# Impediments to Product Differentiation

Vic Wright
Department of Marketing and Management
University of New England
Armidale, N.S.W.

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*Abstract*

The structure of the agriculture sector in Australia appears to pose a fundamental constraint to 'product marketing' and 'value-adding' initiatives of the kind for which many are calling. A case is presented in this paper for the search for differentiation opportunities (as a rubric for product marketing and value-adding activity) to be regarded as a determinant of marketing system performance. This is related to firm-level contemplation of market levels, as distinct from segments within a level, to target. Criteria are presented for the identification of the appropriate market level for an organisation to target within a vertical marketing system and these are then analysed with a view to identifying appropriate grounds for policy intervention in such systems. It is argued that grounds can exist even in markets which are contestable and that agribusiness subsystems are common examples.

## *Introduction*

The calls for Australian fresh food producers and distributors to be more customer oriented and quality oriented, which is no more than code for the same thing, are reaching one of their periodic crescendos. The media, and debates, are awash with assumptions as to the intrinsic merit of satisfying the particular preferences of market segments (which include 'niches') and circumspection from folk such as agricultural economists is derided, once more, as genetically-sourced dismay.

A novel feature of this cycle of marketing optimism is that, this time around, agribusiness spokespersons and the Australian Government are more prominent in arguing for and supporting, variously, initiatives seen to be market oriented, particularly with regard to export markets.

While the notion of customer orientation has intrinsic appeal to all we customers, I wish to argue that as a strategic management objective it has not been modelled well in any discipline. This causes the quality of strategic analysis in fresh food marketing often to be doubtful and, indeed, the interpretation of marketing principles in any context to tend to be somewhat naive.

## *System Performance*

In agribusiness quarters, agribusiness is defined as that 'vertical slice' of economies which undertakes the production and distribution of food and fibre. Within the agribusiness system we could contemplate a red meat subsystem, wool subsystem and so on. In marketing circles, one might refer to the same things as 'vertical marketing systems'. Whatever the label, the idea is of a system which contains all entities involved in the productive activity, from most basic input to finished retail product, contributing to the creation of a defined type of product. Inevitably, these systems intersect, a fact which leads to variety in the vested interests of different system members in particular products.

'System performance' refers to the economic efficiency of such systems. Conventionally, we view this as having allocative and technical efficiency components, with the preferences of final customers lying at the core of allocative efficiency. This conventional approach is incomplete, in my view as a marketer. The partial, 'static' character reflects the difficulty economics has with entrepreneurship (Pasour 1993). The problem is that customer preferences are defined as those reflected over the existing set of available goods and services. I would much prefer a base for allocative efficiency which took into account the tendency of a system to search, or not, for both unmet preferences and better ways of meeting preferences.

As things stand, as economists we would doubtless rate the performance of the Australian red meat system above that of, say, the Australian system which provides recorded music. I doubt many consumers would, though. From the consumer's perspective, the former appears to show barely any interest in the changing needs of the consumer while the latter caters to our every whim and explores need-satisfying possibilities. (There have been two radical changes to domestic sound reproduction - audio-cassettes and compact discs - over the last three decades, each enhancing dramatically, for most consumers, the quality of reproduced music; the red meat system has created Trim Lamb and some butchers do a little value-adding.)

Incorporating measures of system 'pursuit of consumer satisfaction' in performance measures would be no mean feat. It seems, though, to be an important component, particularly when one is considering the matter of systems enhancing their consumer orientation.

The long-run performance capacity of a system can be argued to be bounded by its capacity to capture information about customer needs and new technologies of need satisfaction. (In this context, it has to be recognised that the very definition of systems in terms of what outputs the systems have, rather than needs they satisfy, is risky but this issue is beyond the scope of this paper.) The societal value of the output of a system is constrained by the validity of the information on which production (that is, resource allocation) decisions are based. In the absence of search activity to identify customer needs and preferences, there is little reason to expect that valid information about preferences will exist in a system.

### *System Output*

Systems, as defined, present bundles of attributes to final customers. Systems present alternative (sets of) solutions to (sets of) problems. The problems are composed of two main types, need resolution and exchange. While all problems can be expressed in terms of need resolution, the distinction I draw is based on the derived nature of exchange needs. For example, food is sought to be acquired in anticipation of hunger; anticipated hunger is the trigger need and this leads to a consequential set of problems to do with acquisition of food. In marketing terms this translates into the Product component of the 'marketing mix' typically serving the 'need resolution' problem, while Price, Promotion and Distribution components relate to 'exchange' problems. This latter set of components is therefore usually more ephemeral in its importance to final customers than is Product although this does not imply any ordering in terms of absolute importance.

It is necessary to what follows to recognise that what I refer to here as 'system output' and 'bundle' goes beyond the economic notion of 'product'. A central distinction between economics and marketing is the separation in economics of consumer decision making about product from that about related transactions. In marketing this *a priori* 'partialing out' of either category of decision is seen as arcane and unhelpful. Relatedly, in this paper 'differentiation' refers to the modification of any element(s) of system output or bundle.

The bundle of attributes to which final customers are exposed is the output of a sequence of productive activities in the system which is usually not transparent to the customers. Nor do most customers care who has done what. They may or may not identify particular attributes of the bundle as coming from a manufacturer or retailer, but many attributes they may be indifferent to and others they will not be able to source even if they would prefer to.

For meaningful discussion of differentiation it is necessary to conceptualise the entities amongst which differentiation can occur in complete ways. There are various reasons for this, the most compelling of which is that *realised* differentiation depends utterly on the customer. Differentiation means nothing except where the targeted customer perceives difference to have been achieved. Profit-generating differentiation may be realised only where customers perceive *relevant* difference. Relevant difference may occur over any attribute in the total bundle. The need resolving capacity, as defined, of a product may or may not be where difference is perceived; it may be exchange facilitating characteristics which are relevant.

Which attributes are relevant to customers is a major criterion for market segmentation. A market segment is comprised of people who, for whatever reason, prefer different combinations of attributes to other groups of people. These differences in preferences may be in terms of relative weighting of attributes within a given set or, in the case of interest here, attribute set composition. The former is characterised by preferences for different package sizes or retailer assistance in the shopping event, the latter by convenience in acquisition, or price or some other attribute being in or out of the considered attributes.

The attributes on which consumers ultimately predicate choice are 'determinant attributes' (Piggott and Wright 1992). It should not be presumed that these are of high absolute importance to the customer. They may be of hardly any importance but the only attributes on which the customer can rationalise choice (Carpenter, Glazer and Nakamoto

1994). Much will depend on the perceived proximity of competing bundles of attributes on attributes which *do* have absolute importance.

Amongst all of the attributes on which bundles might differ, determinant attributes will be those over which difference is perceived and which, for whatever reason, choice is based. One consequence of this is that the set of determinant attributes (for any given segment) might be able to be perturbed deliberately by marketers using tactics which attract consumer attention to attributes previously outside the set.

The notion of determinant attributes as the focus, and one I will for now assume is stable, of customer attention is central to an issue rarely, if ever, discussed in the marketing literature: at what level in the vertical marketing system is my market; who is not my customer? This issue is central to the meaning, and management implications, of a 'customer orientation' to each specific organisation in a marketing system and the operation of the system overall in terms of elements such as the predisposition of the system to seek out and meet final customer preferences (reflecting incentives in the system) and the ways in which this might be enhanced (reflecting the origins of structural characteristics of the system).

In the marketing literature on market analysis, the focus is on segmentation and targeting issues *at a given market level*. Implicitly, it is commonly assumed that the appropriate level of the market being dealt with is apparent. (Another common implicit assumption is that the bundle of attributes, the marketing mix, is under a high degree of control; this compounds the felony of assuming the market level is apparent.) The fallacy in this approach is that, in the absence of complete unilateral control over a system, *choice* of market level is not free. Rather, it is a function of the role of one's organisation in the creation of the bundles of attributes put before customers at successive market levels and the returns to customer-oriented exercise of this role.

### *Identification of Relevant Market Level*

The value of the output of a marketing system is bounded by the final consumer satisfaction it creates. Everything that occurs (in an efficient system) is derived from this. Generally, an organisation should view as ideal the serving of final consumers. At this level, organisation output is valued directly and information is most reliable. There are no 'side games' nor artefactual incentives borne of structural and conduct features of the system.

There are four factors which can be argued to be critical, jointly, in identifying the market level an organisation can usefully view as its 'market' and the impediments to differentiation faced by the organisation. These are: the contribution of the organisation to the presence or otherwise of determinant attributes in bundles at any market level; the responsiveness of customers to variation in attribute quantity or quality; the control of the organisation over attribute quality or quantity; and the efficiency of transmission of customer response to the originator of attribute variation.

Since determinant attributes are the focus of customer choice-making attention, an organisation with no role in providing these at any given market level can not usefully view that market level as a target. There is no capacity for the organisation to influence customer behaviour. The customers of the organisation must be at some market level vertically closer to the organisation in the system. (It may be that an organisation will find this situation totally unpalatable and respond strategically to modify the system but this is considered later.)

When a relevant market level has been identified, a logical issue is the responsiveness of customers to variations in the attributes contributed by the organisation. Customers may use very fine or coarse categories to judge attribute quality, there may or may not be clear and stable segments in the market, elasticities may be continuous and positive but too small to warrant investment in attribute modification or customers may be too fickle, seemingly unlikely to exhibit durable responses. In the context of the economics of modifying attributes, these kinds of considerations can provoke an organisation either not to differentiate or to define its market level as being vertically closer to it than the one just discussed. An incentive for the latter response would be that the costs of the greater elaborateness associated with reaching the more distant market seem unlikely to be income earning or that the market one level closer, where the organisation (logically inevitably) contributes a larger proportion of determinant attributes, displays more attractive responsiveness.

A further issue is attribute control. Given customer responsiveness, there is no benefit to knowing it if relevant attributes can not be varied deliberately to play on this responsiveness. Again, the response of an organisation would logically be to not differentiate or to move their focus to a vertically closer market, in this case one where they offer a determinant attribute to which customers are usefully responsive and over which the organisation has control.

With respect to attribute control and customer responsiveness, it is pertinent to bear in mind that attributes achieve determinant status in the context of customer needs. As one contemplates various different market levels (apart from the final market), needs derived from the production processes, and their economics, of system members join attributes which originate in their relevance with final customer needs. Too, attributes are added by successive system members and the same attribute can be added by different members in different ways (for example, meat tenderness as a result of beast production practices, slaughter technique or post-purchase ageing, and wool cleanliness as a result of farm management or picking the trash out by hand some time after shearing). The set of determinant attributes at different market levels will have different composition.

To summarise thus far, the above factors imply that the market level to be targeted needs to be one where the organisation contributes, controlledly, to the set of determinant attributes and this contribution evokes a response from customers which is valuable to the organisation.

There is a further consideration: the efficiency of transmission of customer response. The customer in question is not the immediate customer of an organisation but one who is at least one market removed. 'Efficiency' may be too narrow a notion here. As well as transmission problems driven by market structure and conduct characteristics, response transmission relative to the cost of attribute modification is pertinent. That is, if costs are quite stable but output prices are not, and customer responsiveness is stable in sign but proportional to price, the profitability of differentiation may not always be positive. Relatedly, prompt supply response by competitors can lead to free-riding on the organisation bearing the initial cost of attribute modification (as in the case of red meat promotion or the promotion of microwave ovens by the first brand to introduce them into a market).

Where a marketer perceives little prospect of customer satisfaction increases, achieved by the marketer, generating 'equitable' and sufficient returns, incentives to differentiate will be slight.

## *Plot Thickeners*

While this attention to the identification of relevant vertical markets, and incentives for differentiation, seems to be a useful framework, one must not ignore the diversity of sets of determinant attributes that might exist across the variety of segments at any given market level. It is possible for a marketer to find it useful to target a number of different market levels. This somewhat schizophrenic existence might sound odd but it is precisely the situation in which brand-name producers of products, who also make brandless or 'generic' forms of the same products, find themselves. (This arises because they can 'play the brand marketing game' to final customers who value brand-based cues, but must contract with generic label owners to sell product where the final customers have no brand-based attributes in their set of determinant attributes.)

Another factor to recall is the possible instability of sets of determinant attributes. These can change with changing technologies of need satisfaction, changing consumer preferences (and competencies), competitive behaviour and even changing shopping contexts (for example, shopping in-store compared to shopping in a mail-order catalogue in which brand-to-brand competition is non-existent, or buying fresh meat in a supermarket or specialist butcher shop). Instability here can imply shifts in relevant market levels as well as segment changes. As ever, the instability is only a matter for concern to the extent that it is unpredictable.

A further factor is that the analysis of appropriate market levels is strategic in kind and could provoke search activity for a strategy which changes the system. This could involve vertical integration, one way or another, to modify control and incentives in the system. It could involve re-targeting to move the organisation to more comfortable markets. It could involve reconsideration of the business of the organisation, useful strategic alliances, and so on. It could involve collusion.

### *Impediments of Concern*

One incentive for strategic intervention would be the perception that the system, *qua* system, is under-performing; that is, system outputs are insufficiently driven by consumer preferences or, to return to earlier points, the system is insufficiently active in pursuing the identification of consumer preferences. Various programs launched by the Australian Meat and Live-stock Corporation (AMLC), such as Ausmeat, seem to be precisely what I am calling strategic interventions.

I have argued above that the societal value of the output of a system is constrained by the extent of active search undertaken by 'the system' to identify consumer preferences. The factors which I have argued interact to determine the relevant market, vertically in the system, for an organisation also can be viewed as determinants of incentives to differentiate. Incentives to differentiate, across a system's membership, determine the interest in identifying consumer preferences.

The characteristics of a system which cause organisations with unique abilities to provide attributes of importance to consumers to choose not to assemble those attributes according to consumers' preferences are obviously unfortunate from a consumer's perspective. Whether they are of concern from a societal point of view is another matter.

A prevailing concern in economics is to have industries maintain contestability so that societally dysfunctional conduct is minimised. Where this seems to have been achieved, it could be argued that concern is not justified that this is accompanied by little or no interest in differentiation: that's just 'the way the incentives fall'. This may be too firm a position to take. Desirable levels of contestability can be achieved in ways which impede, quite incidentally, the active pursuit of higher levels of customer satisfaction. Perfect competition is an instance and one where an argument could be mounted that 'imperfection', to some degree, leads to better overall system performance.

Whether impediments to differentiation are worthy of concern is an issue which can be addressed using the framework presented above. That is, consideration of the factors which influence the magnitude of incentives for differentiation helps an evaluation of the relative desirability of intervention or not, by any possible intervener, in the functioning of the system.

It is not necessary to contemplate every conceivable form of intervention, only those that would normally raise the eyebrows of economists but which this approach might propose as socially desirable.

Assuming contestability, inadequate incentives to differentiate which arise from lack of customer responsiveness to, or lack of producer control over, attributes are of no concern. Each of these is fatal to the possibility that allocative efficiency may be improved through differentiation. It may be rational for producers to strive to bring attributes under control, but that is unrelated to this discussion.

Weak, or no, transmission of responses to differentiation is of greater interest. Recall that contestability is assumed. Factors that can impede transmission include reduced interest in specific product category determinant attributes by resellers who offer assortments of product categories (and whose interest is likely to be in determinant attributes with respect to choice of resellers by customers) and information problems where, for instance, the characteristics of products acquired from producers are not known with certainty. Price averaging and loss leading activity across product categories can break the link between successive markets, in the case of the former, and Mullen (1995) has suggested the latter as a cause for transmission problems of premia for Elite lamb to farmers who supply at auction.

Transmission problems may concern producers but their greater importance springs from the fact that they impede innovation which would enhance consumer satisfaction. That is, the incentives governing intervening markets work to the disadvantage of consumers, relative to what might be. This is the hallmark of a marketing system which is performing less than ideally in the pursuit of higher levels of consumer satisfaction.

Transmission problems are much more pronounced where the 'core product' is produced in near-perfectly competitive industries. Here, non-price information often is of low value and price is itself taken rather than set and influenced by broad market aggregates as well as differentiation aspects (possibly). The strategic wish to enhance organisation performance by better satisfying consumers is empty at the level of the individual producer. The industry-level consequence of this is a tendency to poor performance. This may create grounds for intervention. That is, the paradox of perfectly elastic demand faced by individual producers accompanied by less elastic industry-level demand is argued to be problematic for consumers as well as producers.

Intervention which seeks to reduce the contestability implicit in the industry's structure is indefensible. What is required is intervention to enable the mitigation of the impoverishment of system performance that the industry structure implies. This would usefully be legislation which enables the majority of an industry to decide to tax the industry for the purpose of undertaking consumer- and other market-level research, to force the introduction of product description, to fund product development and to oversee the adoption of product innovation (including promotion, where appropriate). These amount to interventions with the purpose of imitating the imperfectly competitive context. That is, activities which have the effect of making it possible at least for the aggregate demand curve to be 'managed'. In the fresh food domain the AMLC's is close to the kind of role set I have in mind. It struggles due to lack of forced product description but has attempted to introduce a number of consumer-driven innovations (Trim Lamb and Right Meat). The International Wool Secretariat operates in similar ways in the fibre domain.

In contrast to the constraining effects on marketing system development that intervention in product markets implies, intervention in the information flow is much less likely to offend pro-competition preferences. The tyranny of the majority which would, and does, offend producers who seek to be utterly free is warranted by the indifference to consumers implicit in such a posture.

The societal justification for this intervention is the inability of the marketing system to pursue resource allocation efficiency. The industry justification is that it enables the possible cutting of the artificially high decline in real prices given that a contributor is declining relevance to consumers. This declining relevance exists wherever competing marketing systems are more active in their pursuit of enhanced consumer satisfaction.

## *Conclusion*

Intervention in agricultural marketing systems has long been sought by producers. The sources of this wish have been utterly selfish, reflecting a desire to enjoy the psychic income arising from the independence of the small producer while avoiding, or minimising, the horrors which await the producer of homogeneous goods.

The economist's enthusiasm for perfectly competitive industry structures makes her the natural enemy of producers who, like any of us, would like to sense that they exercise some control over the outcome of their labours.

In this paper I have argued that allocative efficiency requires a little more than the economist usually proposes and that this is impeded by the absence of incentives to differentiate, a cause of which is perfect or near-perfect competitive structures. Further, I have argued that a socially preferred situation would exist if interventions were to (continue to) be enabled whereby the information flow characteristic of 'less' competitive structures could be imitated, the possibility of the consumer orientation of such systems being increased thereby without contestability being imperilled.

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