

A New Paradigm Applied: The Organic Products Sector

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We are facing a new paradigm driven by a discontinuity induced by technology change, i.e. the separation of information from physical goods driven by information technology diffusion.

To recap, the new paradigm has the following factors:

1. enables a massive growth in wealth
2. reduces transaction costs
3. requires trusted custodians of information
4. enables new forms of organisations
5. changes the boundaries between organisations and the market
6. creates the self-interest for people to own information defining their person
7. requires maximum storage of data to realise maximum returns

The paradigm directly changes several fundamentals in the Organic Products sector and ushers in a period where more change can be expected, with new technologies and concepts changing the way organic products are grown and reared.

First, a massive growth in wealth in society should continue increase the returns to the Organic Products sector, as Consumers demand higher quality and variety. However, the increasing energy deficiency will also result in a significant proportion of organic production being used for non-food purposes, such as new fuels, substitute for chemical products and non-organic goods, and as raw materials for industry. The unfolding environmental concerns related to climate change will likely result in significant productive capacity allocated for primarily environmental purposes, while the nature of available land may change as local climates change as a consequence of global change.

Second, the information paradigm will see a reduction in the transaction costs, enabling effective monitoring and history of organic production. The result will be improved yields, greater transparency of the growing and rearing process, and in the long-term improved Consumer confidence in the products.

Third, the sharing of information between all parties is an essential aspect of an effective information economy. A trusted custodian is required for Consumers to feel comfortable regarding the quality of information, while the Suppliers need to feel assured that information shared between them has not been modified for commercial advantage.

Fourth, the information paradigm enables new organisational forms. The Organic Production section has been organised in the past around family and hierarchical organisational models. There is the opportunity to leverage new models to take advantage of reduced transaction costs and to maximise the advantage from skills and knowledge from local and remote locations.

Fifth, the boundary between organisations and the market are changed by the shift in transaction costs. The organic production sector can increasingly use its Customers to

drive part of the production process, thus capturing Customer knowledge within the sector. The improved linkage can reduce loss of information within the supply chain by capturing Consumer signals, ensuring closer matching of supply and demand, and reduction of wastage. The use of temporary skills can increase, as the links between production and physical locality are overcome.

Sixth, the involvement of large numbers of individuals signalling preferences creates the opportunity for misuse of information. There is a preference for people to control the information that can identify their preferences, with property rights being an effective control mechanism.

Finally, the increasing returns from information encourages the maximising of returns from organic production requires capturing and storing the maximum amount of data, to enable identification of trends, changes and anomalies. This encourages the creation of large-scale repositories to enable data to be accessed and information created as required to meet future unknowable demands from society.

These changes can all be predicted by applying a new paradigm of an Information economy. The consequence of these changes is a substantial improvement in the well-being of people, though at the cost of industry-wide change to realise these benefits. It can be expected that the vested interests in the growing and rearing of organic products will resist change until it becomes no longer viable, as it represents a threat to their power. The ease of the transition depends on the skills and dedication of people in the sector to the consumer of their services.