i>non-labelled and one-only-label display</i>	the display consists of non-labelled apples together with apples all of which have an identical adhesive brand label on them.
<i>non-labelled and more-than-one-label display</i>	the display consists of non-labelled apples together with apples of different brands all of which have adhesive brand labels on them.

The results have been stratified into supermarket and non-supermarket retail outlets.

Table 3 implies that non-labelled displays are regarded by the researchers as single labelled displays. The rationale for this categorisation is that non-labelled displays are a generic or home-brand product. To the consumer non-labelled displays are variety- and size-specific. In addition, they are differentiated from labelled displays by the absence of adhesive brand labels. Indeed, consumers may consider generic products as a product more closely identified with the outlet than the producer.

Figure 1

The occurrence of labelled, non-labelled and mixed apple displays



Produced by Ron Coleman

Figure 2

*The occurrence of labelled, non-labelled and mixed apple displays
in supermarkets*

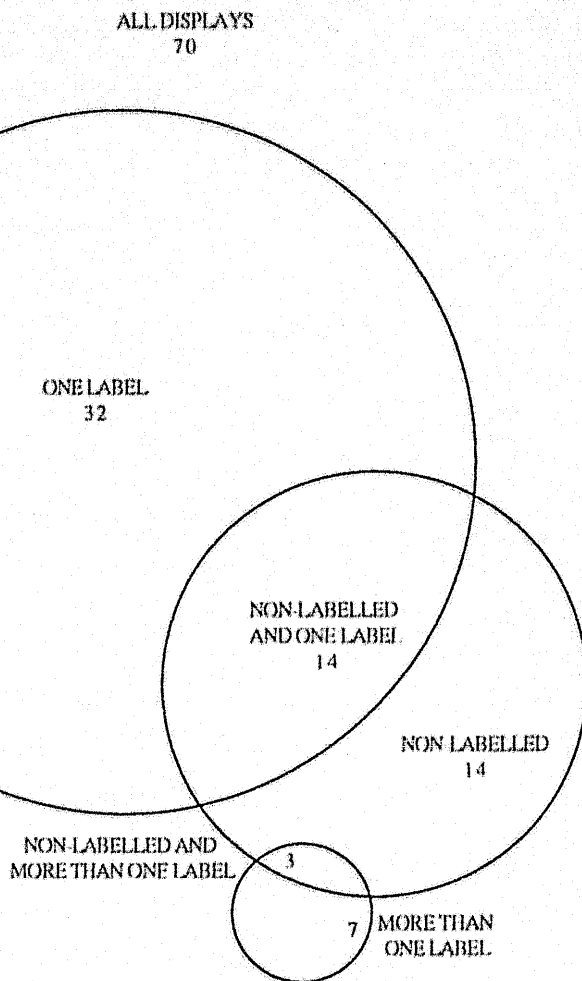
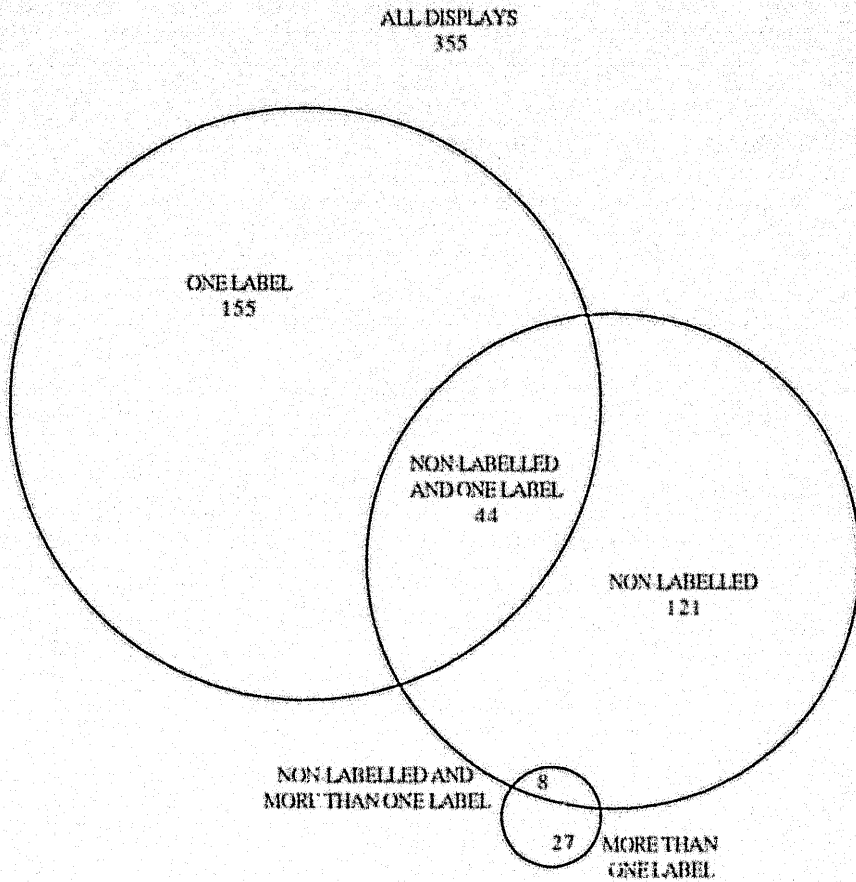


Figure 3

*The occurrence of labelled, non-labelled and mixed apple displays
in non-supermarkets*



Produced by Ron Coleman

Table 3
Consolidated occurrences of labelled, non-labelled and mixed apple displays

Type of Display	Supermarkets		Non-Supermarkets		Consolidated	
	Number	%	Number	%	Number	%
Non-labelled displays	14	20.0	121	34.0	135	31.8
One only label displays	32	45.7	155	43.8	187	44.0
Total: Single brand displays	46	65.7	276	77.8	322	75.8
Non-labelled & one only label	14	20.0	44	12.4	58	13.6
Non-labelled & more than one label	3	4.3	8	2.2	11	2.6
More than one label displays	7	10.0	27	7.6	34	8.0
Total: Multi-brand displays	24	34.3	79	22.2	103	24.2
Total: All displays	70	100.0	355	100.0	425	100.0

Price premia

In our research the retail prices of brand labelled apples were compared to non-labelled apples. Tables 4 and 5 detail the results. The prices of apples are given by size and were recorded in two categories:

1. prices of single apples where the prices were displayed by number, eg. 5 apples for \$2.00; and
2. prices displayed by weight, eg. \$2.00 per kilo.

Table 4

Prices of small, medium and large apples (\$ per apple), where price is quoted in store as apples per \$

	Small	Medium	Large
Total sample size 182			
Price - Labelled	0.27	0.31	0.59
Price - Non-labelled	0.20	0.27	0.30
Standard deviation - Labelled	0.24	0.22	0.36
Standard deviation - Non-labelled	0.04	0.07	0.08

Table 5

Prices of small, medium and large apples (\$ per kilo), where the price is quoted in store as \$ per kilo

	Small	Medium	Large
Total sample size 244			
Price - Labelled	2.07	2.23	2.68
Price - Non-labelled	1.87	2.16	2.28
Standard deviation - Labelled	0.49	0.52	0.62
Standard deviation - Non-labelled	0.40	0.55	0.40

The results are a strong indication that at the retail level labelled apples attract a premium over non-labelled apples. Analysis has yet to be conducted of premia by brand. The research did not attempt to obtain retail turnover figures. In support of these results, 64% of retailers claimed they asked for labelled apples the last time they purchased. Of those, 55% thought they had paid a premium for those labelled apples. Many, however, qualified their response by saying they only paid a premium for quality fruit.

Label as retailer purchase criterion

How important though is the brand label in the purchase decisions of retailers? Retailers were asked to recall in what order they had considered price, variety, size, and the brand label, the last time they purchased apples. All three supermarket chains rated brand labels last. Apple variety was the first criterion they considered. Of the non-supermarkets, only four responded with the brand label ranked either first or equal first. All other respondents ranked the brand label last. Respondents were also asked to rate the four criteria in terms of importance. This aspect of the survey proved difficult to administer. The question was altered to allow respondents to consider how important the brand label would be if they were able to satisfy the other three criteria to their satisfaction. Eighteen of the 38 non-supermarket respondents to this question considered the brand label one hundred percent important. A total of 31 respondents rated the brand label as 50 to 100 percent in importance. Of the supermarkets all three rated the brand label at zero importance.

Brand or varietal name?

Retailers were asked which was more important to them, adhesive brand name labels or adhesive variety name labels. The responses were inconclusive. It would appear that preferences for either *brand* or *varietal* labelling of apples is split about fifty/fifty for the sample. *Variety is seasonal* was the rationale given by one supermarket chain for preferring brand labels to varietal labels. The rationale given by the first of the leading Australian supermarket chains for preferring varietal labelling was:

1. to assist consumers identify the variety of apple; and
2. to provide an industry standard price-look-up code for the variety and the size of apple.

The second leading Australian supermarket chain also wanted an industry standard label for each variety and stressed the need for a *variety colour code* as part of the price-look-up code.

Developments subsequent to the survey

Subsequent to the survey the researchers have become aware of the existence of adhesive fruit labels in use in the Australian market which contain price look-up codes (PLCs). The researchers are not aware of any apple packers currently incorporating PLCs in their adhesive brand labels but await developments in this area within the Australian apple industry with interest. The researchers are also aware that there has been a marked increase

in the size of adhesive labels on other fruits and again await some indication of apple industry trends in this area.

It would appear that the retail apple industry has no overwhelming consensus of opinion on preference for either *brand* or *varietal* apple labels. The survey indicates that apples with generic or varietal only labels are rarely stocked by retailers. This of course implies that varietal only apple labels are rarely used by packers. Given the assumption that leading apple packers have adopted branding as their core strategy, and given the variety of views expressed, apple packers who have adopted combined brand/variety labels in preference to either brand only, or variety only labels, seem to be acting rationally. The logic will be even more appealing to those apple packers who have adopted branding as a conscious strategy and are mindful of the extent to which the major supermarket chains control retail channel power in Australia.

Interpretation

The fact that labelled apples attract premia indicates that the labels add value for consumers. The fact that retailers report that they pay a premium indicates that the labels generate additional revenue, well in excess of the cost of labelling, for packers. In this context, it would seem that the application of labels by packers is rational.

What is less clear is whether these benefits to packers can be regarded as benefits from branding, as distinct from mere labelling. Very few retailers regarded brand as an important determinant of their purchase decision making. Only when quality, variety and size criteria were satisfied did brand assume prominence.

These findings suggest that labelling may be valued by consumers, perhaps as an indicator of minimal quality, but that specific brands do not attract significant levels of consumer loyalty. Consumer research conducted in the United States claims that 50% of consumers think that brand labels on fruit and vegetables convey information. Specifically, 50% believe brand labels convey a perception of quality. In addition, the U.S. research found that 33% of consumers are willing to pay more for branded produce (UFF 1991).

Consistent with consumer response to perceived risk, *lower-income, less well-educated shoppers* were found to be more likely to pay a premium for branded produce. Australian research indicates that 30% of consumers believe that labels displaying *brand name, grower's name or consumer information* are an indication of quality, while a further 10% thought they were *sometimes*. In addition, 44% of Australian consumers said they were willing to pay more for quality fruit. The percentage was said to be higher where the consumers were parents of school-aged children (HRDC, 1990).

It seems possible that labelling has intrinsic value for consumers independent of brand considerations.

Interestingly enough there was evidence of brand dominance in the surveyed market. Of the three hundred and thirty-seven displays containing brand labelled apples, 32.6% were the same brand. The second most frequently encountered brand comprised 24.3% of the labelled apple market. That the two dominant brands comprised 57% of the market is in itself important. More important, however, is the acknowledged fact that the quality of the fruit of the leading brand was widely regarded as the worst in years. The quality problem was confirmed by the marketing manager of that firm (Sept. 93, pers. comm.). It was also acknowledged that the second player had gained some market share in the preceding twelve months. The implications are that the brand image of the number one player was still effective enough for it to retain sufficient consumer loyalty to remain the market leader.

It was not until the field work was under way that it became apparent that apple labelling in Australia was almost exclusively brand labelling. From observation during the field work this appeared at that time to be not an altogether universal characteristic with the labelling of other fruits. That Australian apple labels are almost always brand labels leaves no doubt that the intention of apple packers in the Australian apple market is the creation of apple brands.

In the survey sample only one retail apple display from a total of 429 was found to contain apples with an adhesive varietal label. Adhesive varietal labels contain the name of the variety only and have no indication as to who the apple grower or packer may have been. Data was not recorded on whether labels were brand labels only, or combined brand/variety labels. It was observed, however, that a small proportion of packers were at that time using the combined brand/variety labels. More significantly, these packers appeared to be the industry leaders.

Comments from industry players regarding varietal labelling of apples were mixed. Richard Bennett of the Australian Horticultural Corporation (Aug. 93, pers. comm.) and Dennis Eastman of Sinclair Jenkins, the distributor of adhesive apple labels in Australia, (July 93, pers. comm.) both commented that the impetus for varietal labelling was coming from the major supermarket chains. Eastman further commented that varietal labelling was seen by the major supermarkets as an aid to price-look-up systems at supermarket checkouts. Eastman identified Batlow and Montague as Australian packers who were now using combined brand/variety adhesive labels. Batlow seems to have taken the lead in this development but Eastman thought that in eighteen months it would be common industry practice.

An alternative view to varietal labelling impetus originating with supermarkets was expressed by Nick Pagett of Batlow (June 93, pers. comm.). Pagett made the point that no one packer is capable of supplying a major supermarket chain's annual requirements.

Indeed a single packer would have difficulty supplying all the outlets of a major supermarket chain at the same time. For this reason Pageit felt that the leading supermarket chains do not favour labelling at all and would prefer a generic product.

None but the largest packers have a reasonable hope of achieving brand promotion on a national scale. Second tier packers, conscious of the issues addressed in this paper, however, have the choice of market segmentation; most likely geographical segmentation. A good operator focusing on a manageable geographic segment may be capable of utilising established marketing tools to effectively carve out a share of the market. This could be achieved by creating a brand with strong local support. Local, that is, to the selected retail outlets.

Branding for second tier firms implies foregoing intensive distribution and adopting selective distribution. For this to occur, however, those packers would need to forge strong contractual links with a few, very few, selected wholesalers, and to establish direct links with the selected retailers. Indeed, this is quite fundamental marketing theory which seems to have been overlooked by many packers currently brand labelling their apples. An alternative would be vertical integration. The rationale for undertaking vertical integration based on one product, however, is somewhat obscure.

Paradoxically, the possible unimportance of specific brands to (consumers and) retailers indicates that concerns such as the ability to maintain brand integrity, for example, may be misplaced. The question as to the capacity of packers, of various size in terms of throughput, to convert label importance to brand importance requires further research at the consumer level.

References

- Bagozzi, Richard P. 1986, *Principles of Marketing Management*, Science Research Associates, Chicago.
- Bettman, James. 1979, *An Information Processing Theory of Consumer Choice*, Addison-Wesley, Reading.
- Critchley, Peter.T. 1992, Apples - Batlow Fruit Co-operative Limited, address to the NNF Innovative Rural Marketing Conference.
- Folkes, Valerie S. 1988, 'The availability heuristic and perceived risk', *Journal of Consumer Research*, 15 , 13-23.
- Horticultural Research and Development Corporation (HRDC) 1990, *Consumer Study of The Fruit and Vegetable Market 1990*.
- Lutz, Richard J. and Reilly Patrick J. 1974, 'An exploration of the effects of perceived social and performance risk on consumer information acquisition', in *Advances in Consumer Research*, Vol 1, 393-405.
- Roselius, E. 1971, 'Consumer ranking of risk reduction methods', *Journal of Marketing*, 35, 56-61.
- Sheth, J.N. and Venkatesan, M. 1968, 'Risk-reduction processes in repetitive consumer behaviour', *Journal of Marketing Research*, 5, 307-310.
- Taylor, J. W. 1974, 'The role of risk in consumer behaviour', *Journal of Marketing*, 38, 54-60.