***Halal* Supply Chain Certification: The Next Frontier in *Halal* Certification?**

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Background

Halal supply chains are vulnerable to contamination, risk of contamination and perception issues, providing reputational risks for brand owners operating supply chains in and for Muslim markets.

At the same time, new *halal* standards are being developed by Muslim countries beyond slaughtering and food production, covering areas such as animal welfare, cosmetics, pharmaceuticals, medical equipment, logistics, food services, retail, Islamic banking and finance, etc.

Indeed, *halal* requires a supply chain approach in order to ensure the integrity of a *halal* product, similar to food safety. Therefore, the *halal* assurance system of a company should go beyond ingredients and production process. But, is the certification of an end-to-end *halal* supply chain feasible?

The Concept

Halal certification for a supply chain would not limit the audit and certification process to production facilities, with their compliant *halal* ingredients, but also certify the entire *halal* supply chain based on a more comprehensive *halal* assurance system covering end-to-end supply chain standard operating procedures. Although not every supply chain participant needs to be *halal* certified, *halal* compliance should be embedded in contracts and audit mechanisms by the brand owner (based on market requirements).

The certification of a *halal* supply chain raises a number of philosophical questions. First of all, where does the *halal* supply chain begin and end? Much of the existing literature on *halal* supply chain management talks about the helicopter term ‘*farm to fork*’, suggesting the farmer is the beginning and the house of the consumer the end of a *halal* supply chain. But once you dive into the detail of a specific supply chain scenario, it is not that straight forward. Animals, for example, might not eat grass but consume animal feed from an animal feed plant. Does it make sense to extend control of the brand owner up to the house of the consumer, or is it more logical to have consumer purchase as the cut-off point? In other words, we need to clearly demarcate the beginning and end of each supply chain without creating unnecessary hardship for the industry in

managing *halal* supply chains.

Secondly, which supply chain process links are important to integrate and manage (animal-based ingredients and ingredients from non-Muslim countries?), which supply chain process links are important to monitor and audit (other ingredients and primary packaging materials?), and which are non-critical to be monitored (other suppliers?).

The certification of *halal* supply chains in their full complexity requires effective *halal* management. Existing enterprise resource planning and supply chain management systems do not support the complex *halal* requirements of *halal* supply chains. Blockchain technology, currently tested by Universiti Malaysia Pahang for *halal* food-cosmetics-pharmaceutical supply chains, could possibly facilitate *halal* supply chain certification. *Halal* blockchains could automate *halal* supply chain alignment based on specific market requirements and facilitate audit of the entire *halal* supply chain. But even if this high potential technology is available, is the current *halal* regulatory framework ready for *halal* supply chain certification?

Current Practice

There are already examples of so-called closed loop *halal* supply chains. In Malaysia, the company Ayamas Food Corporation, one of the biggest integrated poultry operators in Malaysia, owns slaughtering plants, supplies chicken feed, prescribes vaccinations and other medical treatment for its birds, and organises all transportation throughout the *halal* supply chain up to retail and their fully-owned *halal* restaurant chain. In other words, the brand owner fully controls the end-to-end *halal* poultry supply chain.

Another example is Degayo Coffee Group, with its own plantations in Indonesia (in Gayo Highlands, Sumatra, and Pangalengan, West Java), green beans processing and export warehouses (in Medan, Sumatra, and Ciwidey, West Java), *halal*-certified roasting and packaging plant (in Malaysia), and coffee outlets (also in Malaysia). Degayo fully controls the end-to-end premium *halal* coffee supply chain and is a leading supplier to hotels, restaurants and coffee outlets all over the world.

What these two companies have in common is that they make the *halal* supply chain as short as possible (the less supply chain parties involved, the better), have short span of control, own and operate critical activities in their *halal* supply chain, and have an effortless drive for perfection in *halal* supply chain management.

Leading multinationals with far more complex supply chain structures than the above examples are also preparing to meet the emerging requirement for

end-to-end *halal* supply chains. However, this takes time as these multinationals have suppliers and factories all over the world, serving the entire Muslim world with a diversity of *halal* requirements. These multinationals are working with various *halal* standards with different and often conflicting *halal* requirements, in addition to the issue of *halal* certification bodies that do not recognise each other and lack of harmonisation of *halal* standards worldwide.

Policy Recommendations

I am of the opinion that the certification of *halal* supply chains is the future, being necessary for better risk management in *halal* supply chains and more adequate corporate reputation management.

However, we need to clearly demarcate the beginning and end of each supply chain and define the managed and monitored process links, without creating unnecessary hardship for the industry.

As existing enterprise resource planning and supply chain management systems do not support complex *halal* requirements, blockchain technology could provide the infrastructure to facilitate effective *halal* supply chain audits and certification. However, this requires a solid international *halal* supply chain standard that is recognised globally, which differentiates between *halal* supply chain management for Muslim (more stringent) and non-Muslim (more practical) countries, and helps meet possible additional requirements for Muslim destination countries (such as ritual cleansing of reefer containers for shipments to Southeast Asia).

Due to the current situation where *halal* certification bodies do not recognise each other, different *halal* standards are being practiced and *halal* certification bodies lack understanding of supply chain. This creates hardship for the industry, especially when *halal* certification bodies try to impose requirements on corporations based on limited supply chain knowledge and local *fatwas* conflict with the *fatwas* of other countries.

Therefore, until there is an international *halal* supply chain standard accepted by all Organisation of Islamic Cooperation (OIC) countries, there should be initiatives driven by the private sector to achieve a higher level of *halal* maturity. The benefits of a closed-loop *halal* supply chain are evident in terms of *halal* risk and reputation management and ultimately winning the trust and loyalty of the Muslim consumer through offering a better quality *halal* product by design.

Finally, there is an opportunity for OIC countries to create *halal* food, cosmetics and pharmaceutical multinationals based on closed-loop principles in order to build the much needed *halal* production capacity under OIC brands.

Notes

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