

The future of car design

*Creating car brands that live up to their iconic
predecessors*

Autovista
Group....

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Introduction

*Technology has always been the driving force behind evolution in car design. Used effectively, autonomy, connectivity, electric drive trains and shared mobility have the potential to be game changers. Used unquestioningly, there is the danger that cars of the future will be stripped of their personality and consumers will lose the personal connection they have always had with their car. **Franck Louis-Victor, New Media and Innovation Services Director at Renault** explores what it will take to develop cars with soul.*

Over recent decades, cars have undergone a series of incremental evolutions. Each new version is bigger, heavier, taller, more sophisticated, more comfortable, more environmentally friendly... Modern cars have become safer, more efficient and more reliable as manufacturers took advantage of continuous technological improvements, but they also have fewer elements in common with their predecessors as a result.

But making better cars under the same name as an iconic original model does not guarantee the car keeps its soul – that unique recipe that made the original a success. The emotion that surrounds a product is rarely just a question of technology. It results from a perfect combination of a relevant value proposition, meeting a precise societal need and a brand associated with strong values.

Franck Louis-Victor was scheduled to speak at Auto Mobility LIVE 2020. While we are unable to bring you the face-to-face event, Autovista is still committed to bringing you the same great insight from our speakers. To stay up-to-date with all of Autovista's speaker insights and plans for future events, register at: www.automobilitylive.com.

Technology makes a difference?

The pace of automotive research and development has probably never been more intense. Engineering has a full toolkit at its disposal with Advanced Driver Assistance Systems (ADAS), autonomous driving, connectivity, big data and smart cockpit technology, as well as having to address key challenges like lowering CO₂ emissions.

To realise the combined potential of the technologies available, OEMs need to rely on their suppliers to provide top-notch solutions and components, but the job of design, upstream specification and integration rests firmly with manufacturers. They need to combine the ingredients to deliver their own unique recipe to the market.

What's more integrating each of these new technologies burns cash, time and resources. It requires specific know-how to join them together – not just technical knowledge, but also procurement expertise to source different components that work together.

Manufacturers are currently spending a lot of time and energy just to keep up. They are struggling to decide what should be developed, what is needed to meet market expectations and what is worth the time, cost and risk it will take to deliver.

And that is leaving very little room to come up with the product experiences that will really make a difference to consumers.

Added to this and raising the stakes for OEMs are four key topics, each expected to be “game changers” for the industry: electrification, connectivity, autonomous driving and shared mobility.

Electrification

Battery electric vehicles (BEVs) represent a major step towards dramatically reducing pollution – and that is something consumers want. By that I mean, what they intellectually want, even if their wallet is still causing them to hesitate and despite the huge financial contribution from car makers and governments towards making BEVs affordable.

A lot has been done in recent years to offer better, more relevant products. These cars are attractive enough to compete with traditional combustion engines; they offer the right level of comfort, and autonomy.

The cost of the technology required to build these attractive vehicles means that financial aid is necessary. Yet, all that incentives are doing is artificially sustaining the market, while CO₂ regulations are forcing car makers to shape their product ranges around zero emission offerings to avoid heavy taxes.



Connectivity

Connectivity was heralded as a major step to update cars for the 21st century and to pave the way for autonomous driving. In fact, it has resulted in limited extra value to consumers in term of in-car experience and pleasure. It has not been used to enhance the value proposition, differentiate brands or drive new revenue streams.

It is viewed simply as an enabler of new on demand services and functions, but one that costs hundreds of millions of euros to implement. The associated business model is weak. That means it has failed to generate the necessary return on the investment, creating frustration for car makers.

Successfully implementing connectivity is not a question of technology. It takes something much broader than that. It requires a holistic approach to combining hardware and

software, with strong marketing and a clear commercial vision. And it all needs to be packaged up in a relevant brand that fits with the product ambition.

Plug a 4G modem into a Nokia 3210 and you will not create an Apple iPhone X.

Autonomy

Autonomous driving may follow the same path, with the additional big constraint: regulation. Adding thousands of euros of technology to the vehicle without changing the business model is a huge pill to swallow. Even more so for mainstream brands that do not sell their cars for €100,000 a time.

Building the technology to support autonomous drive has never really been the problem for our engineers. They have done it. Selling the advantages of that technology is

another challenge. Achieving that against a backdrop of regulation, an exploding list of edge cases and a lack of technical maturity among politicians is another thing altogether. These roadblocks may arrest the biggest revolution in vehicle design: building the car as a tool for living, not for driving.

Shared mobility

Shared mobility is expected to be the business solution to the problems for the car manufacturing industry of the current social revolution in how consumers travel around. “People won’t buy cars anymore. They don’t need to. So, let’s build fleets of vehicles they could share”.

We are halfway down that road, but there are still multiple challenges. Mobility businesses need huge levels of investment to create and manage fleets of sufficient size. And their demand for new vehicles is far from enough to support factories building millions of cars.

By design, and because all the origins of this “functional economy” are on the West Coast where profitability is the enemy of exponential growth, enthusiasm and fund raising, the economic model for shared mobility is deeply buried and unlikely to emerge for some time. The model does not sit easily with European

accounting rules and the timescales typically used for financial and strategic planning.

Industrial and financial challenges have taken precedence over real, holistic, customer-centric strategies

The major OEMs have focused their attention on organic volume growth in recent decades as a way to absorb rising development costs. But these ever-bigger businesses have lacked clarity about the right strategy to adopt, while the growth of siloes has hindered implementation. Industrial and financial challenges have taken precedence over real, holistic, customer-centric strategies. Building more, in more regions, as cheaply as possible, for perceived customer groups is the common approach.

But the current market segmentation is beginning to show its limits in a world that is moving faster and faster, and the current coronavirus crisis is now shaking everything up.

The impact of the pandemic

The terrible pandemic we are living through may provide a vision for the future. Not from the point of view of what an engineering company can develop. But from the point of view of what the market will begin to expect after being shaken up and forced to revert to the fundamentals.

We may consider the current situation as an appetizer of what our globalised, sometimes irresponsible, world has in store for us.

What are the consequences of being stuck at home with partners and children for an extended period – a long enough time for us to get used to it and for it to become the norm? How will we get on trying to work remotely, avoiding commuting via public transport services that are fully or partially closed? Will we become used to going on foot to the only remaining local supermarket? Or will we become so fearful at having to touch a shopping trolley that has been previously used by hundreds of others that we shop online?

The answers are not obvious, and it will be down to each of us to make a choice as to how we face the future. But what is clear is that big crises have the virtue of bringing us back to basics, sweeping away the superfluous, unnecessary things, reducing the choices that we have to make and bringing what is most important to the fore.

A pillar of freedom?

In a somewhat contradictory way, lockdown has shown us that having a personal car can be an essential pillar of freedom. You cannot do anything without a car when you are living away from the centre of the city: having your own means of transport can be essential to going to work, feeding your family, and accessing healthcare services. Having to share a car or other mode of transport with people you do not know is unappealing. Those who escaped the cities in the hours following the lockdown announcement can confirm that only too well.

***Our world will be deeply
shaken by pandemic: the
way we consume, the way
we work, the way we live***

On the other hand, the lockdown has shown us that liberty is not just about individual mobility. Personal freedom is about not feeling too bound by rules and restrictions. That said, we live in a society that is strengthening control over its citizens.

Lockdown is the opportunity for governments to set up tracking and control systems that they will learn to use to the maximum and will be reluctant to relinquish when the current crisis abates. We are experiencing the greatest return of state control over our movements – our way of life – in living memory. We will have to get used to it.

Rethinking the megatrends

In light of the coronavirus situation, it is interesting to look again at the megatrends shaping our industry. Do we need autonomous driving? Yes, but not necessarily for private cars. Those who live remotely, regularly drive long journeys and use their car as a tool for work may be especially keen to retain their car at whatever cost.

But delivery businesses will be very eager to adopt small autonomous vehicles for last mile services. It was already the case before the crisis. It is just becoming more obvious. China is pushing hard for such services. In California, the second company to get regulatory permission to conduct fully driverless tests is Nuro for its delivery vehicles. There is no seat, no passenger, just a robot.

Do we need electric vehicles? Yes, undoubtedly. People are getting used to hearing bird song in Paris, and all across Europe, and to breathing fresh, unpolluted air in city centres. Going back to driving surrounded by noisy, smelly diesel trucks and being stuck in traffic will be inevitable in the medium term but will seem particularly terrible by comparison with what we have now. Things will have to change, and to change fast. That means both private and commercial vehicles.

The rise of EVs had already started before the crisis, supported by manufacturers offering a much wider range of competitive models. That

rise will continue, but the market may have to deal with contradictory pressures resulting from the crisis: demand should grow and large stocks of recently launched BEVs will have to be sold as soon as possible after restrictions are released. But states that have been supporting sales of BEVs with substantial subsidies will be facing a significant period of recession and unable to sustain their contribution. To support sales, manufacturers may have to compensate with additional discounts that will add to their current losses at the critical moment when they are trying to rebuild.

Re-evaluating what's important

At some point, the Covid-19 crisis will prompt us to re-evaluate things. It will result in the relocation of manpower and resources in countries where labour is more expensive, potentially bringing services back from cheaper locations; there will be a reduction in subsidies in states looking to control prices; companies will need to sure up cash flows and profitability; and bankruptcy will lead to reduced competition.

We will probably have to pay the right price for goods more often, rather than an artificially low price. And it may change our behaviour as consumers – buying less but buying better. Better quality and higher cost goods not because of increased product sophistication but because of greater sustainability, less obsolescence.

Manufacturers will be expected to be more virtuous. This has not been lost on some of the big brands that actively ramped up their social contribution in the first weeks of the crisis, transforming their production lines to manufacture essential products in the fight against the virus.

Conclusion

Our world will be deeply shaken by pandemic: the way we consume, the price we pay, the way we work, we live, interact with our family, the personal and professional contribution we make to the community. What defines us is subject to change and this will have an impact on our expectations. For good or bad.

For car manufacturers, continuing to pursue differentiation through technology will only put increased pressure on margins and R&D costs. Instead, they need to find an alternative and recreate meaning by revisiting and rethinking their brand values, their contribution to society, their KPIs.... They need to move

away from a short-term focus on sales volumes and refocus on their value proposition and the relationship with the consumer. This will require them to concentrate on new distribution channels, offer fewer products and more services and create a shorter path from product to consumer. Most importantly, they will need to build their offering around USPs that are not just linked to individual models but also to the values that are delivered by the brand.

Soul lies not in the product alone, but it results from the virtuous combination between the brand, the products and the consumers.



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