École de gestion
TELFER
School of Management

COMPETITIVE INTELLIGENCE REPORT
IMPACT OF VOLKSWAGEN'S TRINITY PROJECT ON TESLA

ADM 3316-[M]
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INTRODUCTION

In our report we are going to describe the situation between Tesla and Volkswagen Group. More specifically, we are going to help Tesla with an intelligence plan studying all Volkswagen Group's moves in launching a new electric car model, the Trinity Project. Trinity Project is Volkswagen's main way of the largest modernization program in the history of the company. This might result as a problem for Tesla because it is going to be a huge competitor in the electric car market.

We are studying the components and characteristics that Volkswagen Group is going to improve with its new project, coming to understand in which areas the competitor's product can overcome that of Tesla. In this way we can develop a plan, based on a lot of information gathered, able to make Tesla even more competitive and maintain its leading position in its market.

The Trinity project is one of the largest investments in the history of the Volkswagen Group, involving about two billion dollars. It will be developed at the group's headquarters in Wolfsburg. It will be facilitated by a strong partnership with a U.S. supplier, QuantumScape. QuantumScape will play a key role in the quality of the product as it supplies a new type of electric battery. From initial analysis, the new batteries will increase from 19% to 80% capacity, with charging cycles of just 15 minutes. It will therefore be necessary and fundamental to study the type of partnership undertaken by VW with its suppliers to analyze its supply chain and understand where to improve Tesla's. In the same way it will be necessary to find new suppliers suitable for Tesla able to fill the eventual gap of materials (batteries in particular) generated by VW's new supplies.

We will study the decisions and actions taken by the VW group in the next 4 years, that is, until the launch of the new product, expected in early 2026. "Understanding new changes in the sector of electric cars to move quickly in the right direction avoiding to lose the best position in the market" is our focus, our team would provide an effective and efficient response to changes in the electric car industry by trying not only to understand the dynamics of this sector but by developing an intelligence project that can improve decision-making throughout the company.
Particularly, the major clients of our project should be: Corporate Management, Production area, Marketing area and Sales area.

How will CI Assist

CI will help Tesla to develop a cohesive and complete strategy on how to develop their new products, define the drivers of the new contracts with suppliers and analyze the structure of the market where VW will become a new competitor in the next few years to guarantee to Tesla to remain the leader of electric vehicles also in the next ten years. Our team will gather the information necessary to develop intelligence about technical aspects like the analysis of the electrical batteries in the next five years, focusing on the autonomy of these batteries and the charging times, two aspects that contribute to build the competitive advantage of Tesla.

This analysis will be useful to Tesla to evaluate the strengths and weaknesses of their main battery supplier Panasonic compared to Volkswagen's one QuantumScape and how the technologies developed by these two companies will be crucial to keep the leadership within the market. Also focusing on clients is important, so a part of our analysis will be about the perception that customers have of Tesla and Volkswagen: which is the current perception of these two brands, how they are perceived in the electric vehicles market and how these results will change with the launch of Trinity Project. These findings will be valuable especially for Marketing and Sales functions, that will use our analysis to build an image of the brand that meets the expectation of the market in the next few years.

Preliminary/Working Hypothesis

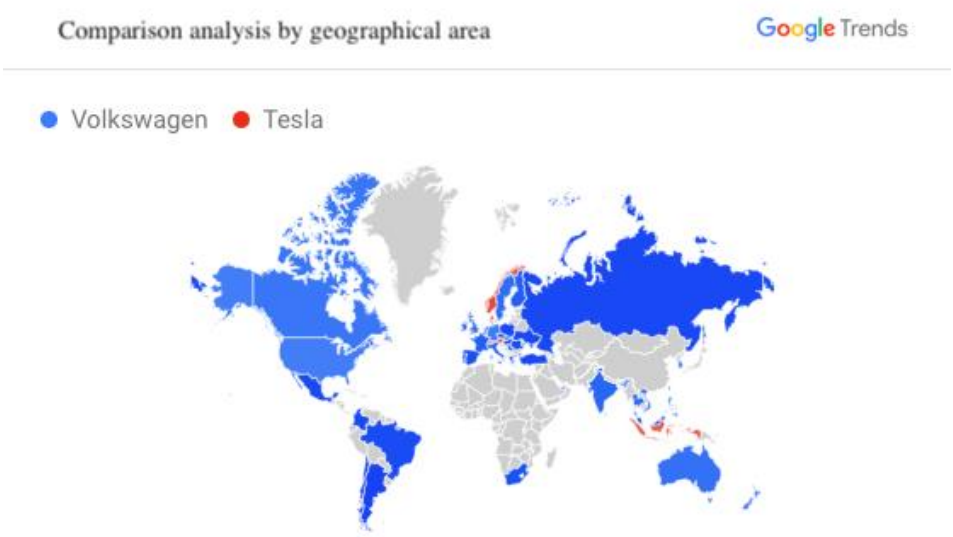
Our team thinks the collaboration between Volkswagen and QuantumScape will be fundamental to our competitor and ensure exceptional performance standards in the level and quality of batteries in electric cars. This is followed by a high investment in the partnership (already 250 million invested) which will guarantee innovative and exclusive technologies to our competitor. For this reason, we deem Tesla must intervene on the procurement of new materials and the strengthening of partnerships with their suppliers. In particular, Tesla could strengthen its already robust partnership with Panasonic, its main supplier of electric batteries. In addition, it could pool its R&D function with its suppliers to meet its long-term goals of discovering new materials.

At the same time, we believe that Tesla is going to lose a little part of its market share due to Volkswagen Group's more powerful entry into the electric car market.

In addition, we hypothesize that there will be a very strong marketing campaign by VW for the launch of the new product. We believe that this will largely take place on social networks as most of the people interested in electric vehicles are the new generations who are looking carefully at the environmental impact of their purchases.

Since most of this user segment is easily reached through social media and social networks, we are confident that they will be a battleground for VW's acquisition of new customers. For this reason, Tesla will have to invest more in promoting its products on these channels so that it can counter VW's moves.

Another preliminary hypothesis is that Volkswagen will aim to acquire many customers among the northern European countries, where Tesla currently prevails, as shown in the chart below.



Northern European countries have been the most environmentally conscious countries for some years now, and for this reason they have immediately focused on electric cars. With the Trinity project, therefore, Tesla will be challenged by VW also in those territories.

Collection Source Plan

Our team started the collection plan from secondary sources. Firstly, we analyzed outside secondary information. We used this kind of information to get an initial picture of the situation, since it is the least expensive and easiest information to obtain. To do so, we searched the internet for various websites specializing in the automotive industry. From there we gathered the first basic information about VW's Trinity project.

Once the initial information was obtained, we developed a plan to collect inside secondary information, using databases, social networks and Volkswagen Group websites. We mainly collected information on websites because it was very clear and detailed. Gathering data, we picked both qualitative and quantitative data to make comparisons between our client company and VW. For example, we used the amount used in the partnership between VW and its main supplier as a benchmark in the search for new suppliers with innovative solutions for Tesla.

Since we have not had direct contact in Volkswagen able to give us more information, in this stage we even had a huge use of social media. We have followed this method because, if well used, it can give a lot of data, both qualitative and quantitative, on the perception that users have of the two companies. Similarly, through social networks we can also find out what topics our competitor is focusing on more strongly. The decision to use this method is also supported by the fact that social media enables people to voice their opinion, sharing information, and improving communication.

We used a great tool in our comparisons: Google Trends. Thanks to this platform we were able to get a well-analysis about different topics such as: interests between Tesla and Volkswagen and the spread of electric cars among the two groups.

After these first phases, we tried to get some primary researches. To accomplish it, we wrote emails to the VW group asking for additional information about its project. In response, we were provided with other papers and data processed by them that were very useful in the development of our intelligence project. At the same time, we contacted some Volkswagen consumer enthusiasts to ask their perceptions and their ideas about the latest project of their favorite automotive company. Last but not least, we have requested information from some partial suppliers and QuantumScape to understand the feasibility of possible partnerships with Tesla. As a final stage we also looked for event opportunities to collect additional data. For this purpose, we have listened to video presentations and interviews to VW group managers in which they talked about the topic we have dealt with. Obviously in the collection and gathering of information we have respected ethical and moral principles, as also indicated in the definition of competitive intelligence.

The Project Plan

The project began in early March and the team met for the first time on Teams just after midterm. In the first meeting we decided what to cover, where each of us proposed our own idea. Once we decided on our topic we each looked for information about the topic. In the next meeting we have the first temporary A, B, C and D tables. After that we had our first meeting with professor Calof. We then edited our work on the tables following the advice we were given and began writing the report.
We divided the report writing into three parts:

- Introduction and description of the project;
- Data collection, meeting, and analysis;
- Intelligence project development.

In the first phase we discussed how we could assign tasks and assignments within the group and the deadlines to respect. Once established, we worked together writing the initial part of our report.

After this first part, we decided to collect information. In this stage the role of each of us was to find as many secondary sources as we could and then put them all together. After collecting this kind of information, we looked for primary researches and event opportunities. Each of us tried to find direct contacts with the companies we are dealing with. Deadlines were:

1) Table A, B, C and D filled within 10th March;
2) Meeting with Professor Calof on 14th March;
3) Write the report's introduction within 15th March, after the first meeting with Professor Calof;
4) Complete collection activity within 20th March and show results to the group;
5) Develop analysis and intelligence from 20th March to the 30th;
6) Complete the final report within 7th April.

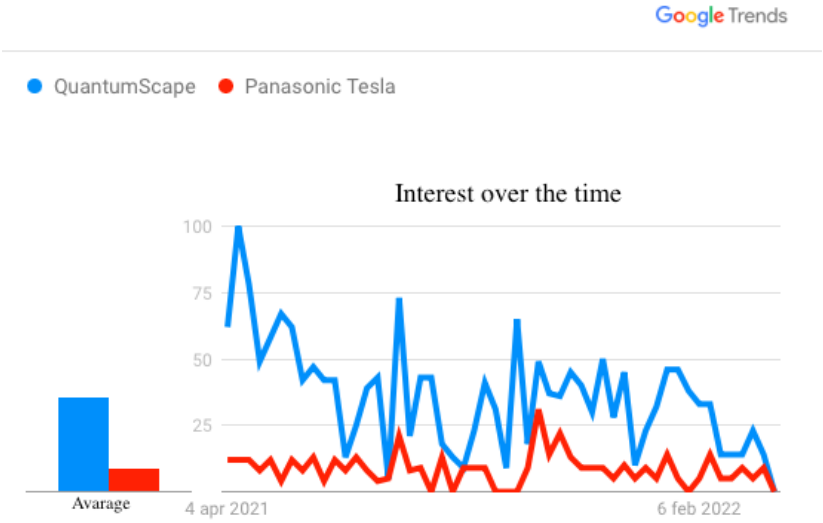
We made this schedule to have enough time to check carefully all information we gathered and to have 10 days to develop a well-organized plan easily applicable. To accomplish this goal, we followed the 5 pillars in developing intelligence plans. Thus, we tried to obtain strategic information (gathering strategic information that can ensure Tesla management to make better decisions, so we need objective information, not based on merely individual points of view); obtaining unbiased and measurable intelligence (avoiding biases when collecting information or using it to make decision and using measurable elements in the analysis because they are the only element able to be converted in intelligence) and developing actionable and repeatable intelligence (the program has to be easy to be turned in practical actions and not left open to interpretation and it has to be not a one-off solution).

Collection Activity Results

Secondary Outside

In the first stage of our analysis we collected "Secondary outside" information, as explained previously. Regarding our first topic in Table D ("In what respects will the competitor's electric batteries be superior to ours?"), we collected information on the web in many ways.

Firstly, we gather all the information found on websites about the Trinity Project. Our collection shows that VW built a strong relationship with one of the most innovators in the electric battery field, QuantumScape. As shown below in the chart, people are more interested in this company than Panasonic (Tesla's main supplier) in the last year.



As well, QuantumScape has guaranteed peak performance in battery quality. Battery capacity increased from 18% to 80% with 15-minute charge cycles. That means buyers of this retro-inspired van can expect at least 250 miles of range on a single charge. The estimated price is around 50,000$.

With this project, Volkswagen group will launch its first car “developed from the inside out”. It means that VW’s focus is on maximizing interior space to enable multiple uses for passengers. According to the sales boss, Klaus Zellmer, “Trinity is doing a lot of new things” and “We call Trinity a time machine, because it will take us to autonomous driving and free up your time while in it. Trinity is a companion for life: for leisure time, family time and so on.” Early prototypes of design proposals for Trinity’s interior suggest it will make maximum use of the stretched dimensions allowed by a skateboard EV chassis, with a minimized dashboard and reclining front seats for when the driver is not controlling the car. This is given by the fact that VW’s emphasis is mainly on driver-assist tech.
In addition, Trinity Project is based on three pillars:

1) New architecture;
2) Radically new production approach;
3) Autonomous driving and neural boost.

However, the German company said that the new EV is expected to be with a Level 4 diver-assist tech (on the SAE scale), which allows automation in a few situations but it still requires a human driver (Level 5 is full autonomy).

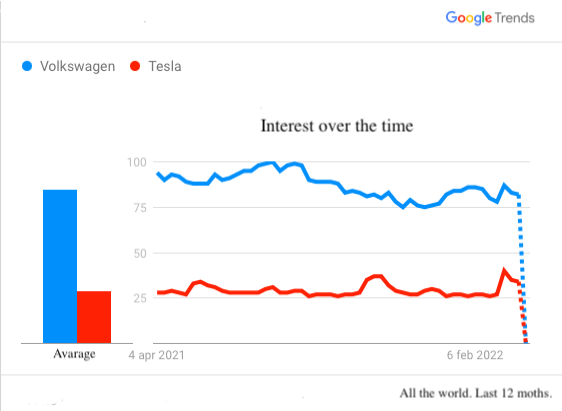
Moreover, Level 4 diver-assist tech will be not available at launch but the car will have only a Level 3. By the way, Level 4 will be added later via over-the-air software update.

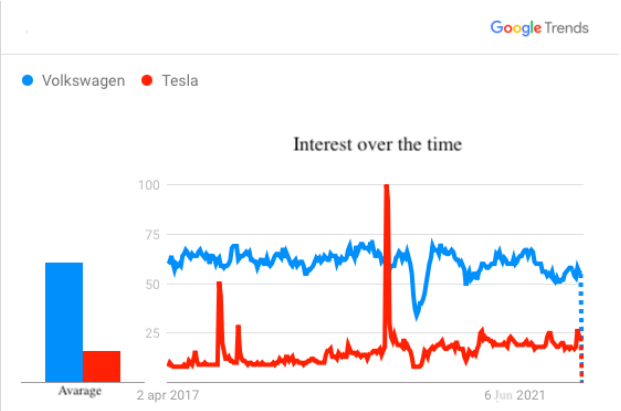
As said on VW’s website this model will be the path of over 40 future vehicles. Production time is estimated at 10 hours for each vehicle. This will be possible thank to several new pillars in all production and logistic areas:

- Fewer variants;
- Fewer components;
- More automation;
- Leaner production lines;
- New logistic concepts.

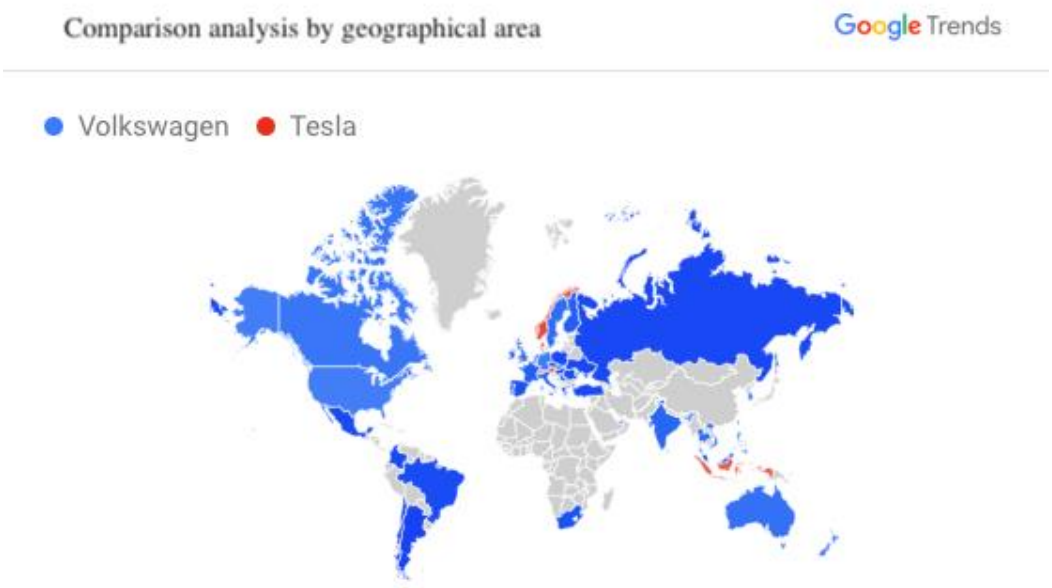
VW is able to make an innovative product even thanks to a huge investment in R&D practices, indeed it is investing 800 millions of dollars on it.

Looking on *Google Trends*, we also attested the people’s interest over the time (last 12 months and last 5 years) on the Internet regarding Volkswagen and Tesla. We got the results below:





In the same way, we collected information about the spread of those two companies around the world (with a comparison analysis by geographical area) and which words were searched mostly:



Associated queries - Tesla

1	tesla model	100
2	tesla car	53
3	model 3 tesla	52
4	model 3	52
5	tesla price	34

Associated queries - Volkswagen

1	volkswagen golf	100
2	golf	100
3	volkswagen polo	90
4	tiguan volkswagen	84
5	volkswagen passat	69

Secondary Inside

After looking outside the company, we moved our analysis on secondary internal researches. We use the companies' website to find information on their last projects and to compare their financial statements.

After going through the Volkswagen database, we were able to find the Trinity project announcement PDF file. This four pages report answered some of the Table C questions. The first question, “In what features will the competitor's electric batteries be superior to ours?” was answered on page 2, Volkswagen group stated that they are going to expand their electric batteries by decreasing the charging time and adding a range up to 700km. The second question “How long until their product is launched in the market?” was also answered. On the first page of the PDF, Volkswagen group stated that they are investing over 800 million euros to build a new factory in Warmenau, Germany, which they plan to start building in 2023, and start production in 2026. The last question “Currently, who performs best from a financial perspective?” was also stated. In the report, Volkswagen-group stated that they are aiming to price the trinity project around $35,000 euro which is equivalent to little less than $50,000 CAD. Meanwhile, TESLA’s model 3 base price costs $60,000, which is higher than the Trinity Project. Therefore, the Volkswagen group is better from a financial point of view.

However, studying their financial statements, like the balance sheets, we can notice that Volkswagen has:

- Reduced its current liabilities from €88,648 millions (2020) to €78,584 millions (2021);
- Increased its noncurrent liabilities from €114,809 millions (2020) to €131,618 millions (2021);
- Increased its noncurrent assets from €67,968 millions (2020) to €77,689 millions (2021), it mainly increased its lease assets for about €10.000 millions;
- Increased its sales revenues from €222,884 millions (2020) to €250,000 millions (2021);
- Increased its operating result from €9,675 millions (2020) to €19,275 millions (2021);
- Increased its cost of sales from €183,937 millions (2020) to €202,959 millions (2021);
- Increased its earnings after taxes from €8,824 millions (2020) to €15,428 millions (2021).

…and Tesla has:

- Increased its current liabilities from $14,248 millions (2020) to $19,705 millions (2021);
- Decreased its noncurrent liabilities from $14,825 millions (2020) to $11,411 millions (2021);
- Increased its noncurrent assets from $25,431 millions (2020) to $35,031 millions (2021), it mainly increased its construction in progress for about $4,000 millions and machinery furniture for $3,000 millions;
- Increased its sales revenues from $31,536 millions (2020) to $53,823 millions (2021);
- Increased its operating result from $1,994 millions (2020) to $6,496 millions (2021);
- Increased its cost of sales from $24,906 millions (2020) to $40,217 millions (2021);
- Increased its earnings after taxes from $690 millions (2020) to $5,519 millions (2021).

Based on this data, we can say that Volkswagen has reduced its short-term commitments, postponing payments in the long term and thus having more liquid assets in the immediate future. Similarly, thanks to the increase in revenues, VW was able to increase its operating profit and almost double its profit after tax.
Tesla, on the other hand, has seen its short-term liabilities increase and its long-term liabilities decrease. This could be a problem should Tesla want to increase investments in the immediate term because it would also have liabilities to fix. However, Tesla has also been able to increase (almost double) its sales revenue and achieve an 800% increase in net profits.

Primary research

Once we obtained a general view given by secondary data, we started primary researches. Our team got in touch with a VW's Manager to discover new information about the Trinity Project. Thanks to this, he sent us some papers and articles containing other relevant data. In this way, we gathered additional information. This project not only paves the way towards electric in Volkswagen vehicles but aims to overcome another of the biggest obstacles of the future for this sector: "*the integration of software into the vehicle and the digital customer experience will become crucial core competences*". Ralf Brandstätter, CEO of Volkswagen, further explained that: "We are using our economies of scale to make autonomous driving available to many people and to build a learning neural network. In this way, we are creating the conditions for the continuous exchange of data from our vehicle fleet – for example, on the traffic situation, on obstacles or on accidents." For this reason, the production strategy is clear: standardization, low production time and economies of scale. In fact, future vehicles such as Trinity will be produced with considerably fewer variants and the hardware will be largely standardized. In this way complexity in production is widely reduced.

Another important thing is given by the intent to increase its revenue from additional packages offered to consumers. Indeed, the German company thinks to increase revenues from charging and energy services, for software-based functions that customers can book as needed, or for automated driving. Finally, VW's CEO also affirmed that: "In the future, the individual configuration of the vehicle will no longer be determined by the hardware at the time of purchase. Instead, customers will be able to add functions on demand at any time via the digital ecosystem in the car." Moreover, a new company was integrated in Volkswagen from 2020 to build a uniform software and technology platform for all Volkswagen Group brands. This company is CARIAD, an independent automotive software company in the Volkswagen Group that is consolidating and further expanding the Group's software competencies. The company is developing digital functions for vehicles, including ADAS, highly automated driving functions, a standardized infotainment platform, software functions for linking powertrains, and chassis and charging technology, as well as new ecosystems and digital business models in and around the vehicle.
According to Volkswagen, CARIAD is a response to changes in consumer demand. Consumers are seeking more comfort, more safety, more sustainability and more connectivity. With its scalable software and technology platform, CARIAD is developing the

technological basis to turn the car into a smart companion: a vehicle that will accompany customers into the future, with continuous updates providing new digital functions even years later. In addition, CARIAD's corporate headquarters are in Wolfsburg, close to the production site of the Trinity project.

Event opportunities

During the first Investor Call, held on June 11, 2021, VW presented the pillars of the new Trinity project. According to the CEO and the CFO of the company, people's excitement changed from hardware to seamless holistic ecosystems. For this reason, their main focus has been: "The car will become the most complex digital product of the world" (Dr. Diess , Nov. 2020). As shown in the presentation, VW moved from the earliest Volkswagen Golf (past) to Holistic Systems with Apple (present), aiming at the "Seamless mobility experience" through ID Companion (in the future), a system that provides more value and flexibility, making life easier for the user.

Analysis and Intelligence

In our analysis, our team started with Porter's 5 forces model to analyze the strategic position Tesla is in and the impact Volkswagen Group's Trinity project will have on it. Given the launch of VW Group's new Trinity project, we can say that the forces influencing Tesla's strategy position are:

- *Supplier Power:* because VW's project is based on a very strong partnership with QuantumScape, suppliers will play a crucial role in the competitive environment between the two companies. Moreover, since the products are highly technological and innovative, the number of suppliers able to ensure excellent performance is very low. Tesla already has agreements with Panasonic as main supplier, the switching costs necessary to find new suppliers are therefore very high, both in terms of time needed in the search, and in terms of costs to ensure an excellent research process.
- *Buyer Power:* in this sector, the number of potential customers and buyers is very high and is destined to grow given the increased focus of individuals on electric power and all its ecological implications. However, as also seen in the data collection phase, VW has a much larger catchment area than Tesla. This could be a problem given also the not low switching costs in moving from one company's product to another. Thus, with a new electric car launched by VW, even customers interested in electric that previously would have opted for Tesla (given the lack of a true all-electric car from the VW group) will now prefer to remain loyal to the European company.
- *Competitive rivalry and Threats of new entry:* we can discuss these two forces together since VW already is a competitive rivalry but it is going to be more powerful with the entrance in the market of electric and autonomous cars.

Due to unclear government laws on fully autonomous driving, VW doesn't believe it will be able to secure this service when the Trinity project launches in 2026 but expects to be able to do so in subsequent years via over-the-air upgrades. This represents not insignificant barriers to entry that partially protect Tesla, at least in the short term, ensuring it has a time margin to at least equalize the quality in the products VW will offer.

At the same time, VW expects to use the Trinity model to develop another 40 EV models in the following years. This could increase Tesla's perceived degree of threat.

Given the balance sheets and income statements of the two companies, it is also visible the greater economic power of VW and the increase in Tesla's short-term liabilities. This could be a problem for the American company in its willingness to increase R&D spending.

However, the number of competitors already present in the electric vehicle market is not very high and therefore does not give much competitive pressure on Tesla, one of the leaders, if not the first leader, of the market.

However, it will not be easy for VW to win the battle with Tesla given the US company's position in the learning and experience curves (clearly ahead of VW in the field of autonomous driving and electric). Likewise, VW will need more upfront investment, as we've already seen from its spending on partnerships and R&D.

- *Threats of substitution:* this is the force less affected by the new VW's product because it will be a real competitor and not a substitute product. However, this force does not impact Tesla very strongly as there is currently no exact substitute product for electric cars. This results in low consumer appetite for different solutions and/or high switching costs due to very high information uncertainty when moving to substitute products.

In conclusion, Porter's analysis shows how Tesla's situation has changed due to the launch of the Trinity Project. It's easy to see the higher force handled by both suppliers and customers/buyers. This is given by the fact that the competition will be also in the supply chain of the companies and suppliers will cover a crucial role. In the same time, consumers will have a wider choice due to the upcoming of VW in the electric sector. Competitive rivalry and threats of new entry will increase their push on Tesla too. The only force not affected by the new VW's project is the Threat of substitution that is not a big problem for Tesla now.

After completing Porter's analysis, we moved to SWOT analysis to develop insights. In this analysis, we will use SWOT analysis to determine Volkswagen's Trinity's impact on Tesla. The analysis will be categorized into four factors: Strength, Weakness, Opportunities and Threats.

- *Strengths*: Trinity project has several strengths such as its partnership deal, high potential battery, competitive price, and budget. Volkswagen has partnered with QuantumScape to develop an electronic battery that is capable of driving up to 700km without charging. Secondly, Volkswagen group has plans to sell its product around $35,000 euro which is equivalent to under $50,000 CAD and it is lower than any of

the Tesla automobiles Lastly, its budget. Volkswagen Group has already invested $250 million euros towards the Trinity Project and is planning to invest a total of $800 million euros.

- *Weakness*: Trinity project's weakness has to be its recognition. Since this project is still a new project and the electric car market is already established by Tesla, it will be hard to get new customers for the Volkswagen group. Another weakness is the negative publicity. Back in 2017, Volkswagen was caught with the emission scandal and some customers still refuses to purchase a vehicle with Volkswagen
- *Opportunities*: Trinity project's opportunity is the rise of the gas price. Since the war began between Russia and Ukraine, the gas price has been increasing dramatically. This could increase the demand of the electric car worldwide and will have a positive impact on the Volkswagen group.
- *Threats*: There are two threats for the Trinity Project.
  The first threat is the competitors such as our company Tesla. Tesla has been the leader of the U.S. electronic market and it will be the strongest market share holder in the electronic market in the U.S.
  The second threat is the government policy. The Trinity Project is still in the planning phase and the actual design stage does not start until 2023 and the selling phase is not happening until 2026. Therefore, there is still a lot of time for the government to add and remove a policy that could affect the Trinity project.

Thus, given these analyses and the information gathered, we can develop an intelligence plan and some insights to suggest future actions to Tesla, but also to other companies who are in similar situations.
Our program, based on our observations, suggests Tesla to:

- New long-term partnership with innovative suppliers;
- Increasing R&D efforts;
- Improving Tesla's market share in Asia, South America and South Europe;
- Raising the hype on the future Tesla's cars through promotion campaigns and trying to be more present on consumers' Google researches;
- Integrate Level 4 driver-assist tech on Tesla's vehicles as soon as possible, trying to anticipate Volkswagen;
- Competing on the price level, knowing that the new Trinity project will launch the product on $45,000/$50,000; Tesla will have to try to offer slightly lower prices to the market.

First of all, there is the need to find innovative suppliers in order to guarantee final products with peak-performance. This is a crucial point since, especially in the automotive industry/sector, the competition is mostly based on quality. With new long-term partnerships with suppliers it's easier to set goals in common in order to combine the production of both supplier and client (Tesla in this case). At the same time, there will be less information asymmetry, therefore there would be more efficiency to the inside of all the supply chain, that it would guarantee one cost reduction (and therefore the possibility to have lower profits or to

be able to offer lower prices to the market) and one better management of the supplies and stocks (reducing the risk of stock-out).

For an obvious reason, Tesla has to increase its R&D efforts. WV, also thanks to the great financial performance achieved in the past few years (underlined in the financial analysis of the balance sheets), has invested more than 800 million euros to arrive at a product of excellent quality. To compete strongly, Tesla has to fight on the quality and large investments are needed. As we have seen in the graphs in the "*Collection activity results*", Tesla has low market share in some parts of the world like Asia, South America and South Europe, compared to VW's group. This highlights the importance of developing a plan to raise its market share and starting a more intense competition to try to increase its market presence worldwide.

In the same way, Tesla is less common than Volkswagen in websites' research by users. This means the need of developing a much more effective marketing campaign that can hinder the hype around the release of Volkswagen's new Trinity project. Moreover, from a technical aspect, Tesla must at least match the level of quality offered by Volkswagen in its next vehicle. Thus, it will be necessary that Tesla will not come out late in autonomous driving in its upcoming vehicles. This reasoning can be repeated in any situation where a competitor is preparing to launch a more innovative product on the market than those already present.

Finally, due to the high level of innovation of the product, which will be among the first in the world to guarantee automatic driving at an affordable price, it will be critical for Tesla the ability to launch a product (with almost the same degree of quality, if not higher) at a price slightly lower than VW's one. This is crucial because it will be essential to acquire the largest portion of the market as soon as possible to build trust around your company and create strong relationships with your customers.

Our plan is an actionable and repeatable program. In fact, this program is easy to be turned into effective actions and it could be repeated in future if there will be other issues like this (the launch of a competitor's new product). The program is also based on strategic, measurable and unbiased data. These are the fundamental pillars of every successful intelligence program, so our team was very committed in respecting these criterias.

Tables

TABLE A			
My organization's success is impacted by the following external environmental factors	**Specifically, I need to understand**	**How forward looking?**	**And with that intelligence my org. will likely make the following decision**
Competitor	Will our main competitor's new product (Project Trinity) lead them to outperform us?	4 years	Analyze our competitor's new project and how it will benefit them in the future, and use that information to adjust our projects to be better than our competitors.

TABLE B: KIT INFORMATION	
The KIT as worded in table A (Anticipation/insight needed)	Will our main competitor's new product (Project Trinity) lead them to outperform us?
The decision action as worded in table A	Analyze our competitor's new project and how it will benefit them in the future, and use that information to adjust our projects to be better than our competitors.

How forward looking as worded in table A	4 years
Hypothesis – If you had to guess know what you think your conclusions would be on the KIT and why	We think the collaboration between Volkswagen and QuantumScape will be fundamental to our competitor and ensure exceptional performance standards in the level and quality of batteries in electric cars. This is followed by a high investment in the partnership (already 250 million invested) which will guarantee innovative and exclusive technologies to our competitor
Who is the client for the intelligence	Corporate Management and Production area
Besides yourself who else will be part of the intelligence team	Production area and Managers finding new partnership opportunities
For the decision that the client is making how they are measuring success, what is their desired outcome from the decision for which the intelligence is providing support	Understanding new changes and progress with our competitors and adjusting to head in the right direction and stay ahead of the competition

TABLE C		
Information needs/indicators/questions to be asked:	**Guess what you think you'll find**	**What response would lead you to make a recommendation**

1. In what features will the competitor's electric batteries be superior to ours?	Increased battery capacities and reduced charging times	If there are a lot of features better than our company ones, we need to raise expenditure on partnerships and research and development
2. How long until their product is launched in the market?	5 years	Sooner is the date, sooner we have to find a solution to remain competitive
3. How much would it cost (in terms of expense, time and skills) for our company to find materials that could at least match the quality level of the competitor's new product?	More than the current costs	If costs will be high, we have to find solutions to optimize expenses within the company
4. Currently, who performs best from a financial perspective?	Volkswagen group is better from a financial point of view	Tesla has to reduce production costs and, above all, increase its market share

TABLE D. INFORMATION SOURCE FORM

Info #	Information Need (from C)	Primary (people)	Secondary (documents, archived)	Event Opportunity
1	In what respects will the competitor's electric batteries be superior to ours?	Email correspondence with experts of VW's Group	- Information and research on the web about suppliers' products - Company database	New product presentations

2	How long until their product is launched in the market?	Volkswagen group customers	News about the release of the new product	TV or newspaper interviews of competitor managers company database
3	How much would it cost (in terms of expense, time and skills) for our company to find materials that could at least match the quality level of the competitor's new product?	Research among the supplier park, questions to experts	Analysis through the Financial area of the company based on similar materials	Conferences about these new technologies
4	Currently, who performs best from a financial perspective?	Financial analysts	Financial statements	Conferences

TABLE E

Information need(s) being searched for	Search engine being used	Search statement being used	Results
VW's main suppliers	Company website and database	Volkswagen's suppliers	- QuantumScape - CARIAD
Expected price	Websites	Trinity car expected price	$45,000-$50,000
Release date	Websites and email correspondence	When will VW launch the Trinity Project?	2026

Battery improvements	Blogs and suppliers' websites	What will be the characteristics of the new electric batteries for the Trinity project?	Battery capacity increased from 18% to 80% with 15-minute charge cycles
Production time of a car	Trinity Project presentation	Information about production chain	10 hours
Production process	Company website	Trinity project's production process	- Standardization - Low production time (10 hours per car) - Economies of scale - Over-the-air updates - Leaner production lines
VW's investment in R&D	Websites and financial statements	Volkswagen spending on R&D	800 millions of dollars
Interest over the time (12 months and 5 years) in the world on Tesla and VW	Google Trends	Tesla and Volkswagen	VW > Tesla
Interest over the time (1 year) in the world on Tesla and VW's main suppliers (QuantumScape and Panasonic)	Google Trends	QuantumScape and Panasonic	QuantumScape > Panasonic

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By signing this Statement, I am attesting to the fact that I have reviewed not only my own work, but the work of my colleagues, in its entirety. I attest to the fact that my own work in this project meets all of the rules of quotation and referencing in use at the Telfer School of

Management at the University of Ottawa, as well as adheres to the fraud policies as outlined in the Academic Regulations in the University's Undergraduate Studies Calendar Academic Fraud Webpage. To the best of my knowledge, I also believe that each of my group colleagues has also met the rules of quotation and referencing in this Statement. I understand that if my group assignment is submitted without a signed copy of this Personal Ethics Statement from each group member, it will be interpreted by the Telfer School that the missing student(s) signature is confirmation of non- participation of the aforementioned student(s) in the required work.

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