



PORTFOLIO STRATEGY

Volkswagen of America (VWoA) is working to improve the gas mileage of its gasoline-engined vehicles while also bringing hybrids and alternative propulsion—such as plug-in hybrid and battery electric vehicles—to market. The key, Michel said, is acceptance by a broad range of customers, so VWoA is focused on providing environmentally friendly vehicles that are also fun to drive. (Photos courtesy of VWoA.)

KEEPING THE PORTFOLIO PROFITABLE



For Volkswagen of America, it boils down to quality, balance, and branding



This Critical Thinking interview is with Rainer Michel, Vice President of Product Marketing and Strategy for Volkswagen of America.

Michel is responsible for ensuring that Volkswagen offers a competitive product lineup, working with his team to integrate the proper features and technology in existing and future Volkswagen products in the U.S. market. His team also listens to the voice of the U.S. customer and ensures that the proper requirements are taken into consideration during the development of VW products sold in the United States. In addition to product development activities, he manages the development of a balanced product portfolio strategy including power-train strategy, connectivity integration, e-Mobility solutions, as well as pricing strategy for Volkswagen's entire U.S. product portfolio.

Michel joined Volkswagen of America (VWoA) in January 2010. Previously, he served as

Executive Director of Product Management for Global Small Cars at Volkswagen's global headquarters in Wolfsburg, Germany. Before joining Volkswagen, Michel held numerous positions of increasing importance in purchasing, engineering, product management, marketing, and planning for General Motors Europe and Opel. During his tenure at GM, Michel worked on various assignments for the U.S. market at the company's global headquarters in Detroit and technical center in Warren, MI.

Michel holds a master's degree in mechanical engineering from Darmstadt University in Germany.

Q. There are striking parallels between Volkswagen's development strategy and philosophy, and that of the U.S. Army's acquisition community. Both organizations set out to develop and deliver the right products, always looking for the next level of excellence in performance, technology, fit, and value, to



AT HOME WITH HERBIE

As it happens, Michel was born the same year as Herbie, the “Love Bug” made famous in Disney movies. Here, Michel relaxes with Herbie in Bad Camberg, Germany, Michel’s hometown.

name some of the key parameters. How does your leadership philosophy sustain these principles?

A. Our leadership’s philosophy is always to really strive for the very best. That, I believe, is the difference between us and other car companies: We don’t compromise on product goals and targets. It’s easier in some ways to have the best product—not just at the start of production but all the way through its life cycle—rather than trying to be tactical. In big organizations, especially, it is very difficult to keep the entire workforce moving to the same goals, so when you’re striving for the very best, the risk of wrong interpretation and translation of those goals by different parties is much lower. It is important to stay ahead of the competition by setting ambitious goals. A good example of our mindset is that we always want to win comparative tests in the media, which means that everyone in the organization is always pushing to be the best so as to not endanger this goal.

Q. In line with how the Army approaches its Capability Portfolio Reviews for its tactical wheeled vehicles, network, and the like, can you tell us if Volkswagen has a similar approach and how it influences the future direction of the company?

A. We have defined the portfolio framework, dividing it into two groups. There are core models, which are the backbone of VWoA and which will ensure the major part of our volume growth. Beside these, we have the so-called ambassador models, which support the brand values. Both groups receive absolute priority when it comes to investment in product and marketing efforts.

All products must be in line with the VW performance characteristics—best-in-class driving dynamics, and so on—which are defined in relation to the competition. My team is continuously monitoring the market and investigating all business opportunities for the U.S. Any new product idea or successor model will have to

support the brand values, and the market input into the development process must be in line with the defined VW product characteristics. The Golf R is a very good example of an ambassador product that demonstrates a lot of sportiness, is fun to drive, and has excellent driving dynamics.

We review our portfolio—including all new opportunities—twice a year with the VWoA executive team. This makes the most sense to us, because the required market research data is available in the same sequence.

Q. How does Volkswagen of America build and sustain a workforce that can carry out its strategy successfully on a day-to-day basis, yet remain flexible enough to react to customer demand? In other words, how does it manage its people portfolio?

A. You want to hire the best talent, and you want to expose that talent to all sources of information. In addition, as discussed before, you want to give strict and non-interpretatable goals to that workforce. We encourage our people to have close relationships with our partners—for instance, companies such as Bosch and Continental—to have enough time to continuously drive all of our products, and to benchmark our cars and processes against those of our competitors. Product is king. We make it a point of personal honor to strive for the best solutions and not pursue suboptimal concepts.

Q. What defines an appropriately broad and balanced vehicle portfolio for Volkswagen to manage against? How do you identify and distinguish the diverse types of cars that you want to produce, while preserving choice and allowing an appropriate degree of redundancy between cars?

A. A balanced portfolio for VW means that we need core models that create

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the necessary volume, combined with highly emotional products that support our brand positioning, with autobahn-inspired performance and exhilarating everyday driving. All of the products must be of the highest quality and provide lasting value, with sophisticated German engineering. We believe in and live our slogan, “Everyone deserves a better car.” Volkswagen of America’s portfolio has developed in recent years from individual niche products to a full-line offering. We continuously monitor our target customers and align our product offerings on a continuous basis.

When it comes to redundancies between cars, we look at it slightly differently: Looking at the human-machine interface, we want a common set of components so that a VW Brand customer who is moving between products according to their changing needs and life stages knows they are in a VW. We can differentiate models in many different ways, from their driving dynamics to their styling, but we want to spread components across as many vehicles as we can, as long as the specific segment requirements are met. Between VW Group brands, we share respective components that are not brand-specific, in that they’re non-visible/-perceivable for the customer and are independent from

the respective Brand DNA. Does it matter to the customer if an air-conditioning unit behind the instrument panel surface is the same on a Golf as on a Passat, as long as they work perfectly?

Q. The Army, which builds its portfolios based on needed capabilities, must consider technological obsolescence when making portfolio decisions. For Volkswagen, the guiding principle ultimately must be return on investment, but the obsolescence factor also plays a role in Volkswagen’s portfolio decisions. How far ahead of production can Volkswagen safely identify a new product or feature, e.g., a radio, and make a portfolio decision?

A. Return on investment is certainly a very important Key Performance Indicator, but if market conditions change—for example, during the financial crisis of 2008—then the company’s leadership has to take decisive action. Normally we are striving for a six-to-seven-year life cycle, which is in tune with the aging curve of our products and the ability of the organization to keep the product fresh with mid-life-cycle measures. The ability to predict what is needed not only for launch but also for the whole length of the life cycle must be considered a core strength

of an organization’s design, product planning, and engineering capabilities.

You have to continuously fill the product shelf with innovative features and cool and appealing product ideas. Because the Group is so big, it enables us to fill more niches and provide new features more quickly than other competitors. Based on the timing of the development process, we are forced to plan several years ahead and cannot react immediately, although development times have been significantly reduced in the past decade by the intensive use of simulation software. However, our competitors are also using the same techniques, so it is difficult to gain an advantage here. One advantage VW certainly has is its timeless and classy design language and high-quality design execution. As a result, VW models that are no longer in production still look fresh and appealing on the street, even if their technology and performance might not be up-to-the-minute.

Q. Volkswagen’s modular tool kit strategy allows the use of common core design and common engineering for the major component systems in your subcompact, compact, and medium models around the world, while accommodating multiple variations at minimal additional cost.

Could you elaborate on how this strategy will create efficiencies in your vehicle engineering and production?

A. The more you can use the same parts across multiple vehicles, the fewer engineering hours need to be expended on all those vehicles, the less testing and validation needs to be done, and the less expensive the hardware you have to build. You will want to reinvest some of those savings to insulate yourself to any quality risk when rolling out in bigger volumes around the globe.

With this, you will achieve a higher level of quality from the beginning. In addition, all the knowledge you gained from the very first model launch can be applied to the following model, leading to launches that will be much faster and flawless. Faster launches with fewer interruptions mean more volume arriving faster at the dealers and in customers' hands, thus generating the required profits sooner.

Common parts also mean less tooling variance and more commonality across factories around the world. Besides the regular scale effects, a vendor's tooling can be simply copied, instead of designing and building a new tool for a different part. This is significantly cheaper and faster.

We call the component set our MQB—Modularer Querbaukasten, German for modular transverse matrix. It enables not just the usage of common parts across different segments, but also VW's modular production system, which leads to factories with the highest level of commonality and flexibility.

In future, all factories around the globe will be almost the same. Again, this saves cost, ensures top quality, and makes us very fast in reacting to changing market demands.

All this allows VW and the VW Group to invest in niche models alongside the core vehicles and to tailor the vehicles to what each market needs. The new Passat, with its specific dimensions such as a unique wheelbase for the U.S., is certainly a very good example of a product that's tailored to the market.

Q. Volkswagen has a global reputation for engineering leadership and views engineering excellence as a capstone of its success. How, specifically, do you identify areas for innovation?

A. Most importantly, we brainstorm with our staff at every level and in every area of the company in order to improve our products and the driving experience for our customers. We conduct a large number of drives with the Board of Management in both the Southern and Northern Hemispheres, as well as in all markets in all stages of the development. New innovations will be reviewed, tested, and discussed very early. Continuous benchmarking is an important tool as well.

Here in the U.S., we have established the Electronics Research Laboratory in San Francisco, which focuses on identifying and evaluating innovations for all our brands. Besides internal research, we continuously work closely with our vendors as a secondary source of innovation. It's important to have a close relationship, because they bear expertise in areas that we do not consider our core business. They can give you insights to innovations that may be happening outside your organization. If you give your employees and your partners a chance to work together early in the vehicle development process, then you will be able to leverage those relationships by getting early access to innovations. It's key that you must be a reliable partner so that vendors are really willing to disclose their best insights to you.

Q. Sales figures are, of course, an important measure of Volkswagen's success, but by no means the only one. What are your top three to five metrics for measuring performance in the marketplace?

A. Our Mach 18 strategy states that Volkswagen wants to be: a top employer; the most environmentally responsible automaker; the leader in quality and customer satisfaction; and we want to have the highest returns for a volume automaker. Yes, we are also aiming to produce more than 10 million vehicles a year by 2018. But volume alone isn't the only measure of a company's true success. We like to think of VW as a volume brand with a premium touch and want to achieve significant market share in all the main markets. In the U.S., that means having five or six cars on the street among every 100 new ones in order to be relevant and visible.

It is clear to us that truly credible global leadership cannot be achieved without being successful in all major markets, even if it looks possible from a pure sales volume point of view. Success is especially important in the U.S., where vehicle mass production was invented by Henry Ford and where VW has underperformed over the years; everyone in top management here and in Germany is very eager to succeed.

Q. The Army has put a great deal of effort into incorporating Soldiers' feedback into the design of their equipment, early and often in the development process. Like Volkswagen customers, Soldiers know what will work and won't work on the battlefield. How does Volkswagen connect with the public and encourage customer input? What methods have proven most productive for the company?

A. We interact with our customers on many levels. We do market research and



SUSTAINABLE MANUFACTURING

The VVoA factory in Chattanooga, TN, which produced its first customer car in April 2011, is an example of the company's sustainability strategy, which also encompasses VW products, green energy supply, and environmental initiatives, among other elements. The Chattanooga plant is the only auto factory in the world that has LEED Platinum certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design program, Michel noted.

run intensive clinics where customers critique future products. We get feedback from auto shows and in the growing social media space; we have more than a million fans on Facebook, so we get feedback there, too.

Importantly, we cooperate closely with our dealers here in the U.S. and have installed a rotating Dealer Product Committee consisting of 10 dealers from all over the country at any one time. This committee provides very valuable feedback from the showrooms, which we include in our product strategy. And we think that our 500,000-plus employees are, to use an analogy to the Army, our troops, who are super-critical of what we do, so we survey their reactions and ideas. Besides the important information we can gather, being inclusive with the workforce has a significant motivational factor. So this is a clear win-win.

When it comes to quality, we closely cooperate with JD Power and Associates, and we look critically at feedback from the media, especially the key influencers such as *Consumer Reports* and *Edmunds.com*, and the enthusiast media such as *Motor Trend* and *Car and Driver*.

Q. Environmental standards are an important consideration for any automaker and are increasingly important to consumers as well as regulators. Volkswagen's Think Blue® philosophy is one example of how Volkswagen has responded to both communities. The TDI Clean Diesel Passat is another. How does Volkswagen keep up with the demand for cleaner products and more sustainable operations?

A. Clean Diesel is an important and unique selling point in the U.S. for VW, and we will continue to increase its share and roll out the technology to more products in the portfolio. But at the same time, we are working intensively to improve the gas mileage of our gasoline-engined vehicles and on bringing hybrids and alternative propulsion—such as plug-in hybrid and battery electric vehicles—to market.

The key to us is acceptance by a broad range of customers. Therefore you will always find the combination of environmentally friendly but at the same time fun-to-drive vehicles. Perhaps the best example is the New Generation Beetle Coupe with the TDI engine, which will be introduced in the market this summer. The TDI engine's great torque characteristics combine with

this highly emotional product to let you enjoy driving while saving fuel.

When it comes to manufacturing, we are moving forward in a sustainable manner, exemplified by our brand-new, state-of-the-art factory in Chattanooga, TN: This is the only auto factory in the world that has LEED Platinum certification from the U.S. Green Building Council. Besides our products and their production, our Think Blue philosophy also encompasses: green energy supply, such as solar power and wind energy; environmental initiatives such as helping to preserve wolf habitats; and encouraging bicycle use with initiatives like Bikes Belong.

Q. Volkswagen aims to be the leading automaker by 2018. For 2011, the company was No. 2, behind General Motors. As someone who has worked for GM and now is a member of the Volkswagen leadership, what do you think is going to move Volkswagen ahead of GM?

A. We have a leadership that is heavily engaged in vehicle development and believes in striving to create and produce the best cars, with no compromise when it comes to product excellence, profitability, and quality. The VW Group is also unique in that it has a portfolio of brands that spans the demands of customers in all markets and all segments of those markets: We are the only manufacturer that has sustained success with multiple brands, all the way from Skoda up to super-luxury brands like Bentley and Bugatti.

In times when the world economy was in trouble and everyone was cutting costs, VW's size and profitability allowed it to keep on track with its R&D. All the fruits of this thinking have yet to be seen, although the new modular tool-kit strategy is an example: While others have platforms, we are already at the next level. ?