

Toyota parts with global impact

For the car industry, the “carry-over component strategy” has dramatically increased the consequences of minor faults

By Gernot Kramer



It seems almost unbelievable that a defective gas pedal could drive a global company into such difficulty. But Toyota is not an isolated case; carmakers around the world are building the same parts – and therefore the same potential for error – into their cars.

Toyota is number one worldwide, the biggest carmaker there is. The Japanese company has never built particularly exciting cars but instead, banked on making good, and above all, reliable vehicles.

“Kaizen” (continuous improvement) is one of the factors contributing to Toyota’s success. Another is “Genchi Genbutsu” (go and see for yourself). With philosophies like these, the corporation hoped to integrate Japanese quality standards into their production processes worldwide.

Another recipe for success – even though its name is not as exotic – is the “carry-over component strategy.” Toyota tries to save costs by using the same components

in a variety of models. “Kaizen” convinced many customers and has put the company in an economically strong position.

Unfortunately, this same efficient use of standard components has now become a liability for Toyota. Recalls and retrofitting are normal but a case like Toyota’s jamming gas pedals is unique in the annals of automotive history.

A small component has caused serious difficulties for Toyota. The recall action involves more than eight million vehicles worldwide. But above and beyond the immediate situation at Toyota, the jamming gas pedal is sending a signal to the entire industry.

Toyota’s successful ways of doing business have been adopted by all of the other auto manufacturers. The latter dual illustrates a new global production problem, according to car industry analyst Ferdinand Dudenhöffer, founder and director of the Center for Automotive Research (CAR) at the University of Duisburg/Essex.

Platform cars and carry-over component strategies have been the “magic formula” of the industry for more than 15 years. That is how long corporations like Renault/Nissan and Volks-

wagen have been using standard components – especially in places where customers will never see them.

The production revolution begun by Toyota seemed as far-reaching as the invention of the assembly line but customers rarely realize that it exists. It is discussed in industry journals but avoided in advertising.

Customers want as many models as possible in order to differentiate themselves as buyers. If they knew that those sheet metal bodies with different exterior charms covered the same technology, it would destroy their illusions of extravagance. For example, when the strategy was young, Jaguar launched a model using some of the same dashboard controls as a Ford. Jaguar customers were furious.

Carmakers have learned from their mistakes. Today, only systems that drivers do not see, feel or otherwise perceive are standardized. “At one manufacturer who follows this strategy, that is easily two-thirds of the entire vehicle,” said Dudenhöffer.

Carry-over components are not ornamental elements or small parts like mufflers; instead they are essential components such as motors, gearboxes, clutches

and generators. Production costs drop because the higher the production quantity, the lower the production costs for these components.

The savings in logistics, spare part supply, and new series developments are also important. New cars no longer have to be developed from scratch each season. They are usually a combination of existing modular components.

That is the only way to launch an growing number of series with increasingly less lead time. One example is that more than 16 VW, Audi, Seat and Skoda models are based on the Golf platform.

“It is impossible to turn the carry-over component strategy around,” said Dudenhöffer. “The cost advantages are much too high. An Audi A3 and its convertible or Sportback variants would cost too much to manufacture as isolated series. They had to adopt the basic Golf construction.”

When a carry-over component is determined to be faulty, as has now happened at Toyota, a correspondingly large number of vehicles are affected by the problem. The defective gas pedal was integrated into a total of eight model series manufactured worldwide over a relatively long period of time.

The faulty part is also used in cooperative and joint venture vehicles like the Citroen C1 and the Peugeot 107. The consequence is a chain reaction of recalls, resulting in the worst-case scenario for any company’s image.

Innumerable small recalls occur every year but they usually remain below the radar, meriting a few lines in a business section of a newspaper at most. But a “tsunami recall” with worldwide market-by-market impact is a major global news story.

Volkswagen aims to replace Toyota as the world’s largest carmaker by 2018 – and is running the risk of repeating the Japanese company’s mistake. Rampant growth always poses a hazard to quality standards.

Toyota is now demonstrating that quality has suffered under the company’s growth strategy. Former leaders in customer satisfaction and defect reports, Toyota models have slipped into the average range. The competition has improved and Toyota’s inner strength is showing signs of wear.

Is there a lesson to be learned for Toyota and others who want to borrow the magic formula of the carry-over component strategy? As in the case of tsunamis, according to Dudenhöffer, a sen-

sitive warning system needs to be created. No manufacturer can possibly guarantee a perfect car, so problems have to be detected at an earlier stage.

Dudenhöffer suggests that the “fieldwork at customers’ locations” has to be reinforced; initially diffuse complaints from anywhere in the world need to be centrally compiled and accurately processed: “It’s not okay for a company like Toyota to let seven months go by before it reacts.”

To be able to react more quickly, carmakers first have to know what they are installing where and when. “Manufacturers will have to accurately document which components from which suppliers were put into which series,” Dudenhöffer said. “Right now, component flows have to be laboriously reconstructed after a complaint is submitted.”

Dudenhöffer believes manufacturers should stop trying to save on customer service: “Declarations of intent alone are inadequate: The departments involved need to have the technology and the personnel to follow up on abnormal situations and complaints. Manufacturers have to learn from the pedal debacle to halt the wave at the beach and not wait until it has flattened the village.”

A second passport for Americans

Why AmCham Germany wants dual nationality for US citizens | By Katja Ridderbusch

Holding joint German and American nationality is an exception. German law generally prevents people from holding dual citizenship. But AmCham Germany is trying to change that.

Rick Jones (not his real name) was born in Germany, the son of American parents. He grew up in the United States, was stationed in Germany while in the military and later returned to Germany for business. Today, he is the general manager of the European operations of a large American electronic supply company. He has lived in Lower Saxony for the past eight years and speaks German with a thick Texan accent. His wife is German and he proudly claims that his two daughters are perfectly bilingual and bicultural.

Jones has two passports, one German and one American. That makes him an exception because German law generally prevents people from holding dual citizenship.

AmCham Germany, the largest American Chamber of Commerce in Europe with 3,000 members, recently launched an initiative

to facilitate dual citizenship for Americans living in Germany. In a Jan. 7 letter addressed to the Federal Ministry of Interior in Berlin, AmCham’s president Fred B. Irwin suggested that the German government should “consider preferential treatment for American applicants according to the principal of reciprocity” and accept dual citizenship for them. The Ministry of Interior is currently reviewing the matter.

The United States allows foreign nationals wanting to become Americans to keep their prior citizenship, while German law requires foreigners to give up their other passports once they become naturalized.

AmCham Germany has noted an increased interest among their American members regarding the issue of dual citizenship. Americans who have lived in Germany for as many as 10 years or more want “to become Germans without having to give up their American citizenship,” said Sebastian Meis, a commercial attorney with the German-American law firm Bridgehouse Law in Atlanta, which is a long-time member of AmCham Germany.



German citizenship law was reformed in 2000 and now has a number of exceptions regarding the relinquishing of previous citizenship. Foreigners wanting to become Germans may keep their prior citizenship if their country of birth doesn’t release them from their citizenship, as is the case with Iran. Applicants may also keep their citizenship if giving it up would cause them “severe disadvantages in economic and proprietary terms.” Further exceptions apply to elderly and refugees. European Union citizens who

become naturalized Germans are also allowed to keep their former passports.

An additional clause in German citizenship law suggests that dual citizenship may be accepted if there is “an overwhelming public interest” in the naturalization of a foreigner. In the past, this rule has been applied to a number of foreign athletes who were then able to compete under the German flag in high profile competitions.

However, such overwhelming public interest does not seem

to exist in the case of American business representatives in Germany. “We’ve only seen very, very few cases in which dual citizenship has been granted to Americans,” said Meis. One of them is Rick Jones.

Yet, the American business community in Germany sees a number of good reasons to grant dual citizenship. Cross-border business, for example, could be handled more flexibly, and mobility among American executives could rise. Having a German passport would allow US citizens who are working for multinational corporations such as banks, to be transferred to divisions all across Europe. “They would not have to go through the entire application process again, once they return to Germany,” said Meis. The European Union’s “Blue Card,” adopted in 2009, aims to facilitate residency within the EU member states for highly qualified third-country citizens. However, it does not grant full flexibility in the labor market.

At the same time, Americans working for American corporations in Germany with high security clearance – like IT companies or defense contractors – may run into trouble if they

give up their US citizenship, and they may ultimately lose their jobs. According to Jones, it also enhances professional credibility when an American executive working in a foreign country also holds that country’s passport. “It sends a strong message that you are making a commitment – to the country, the company and the employees.”

So, how has Jones managed to become a German and remain an American citizen when only a few get that status? “It certainly helps to get the political support from local and state authorities,” he said. Also, his choice of residence played in his favor.

In Germany, it is up to the federal states to decide on applications for citizenship, and legal practice has shown that some of the economically stronger states like Bavaria, Baden-Württemberg and Hesse tend to be rather restrictive in granting exceptions, while states like North Rhine-Westphalia and Lower Saxony – the state in which Jones resides – seem to be more open.

Meis is only cautiously optimistic that chances for Americans in Germany to obtain dual citizenship will increase over the next years. Still, he said, “the fact that AmCham is lobbying for it now is a big step forward.”