

Value Added Developments for Poultry

by

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Four Trends that Shaped Today's Poultry Industry

Growth of the poultry industry was caused by four interacting trends: a) rapid increases in per capita consumption of poultry compared to red meat; b) the shift from ice-pack to prepackaged branded poultry; c) the shift from whole birds to cut-up and further processed products; and d) the decline of the "Mom & Pop" store and the rise of the large supermarket chain.

The first of the four trends, and the most widely recognized, is the shift in consumption from red meat to poultry. Total poultry sold at retail level on a per capita basis surpassed pork in 1982 and will pass beef by the end of this year. Chicken alone accounts for eight out of ten pounds of poultry consumed, and the National Broiler Council projects it will surpass beef by 1990.

Why has poultry been favored by the consumer? Although concerns over cholesterol and other health matters have helped the trend, the main factor has been price. The poultry industry has gained the price advantage by becoming vertically integrated and achieving superior feed conversion. Improved service and reliable supplies of high quality products have also been trademarks of this integrated industry.

Floyd A. Lasley of the National Economics Division, ERS, USDA showed the poultry industry's productivity gains in a simulation

model. By holding technology and input-output ratios constant at the 1960 level and passing through average annual input price changes, he could compare this simulated retail price to the actual retail price. If input prices had been passed through to retail, consumers in 1981 would be paying \$1.30 per pound, a full 56 cents above the actual retail price. Lower returns per unit to producers and others in the distribution channels also contributed to these declining real prices for broilers. Lasley cites eight ways in which vertical integration has contributed to the poultry industry's success:

1. Facilitating rapid adoption of improved technology.
2. Assisting in financing production.
3. Realizing potential economies of aggregation and scale.
4. Coordinating flow of products.
5. Reducing and controlling risk.
6. Improving use of facilities.
7. Passing efficiencies through to consumers.
8. Reducing the number of profit maximizing centers.

This coordinated effort will be the key to the poultry industry's evolution into the value added age.

The second trend influencing the poultry industry's growth is the conversion from ice-pack commodity chicken to prepackaged pre-priced branded chicken in ready to cook form. One of the efficiencies created in the integrated companies was a product of uniform quality and characteristics. Control of the generic development allowed differentiation within the commodity oriented industry. With a differentiated product of consistent quality, one can develop a brand and extract a premium over commodity prices. Frank Perdue did exactly that. The vertical integration allowed a concerted effort between production and marketing under a common mission statement. While marketing convinced the consumer that this brand was better, production backed up the claim by controlling form and quality right to the supermarket shelf. Packaging provided another medium for advertising and guaranteed the form in which it was presented to the consumer. Holly Farms developed the chill-pack process, and Perdue uses controlled atmosphere. The prepackaged product eliminated costly handling at the retail level, another savings which could be passed on to the consumer.

The third major trend has been driven by the consumer's demand for increasing convenience. Broilers are increasingly marketed in cut-up or further processed form. The consumer has consistently demanded reduced preparation time. In 1962, 83 percent of broilers were sold whole; by 1980, only 50 percent were whole, 40 percent cut-up, and 10 percent further processed. This year only 20 percent are sold in whole form, 58 percent cut-up, and 22 percent further processed. The adaptability of chicken and turkey to consumers' desires, as well as the price advantages should favor poultry in its continued growth. Low returns on whole birds encourage processors to explore aggressively new uses and forms.

The last trend and probably the most significant is the change in structure at the retail level. The fully integrated poultry companies have grown with the large supermarket chains. All three of the other trends enhance these two organizations' growth. Efficiencies created through technological sophistication

could be developed in partnership between the supermarket chain and the vertically integrated poultry company. As retailing transformed from distributors servicing mom & pop stores and butcher shops to large regional chains with distribution centers, an equal transformation from ice-pack to prepack was occurring. Greater predictability was achieved by poultry companies as their business evolved from an ice-pack/distributor customer with pricing on a daily market, to a prepack/chain that books feature pricing weeks in advance. This greater predictability allowed increased sophistication in production planning and logistics. Benefits were also gained by the supermarkets. Locked-in prices on heavily advertised, branded poultry created excellent feature items that attracted the consumer to do her one-stop shopping at that chain. Prepackaged, pre-priced poultry in desired forms saved time and money for the understaffed meat departments. Other services were generated as the partnership between poultry companies and supermarkets developed. Bar code inventory systems, modular pallets, direct store deliveries, EDI are just some of the possibilities.

It is through these four trends that the present day poultry industry has emerged--an industry which has awesome efficiencies in production and strong brand images from which to build successful new product programs.

New Products

The development of a new product idea is a slow, costly process. To minimize the time and cost involved, a high level of communication and organization must be maintained. Throughout the development process people representing three areas should be involved: marketing, technology, and economics. These three parties guided under a common mission statement can generate new concepts, screen and define them, and develop a viable prototype. All three parties must maintain their coordinated effort throughout the test markets and introduction. The fully integrated poultry companies are excellent vehicles from which to develop new products. They offer a corporate structure with open channels of communication and a common mission throughout production, processing and

marketing. This coordinated effort will allow the poultry industry to introduce value added products faster, cheaper, and more successfully than can non-integrated agricultural industries. One such product showing increasing success is fully cooked chicken. I will use Holly Farms Oven Roasted Chicken as an example of the development process.

Holly Farms established its mission as a national fresh food company concentrating on value added items sold through major super-market chains. Oven Roasted Chicken was chosen as the lead item in this new mission. Great Britain currently has 26 percent of its fresh meat case committed to fully cooked items. Kroger, one of Holly's largest customers, has also been developing a fully cooked section for its meat case. The consumer demanded further reductions in preparation time, and wanted a fresh wholesome alternative to frozen or fast food. The supermarkets had lost approximately 10 percent of total broiler tonnage sold (between 1981-85) to the fast food industry. Thus the trade was looking for opportunities to gain back this business. All signs pointed toward the road of success for Oven Roasted Chicken. Holly brought along two very important partners in this journey: Dr. Neil Rattrie, from Scotland, one of the pioneers in fully cooked meat technology, and Kroger, itself an innovator in the retail business.

Three test markets, Atlanta, Cincinnati, and Indianapolis, were used to experiment with different advertising and promotional strategies. These test markets also allowed refinement of the production process at pilot plant level. The amount of testing one should do is proportional to the risks involved. Test the product in the marketplace until the cost of testing is greater than the cost of making the wrong decision. One exception is if a particular uniqueness must be kept secret to prevent competitors from copying. Holly Farms did not test market the Cajun and Smokey Barbeque flavors in order to gain an advantage over Perdue when introducing the product line. Those flavors are already associated with chicken so the risk of failure was not great. In the testing phase Holly learned the palatability of the product began

to decrease on the 14th day; yet the shelf life was many days longer. Holly decided on a 13-day code for the product, and encouraged the trade to make smaller, more frequent orders. The loss of efficiency in production was outweighed by the need for premium quality in this value added product.

Effects on Distribution Systems

As the poultry industry transforms from a commodity industry to a further processed packaged goods industry, there will be considerable effects on its distribution systems. One such effect felt by Perdue, Inc. was a drop in payload, and a resulting increase in transportation cost, from the introduction of its "Done-it" breaded product line. Based on a report generated by Randall Day, Physical Distribution Manager, at Perdue on August 26, 1986, the reduction in payload between FY86 and FY87(YTD) of approximately 1000 pounds resulted in an increase in transportation cost of \$690,000 per year. This was primarily caused by increased tonnage in the new "Done-it" product line. Following is a very abbreviated explanation of Day's payload analysis.

Average payload on customer deliveries was 34,451 pounds per load FY86 and 33,450 FY87(YTD). Payload consists of number of pallets per load, and net pallet weight. Average pallets per trailer was 18.17 FY86 and 18.22 FY87(YTD). Thus, pallets per load did not contribute to the reduction in payload. Day's study revealed three sources of decreased net pallet weight. Increased volume in the new "Done-it" product line, changes in packaging specifications, and decreased live bird weights, were the main factors in the loss of 1000 pounds in net pallet weight. A summary of the effects of reduced live bird weights for all plants showed a loss of 38 pounds/load. Changes in packaging specifications for three items had a 240 pound/load negative impact. The major factor in reduced net pallet weight was the introduction of the lighter "Done-it" breaded products. This accounted for 720 of the 1000 pound loss in net pallet weight for the beginning of FY87.

Most poultry companies are shifting their product mix toward further processed value added products to improve profit margins. This pleasing picture of increased profits should be inspected more closely for hidden costs and strains on existing distribution systems. As the poultry companies evolved from strictly slaughter and evisceration, to cut-up and prepackaging the product, they had to develop distribution skills. The whole breast on ice has now transformed into a multitude of forms that the consumer desires. As the poultry companies continue to integrate into further processing, the stock-keeping units (SKU) skyrocket. With the increasing number of SKUs being pushed back up the distribution channel, storage and selector efficiencies are reduced. This is compounded by the added service of prepricing offered to the supermarket chains. Payloads are decreasing with the increased packaging material associated with added value items. When companies see the attractive gross profits, they are lured toward shifting their product mix. But increased logistics costs from increased SKUs and decreased weight per cubic foot must be considered in the total picture.

The possibilities of adding value to your products are endless. Adding value by adding service can be very beneficial. The partnership between integrated poultry companies and supermarkets will be enhanced with efficiencies gained through added services. Modular pallets are already being used and EDI will soon be available. Bar code information systems will definitely play a part in adding service. Technologies such as these are being pushed through the distribution system and not presently being pulled. The poultry industry has enjoyed rapid growth and the only way it will continue is to add value through new uses, forms and services.

