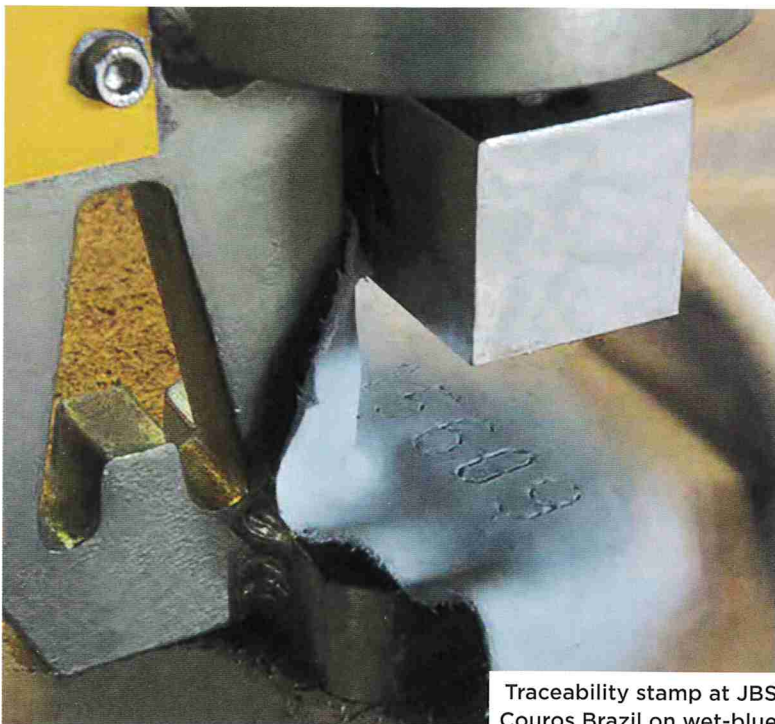


Current traceability gaps



Traceability stamp at JBS Couros Brazil on wet-blue

ILM Consultant Technical Editor, **Karl Flowers** presents the challenges surrounding the successful implementation of traceability standards.

A traceability standard for the leather supply chain is imminent. By the middle of 2020, the industry will see a global standard that brands and retailers will either adopt or ignore. The traceability standards in other industries have now become mainstream and they stand as exemplars for the leather industry to use.

There are numerous tiers in the leather supply chain, and compared with other industries this is an additional complication to what is going to be a challenging path forward. As it stands, the following gaps exist for the traceability standard:

- Where is information lost?
- Will it be trackable or traceable?
- How can the information be trusted?
- Can the vast number of tiers be realistically audited?
- Who pays?
- Collection in some countries will be complex
- What are the information sensitivities?

Many different groups are discussing how traceability in the supply chain should work. Many large brands and retailers are independently working on their own standards, with very little involvement in industry consensus, and are really interested in having their own standards in place rather than helping to commit to a unified approach.

Figure 1 shows the leather supply chain for footwear, leather goods and clothing leather types. As a conservative estimate, it takes five tiers to get to the farming level. Additional tiers can be added if the supply chain is fragmented through a cluster-type approach to leathertanning. The sheer length of the supply chain makes information integrity difficult; for instance, the longer the chain, the easier the communication can become corrupted or lost. Like a real-life game of Broken Telegraph, where a message is sequentially whispered into the ear of a neighbour down a line of people, the final message will come out incorrect.



Figure 1. The supply chain for shoe, leather goods and clothing leather types.

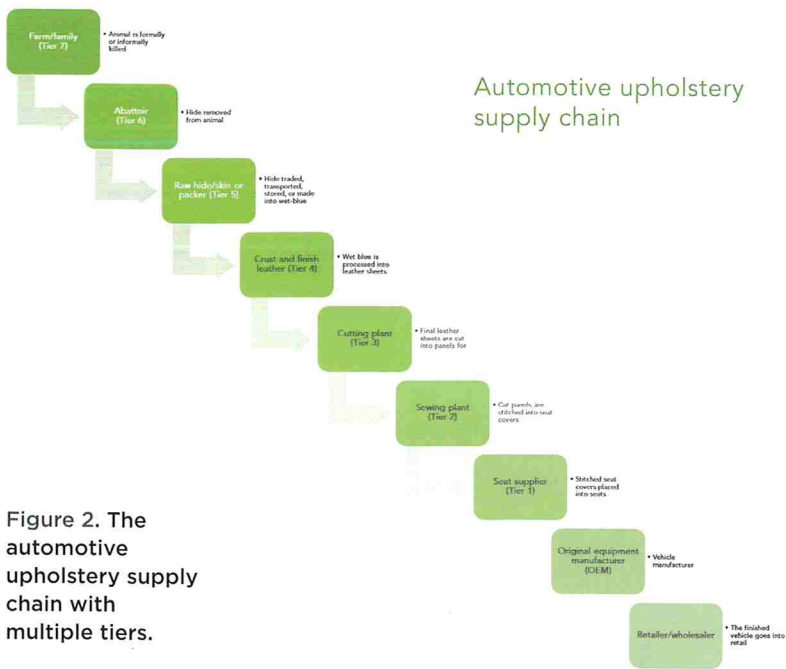


Figure 2. The automotive upholstery supply chain with multiple tiers.

The system where information is handed down from person to person in the chain will never work as it will take one gap to result in the breakdown of history. Trackability works internally in the tannery but it will not work for a supply chain. Traceability will operate where each step of the supply chain feeds its information confidentially into a database, especially designed for that part of the supply chain. The information enquiry will then jump from database to database to find the information required. All these database entries will then depend on the unique identifier given to each piece of leather (and its by-products).

Figure 2 shows that the automotive industry has a longer sequence of tiers but is probably closer than any other leather type to full trackability through the supply chain. The exotic leather supply chain is already at full traceability because of theft, CITES protection and counterfeiting but still requires harmonisation behind a single standard.

Realistic auditing

The length of the supply chains shown in Figure 1 and 2 show the depth of tiers. In the auditing of tiers for social responsibility, such as for modern slavery, the retailers have rapidly realised that it will become nearly impossible to effectively audit because of the exponential increase in the number

The sheer length of the supply chain makes information integrity difficult and it can become corrupted

of suppliers as one moves from Tier 1 to Tier 6. Practically, the Tier 1's would have to audit all suppliers, including contractors, and this may not be realistic to achieve. With a vast network, giving rise to complexity, can this information be trusted?

The other vital question that no-one is answering is: Who pays for this? There are three obvious models of how this could be done:

- A democratic approach, where all parts of the supply chain pay
- Consumer pays
- Producer pays

The first producer to jump will certainly get first-to-market privilege and market leadership for many years when they implement a system. Likewise, brands and retailers that lead by example and through good corporate responsibility endeavour to roll out a top-down system through their current preferred suppliers, with future suppliers having to meet those barriers of entry if they want to supply.

The other way the system could be funded is that the person who wants the information most gets to pay. If the traceability goal turns out for risk management, then the supply step that has the most to lose will be most desperate to have the

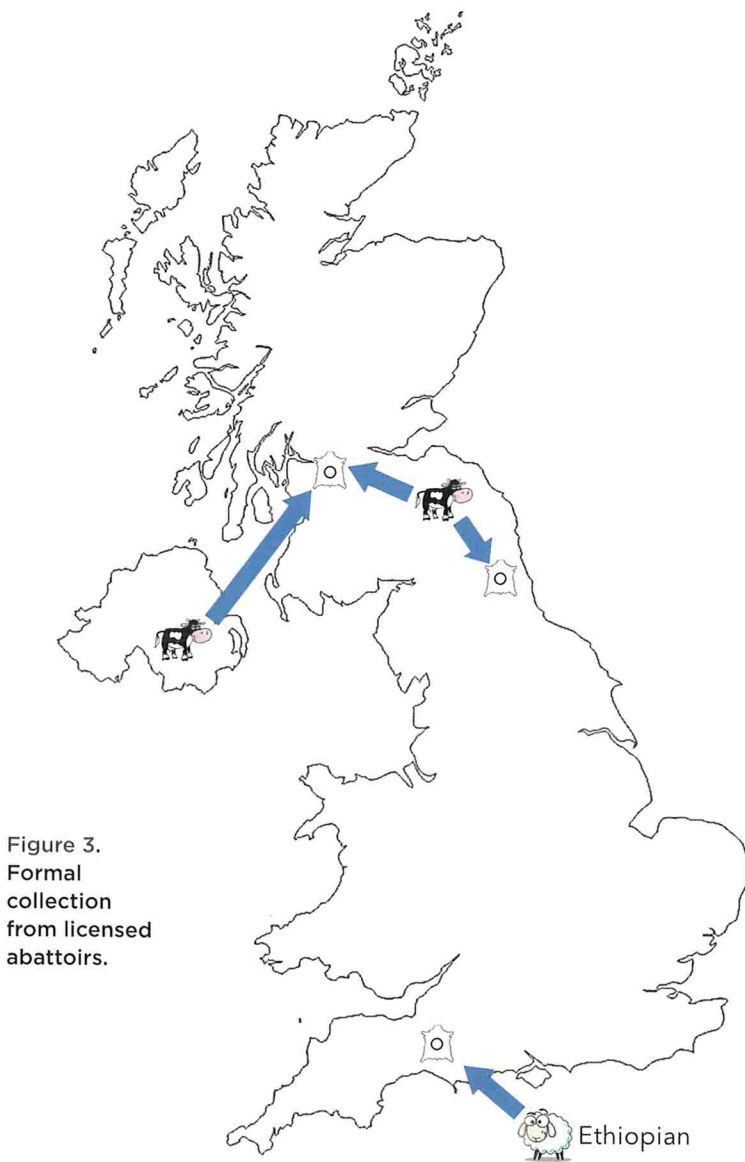


Figure 3. Formal collection from licensed abattoirs.

information. The information request count will tell the supply chain who the highest users are.

Collection of raw materials

Raw materials globally are collected through two mechanisms; formal abattoirs and legislation that force farmers to send animals through organised harvesting, and informal animal harvesting through ritual or rural killing. Formal abattoirs result in automatic aggregations of animal hides and skins. Figure 3 shows the simplicity of a formal structure where the farm animals are sent to fixed locations, where material rapidly enters the supply chain. Traceability back to the farm is very easy, allowing disease control and material traceability.

Figure 4 shows the slightly more complex nature of rural hide collection, where the raw material aggregates until hide merchants organise the collection. Formal abattoirs do exist in South Africa, so both systems operate in effect. Rural slaughter and informal abattoir complicate traceability, and this means that low- and middle-income countries, where this informal mechanism operates, will have to develop legislation, cultural changes and increased regulation with regards to slaughter - a few more hurdles than high-income countries. Traceability will, without a doubt, punish low income countries.

Types of information

Another area of complication is the data sensitivity that the supply chain is trying to gather. It is not fair that the supply chain should be required to divulge the origins of their raw materials. Supplier names and contacts are commercially sensitive datasets and it is anti-competition to expect producers to hand this knowledge over. The European Union protects companies from being forced to divulge this, but there are ways around this. Figure 5 shows the three main tiers of information that tanneries will have, going from confidential Tier 1 information through to public Tier 3 information (that tanneries happily promote).

The classification of information helps with end-users identifying what information should be asked for and how the information can be anonymised so that it gives the end-user the information they require without compromising the commercial and legal rights of companies. Information requests through the supply traceability system should keep these important differences in mind. |



Researchers at CTC in France have been working on a hide traceability project

Figure 4. Rural or informal collection of raw hides.

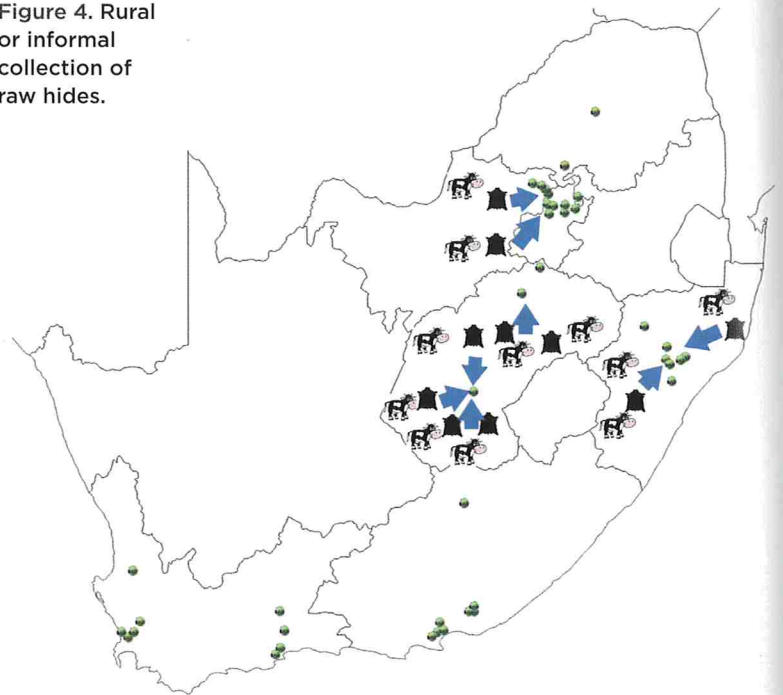


Figure 5. The different tiers of information that tanneries possess.