



Supply chains: Smart cars

Smartville

Commentary:

The fun in Smart cars begins as early as the factory in Hambach, France, near the German border. There's a certain whimsy about the factory. For starters it's called Smartville. The four main areas are labelled Earth, Fire, Water and Air. The whimsy continues inside. The moment when the power train is united with the chassis is called the marriage, preceded of course by the engagement. But concentrating on the whimsy takes your attention away from the fact that behind the branding is a radical rethinking of the assembly process and its associated supply chain.

Jean-Yves Schmitt, Smart:

As soon as you arrive in Smartville you are aware of the architecture: the geographical organisation of the buildings. Everything here has been planned to produce the Smart in the best possible technical conditions with the minimum delays and lowest possible production costs.

Commentary:

MCC, the Micro Compact Car company, is the assembler, operating a modern plant using up to date technology, just in time manufacturing methods, and with an emphasis on continuous improvement. It's a worker-friendly environment and the average age of the Smartville workforce is under thirty.

Jean-Yves Schmitt, Smart:

The final assembly lasts four hours from the time the completed chassis enters the assembly line. Between three and four hours into the assembly the interior and exterior fitting begins. In total eight hours.

Commentary:

You can park the Smart where no other car will fit, and the short car is a marketing person's dream. Half price car washes, motor rail and ferries.

Daniel Preiss, Smart Dealer, Saarbrücken:

You pay in Germany really low tax, the diesel pay no tax for four years, and the petrol engine pays 60 Germany marks in the year, a normal car costs 400, 500, and all the parts are also really cheap for the car because they are smaller than in the other cars, and also the insurance is quite cheap so that you don't need so much money to drive a car in a man's life in normal car.

Commentary:

Building a brand image gets a manufacturer into interesting areas. The badged merchandise, for example. Swatch have been here before.

Nicolas Hayek, Founder of Swatch:

When we presented it to the press at the beginning we presented it underwater in our department stores so that everybody sees it's completely watertight. We threw it against the wall so that everybody sees it doesn't break, it's a very sturdy, very high quality watch.

Commentary:

Of course cars are not disposable watches but we do still have to throw them into walls.

Joachim Eberhardt, MD, Daimler-Chrysler, UK:

Mercedes-Benz has always been on the forefront of safety technology and we find ourselves to be a leader in that area, and we have taken that expertise and transferred it to the Smart car, and it actually has this Tridion Safety Cell which is a very sturdy steel component in the vehicle that absorbs all the impact, both in a frontal and rear, and side impact, and because of its short dimension and short wheelbase wherever the car is hit in the unfortunate event, it hits that sturdy Tridion frame, so therefore is unparalleled safety in this segment, which was evidenced by some independent tests, and we actually see a vehicle back there that was crashed at about 65 kilometres head-on and it provides perfect security, combined with air bags for driver and passenger air bag which comes standard, which is very useful for this segment.

Commentary:

As well as its crash safety the Smart claims exceptional handling and braking. Mind you, it can be a little unsettling when the Hambach test driver demonstrates all of this by trying, unsuccessfully, to lose control.

There's a Smart coming off the assembly line every 96 seconds. Every one has been sold to a specific customer. Since you can order your own customised version over the internet the system has to cope with your choice of body colour and interior trimmings, making sure it's your choice of door panel that's added to your car. The scale of car assembly is very different to microscopic watch-making. This is an area where Swatch seem to have little to contribute to the partnership. In fact now that Smart is a production car Swatch has no further formal involvement. Some people suggest that the separation was the result of differences over the engine. Hayek was keen on a hybrid, electric and petrol. Mercedes eventually settled on conventional petrol and diesel options.

Prof. R. van Hoek, Supply Chain Management, Cranfield University:

The original plans for the car emission, the use of hybrid engines which still not, is still not being practised today, which really lowered its environmental friendliness in the end, and from what I'm being told that actually is one of the reasons why Swatch decided to pull out of the entire project. There's very little detailed information available about the actual true rationale for that but what the publications do clearly point out is disappointment in the extent to which they stretched the innovation a lot. There was even some thinking in the early days to actually do some of the assembly in their dealership to make the dealership the extension of the assembly line which never took place, part of the rationale being well, we've never done that and we run factories, so let's just run a factory.

Commentary:

From the loading dock Smart cars are shipped off to a network of dealerships called Smart Centres. Typical of the rethinking that Smart have done these tend to be in city centre locations.

Daniel Preiss, Smart Dealer, Saarbrücken:

So we have sold the Smart since two years. In the beginning it was a little bit difficult but now we have good results. We sell nearly a thousand cars this year and we hope that we're getting better and better in the next years.