Interview – Navigating the Remanufacturing Trilemma:
Balancing Customer, Manufacturer, and Lawmaker Interests

Interviewee background

Date: 12.02.2024

Time: 10:00-11:00

Business Area: OEM (Automotive)

Occupation: Equipment Planner in Reconditioning

Professional Experience: 32 years

Disclaimer: The interview was conducted in German and has been translated

(State) subsidies and incentives

In the area of financial incentives, the legislator wants environmental requirements to be met and emission limits (CO2) to be adhered to and is in favor of subsidies and incentives. There are advantages e.g. in vehicle construction. At times there have already been bonuses (e.g. scrappage premium), today there are tax benefits for e-cars and CO2 taxation will also be an issue in the future. Existing car manufacturers are in transition to electric vehicles to avoid penalties. The state subsidises environmentally friendly vehicles and recycling. The cannibalisation and recycling of old vehicles, for example, is also lucrative, but does not happen at the manufacturer. However, there are components that have a very long service life. Overall, the legislator sees financial incentives as very positive. The manufacturer also sees it as very positive, as he gets the products back. The customer sees it as very positive, as he receives financial incentives to return products. The scrappage premium has already worked very well in the past.

Branding and (Intellectual) property

Securing unique selling points through patents is very important for manufacturers. The protection of ideas and intellectual property is important. The branding and intellectual property are therefore very positive for manufacturers. Saved resources are important for communication with the customer. The customer indirectly sees patents as positive because they drive developments forward and they can always have a state-of-the-art product. The issue is not so important to legislators, but they also want to drive developments towards sustainability, so it is a positive aspect.

Circular/Sustainable business models

New vehicles, for example, have become very expensive, but by renting them out, the customer may save on their taxes. However, this is also linked to being tied to authorized workshops to guarantee a regular service. However, this approach is not linked to the environment, or only to a very limited extent. Internal equipment is sourced via alternative business models – but custom tooling is usually owned. As-a-service is conceivable for systems but is currently rather unusual. The world is changing rapidly, and the cost pressure is very high in international competition. A holistic approach is required, particularly promoted by the legislators. Also, environmental issues influence the selection of business models. These developments are very positive for customers, as they can choose the business model that suits them best. It can be significantly cheaper than buying a new product. The range of different business models is also positive for the manufacturer, as it remains competitive and acts in a customer-centered manner. Legislators also see sustainable business models as positive because they want to drive the transformation towards a circular economy.

Compliance with Regulations

Safety regulations have long been controlled by the legislators. Great attention is also paid to compatible materials when selecting materials. The availability of spare parts is also regulated by law (15 years) and must be guaranteed by manufacturers. Legislation is the driver behind sustainability and a strong spokesperson. Manufacturers have increased development costs and must ensure that new materials fulfil customer requirements over the course of a long product life. However, price-critical customers may be at a disadvantage. Regulations can become problematic for financially weaker companies. However, the associated costs also have positive financial effects in the long term and improve the competitive situation. Sustainability is a socially unavoidable issue and political pressure is necessary, important and right. Although this means higher development costs for manufacturers, it should be seen in a positive light, as they remain competitive in the long term. The customer wants this sustainable development and sees it positively, but not if it is reflected in more expensive products. For legislators, compliance with regulations is very relevant and very positive, as it can influence recyclability and material selection, for example. Compliance with regulations can also be viewed negatively by the manufacturer. However, in the future it will still be important for competitiveness, and it therefore makes sense to accept the costs now.

Data Handling

Customer data, especially from usage, has become very valuable and must be protected. Data is the basis for further development and innovation. The manufacturer therefore benefits greatly from this data and sees it as very positive. Customers demand data security for products. However, data utilization can also lead to a better user experience and therefore be very positive for the customer. Developments in the future can be sold as on-demand functions. The security of data is particularly important for legislators and therefore good handling of this data must be supported.

Information Transparency

Legislators demand transparency – in the case of vehicles, for example, it is fuel consumption. The legislator explicitly demands this and therefore sees it as very positive. Customers use this information to compare products and therefore see it as positive. However, the utilization of user data is less obviously commented on. Indirectly, extended transparency can reveal internal processes or manufacturing procedures. The manufacturer therefore views it somewhat critically and only wants to disclose as little data as possible but can still use it for advertising purposes. So it basically sees it in a positive light. Information transparency can also be negative for manufacturers if it allows conclusions to be drawn about processes. But this can also be the case with patents.

Process Design

Close integration of production and development helps to save resources within the planned production. Energy savings have been relevant in process design for years. Penalties are imposed if harmful emissions are released into the environment. Companies also try to make greater savings with reasonable effort. Lean processes prevent material waste. The factory environment has many advantages here and generally takes a positive view of this. But all measures cost money. The legislator creates a framework through specifications and regulations and sees these developments in a very positive light. The customer sees this also in a very positive light, as they may be able to buy cheaper products if manufacturing costs fall.

Product Characteristics

Improved aerodynamics, for example, save fuel and indirectly serve as a competitive factor. Environmental labelling serves as an orientation for the customer and enables comparisons. The

customer wants a lot of information, and the throwaway mentality is currently declining. The customer sees sustainable product characteristics as very positive. OEMs have always focused on reparability, and this is part of their business model. This is therefore also very positive for manufacturers. However, the legislator intervenes more comprehensively here with right-to-repair. This means that the legislator sees sustainable products as very positive. This can be problematic for some manufacturers. At some point, customers will demand sustainable materials more explicitly and ecological improvements usually cost money at first, but the image of the products and companies will improve in the long term. The implementation of sustainable product characteristics can initially be negative for the manufacturer, but in the future the manufacturer must implement it anyway.

Product Design

Modular platforms are very successful in the vehicle sector and prices can be realized more cheaply. Plastics must be recyclable in some way. Design in the direction of material savings also brings productivity, so it is also very positive for a manufacturer. Saving electricity or gas makes products cheaper and these aspects are incorporated into development accordingly. This is a high priority for the manufacturer and is supported by a great deal of human resources. Complex service life tests, for example, serve as a basis for decision-making. The manufacturer benefits the most, as process costs can be reduced with appropriately designed products. However, product design should also convey a message to the customer. They also want customized products. Good design not only saves the manufacturer money, but customers also have more favorable prices. The customer therefore also sees this in a positive light. It is not so important to legislators, but they still want to move in the direction of sustainable development and therefore see it in a slightly positive light.

Product Labeling

Labels in general are important for advertising and are therefore viewed positively by the manufacturer. In operation, for example, environmental zone stickers are essential for some customers. E-license plates offer advantages when parking. For the customer, it is therefore positive in terms of design and image. In this context, the legislator is less involved.

Strategic Co-operation

Leasing or rental partners can be useful for companies. Cross-OEM platforms or components are also used by companies to reduce costs and development time. Co-operation is therefore essential for manufacturers and should therefore be viewed very positively. On the software side, however, OEMs need to catch up to make their products smart. Accordingly, many new business relationships have emerged in recent years. Customers can save costs through strategic partnerships between manufacturers and therefore see this in a positive light. Legislators see strategic partnerships as neutral.