

What business are we in? – the uniformity business!

Most businesses periodically ask themselves what business they are really in and it is interesting to see how perceptions change with time. If we look at farm level the chicken farmer evolved to become a poultry producer and then it became fashionable to be a poultry integrator.

Nowadays, perception has moved away from the farm as companies have seen themselves as being in the much larger food business and many now see themselves as egg, meat or processed product businesses.

As those businesses have progressed into the cooked sector, the more forward thinking companies see themselves as 'high care food companies'.

This is important because this perception needs to percolate back down their production chain to all stages, such as the commercial farms, breeder farms, hatcheries, feed mills and, even, the breeding companies. Companies also like to perceive themselves in geographical terms and, here again, perceptions have become broader. The Texan or Scottish company soon saw itself respectively as a USA or British company and as they grew these changed to American and European companies. Nowadays, some companies can truly call themselves international or global companies.

Rising stars and cash cows

Typically, businesses can be seen as emerging, consolidating or mature and declining and in the business world jargon names such as 'rising stars' and 'cash cows' have appeared.

We need to know where we are in this cycle because if we do not realise that we are in the final or declining stage then we can soon be in real trouble.

A hatchery based business can soon change because of a few mergers or takeovers in the processing sector, which can suddenly remove from the open market a large proportion of potential customers. One only has to look at breeds to see that some of the most successful breeds of the 1970s and 1980s (when they were cash cows) rapidly declined in the 1990s and some of them have disappeared totally.

Why was this? Basically it was a reflection of changing consumer preferences and/or customer requirements and a fail-

ure of certain breeder companies to detect these.

Interestingly, circumstances outside our control, and a very good example of this is avian influenza, can cause a company to change quite quickly. In Thailand several companies have moved very quickly from being poultry processors or producers of processed poultry products to 'high care food companies' as they have had to rapidly expand their cooking operations to maintain export business.

Understanding your customers

So, what are the ramifications of all this to the breeding and hatching sectors? Basically, we must know what businesses our customers are in so that we can then give them the best products and services for their particular situation.

For example, if our customers are in high care food production, we must also have a similar philosophy because, as their suppliers of day olds, we are an integral part of their supply chain.

This being the case, and whether we like it or not, their more demanding customers are going to want to include us in their requirements, audits and the like.

If we look closely at the requirements of today's leading customers most of them have one requirement of their suppliers in common. They want consistency and uniformity. To many these two words are synonymous, but are they? Some would say we want 'a consistent supply of a uniform product'.

Does consistency have more of a temporal component than uniformity? Does uniformity have more of a quantitative facet in that we tend to talk of uniform size or weight? When it comes to quality many just juxtapose these two words.

Avoid misconceptions

A take home message here is that in many people's minds these two words can be interchangeable so we must find out just what our customer means when he uses one of these words.

If we do not we can make very serious wrong assumptions.

As we progress through this article it is going to be inevitable that some fuzzing of the boundaries of definition of these two words will occur.

Why is uniformity important in final product? Consumers expect it! As a parent, you will know the problems of taking three or four young children into a fast food restaurant and ordering the same meal for all of them to avoid squabbles and upsets, only to find one has a bigger piece of chicken and another has fewer French fries!

The fast food restaurant knows that this then becomes an undesirable experience and that most parents will avoid a recurrence by not going to that particular restaurant again.

Consequently, they place a heavy emphasis on portion control that goes all the way back up the food chain to the breeder farm and even the breeding company.

So, in many parts of the world, the whole production chain is driven by a desire, or even a need, to put a uniform product into the processing plant and, hence, on to the consumer's plate.

While the uniformity of this product can be greatly influenced by what happens on the broiler farm it is a well known fact that a key prerequisite to a uniform end product is uniformity in the day olds.

Uniformity of hatching eggs

Day old chick weight is a constant two thirds of hatching egg weight and so this, in turn, is governed by the uniformity of the eggs going into the incubators.

We know that egg weight is influenced by breeder age and so there is wisdom in setting eggs from different flocks separately and keeping their chicks separate by placing them in different houses.

This then brings in one of the other great issues of the day – traceability. We will leave that for another day!

While there is a lot of genetics and other issues associated with egg size, breeder hen size plays its part and this is why on the breeder farm we placed a strong emphasis on uniformity of body weight. In addition, how a bird comes into lay is influenced by body weight and so to get the best possible production from our breeders we need to have a uniform flock of optimum weight at point of lay.

But, uniformity is not confined just to body weight. We mentioned earlier that

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bird performance on the broiler farm can be influenced by many things. One of these is disease.

Thus, as a uniform resistance to disease is desirable, one of our key tools for managing disease is vaccination and this, in turn, is significantly influenced by the level of maternal immunity in the day old chick.

The implications of this are typified in the whole Gumboro disease vaccination story. If we vaccinate a chick that has too much maternal antibody persisting the vaccine will not work.

Conversely, if we vaccinate a chick that has been below the maternal antibody level that will block the vaccine for several days and there is a real chance that the disease gets in first and the vaccination is too late.

If we now look at the vaccination of a flock of broilers the importance of a uniform maternal antibody level in that flock should become very apparent.

Maternal antibody level in the day old is directly correlated to antibody level in the parent hen and we know that this declines with age.

This being the case, if we want to maximise the uniformity of the maternal antibody levels in the day old we need to periodically boost the parent hen's immunity or we need to divide and set our eggs by breeder flock age.

Drinker uniformity

However, if we look a bit more closely at what we do on the farm or in the hatchery we can apply the word 'uniform' or 'uniformity' to it and if we do we are invariably improving matters.

For example, when it comes to drinker management it is important that all the birds receive a similar (or uniform) amount of water. To achieve this drinkers should be uniformly distributed throughout the house and be at a uniform height with a uniform level of water in all bell drinkers or a uniform water flow should occur through all of the nipples.

Water quality should remain the same (uniform) throughout the day and over the flock's life as, for example, fluctuating salt levels can have undesirable consequences.

When it comes to the environment uniformity is again very much to the fore. We want uniform light levels, a uniform temperature throughout the house and uniformity in our ventilation rates.

Uniformity in the feed is crucial, as is uniformity in feed intake. The bedding material wants to be spread uniformly through the house at a uniform depth.

Unfortunately, people are individuals

so we often have a real challenge in ensuring that their inputs into the system are uniform! In our incubators we do not want hot or cold spots and so uniformity of temperature is critical. The same can be said for egg store and egg vehicle temperatures. In fact we should not be looking at these in isolation. Starting at the on farm egg store we ideally want to maintain our hatching eggs at a relatively constant and uniform temperature.

If we go to the feed mill uniformity is paramount. If we apply products to control salmonella or mould growth they must be applied uniformly throughout the feed if they are to be effective. If we consider starter feed, where daily intake

by the chick is small, then the uniformity of essential nutrients in that feed is a key issue. This is because we want the young bird to receive a balanced nutritional intake every time it takes in food – we do not want the situation where several days' feed intake averaged out provides the chick's needs. This is important for, among other things, good bone growth and ensuring the chick gets those key minerals that are so important to the enzyme systems which have to work that much harder in the young, developing chick.

So, an interesting way to summarise modern poultry management is uniformity, uniformity, uniformity! ■