



Case Study

The Volkswagen Group

Part B: Sept - Oct 2015

Disaster in the integrated corporation

Part A (2002 – Aug 2015): Reaching for the top

This case was written by Günter Müller-Stewens (University of St Gallen) and Joachim Stonig (University of St. Gallen). It is intended to be used as the basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation. The case was compiled from published sources.

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*"I'm profoundly convinced that we can be the world's most successful car producers in a few years"*¹, said Martin Winterkorn in 2007, one year after becoming CEO of Volkswagen AG. Up until August 2015, everything looked as though he would be right. But then this vision was abruptly under threat.

The scandal

"We completely screwed up". This was the reaction of the head of Volkswagen USA, Michael Horn, to the scandalous reports from Friday 18.9.15 affecting his company. The object of the revelations were the manipulated emission values for diesel engines of type EA 189 in what transpired to be around 11 million vehicles across different brands of the corporation, both inside and outside the USA. The corporation has thus broken one of its longstanding core promises, environmental friendliness - "clean diesel" was the advertising slogan. Enormous damage threatened the Volkswagen Group: an unprecedented loss of public image and trust from customers, legal action from the US Department of Justice on the grounds of fraud, financial penalties payable to the authorities, legal proceedings against individual managers, as well as many other legal consequences of an unknown extent. On the Sunday, CEO Martin Winterkorn had already conceded the fraud indirectly. Thereupon, Volkswagen's share price lost almost 40% of its value on the Monday and Tuesday trading days. In a video statement, on Tuesday 22.9.15, Winterkorn made a formal public apology, announced a complete investigation, and pleaded for trust in the top management of the corporation. But by Wednesday, in response to public pressure on the company, he had already withdrawn from his position as CEO of the Group. The interim Chairman of the Supervisory Board, Berthold Huber, spoke out clearly on the fraud: "The test manipulation means a moral and political disaster for Volkswagen. ... We can only apologize and call upon customers, authorities and investors to give us the opportunity to make amends."²

Multimedia tips:

(1) https://www.youtube.com/watch?v=Q2eT_cRNrCI (Video statement from Prof. Dr. Martin Winterkorn on 22.9.15 – 2:33 min – in German)

(2) <https://www.youtube.com/watch?v=Q6z8uUJE-jE> (Statement from Michael Horn, President and CEO of the Volkswagen Group of America, on 22.9.15 – 1:24 min – in English)

How the scandal was uncovered

The press conference of the US Environment Protection Agency (EPA) on 18.9.15 changed the perception and future of the Volkswagen Group in a dramatic way. The EPA accused Volkswagen of having installed a sophisticated software algorithm in diesel vehicles that influenced the results of emissions tests. This software served to evoke low emission values, which are not attained in normal driving. "VW withheld facts from the EPA ... The use [of such software] is illegal and a threat to public health", announced the EPA spokesperson.³ These facts were apparently already discovered by chance in May 2014 during tests from the independent US-based NGO ICCT (International Council on Clean Transportation). The California Air Resources Board was also involved in the revelation. For years it was an open secret that the vehicle manufacturers only managed to obtain the official emissions values under laboratory conditions, which can certainly

be interpreted as customer deception. Nevertheless, these “natural” deviations are legal, whereas, in the case of Volkswagen a software programme had obviously been used deliberately.

Interestingly, these revelations were made just after the start of the most important automobile exhibition in Frankfurt, shortly after the launch of the new US version of the Passat and just before the planned early contract renewal of CEO Winterkorn at the meeting of the Supervisory Board on 25.9.15.

Volkswagen had been responsible for more than its fair share of scandals and affairs over recent decades: In 1993, Volkswagen poached the manager Ignacio López from General Motors who took secret documentation with him from his previous employer; just over ten years ago there were bribery payments and pleasure trips with prostitutes taken by members of the staff council that came to light; then at the height of the financial crisis, the takeover battle with Porsche for which legal proceedings are still ongoing today; and lastly, half a year ago the power struggle between Volkswagen patriarch Ferdinand Piëch and cooperation boss Martin Winterkorn, whereby Piëch (for the moment?) lost. If what is claimed in the media is true, then the first questionable engine software was already installed in 2008; this is the year in which the legal proceedings concerning the pleasure trips had just reached their climax.⁴ The question that may be asked is if Volkswagen learned of these scandals or when the conditions that created these occurrences are abolished. "But irrespective of such episodes, the corporation's cars always had the reputation of being reliable and technically good. The latest scandal shakes this promise", the Neue Zürcher Zeitung (NZZ) newspaper writes on 23.9.15.

The immediate reactions in the crisis

The events unfolded dramatically in the week following the EPA press conference. On the Tuesday, CEO Martin Winterkorn already confirmed that the "accusations made would be taken very seriously".⁵ This was interpreted by many experts as being a hint of premeditated fraud. To start with, it was still unclear what scope the manipulation scandal would take on. Initial estimates assumed hundreds of thousands of vehicles in the USA to be affected. But it soon became clear that the scope was far broader. After the first investigations, Volkswagen communicated the number of 11 million cars equipped with the manipulative software.

The reaction of consumers and governments was immediate and severe. There was talk of possible financial penalties of up to \$37,500 per car in the USA alone, which could have meant a financial burden of \$18 bn. for the corporation.⁶ Some countries, such as Switzerland, suspended the licence for some VW models. In France there was discussion of reclaiming environmental subsidies from the corporation and revoking tax advantages for diesel. The level of the financial penalties is just one of the cost factors for Volkswagen. Then there is indeed the expense of a gigantic recall campaign, as well as the image loss whose enormous extent cannot yet be estimated. The reaction of the stock market was correspondingly tough: Within two weeks, the share price dropped to almost 40% of its level before the crisis (rem.: 17.9.2015: 167 € 2.10.2015: 102 €, here you have to realise that the share price in 2005 was just over 30 € and by the spring of 2015 had risen by around 700% to almost 250 €)

The internal consequences of the emissions scandal were also enormous. By Wednesday 23.9.15, Martin Winterkorn had already resigned his post as CEO of the corporation, especially because of increasing pressure from the shareholders. "I am doing this in the interest of the company, although I am not aware of any wrongdoing", he said.⁷ On 1.11.15 he also stepped down as CEO of the Porsche-Automobil-Holding SE, the majority owner of Volkswagen, which represents the Piëch and Porsche families. Here his position was taken over by the Chairman of the Supervisory Board Hans Dieter Pötsch. Also another dozen top managers had to go, including the two chiefs of development of Audi and Porsche (who were previously at VW).

Just two days after Winterkorn's resignation on Friday 25.9.15, Matthias Müller, who was previously boss of the Porsche brand and had spent his entire career at Volkswagen, was appointed as the new Chairman of the corporation. He had distinguished himself in recent times for the relatively smooth integration of Porsche in the Volkswagen Group, which was by no means an easy task.

On 7.10.15 the second top position in the corporation was newly filled, which, following the resignation, had been occupied by Ferdinand Piëch on an interim basis: Hans-Dieter Pötsch, who had been the Group's Chief Financial Officer since 2003 immediately took over chairmanship of the Supervisory Board. He spoke of a "crisis threatening the existence of the corporation". Now he was faced with the task of heading the control body of this management and uncovering the errors that had led to the emissions scandal. An external investigation was initiated for this purpose that reported directly to a newly established committee of the Supervisory Board.⁸

Multimedia tip:

<https://www.youtube.com/watch?v=-98raXu90Cs> (Video statement from the new Chairman of the Supervisory Board Hans Dieter Pötsch, from 8.10.15 – 3.11 min – in German)

In his election, Pötsch received the clear support of the Porsche and Piëch families that hold 52.2% of the ordinary shares. Critics argue that the principle of overall responsibility applies, which says that every member of the management board bears responsibility for management decisions as a whole. This means that Pötsch, as CFO, would be just as much responsible for the transgressions as a member of the management board responsible for a brand or for development. Critics also cast doubt as to whether the Müller/Pötsch team could succeed in breaking with the past.

The creation of a new management function for integrity and legal affairs was immediately resolved and implemented. Christine Hohmann-Dennhardt, who had been employed by Daimler since 2011, was recruited for this post.⁹ She had established a similar function at Daimler. Alleged corruption had previously led Daimler to reach a settlement with the US authorities amounting to \$185 mil. in the course of which it had committed itself to setting up an internal control system to prevent future bribery payments. Before 2011, Frau Hohmann-Dennhardt was a judge at the German constitutional court. Winfried Vahland, previously CEO of Skoda, was very soon appointed as the new group manager North America. But just a few days after taking office he left the VW Group, allegedly on account of different views regarding the strategy in the USA. This leaves another gap in the management team, as Vahland's previous work had been characterised

by great successes.¹⁰

Supposedly, the longstanding demand in the corporation for more personal responsibility and decentralisation for the brands would now be promptly addressed too. Porsche is to be combined with Bentley and Bugatti to form a brand group and look after the further expansion of the sports car and mid-mounted engine platform. The Audi-Lamborghini-Ducati brand group should apparently remain unchanged and also the individual brands of Volkswagen, Seat and Skoda should remain independent. A new strategic unit was also to be formed: product strategy, cooperations/holdings, connected car and CO2 control. The function of a Group Chief Technology Officer is also to be set up across the corporation.¹¹

Besides the personnel changes at the top, the enterprise is now also forced to implement a cost cutting and restructuring package that would include investment cuts, but would also entail downsizing. "That won't happen without pain", the new CEO Matthias Müller announced.¹² On 6.10.15, in front of 20,000 employees on the grounds of the Wolfsburg plant, he promised the workforce at the staff meeting "fast and relentless clarification" of the emissions scandal: "Besides the huge financial damage that is not even foreseeable today, this is, above all, a crisis of confidence. Because it affects the core of our enterprise and our identity: our cars."¹³

The origin of the software

Although the public scandal unfolded in September 2015, the manipulative software that was used for almost a decade and was recognised long before the scandal.

At the beginning of 2014 the small environmental organisation ICCT (International Council on Clean Transportation) undertook an investigation to show that under strict regulations, the automobile industry is in a position to produce environmentally friendly vehicles. Three vehicles were selected, as these just happened to be available. This also included two from the Volkswagen Group. The West Virginia University in Morgantown was commissioned to conduct the tests. In these tests with a mobile exhaust measuring system, it was then found that both Volkswagen models significantly exceeded the nitric oxide limit values (NOx emissions). Nitric oxide reacts with fine dust particles in the air and is partially responsible for ozone and smog pollution. For instance, 15 to 35 times the NOx limit value permissible in the USA was measured for the Jetta, for the Passat it was 15 to 20 times. Nevertheless, the values for the statutory tests were within legal limits. These data reached the attention of the EPA (Environmental Protection Agency) and its partner authority the California Air Resources Board (CARB). They confronted Volkswagen with the results. VW initiated a recall campaign and reported to the EPA environmental authority that almost 500,000 vehicles in the USA would be provided with a software patch. But the authority investigated and on 8.7.15 had still not arrived at satisfactory results. As Volkswagen was unable to explain this convincingly, the EPA threatened that they would not issue any licence in 2016 for the Volkswagen models in question.¹⁴ On 3.9.15 Volkswagen had to admit to the authorities that software for emissions manipulation was in use. On 18.9.15 the EPA went to the press with its findings, which then, on the basis of the admission from CEO Winterkorn triggered the crisis on 20.9.15. This means that facts were already clear to the corporation on 3.9.15, but a public admission only came 17 days later following the EPA press conference.

What are the advantages of such software that have justified its development? Although the software increases the nitrogen emissions, at the same time it prolongs the services life of the engine parts, improves performance, as well as the driving experience and surprisingly, drops the average consumption.³ Because the environmental technology to keep within the nitric oxide limit values was indeed present, but was associated with technical difficulties and costs. The installation of larger filters in the Jetta model would have generated extra costs of 80 - 100 € per car and would also have increased consumption, as the filter would have to be continuously cleaned.¹⁵ In the case of the Passat model, a urea tank would be necessary, which takes up space and also has to be regularly refilled.¹⁶ The Volkswagen engineers were evidently not capable of developing a solution that could satisfy both environmental protection, as well as the cost expectations of Volkswagen management, in particular. The software, which, according to some sources, was already introduced and installed in 2008 – just before the start of series production of the EA 189 engine – appeared to offer a way out of this dilemma without threatening the start of series production. The software, known as the "defeat device", ascertains whether a vehicle is undergoing an emission test. Only then is exhaust gas cleaning activated, i.e. in normal operation the air pollution is many times higher. Allegedly the supplier Bosch had warned as long ago as in 2007 against using the software, as it was only intended for testing purposes.¹⁷

How could something like that happen?

Even though it was evidently just a small group of developers from corporate headquarters in Wolfsburg who illegally intervened in the control of the EA 189 diesel engine, fundamental questions as to the enterprise culture and ethics in the corporation have to be raised. Why could it occur that illegal software could be installed in millions of cars? And if top management really knew nothing about it: Why did information received in Volkswagen's so important market of the USA remain unnoticed a long time before the crisis or did not reach the attention of the responsible managers? Was Volkswagen's communication and crisis strategy calculated such that a deviation from nitric oxide values unknown to most consumers would cause a harsh reaction? Or did the compliance systems and control structures fail here? Or is this to do with something more fundamental? Was management so caught up in the perception influenced by the enterprise culture that no one simply wanted to see the warning signs? What is not allowed cannot happen!

So there are now critical remarks externally and internally about the management culture at Volkswagen. For example, the former Telekom board member responsible for Human Resources, Thomas Sattelberger, describes Volkswagen as "a company based on command and obedience, trimmed for mass and efficiency, which is dictatorially governed" and he accused Martin Winterkorn of having created a culture of fear.¹⁸

But calls for a change in culture also become prominent within the corporation. Member of the Supervisory Board and the Corporate Staff Council Bernd Osterloh is of the opinion: "For the future we need a climate in which problems are not concealed, but are openly communicated to managers. We need a culture in which one can and should be allowed to argue with one's manager about what is the right way. We need a culture in which all departments work together to solve

problems.“¹⁹ Here it has to be considered that Osterloh was also part of this system he now criticises. As a powerful member of the Corporate Staff Council, why did he not take a stance against this before? Or was he already too much part of the "followers" at the top of the corporation.

Michael Horn, US boss of Volkswagen, said at his hearing before Congress on 9.10.15 that the fraud was a result of "pressure in the system to get resolutions and cost pressure".²⁰ Evidently there was enormous pressure to succeed due to the perhaps overambitious targets. For example, there was the target of selling 800,000 cars on the US market in 2018, although in 2014 sales had dropped by 10% to 370,000 units.

Multimedia tip:

https://www.youtube.com/watch?v=YdJAFqo6_s0, (Michael Horn, President and CEO of Volkswagen of America, testified in front of the House Committee on Energy and Commerce Subcommittee on Oversight and Investigations on Thursday, October 8, 2:22:04 – in English)

Other insiders, who wish to remain anonymous, reported an "absolute monarchy", in which something that is not allowed cannot happen. The management style is like the one of a "plantation". Employees who call something "impossible" would not have a career or could look for a new job.²¹

Although there are, of course, very different opinions and evaluations, all are directed in a similar direction: the management culture. Its dysfunctionalities were obviously visible in the past, but the success of the corporation seemed to immunise the corporate board against these weak points that had arisen.

The danger for Volkswagen now is that no radical change comes about, but instead that in a dominant engineering culture the problem is reduced to its technical dimension. The "technical solution" is for example the dismissal of the engineers responsible and tightening up of the compliance rules and the management control. But this would mean entering into a grand illusion of how these issues can be tackled.

What is the way forward?

For most, it was clear that the enterprise, which had lost almost half its market capitalisation within a short time, along with the decisions to be made in the short term, also needed a fresh start. Fundamental reforms had become urgent and were also expected from the stakeholder groups. But the question has to be asked whether the decisions made in the short term would really enable a fresh start. How radically do those in positions of responsibility have to and want to leave the past behind and create space for a credible fresh start? Or in other words: Is the current management team professionally and morally legitimised in the eyes of the majority of those involved and affected? This how the FAZ newspaper expressed its scepticism towards the fresh start on 12.10.15: "What fresh start. Volkswagen will now set about an allround clean-up operation. A likely story! There is indeed a change at the top with Matthias Müller. But when it comes to it, cronyism and sleaze still abound."

As the numerous statements on the authoritarian management culture illustrate, not only a

tightening of the code of conduct or the compliance rules is called for. The point is rather to readjust the relationship between centrality and decentrality in the corporation and fundamental scrutiny of the management style and corporate culture.

So in October 2015 there are 600,000 employees, shareholders and the Volkswagen management facing ruin. Horror stories are circulating that even speak of a break-up of the corporation. Employees are preparing for their dismissal, not only at Volkswagen, but also among the suppliers. The municipalities and federal states dependent on tax income are already talking about drastic budget cutting on account of the missing tax revenue. The questions of the employees, the customers and the population affected directed to the new management team are clear: How is the damage arising to be repaired? How can there be confidence as soon as possible that the corporation has recognised and eliminated the problem? And what has to be done to prevent such fraudulent wrongdoing in the future? Initially the corporation put aside €6.5 bn. to cover the financial impact of the crisis. But this probably will not nearly be sufficient if the pending penalty payments, compensation claims (e.g. class actions from the buyers), recall campaigns, process costs etc. are considered.

But what does this crisis also mean for the German automobile industry? Audit authorities that do not really audit, all-powerful lobbyists from the manufacturers who often come from politics and appear to steer politics, or suppliers who do not dare say anything for fear of losing customers - this does not present an overall trustworthy image of "made in Germany". The few whistle-blowers from the industry are not listened to. The only hope is that – like in the Austrian wine scandal in the 1980s – this deep crisis will be used for a comprehensive and successful fresh start, as the competencies for this are certainly there. As regards the political will of all those involved, some doubt is still justified.

Tasks of the case study Part B

Crisis management

1. In Part A of the case study you addressed the risks of a diversified and integrated major corporation like Volkswagen. Which risk has become a reality here? Did this happen unexpectedly?
2. Where did Volkswagen set its priorities in crisis management?
3. Do you see the demanded “fresh start” as being sufficiently assured by the decisions made so far? To what extent were the principles of good corporate governance observed? How independent are the members of the Supervisory Board, for example? Who appointed the new CEO and how did this come about? Which role do you ascribe to the VW Law (see Part A on this)? Etc.
4. Volkswagen is looking to take off into the digital age (Industry 4.0), in which all things and people are networked with each other. A transformation of the car producer into the mobility service provider is strived for, as described in detail in Part A. How do you view this against the backdrop of the short-term decisions reached? Will the crisis and the associated personnel/structural changes be used to prepare for the future?

Urgent areas of action

5. Where do you see a need for action in the corporation, e.g. in view of the criticism expressed from the outside and the inside? Do you see the risk of a break-up or takeover of the corporation? Which steps are now necessary in the short and mid-term for mastering the crisis? Create a brief presentation to the Supervisory Board committee with the priorities for the first 100 days and the recommendations for mid-term action. You can use the 10 Planet Model for the analysis.

The corporate management of large corporations

6. During the crisis, the following principles were to be found on the homepage of the Volkswagen Group (excerpt):²²

Top performance: *To survive in the face of competition and to achieve top performance, the Volkswagen Group needs employees who enthusiastically give their best. A good balance between demands and ability (the so-called "flow channel") is the basic precondition for optimum performance and results. For this reason, we want our employees to be neither overstretched, but also not understretched, so that they are able to deliver top performance and advance the success of our company.*

Leading by example: *Management assumes a decisive role in this entire process. Our principle has to be "Lead, Demand and Promote". The Group will only be able to achieve its goals with exemplary leadership and constructive cooperation between management and workforce. This includes both targeted and continual personnel development and work organisation, which we continue to develop with the so-called "Volkswagen Way".*

There is also a "Code of Conduct" that defines the principles of conduct for all employees. This defines, among other things: ²³

Management culture and cooperation: *All manager takes responsibility for their staff. All managers are role models and have to ensure to a high degree that their actions are aligned to the principles of conduct. Through regular information and education on the duties and authorities relevant for the work area, managers foster the compliant conduct of their staff. Managers place trust in their staff and agree clear, ambitious, yet realistic goals, allowing their staff as much personal responsibility and scope as possible.*

How do you stand to these principles in view of the events that took place? Why are both principles and a Code of Conduct defined? Do such values (shared values) make sense at all in a large corporation like Volkswagen?

7. *Thomas Beschorner* and *Martin Kolmar* ascertain in their article that in view of the latest scandal at Volkswagen, but also against the backdrop of a lengthy list of other cases of business fraud in recent years, trust in the moral integrity of "business" is diminishing. They urge the need for moral action to be "organised": "Today, companies are obliged to organise themselves such that critical indications of irregularities are not only possible, but also welcomed by management if corporate responsibility really is meant seriously. The employees have to be encouraged by management to point out irregularities. Modern whistle-blowing systems provide diverse options via internal and external contact points." Where do you stand on this? Draw up your own statement on the Blog with a maximum of 100 words.

Source: <http://www.oekonomenstimme.org/artikel/2015/10/wo-bleibt-die-verantwortung-ein-kommentar-aus-gegebenem-anlass/> (in German)

8. The incidents surrounding Volkswagen have also attracted the attention of critics of major corporations. On account of their size and complexity, these corporations have become unmanageable and represent a systemic risk for a economy. What is your personal position on this argument?

Take a look at the exchange of blows between Jakob Augstein, publisher of the weekly newspaper "der Freitag", and Nikolaus Blume, publicist, to expand on this question.

„VWeh adé: So schmutzig ist Kapitalismus" ["VW adé: How dirty capitalism is"], published on 25.09.2015.

Source: <https://www.youtube.com/watch?v=0A91hdXQaOs&feature=youtu.be> (in German)

APPENDIX

I. Development of the share price (Source: Börse Online)

Volkswagen AG Vz. (VW AG)



Volkswagen AG Vz. (VW AG)



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