



Trust, technology and beyond certification

How can we ensure values travel
across the food chain?

A report of the Business Forum meeting on
Tuesday 31st October 2017

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About the Business Forum

Ethical questions around climate change, obesity, food security, people and animal welfare, and new technologies are becoming core concerns for food businesses. The Business Forum is a seminar series intended to help senior executives learn about these issues. Membership is by invitation only and numbers are strictly limited.

The Business Forum meets six times a year for an in-depth discussion over an early dinner at a London restaurant.

To read reports of previous meetings, visit foodethicscouncil.org/businessforum.

For further information contact:

Dan Crossley, Food Ethics Council

Phone: +44 (0)333 012 4147

dan@foodethicscouncil.org

www.foodethicscouncil.org

Introduction

Certification schemes were developed to help standardise social and environmental criteria, while also monitoring compliance. Meanwhile, labelling can improve both the traceability of food products in the supply chain and the transmission of information. Most importantly, certification and labelling can help ensure that values travel across the food chain and can support brands building trust with their customers.

Mike Coupe, CEO of Sainsbury's, in describing one scheme recently, said it "might have been fit for purpose 25 years ago, but we're in a new world with new technology". Hence, some food businesses are developing their own alternatives to existing independent schemes.

Who are existing certification schemes and sustainability standards *really* benefiting? How will they need to change in the future, and what might the role be of different technologies in enabling that? Or will some certification schemes become redundant in the future? How should food companies ensure that values can travel seamlessly across the food chain?

From Fairtrade and Organic, to Red Tractor and MSC, the food and farming sector is filled with certification schemes, each with a slightly different focus and criteria. Now is a good time to challenge and understand what these schemes are really there for. There is surely a need to build trust in an increasingly complex food and agricultural system that is arguably further removed from the public than at any other point in history.

The October 2017 meeting of the Business Forum explored the role for sustainability standards and certification schemes in the future, as proxies for trust and traceability in the early 21st century; and the role for technology in building or eroding trust along food chains.

We are grateful to our keynote speakers, **Rachael Gan**, Project Lead at Provenance and **Patrick Mallet**, Director of Innovations at ISEAL. The meeting was chaired by **Jon Alexander**, Co-founder of the New Citizenship Project and current Chair of the Food Ethics Council.

The report was compiled by Dan Crossley and outlines points raised during the meeting. The report does not necessarily represent the views of the Food Ethics Council, the Business Forum, or its members.

Key Points

- Certification schemes and sustainability standards have collectively delivered a great deal of benefits in the last couple of decades, and their role should not be underestimated. They can help ensure that values travel along the food chain and that brands build trust with their customers.
- However, there is a growing sense that certification and standards bodies need to innovate to remain relevant. Their evolution is likely to include being able to communicate through tools such as blockchain and handling information in real-time about performance improvement on the ground about issues people care about.
- To get a better picture of performance over time is likely to be best served by bringing in multiple sources of information – perhaps still an audit, but also information from satellite data, sensors, workers with smart phones who can record conditions in real time, complaints and more. Using multiple information sources is likely to provide a more robust picture of where the risks are in the system.
- Blockchain is potentially a way of digitising trust, enabling transactions to happen that typically used to require third parties to act as brokers of trust (e.g. certification schemes). It is instead the system itself – with enhanced transparency - that is said to enforce trust. Blockchain both provides a higher level of integrity than currently exists *and* requires a higher level of openness and trust.
- Like any technology, blockchain should not be thought of a panacea and further questions remain about ownership, access and confidentiality of the data that exists on blockchains. Verification of data will remain important in a 'blockchain world'.
- In a data-rich world, there is arguably a greater need than ever for *independent* organisations to make sense of data, to help decide 'what is good enough' and to challenge in order to accelerate much-needed progress towards environmental and social goods. Company-developed schemes may struggle to do this.
- Certain technologies have potential to improve transparency of complex, opaque chains – and these should be explored carefully. However, it is important too to challenge the fundamentals of food value chains and to for example, look for ways to reduce the number of links in the chain too.

In food we trust

Trust between different actors along food chains is vital for food systems to function. In current food value chains, there is often a tremendous disconnect between those producing food and the public. Farmers and those 'early' in the supply chain can be disincentivised to adopt (what can be) more costly, sustainable practices, because the value is not being communicated up the supply chain or rewarded in increased economic (or other) value.

There is growing desire for greater transparency across supply chains – in both directions – and that has the potential to benefit all actors in the chain. For progressive food companies, there will be a competitive advantage in 'having nothing to hide' in the future, when it comes to environmental and social credentials.

The food system includes both dedicated supply chains and commodity supply chains. In commodity supply chains, products are often blended so that it is not possible to assign an individual identity to the product that ultimately comes out of it.

There are many important questions about trust in food systems. Who do people trust, and who should they trust? Can technologies be effective in a world where people seem reluctant to trust brands and governments? How can we measure trust unless trust exists in the first place? What level of assurance do people need?

Current role of standards and certification

Certification is arguably a direct consequence of the global expansion of markets. A long time ago, a person would know where a pig came from and how it was looked after, because he or she could see it in a neighbour's back garden. The reality now is that what goes into much of the food that people eat, particularly in the Global North, is distant and indeed is sometimes *hidden* from view in long, complex and opaque global supply chains.

Currently standards and certification are one of the few ways that farmers and producers can communicate better practices in a way that reaches along the chain to the person buying the food and that is rewarded.

Certification is a proxy for assuring good practice, whether that be on environmental issues, animal welfare or social issues (including fair treatment

of workers). Standards systems include both non-profit multi-stakeholder initiatives and company-developed schemes, which are growing in popularity.

Current approaches vary, but typically involve in-person audits, or often multiple audits. There is much debate about the value of such audits. Some argue audits are often unnecessary, costly, inconsistent and inefficient (particularly if duplicated). Others argue they are vital to maintain high enough levels of assurance. There is surely value in interpersonal relationships and there are likely to be things that humans spot that machines can not (and arguably vice versa).

There are often competing demands from different parts of the food supply chain. What marketers might want (to make claims about CSR policies) may be very different from what the technical team wants, from what producers want and what customers want.

It is important though to come back to the fundamental question of what the purpose of certification is. The answer is likely to be about improving the environment or improving living and working conditions. Some will argue that what is needed is an improvement to baselines to affect the changes that are affecting all our futures and our children's futures.

Are current models running out of steam?

Looking back over the past couple of decades, for most of that time, models for certification schemes have been largely unchallenged. However, in the past few years, while many certification schemes and sustainability standards have continued to drive real change, it was argued that most have not innovated. Hence, they risk becoming out-dated, particularly as the world changes rapidly around them.

Even with the significant successes that standards and certification have had over the past 20 years, progress has gone no way near far enough. There is a need to find scalable solutions, ways of taking what works and expanding that across entire sectors to get systems transformation.

Standards systems have changed the nature of the dialogue, the multi-stakeholder space where sustainability discussions are happening. Many certification schemes have deliberately worked with the 'better' producers and have appealed to

a growing, but still small, segment of the public. They have, by and large, not transformed the entire market. There is an important distinction between ‘championing the top’ and ‘raising the bottom’. Much debate exists about where attention should be focused to deliver maximum benefit and/ or minimum harm.

Another challenge laid at certification schemes is that judgements are being made from (for example) an urban environment in London about why farmers in a country in the Global South are cutting down rainforests or using child labour – without always truly understanding the reality of what is happening, and what is driving that. The danger is that (often but not always) Global North-based organisations are deciding what constitutes improvement and what drives that improvement.

Waking up to the need to change

Some standards systems are starting to step away from certification entirely. One example is the Global Coffee Platform, which is a baseline standard for coffee production. It has decided that the best way to get everybody ‘in the door’, at least that first step, is to become a convening platform. So, it has set up national dialogues that bring governments, producers and businesses together to understand what are the practices that need to change in that country context to move towards entry-level requirement.

Two large agricultural standards bodies, Rainforest Alliance and UTZ Certified, are merging. Rainforest Alliance itself was a certification organisation in partnership with a whole network of national certification bodies, called the Sustainable Agriculture Network (‘SAN’). SAN ran that certification programme, but with the merger, SAN is largely stepping away from certification and is instead focusing primarily on capacity building. This is because it is felt that the primary need is to engage producers, producer networks and company supply chains in practical support.

It was suggested that some sustainability standards systems have become, in effect, service providers to companies. This is controversial as questions can be asked about how to ensure the integrity and impartiality of such a system. Some food companies are wanting help with capacity

building or greater information, which is where technology potentially has a role to play.

Real time information

Companies are increasingly calling for real time information about improvements on the ground. There remain key risks which companies must mitigate, for example no child labour or forced labour in the supply chain. However, more questions are being asked about how to improve, as opposed to ‘just’ remain compliant.

It was suggested that auditors going into the field and assessing performance at a point in time has worked reasonably well. However, technology offers alternatives that may bring significant benefits. Crucially it is not an either-or proposition. To get a better picture of performance over time is likely to be best served by bringing in multiple sources of information – an audit perhaps, but also information from satellite data, sensors, workers with smart phones who can record conditions in real time, complaints and more.

Using multiple information sources is likely to provide a more robust picture of where the risks are in the system. Armed with that information, companies can then be much more targeted and only conduct in-farm or in-field audits where a risk has been identified. Such a risk-based approach to assurance would ideally improve both the efficiency and the value of the information coming from the audit. One challenge is that different actors along the chain require different levels of assurance. Governments need a fairly high level of due diligence, whereas companies are mixed. Some companies are happy with assurance that nothing illegal is happening, while others are looking for a much higher level of integrity. It was suggested that a risk-based approach using different sources of information may result in more, rather than less, auditing than now – because the level of assurance currently is relatively low.

“We have a system that creates incentives to cheat, but if you want to cheat, you can cheat pretty easily. If we want to ensure that there’s no cheating, or no really bad practices, you probably need more information about what is happening.”

Blockchain and certification

Blockchain is a nascent, disruptive technology that is believed by many to be the next phase of the internet. It was argued that it offers benefits over current data systems, enhancing transparency for all actors in the value chain by being inherently auditable. A simplified way of considering blockchain is that it can be thought of as a shared database where information gets recorded as a 'single source of truth' and is a ledger of events. Any actors in that chain can open up the database and see the same data, instead of having to download separate files and share them.

Blockchain is described as a way of digitising trust, enabling transactions to happen that typically used to require third parties to act as brokers of trust (e.g. certification schemes). It is instead the system itself – with enhanced transparency - that enforces trust.

It was argued that technologies like blockchain have the potential to act as a catalyst for the adoption of sustainability standards by increasing integrity of standards; through lowering time, effort and cost of compliance; and by enabling new approaches to engaging shoppers.

Blockchain potentially brings lots of opportunities to innovate. One opportunity is in relation to *proof of compliance*. Currently, the cost of certification is relatively high, as it often entails in-person audits. Lots of data sets are already available that will help with the audit of this information, but these are rarely used today, and part of the reason is that some of the data does not exist in a digital or shareable format.

Second is the issue of *accessible information*. Currently certificates are rarely portable in a trustworthy way, as pdfs can be fraudulently photoshopped for example. Arguably digital certificates would help improve accessibility across the chain. The role of technologies like blockchain could be to improve conversations across the chain and to ensure that people know what they are getting at the point of purchase.

Third is the opportunity of promoting *greater integrity in the chain of custody*. This might include moving towards a 'single source of truth' on a product and its related claims.

Putting blockchain et al on the block

Blockchain both provides a higher level of integrity than currently exists *and* requires a higher level of openness and trust, because everyone can access the information. It can be set up so that different people in the system have access to different bits of information, but traceability works depending on people's trust in the system.

Many standards systems and companies have put traceability systems in place and some have failed because actors in the supply chain are unwilling to share information in the way that is being proposed. Blockchain will only succeed if all the users in the supply chain can be convinced that it is a credible, trustworthy system with integrity, where an organisation's own data will not be shared with those they do not want it to be. Issues of data confidentiality and integrity are increasingly important.

A blockchain is essentially a public layer of information, and supply chain actors can choose what to upload. Verification of data will remain important in a 'blockchain world'. Being on a blockchain of itself does not make data trustworthy. Datasets, whether on blockchain or not, are only as good as the information that goes in ('rubbish in, rubbish out'). Blockchains can be public or private. Ownership of data as always remains a contentious issue.

With growing interest in blockchain technology, there may be ways to involve more people in deciding what the standard should be. The question was asked as to whether people feel as though they have 'skin in the game', in terms of information and ability to influence. This is likely to develop as the food system evolves from producer-manufacturer-retailer-consumer chains to food networks that are less linear.

The investment needed for technologies like blockchain is often very significant. Is there any first mover advantage in certification bodies and/or food companies investing time and money in pilots to work out what a sensible approach is? And crucially who will pay for the technological development and roll out?

Future role for certification bodies

Does the democratisation of data and increase in data sharing conflict with the fact that the desire to collect data often comes from commercial interests? Where is the independence and challenge that says if systems are not delivering required improvements in greenhouse gas reductions or human rights, that is not good enough? One of the strengths of many existing certification bodies is that they provide *challenge* that often no one else does. If not-for-profits and others involved in certification were no longer there, arguably progress on environmental, animal welfare and social outcomes would slow down or even reverse.

“Where is the independence? Where’s the voice of absolute challenge that says I don’t care if those chickens are a little bit better than they were last week, but they’re still not anywhere near what they should be, and should we be eating them anyway?”

One potential role for certification schemes going forward is that of ‘sense makers’, making sense of real time information and helping sift through the avalanche of data, to enable food companies to focus on the things that need improving.

Emerging approaches

There is an increasing focus on *outcome measures*. Certification is a proxy for results. Assurance is provided that an individual farm or factory is doing ‘good things’. However, what are the results of that? Outcomes - such as changes to soil structure, to water availability and quality, to human rights and decent work – are becoming much more the focus of attention than inputs.

There is likely to be more experimentation over the coming years. This might include a *jurisdictional* approach, where a state or regional level government takes the lead in land use planning to bring companies, their suppliers and other actors in that area together to help deliver a more coherent land use strategy over a large area. The ultimate goal would be a situation where it is possible to say that products from a particular region are responsible or sustainable, as opposed to products from an individual farm or

factory. Although this approach is not without its pitfalls, it is surely worth exploring.

Conclusions

Certification schemes have collectively delivered a great deal of benefits. However, if standards systems do not innovate quickly, there is a real possibility certification bodies will become largely irrelevant. Their ‘shelf life’ can be extended, but there is a need for greater innovation in what they do and how they operate. Their evolution is likely to mean being able to communicate through tools like blockchain and handling information in real-time about performance improvement on the ground about issues people care about. A key challenge is coming to a shared understanding of what those measures should be. The shift to *outcome* measures and outcome focused standards is already starting to happen and is likely to accelerate.

Third party certification schemes must evolve or risk becoming redundant. In a data-rich world, there is arguably a greater need than ever for independent organisations to make sense of data, to help decide ‘what is good enough’ and to challenge in order to accelerate much-needed progress towards environmental and social goods. Standards organisations need to evolve, perhaps to become standards setters or sense makers.

Post-script: values and transparency

For values such as respect for fairness, wellbeing and freedom to be embedded in food systems, the ways that people and organisations interact with each other needs to change. Certain technologies have potential to improve *transparency* of complex, opaque chains – and these should be explored carefully. However, it is important too to challenge the fundamentals of food value chains and to for example, look for ways to reduce the number of links in the chain too. Technologies like blockchain might *enable* trust, but they can not *create* trust on their own.

At the Food Ethics Council, we encourage businesses to take the **transparency test** and to ask, “*would your customers still eat your food if they knew where it came from?*”. If you are not sure, then you are doing something wrong, whatever the market is telling you.

Speaker biographies



Rachael Gan is the Project Lead at Provenance, a blockchain startup empowering organisations to take steps toward greater transparency by tracing the origins and histories of product with technology. A believer in the ability of technology to help address food industry challenges, Rachael has been involved with several food tech startups, including ImpactVision, a company using hyperspectral imaging and machine learning to change the way food quality is analysed, and DayOld, a London-based social enterprise that she co-founded, focused on reducing the dual problems of food waste and food poverty. Prior to working in food and technology, Rachael had an 8-year career in finance, where she was a Vice President at Goldman Sachs.



Patrick Mallet is Director of Innovations at ISEAL Alliance, the global network for sustainability standards. Patrick founded ISEAL and served as its first Executive Director until 2005. He is responsible for ISEAL's Codes of Good Practice that support effective standards and certification, and contributes strategic leadership to ISEAL's learning communities. Through ISEAL's Innovations Programme, Patrick is helping to define what effective sustainability standards will look like in the future. He lives in British Columbia, Canada.



Jon Alexander is co-founder of the New Citizenship Project, a social innovation lab, established in 2014 to help catalyse the shift to a more participatory society. Jon's background is in the advertising industry, which he left after a Jerry Maguire moment, having co-authored a seminal report on ethics in advertising called 'Think of me as evil?' He is now back in the industry, but with a very different role, working with agencies and marketing directors to find ways to open a new kind of conversation about the society we want. Jon is current Chair of the Food Ethics Council.

(Jon chaired the discussion)
