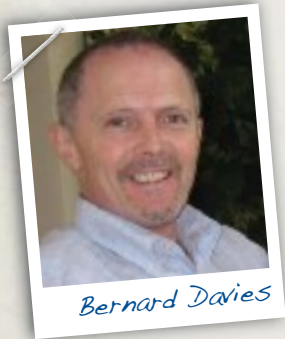


ON THE SOAPBOX

The making of a modern marvel



In his latest column, **Bernard Davies**, Director at Fleet Force Ltd, encourages us to take a step back to consider the myriad elements involved in the production of the modern car.

I CAN still remember (more than 25 years on) my first visit to a car factory. It (obviously) made an impression on me then and I continue to be spellbound whenever I have the opportunity to visit one now.

Sure, in the intervening years cars have changed, both cosmetically and under the skin, but they are essentially the same today as then – an engine, four wheels and somewhere to sit. The list of optional equipment has got longer as indeed has the sophistication of the systems (fuel injection was in its infancy and air conditioning confined to the luxury brands at that time), making the production scheduling ever more complex but it never ceases to amaze me when the right bits arrive at the right time for the right car. Taking the doors off after painting and sending them away for sub-assembly purposes, only for them to arrive back at precisely the moment they are required could be called magic!

And with all the current complexity – stop/start, hybrids, full parking aids, systems for auto brake, driver alert and traction control, the list is endless – we have still found nothing better than four (or five) nuts to keep the wheel on. Marvellous!

China seems to have its fair share of planned new factories, many as joint ventures with established foreign manufacturers, but who would start building cars from scratch at the moment? The investment needed not just for the factory, but for the product range is enormous. I don't know whether it's relatively more or less than when people like Henry Ford were starting out, but securing capital is only the first in a number of challenges to be faced and overcome.

So having decided to enter the world of automotive manufacturing you will need a product to make and this is where the designers and engineers come in. The whole team will get to work on the concept and detail, designing every last component and liaising with every supplier to determine the best look and material to use – all the way through the development process. And this, together with testing (to near destruction), goes on for two or three years until you are ready to take the covers off your finished product and show the world.

Apart from a small number of design clinics, no one outside your organisation has seen (or driven) your new creation until this mo-

www.fleet-force.com

ment. You hold your breath and wait for reaction – firstly to the look and then (this bit is crucial) to the driving experience, which will be discussed and scrutinised after the motoring press have driven it. Do you have a golden-egg laying goose, or a turkey? Oh, and while all this is happening, someone is already thinking about the mid-life revision...

The integration of the design is probably the best bit. The use and feel of materials, subtle shapes and positioning all behave as pieces of a giant jigsaw puzzle. Next time you check your oil or replenish the washer

fluid have a look around. Every part has been placed in its position for a purpose. Every profile in the pressing is there because it needs to be. Every cable tie, clamp, hose and bracket has a part to play. I know you could marvel at design-integration in any item you buy, but I can think of few domestic purchases where the whole is more than the sum of the parts. And this isn't a kettle or a bed – it'll sit outside your house for the next three or four years, possibly (via Google Maps) for the whole world to see.

It's no wonder these things are expensive!

