

Computer-generated images are the next marketing platforms for motor vehicles By: Armin Pohl

The digitization of the automotive industry is in full swing. This includes an area which is seldom in the spotlight – the generation of images and visuals.

Marketing communication systems being used by the big manufacturers are currently undergoing a revolution, and are set to fundamentally change the whole industry. This article takes a look at the state of play.

The automotive industry has never just been about cars, but also about images. Without images it is impossible for any manufacturer to get customers enthusiastic, or tempt them to buy cars. This is why the first advertisement placed for a car included

a picture – not a mean feat in the days of hot metal presses. To be precise, it was a black and white lithograph of a Winton Motor Carriage from 1898.

Winton Motor Carriage Company.
Add from Scientific American
February/March 1898.

Much has changed since then. Digitization has opened up a whole host of opportunities to companies and customers, and the demand for images from the automotive

brands has grown exponentially. Today, CGI (Computer Generated Imagery) is indispensable. CGI is used to visualize complex products which come in a vast range of models and with a whole host of features. The combination of real films with vehicles fully generated on computers, as well as the photo-realistic appeal of images and

videos has made electronic image generation and editing a tool that the automotive industry can no longer do without.

Alongside ads, posters and brochures, companies now also need films, digital and social media content, websites and product configurators. Recently clients have started demanding augmented or virtual-reality worlds to experience. OEMs consistently have to produce these materials from scratch or alter them because they update their vehicles virtually on an annual basis.

CGI is all about efficiency

The advantages of digitally generated material are many. Companies create whole worlds to experience which are applied

across media channels internationally, while at the same time being localized for each market. A digital object is easy to place in various settings, whether it's in the Australian desert or on a cliff on the North Sea coast.

Quite apart from the shipping and travelling costs, automotive manufacturers are faced with the challenge that nobody is allowed to see a new model before its market launch. Therefore, security measures are correspondingly complex and the costs entailed are high. Thanks to CGI companies can start working on visuals much earlier in the development process and display products that don't even physically exist yet.

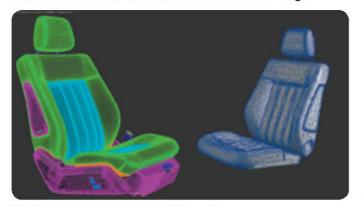
CGI also makes it easy to show the product in different colors or with other features. This variability is highly practical for customization purposes, i.e. marketing products which the customer can change to suit preferences, either in terms of technical sales or selling designer products.







Single source publishing: Real photo models can be inserted into rendered master scenes in this Mackevision image.



CAD data is used to create 3D models.

All that would be impossible with conventional ways of generating images and marketing material. This is why automotive manufacturers such as Hyundai, Mercedes-Benz, BMW or Volkswagen have long been using data-based visualization processes. Five steps are required to turn 3D design data from industrially made products into a CGI visualization: model – research, collation, preparation, model development and acceptance.

This process creates a standardized framework for all media productions worldwide. As a result, all types of product presentations can be created with computer-generated media and in constant quality thanks to consistently superior databases. This principle called single source publishing allows the simultaneous provision of image content on all channels and on all devices. Content is intelligently linked, centrally managed and tailored to the end customer.

It is provided quickly, securely, cost efficiently and in consistent quality. And it allows manufacturers to start advertising new vehicles before they have even been produced.

Anyone who can still recall how long it used to take to draw an image by hand and knows how quickly vehicle images are generated in today's highly automated, industrial processes can imagine the competitive edge that can be generated. The greater efficiencies achieved through CGI are vast. Given that at least 80% of all images for communications purposes can be created using CGI, the investment in data preparation systems quickly pays dividends.

Tomorrow's CGI - new worlds, new routes

Nowadays efficiency isn't CGI's only focus. There's a distinct trend towards creating personal experiences for customers. One example is the impressive product configurators of the type found in the major automotive brands' flagship stores. Customers

About the author

Armin Pohl is CEO and co-owner of Mackevision, a global specialist in solutions for data-based visualization, CGI and visual effects. Mackevision is also a pioneer of data-based image generation. Based on longstanding experience working with automotive and other industrial companies, he and his company develop concepts and solutions for using CAD-based image generation in a range of different companies, ad agencies and film production companies.



can configure their favorite models on multi-touch tables and subsequently display life-size versions on media walls.

In order to respond to the expectations of their digitally-savvy customers, many automotive manufacturers are bidding farewell to longstanding methods of advertising and selling vehicles and developing brand-new concepts. These turn real and digital ideas and touchpoints into all-embracing worlds to experience with a strong emotive appeal. In the majority of cases they use CGI content to do so. Manufacturers like Mini offer 360-degree commercials. Volvo experiments with virtual test drives on smartphones and Google's "Cardboard." With its "Audi City" in London and in Berlin Audi can give its customers digital access to all models in their real size and in real time. No physical test-drives are required as they are carried out in virtual reality.

And there are good reasons why manufacturers are pursuing this route because in the future competition will take place primarily in the digital world. According to management consultants McKinsey, the number of people visiting dealers before vehicle purchase has already halved because customers mostly seek information online. Market observers at US company Frost & Sullivan are predicting that by 2020 some 60% to 70% of all new sales leads in the vehicle business will stem from digital channels. And they believe that 5% of all new vehicles will be bought online – at least from manufacturers who offer sufficiently impressive, experience-rich digital platforms.

All in all, we can confidently assume that despite all these years in existence, CGI is still in its infancy and that the next few years will continue to see a massive growth in its importance and benefit. Manufacturers, their customers, and also service providers and new media stand to gain hugely. And we will all be able to experience cars in a completely different and totally new way.

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