



# Competition analysis and development of marketing strategies within the automotive After-Sales

A Master's Thesis submitted for the degree of "Master of Business Administration"

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# **Affidavit**

#### I, SAMUEL EICKEN, B.ENG., hereby declare

- 1. that I am the sole author of the present Master's Thesis, "COMPETITION ANALYSIS AND DEVELOPMENT OF MARKETING STRATEGIES WITHIN THE AUTOMOTIVE AFTER-SALES", 74 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
- 2. that I have not prior to this date submitted this Master's Thesis as an examination paper in any form in Austria or abroad.

Vienna, 28.09.2018	
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Abstract

### **Abstract**

The present Master's Thesis is putting the focus on the business field of automotive After-Sales. Taking into consideration the EU Block Exemption Regulations, the area of After-Sales is demarcated and its importance for the industry, especially in terms of profit contribution, is pointed out comprehensively.

After a spatial, temporal and factual delimitation of the scope of investigation, a competition analysis for the assortment of wheel balancing weights is carried out. Using a strategic, methodical approach based on an external environmental and internal company analysis, a statement about the competitiveness of the investigated OEM is made possible. The analyzes are implemented using Porter's structural (five forces) approach as well as a company-internal technical, assortment and potential investigation.

The result – which is summarized in a SWOT analysis – shows that the overall market share of OEM parts is relatively low as substitutional products are available, market entry barriers are low and supplier's market power can be considered high in general. Strong competition and high share of external sourcing at the OEM's dealerships and service partners due to significantly lower purchasing prices offered by wholesalers reveal a strong potential for sales increase trough marketing and price adjustment measures.

Based on the findings derived from the strategic analysis, concrete marketing measures along the four elements of the marketing mix (four P's) and further recommendations for the future company focus are developed. The most important leverage points are assortment modifications in terms of handling convenience as well as price reductions and promotions for the investigated part segment and a decidedly end-customer marketing going along with an expansion of sales to independent workshops.

The methodical approach that was developed in the course of this Master's Thesis can be applied to additional part assortments and other branches, thus helping to further improve the overall future strategic planning in After-Sales.

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#### I List of abbreviations

This directory is used to look up all abbreviations used in the Master's Thesis.

AG Aktiengesellschaft (stock corporation)

ATU Auto Teile Unger (Service/After-Sales company in Germany)

AW Arbeitswert (specified time for a certain extent of work)

BER Block Exemption Regulation

BMW Bayerische Motoren Werke

EBIT Earnings before interest and taxes

GLC Global Logistics Center

GSP Global Service and Parts

ISP Independent Service Provider

ISPL Independent Supplier

MBVD Mercedes-Benz Vertrieb Deutschland (Mercedes-Benz Sales

Germany)

MPC Market Performance Center

MRA Marketing Research After-Sales

OEM Original Equipment Manufacturer

OES Original Equipment Supplier

PCS Pieces

R&D Research and Development

ROS Return on Sales

RRP Recommended Retail Price

SWOT Strengths, Weaknesses, Opportunities, Threats

USA United States of America

VAT Value Added Tax

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### 1. Introduction

The competitive situation in the automotive industry has become increasingly tough over the past decade, mostly triggered by the developments in emerging markets, accelerated rise of new technologies and competitors, sustainability policies and changing consumer preferences.<sup>1</sup>

One of these factors is the shift of market importance from the saturated markets of Europe, North America and Japan towards the emerging markets. While countries like USA and Canada peak with 790 cars per 1000 inhabitants, China and Africa still show enormous sales potential with a current ratio of 70 (respectively 40) cars per 1000 inhabitants.<sup>2</sup>

The ongoing structural change can also be noticed looking at upcoming technologies like automated driving, electrification and the disruptive market entrance of new competitors such as Google or Tesla. Established OEMs are facing increasing investment costs for R&D to drive forward the development of those new technologies and to keep up with their new competitors.<sup>3</sup>

The diesel crisis in the context of tightened global sustainability policies has shown once more how vulnerable the automotive industry is with regard to external influencing factors that are hard to predict. In view of the current situation, it is all the more important for the automotive industry to promote current successful business areas and to increase their competitiveness.

With an average revenue contribution of about 30 percent to OEMs and more than 50 percent to automotive traders, After-Sales business<sup>4</sup> is now a key source of revenue in the automotive industry.<sup>5</sup>

The After-Sales business in general is composed of the service and spare parts business. Here, the spare parts business is of particular importance from an earnings perspective. In addition to high profitability, this "relatively

<sup>&</sup>lt;sup>1</sup> Cf. McKinsey & Company (2016), page 3, Cf. also Parment, A. (2016) pages 7 ff

<sup>&</sup>lt;sup>2</sup> Cf. Dudenhöfer, F (2016), pages 17 ff

<sup>&</sup>lt;sup>3</sup> Cf. ibid. pages 97 ff, 197 ff and 223 ff and McKinsey & Company (2016), page 13

<sup>&</sup>lt;sup>4</sup> Demarcation of the term "After-Sales" in chapter 2.1.1

<sup>&</sup>lt;sup>5</sup> Cf. Wandres, S. / Brandt, F. (2008), page 34, see also chapter 2.1.3

cyclically resilient<sup>"6</sup> and thus an indispensable source of income, especially in economically weak years.

However, car manufacturers also face problems in this business area. These become particularly visible looking at several changes in the legal framework for the sale of spare parts<sup>7</sup> as well as an improved spare parts quality of independent retailers and the associated overall increase in competition in the business.<sup>8</sup>

To strengthen the competitive position of automobile manufacturers in the aftermarket business, the following levers could be used: win back of customers with older vehicles into Mercedes-Benz dealerships and the strengthening of sales and marketing of OEM parts to independent retailers<sup>9</sup>. In order to increase the purchasing loyalty of the Mercedes-Benz dealerships, the formation of a competitive price differentiation, especially in cross-brand small parts, is expedient.<sup>10</sup>

Based on the described market and competitive situation, there is a need for a targeted marketing of spare parts by the automobile manufacturers in order to be able to participate in this profitable business in the long term.

#### 1.1 Problem definition of the Thesis

Mercedes-Benz currently does not participate sufficiently in the business of balancing weights for wheels due to a lack of transparency regarding its marketing position and price competition.

A majority of Mercedes-Benz authorized service partners<sup>11</sup> and dealerships<sup>12</sup> do not purchase their balancing weights directly from Daimler AG, but rather from competing wholesalers for automotive accessories, such as Adolf Würth

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<sup>&</sup>lt;sup>6</sup> Cf. Diez, W. (2015), page 19

<sup>&</sup>lt;sup>7</sup> Cf. in detail chapter 2.1.1

<sup>&</sup>lt;sup>8</sup> Cf. Deloitte (2007), page 1; Cf. also Wandres, S. / Brandt, F. (2008), page 34

<sup>&</sup>lt;sup>9</sup> Cf. Definition in chapter 2.1.1

<sup>&</sup>lt;sup>10</sup> Cf. Mercedes-Benz Global Service & Parts (2013), page 14; Cf. also Wandres, S. / Brandt, F. (2008), page 35

<sup>&</sup>lt;sup>11</sup> Authorized service partners may choose their suppliers of spare parts freely

Mercedes-Benz branches must cover their parts needs via the manufacturer's own sales channel

GmbH & Co. KG.<sup>13</sup> Those can achieve more favorable purchasing conditions due to larger purchase quantities and their stronger bargaining power, which can then be passed on to the dealerships. As a result, many dealerships purchase their balance weights at significantly lower prices from the wholesaler. In addition, the balancing weights offered there are completely substitutable with the balancing weights sold by Mercedes-Benz, because in fact identical products from one manufacturer are offered.<sup>14</sup> For this reason, the assortment of balancing weights from the perspective of the After-Sales business of Daimler AG is classified as highly competitive. Nevertheless, due to the high number of balancing weights, it is worthwhile for the Daimler AG to expand this business field in order to generate additional profit contributions in the After-Sales business.

# 1.2 Solution steps

Derived from the presented problem, there are two primary objectives for the present Master's Thesis:

- Creating transparency regarding the competitive risk of the product assortment of wheel balancing weights, in order to make a statement regarding the market position.
- Derivation of marketing approaches and elaboration of recommended actions for the development of a product management for the wheel balancing weights assortment.

To ensure a structured and effective way of working on the Master's Thesis, a systematical, corresponding approach was developed in the beginning, which is represented by figure 1 schematically.

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<sup>&</sup>lt;sup>13</sup> Cf. in detail Chapter 3.2.3

<sup>&</sup>lt;sup>14</sup> Cf. Eucon information systems (2017)

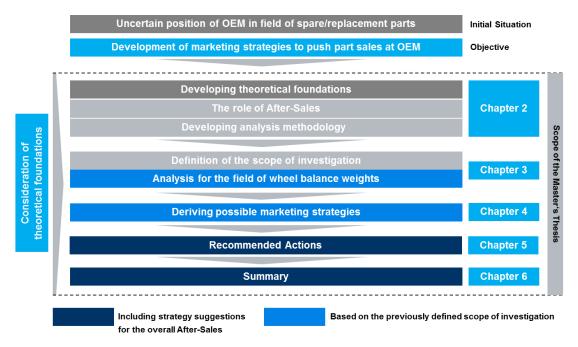


Figure 1 Systematical approach of the Master's Thesis

Source: Own illustration

The objective of the present Thesis is to analyze the competition in the wheel balancing industry. Based on this, recommendations for the initiation of an active marketing of Mercedes-Benz original balancing weights are to be worked out.

In order to carry out the competition analysis, it was first necessary to gain an overview of the manufacturers and wholesalers of balancing weights available on the market and to point out possible differences or advantages of Mercedes-Benz balancing weights compared to competitive products.

Subsequent to this competition analysis, an in-house analysis was carried out, which gives an estimation about the potentials available on the market. From the results of these analyzes, an estimate regarding the possible sales potential could be made in the further course of the Thesis.

Throughout the processing of the present topic, the theoretical foundations outlined in chapter 2 will constantly be taken into consideration, ensuring a continuous link between theory and practice.

# 2. Development of theoretical foundations

Subsequently, theoretical principles forming the basis for the Master's Thesis are developed which are relevant to the processing of the project content listed in chapter 1.1 and chapter 1.2.

First the chapters 2.1 and 2.2 will outline the automotive After-Sales business and its importance for the industry and within the Daimler AG.

Chapter 2.3 then presents the methodology of a strategic analysis and transmits its application to the problem of this Thesis on the basis of a derived model.

Following this, an appropriate methodology for market analysis will be developed to determine the market share of Mercedes-Benz in the market for balancing weights in chapter 2.4.

#### 2.1 Automotive After-Sales

To be able to understand the contents of this Master's Thesis, the business segment of automotive After-Sales<sup>15</sup> itself as well as its importance for the group business of the Daimler AG is outlined subsequently.

# 2.1.1 The After-Sales in the automotive industry

In addition to its actual core business, the sales of new vehicles, the automobile manufacturer is offering many other services that are related to the vehicles sold.

The total range of services offered by the manufacturer is divided into the socalled primary and secondary services. Primary services include all activities in the core business of the company. At Daimler AG, this is the sales of new and used vehicles.<sup>16</sup>

Technical and business services after the purchase Cf. Gabler economic encyclopedia (2018), term: After-Sales

<sup>&</sup>lt;sup>16</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 461

Secondary benefits are all types of benefits that are provided on an ancillary or subsequent basis to the primary transaction, thereby completing it.<sup>17</sup>

The secondary benefits within the automotive market consist of three different types of services (see figure 2).<sup>18</sup>

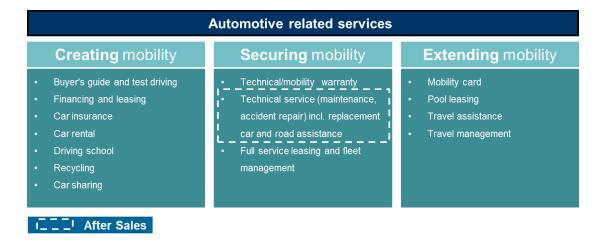


Figure 2 Delineation of the term After-Sales for the present Master's Thesis Source: Own illustration based on Diez, W. (2015), page 165

This type of service only becomes even more important during the life cycle of a product and includes various types of services that maintain or repair the primary service that was purchased. In particular, all activities that are summarized under the term After-Sales are relevant to the automotive industry.

According to Diez and Reindl, the term After-Sales in the automotive industry is comprised of maintenance<sup>19</sup>, repair<sup>20</sup> (both wear and accident repairs) and parts/accessories sales.<sup>21</sup> The automotive After-Sales is thus assigned to the range of mobility-securing services and consequently, the term After-Sales used in this work is limited to the service range identified in figure 2.

<sup>&</sup>lt;sup>17</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 461

<sup>&</sup>lt;sup>18</sup> Cf. in detail Diez, W. (2015), page 164f

<sup>&</sup>lt;sup>19</sup> Maintenance is a preventive measure to reduce or prevent signs of wear. Cf. Gabler economic encyclopedia (2018), term: maintenance

<sup>&</sup>lt;sup>20</sup> Repair includes measures to repair damage to objects that affect their use. Cf. Gabler economic encyclopedia (2018), term: repair

<sup>&</sup>lt;sup>21</sup> Cf. Diez, W. / Reindl, S. (2004), page 6

Primary and secondary benefits thus differ in the fact that secondary benefits are dependent on and complement the purchase of primary output, while primary benefits are completely independent of the acquisition of secondary benefits.<sup>22</sup>

#### 2.1.2 The After-Sales market

According to Meffert, a market is defined by "a large number of current and potential buyers of certain services as well as the potential providers of these services and the relationships between buyers and sellers"<sup>23</sup>.

The relationships between the market players in the automotive After-Sales market are significantly determined by the Block Exemption Regulation (BER) 461/2010. In the following, it is to be deduced why the automotive industry and, consequently, the automotive After-Sales market are specified by the BER 461/2010 in order to present their effects afterwards.

In addition, the following sections serve to define concepts of the After-Sales market and to differentiate them from each other. Finally, taking into account the definition of terms, the After-Sales market will be outlined from the point of view of the spare parts business of Daimler AG in figure 3.

Selective distribution systems form the basis of automotive sales.<sup>24</sup> This means that in addition to the distribution of their vehicles via factory-owned subsidiaries (dealerships), automobile manufacturers may also select their authorized dealers on the basis of qualitative and quantitative criteria.<sup>25</sup>

One of the qualitative criteria is, for example, the "personal qualification of the trader and its employees". Even if a company complies with these qualitative conditions, the car manufacturer may nevertheless withhold the transfer of rights of sale if it considers that "in a given area, no further dealers are

<sup>&</sup>lt;sup>22</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 461

<sup>&</sup>lt;sup>23</sup> Cf. ibid., page 46

<sup>&</sup>lt;sup>24</sup> Cf. Diez, W. / Reindl, S. (2005), page 97

<sup>&</sup>lt;sup>25</sup> Cf. ibid.

necessary for the exploitation of the market"<sup>26</sup>. This represents the quantitative criterion.

The consequence of this selection is an anticompetitive effect. "Restrictions on competition are, in principle, prohibited by Article 81 (1) of the EC Treaty."<sup>27</sup> According to Article 81 (3), the EU Commission may derogate from this very strict antitrust prohibition of Article 81 (1) in case consumers are appropriately involved in the profit resulting from the restriction of competition.<sup>28</sup> Such an exemption is implemented in the form of a sector-specific block exemption regulation.<sup>29</sup>

Competition on the automotive market was previously regulated by the BER 1400/2002 which entered into force on October 1<sup>st</sup> 2002 and was valid until May 31<sup>st</sup> 2010.<sup>30</sup> It constitutes a competition law provision whose function is to "bring vertical agreements and concerted practices in the automotive sector under the conditions laid down in of the prohibition of Article 81 (1) (EC) [EC Treaty]". Although replaced by an updated regulation in 2010, the before mentioned BER 461/2010, there were only minor changes in terms of aftermarket competition.

The BER precisely defines the market participants of the automotive industry. With regard to the possible workshop types of the automotive After-Sales market, it differentiates between "authorised repairer" and "independent repairer" and "independent repairer".

An authorised repairer is defined as a repair and maintenance service provider for motor vehicles, which belongs to the distribution system set up by an OEM. Conversely, an independent repairer does not belong to the distribution system of an OEM.<sup>33</sup> In practice, the terms dealership/authorized service partner and independent service provider (ISP) are more common than the preceding

<sup>&</sup>lt;sup>26</sup> Cf. Diez, W. / Reindl, S. (2005), page 97

<sup>&</sup>lt;sup>27</sup> Cf. Creutzig, J. (2005), page 129

<sup>&</sup>lt;sup>28</sup> Cf. Berg, H. / Welzel, M. (2004), page 419

<sup>&</sup>lt;sup>29</sup> Cf. ibid.

<sup>&</sup>lt;sup>30</sup> Cf. European Commission (2010), Chapter 1, Article 1ff

<sup>&</sup>lt;sup>31</sup> Cf. European Commission (2010), Chapter 1, Article 1c

<sup>&</sup>lt;sup>32</sup> Cf. ibid. Chapter 1, Article 1e

<sup>33</sup> Cf. ibid.

terminology.<sup>34</sup> Therefore, in the further course of this Thesis, these terminologies will be used.

The automotive distribution system consists of two main sales channels at retail level:<sup>35</sup>

- Own retail of the OEM (direct sales channel<sup>36</sup>: company-owned dealerships) as well as
- Sales through legally and economically independent distributors (indirect sales channel<sup>37</sup>: authorized service partners).

Dealerships have a very strong OEM loyalty.<sup>38</sup> Authorized service partners can generally be defined as "independent traders"<sup>39</sup> who "are constantly entrusted with a contract, to distribute goods in its own name and on its own account and are obliged to promote their sale according to the manufacturer's conception"<sup>40</sup>.

For the present topic of the Master's Thesis the following two regulations of the BER are relevant:

- Definition of spare part types as well as the
- Sales and purchasing freedom of spare parts for suppliers and dealerships/authorized service partners.

<sup>36</sup> Direct sales is characterized by a direct contact between the manufacturer and the end user without any intermediaries. This direct contact can also take place in the form of its self-owned dealerships, insofar as these are economically dependent on the manufacturer. Cf. Meffert. H. / Burmann, C./ Kirchgeorg, M. (2015), page 574

<sup>40</sup> Cf. Ahlert, D. (1996), page 215

<sup>&</sup>lt;sup>34</sup> The terms are used commonly within all internal Mercedes-Benz presentations, e.g. Mercedes-Benz Global Service & Parts (2013)

<sup>35</sup> Cf. Diez, W. (2015), page 271ff

<sup>&</sup>lt;sup>37</sup> Indirect sales occurs when legally and economically independent retailers and/or wholesalers (sales intermediaries) or contractually bound but economically independent cooperation partners are involved in the sales channel. Cf. Meffert. H. / Burmann, C. / Kirchgeorg, M. (2015), page 573

<sup>&</sup>lt;sup>38</sup> Cf. Diez, W. (2015), page 311

<sup>39</sup> Cf. ibid., page 274

The definition of spare parts<sup>41</sup> covers all parts or consumables (e.g. lubricating oils) that can be incorporated or used in a motor vehicle. 42 However, fuels are excluded from this definition.<sup>43</sup> In addition, the BER differentiates between two types of spare parts: original spare parts and equivalent parts.

Original spare parts are defined as parts that are manufactured exactly to the specifications and production requirements of the car manufacturer. This also includes spare parts that are manufactured on the same production basis as these components.44

Derived from this, there are three groups of original spare parts:<sup>45</sup>

- spare parts produced by the OEM;
- spare parts supplied by the parts manufacturer to the OEM;
- spare parts supplied by the parts manufacturer to other than the OEM.<sup>46</sup>

This clarifies that not only parts that are manufactured by the OEM or distributed through its sales channels are considered original spare parts.

Furthermore, the OEM must not restrict the ability of the spare parts manufacturer to affix his own trade mark or logo to original parts "effectively and visibly".47 By contrast, qualitatively equivalent replacement parts must be of the same quality as original spare parts, but not made to the specifications of the vehicle manufacturer.<sup>48</sup> For example, these parts may be made of a different material or painted in a different color. Particularly important for the present problem of this Thesis are the regulations regarding the freedom of replacement of the spare parts manufacturer as well as the freedom of

<sup>&</sup>lt;sup>41</sup> Subsequently, the terms "spare part" and "part" are used synonymously.

<sup>&</sup>lt;sup>42</sup> Cf. European Commission (2010), Chapter 1, Article 1h

<sup>&</sup>lt;sup>44</sup> Cf. European Commission (2010), Chapter 1, Article 1t

<sup>&</sup>lt;sup>45</sup> Cf. Creutzig, J. (2003), marginal ref. 654-664

<sup>&</sup>lt;sup>46</sup> Other than the OEM are: dealerships, independent workshops as well as the independent wholesale.

<sup>&</sup>lt;sup>47</sup> Cf. Creutzig, J. (2003), marginal ref. 658

<sup>&</sup>lt;sup>48</sup> Cf. European Commission (2002), Chapter 1, Article 1u; Cf. also Creutzig, J (2003), marginal ref. 672

movement for authorized repairers. Both the old BER 1400/2002 and its successor the BER 461/2010 allow spare parts manufacturers to distribute the parts they produce directly to authorized workshops/dealerships, independent workshops and independent wholesalers.<sup>49</sup>

In practice, this is referred to as parallel distribution. Conversely, authorized repairers are generally free to purchase parts.<sup>50</sup> This means that the car manufacturer cannot oblige its authorized repairers to exclusively buy original spare parts for their own use, normal maintenance or repair of motor vehicles via the OEM channel<sup>51</sup>. While under the old BER 1400/2002 there was an obligation for authorized repairers to purchase a minimum of 30 percent of their spare parts<sup>52</sup> from the OEM, the new BER 461/2010 does not mention any minimum purchase requirements anymore.<sup>53</sup>

In addition, an exclusive purchasing obligation for original spare parts may be required, if the work is done "under the manufacturer's guarantee, the gratuitous customer service or recall actions"<sup>54</sup>. From the point of view of the OEM, the purchase of spare parts by authorized repairers from independent suppliers is referred to as external procurement.<sup>55</sup>

Furthermore, authorized repairers are allowed to sell parts for repair and maintenance work in the context of cross-deliveries to independent service providers. In practice this is done via a so-called "delivery via counter" of authorized repairers.<sup>56</sup>

Figure 3 depicts the market players in the automotive After-Sales market from the point of view of the spare parts business of Daimler AG, thereby considering the previous definitions of terms.

The manufacturer channel supplies its authorized workshops with three vertical distribution channels. Their business is divided into the workshop

<sup>&</sup>lt;sup>49</sup> Cf. European Commission (2002), Chapter 4, Article 1j

<sup>&</sup>lt;sup>50</sup> Cf. ibid., Chapter 4, Article 1k

<sup>&</sup>lt;sup>51</sup> Cf. Creutzig, J (2003), marginal ref.1221

<sup>&</sup>lt;sup>52</sup> Cf. European Commission (2002), Chapter 1, Article 1b

<sup>&</sup>lt;sup>53</sup> Cf. Plate, D (2010), page 14

<sup>54</sup> Cf. Creutzig, J (2003), marginal ref.1221

<sup>&</sup>lt;sup>55</sup> Cf. also figure 3

<sup>&</sup>lt;sup>56</sup> Cf. ibid.

business and counter business. As part of the workshop business, maintenance and repair work is carried out. In the counter business, the workshops distribute parts to private end-customers or as part of cross-deliveries to independent service providers. The manufacturer's channel is supplied by spare parts from approved suppliers<sup>57</sup> as well as parts that originate from the in-house production of the respective OEMs. Furthermore, authorized repairers can purchase parts from independent suppliers (third-party purchases). The manufacturer channel is henceforth referred to as "Mercedes-Benz Channel".

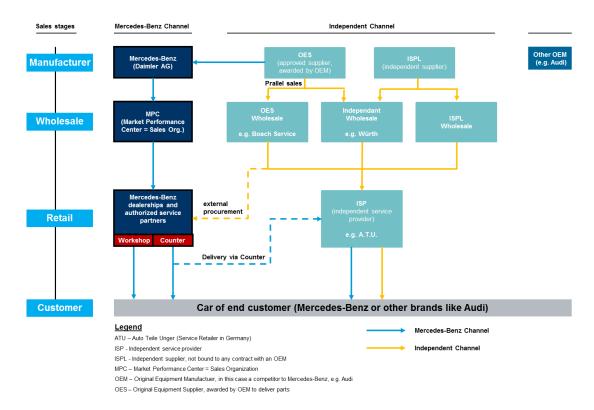


Figure 3 Simplified sales structure of the After-Sales market (Daimler AG perspective) Source: Own illustration based on Daimler AG (eds.; 2013)

The OEM channel represents the After-Sales distribution system of a competitor of the OEM (e.g. Audi). These OEMs may do repair work on foreign-branded vehicles and purchase the required parts via the counter of the

<sup>&</sup>lt;sup>57</sup> Approved Suppliers (OES) are suppliers contracted by the automobile manufacturer (OEM). Conversely, all other suppliers are referred to as independent suppliers.

respective OEM or refer to the independent part channel. For clarity reasons, the OEM channel is not shown in detail in figure 3.

#### 2.1.3 The importance of the automotive After-Sales

"Service is an English term - but for the new hardseller<sup>58</sup> it is not a foreign word, because he understands After-Sales services as measures of customer loyalty, customer enthusiasm, cross<sup>59</sup>- and upselling!"<sup>60</sup>

As the service business is generally seen as less dependent on the economic cycle<sup>61</sup> than the sale of new or used cars, the importance of the After-Sales business has increased significantly in recent years and especially during the economic crisis of 2008/2009.<sup>62</sup> While the car sales figures and thus also the achieved consolidated earnings in the division Mercedes-Benz Cars declined during the crisis, Daimler AG's After-Sales business posted a considerable increase.<sup>63</sup> Looking at the current discussions about the diesel scandal, which are forcing some automakers to make massive financial provisions, the After-Sales and service business in general continues to be an important stabilizer for the industry.

In comparison to the main field of business of automotive OEMs – the sale of new cars – the After-Sales business provides planning certainty, as it is linked to the already available cars in the respective market and is not dependent on the current sales rates of new cars.

At least as important are the profit margins that can be achieved via After-Sales in general and especially within the parts business. While the margins

In contrast to the "old hardseller" of the sixties, who wanted to bring his products to the customer with aggressive methods and did not respond to the needs of the customer, the new hardseller should focus more on the customer, motivate him and thereby encourage the purchase. Cf. Limbeck, M. (2017) pages 15-20

Marketing name for the sale of complementary products or services (cross selling) or improved variants of a product (upselling).Cf. Gabler economic encyclopedia (2018), terms: cross selling / up selling

<sup>60</sup> Cf. Limbeck, M. (2017) page 245

<sup>61</sup> Cf. Diez, W. (2015), page 176

<sup>62</sup> Cf. Barkawi, K / Baader, A. / Montanus, S. (2006) page 251

<sup>&</sup>lt;sup>63</sup> Exact figures are not mentioned here for reasons of confidentiality.

on newly launched cars are under pressure as a result of both high development costs (e.g. electric cars) and an overall increasing competition on the market (resulting in extra content that needs to be put into the cars to make them attractive for customers combined with an overall increased pressure on sales prices), automotive OEMs can still achieve high margins on spare parts and services in general.<sup>64</sup>

As below figure 4 illustrates, the downstream business is more profitable than the upstream business. The highest margins can actually be achieved within the parts wholesaling and the service/aftermarket sector in general.

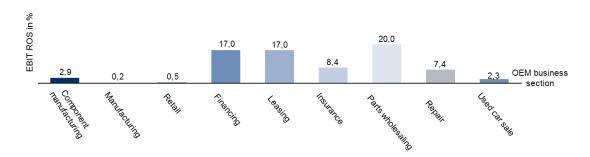


Figure 4 Profit pool of European automotive companies

Source: Bain & Company (2005)

A benchmark study carried out by the Boston Consulting Group once again confirmed the importance and attractiveness of the After-Sales business for automotive OEMs. For the total 50 companies whose key business figures were investigated in the course of the study, the service business contributed more than 50% of the annual profit, although only marking 30% of the total revenue. Profit margins were at an average of 24% and thus clearly differ from the overall profit margins that are achieved from vehicle sales in the industry.

<sup>64</sup> Cf. Diez (2009), pages 22f and Loukmidis/Luczak (2006), page 251

<sup>65</sup> Cf. Boston Consulting Group (2009), pages 1ff

<sup>66</sup> Cf. ibid.

"Especially in difficult markets, the After-Sales business is an important pillar for dealer profitability, and After-Sales is also a major player in customer loyalty."

As quoted by Harald Krüger, in addition to its function as a source of income, After-Sales is now used by manufacturers as an important tool to strengthen their brand image. According to a study outlined by J.D. Power Institute<sup>68</sup>, 40 percent of the overall customer satisfaction depends on the service quality.<sup>69</sup> Therefore, the handling of the customer during the average four-year life cycle<sup>70</sup> of his vehicle is all the more important. After the vehicle handover<sup>71</sup>, which is eventful for many customers and associated with positive impressions, the contact between the respective dealership and the customer is practically limited to service, repair and maintenance services.

The After-Sales business is therefore the only way for the car manufacturer and its affiliated car dealers to confirm the first positive quality impression and possibly also to induce the buyer to re-buy the same vehicle brand.<sup>72</sup>

#### 2.2 The After-Sales at Daimler AG

The Global Service and Parts (GSP) division at Daimler AG<sup>73</sup> is responsible for the worldwide After-Sales business including parts logistics.

On the one hand, the service portfolio in the After-Sales comprises the area of service, which covers among others maintenance and repair as well as insurance services. On the other hand, the parts area includes all spare parts and accessories offered by Mercedes-Benz, including engine oils and tires.<sup>74</sup>

<sup>&</sup>lt;sup>67</sup> Quote given by Harald Krüger, former board of management member responsible for the division of After-Sales at BMW, who is now CEO of BMW AG. Cf. Automobilwoche (2013)

<sup>&</sup>lt;sup>68</sup> Cf. JD Power and Associates (2018)

<sup>69</sup> Cf. Diez, W. (2015), page 176

<sup>&</sup>lt;sup>70</sup> Cf. Antonius, R. (2002), page 201

<sup>71</sup> Cf. ibid.

<sup>&</sup>lt;sup>72</sup> Cf. ibid.

<sup>&</sup>lt;sup>73</sup> GSP is responsible for the group divisions Mercedes-Benz Cars, Smart, VAN and truck Cf. Daimler AG (2018a)

<sup>74</sup> Cf. Daimler AG (2017)

In order to ensure the global supply of dealerships and other service partners with these parts, GSP has built up a branched network with various regional carriers starting from the central warehouse in Germersheim, Germany. The combination of the two areas enables a comprehensive, efficient and customized After-Sales service for all markets worldwide.

The aim of Daimler AG as the world's leading manufacturer of premium vehicles is to steadily increase the company's competitiveness and customer satisfaction while at the same time ensuring continuous profit maximization.<sup>75</sup> These principles also apply to GSP and serve as a guideline for the in-house claim to be "number 1 in customer satisfaction within all segments" while ensuring "profitable growth" today and in the future.<sup>76</sup>

Important indicators for this include the so-called J.D. Power Customer satisfaction study, in which Mercedes-Benz ranks among the top OEMs worldwide as well as the numerous workshop tests of various car magazines in which Mercedes-Benz also regularly receives top marks.<sup>77</sup>

# 2.3 Development of a methodology for the analysis of the actual situation

A successful product management depends in particular on the key variables given by the market, such as the position and competence of one's own company, but also the market situation of the competition.<sup>78</sup>

Therefore, for the successful completion of the Thesis against the background of the problem mentioned in chapter 1.1, a strategic analysis of the initial situation is required. This forms the "starting point for strategic marketing

<sup>&</sup>lt;sup>75</sup> Cf. Daimler AG (2018c)

<sup>&</sup>lt;sup>76</sup> Cf. Daimler AG (2018b)

<sup>&</sup>lt;sup>77</sup> Mercedes Benz received the J.D. Power quality and dependability award in 2018, Cf. J.D. Power and Associates (2018)

<sup>&</sup>lt;sup>78</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 231

planning<sup>"79</sup> from which conclusions about the future position of Daimler AG in the market can be drawn.<sup>80</sup>

In addition, the analysis offers the opportunity to set a price that is appropriate<sup>81</sup> for the product, taking into consideration the competitive situation, and to provide further recommendations for action, in particular with regard to a possible marketing strategy.<sup>82</sup>

The strategic analysis is part of strategic planning<sup>83</sup>, which has become increasingly important in recent years. Businesses today compete with a wide variety of competitors and their substitution products<sup>84</sup> around the world, demanding strategically secured top management decisions.

The necessary process is essentially divided into the two main elements: the environmental analysis and the company analysis. Finally, the results from these analyzes are summarized in a SWOT<sup>85</sup> analysis.<sup>86</sup>

The environmental analysis examines the external environment of the company for possible threats and opportunities of the respective business, which are beyond the control of the company.<sup>87</sup> It also takes into account developments and trends in the industry.<sup>88</sup>

In contrast to that, the company analysis looks at the "internal resource situation" by highlighting company strengths and weaknesses and

80 Cf. in detail chapter 3.3.2 and chapter 3.4

<sup>79</sup> Cf. ibid.

<sup>81</sup> Selection of a price for a product. The aim is to optimally exploit the functional relationships between price level and sales volume and thus to increase a target size (for example sales, profit, market share). Cf. Gabler economic encyclopedia (2018), term: pricing

<sup>82</sup> Cf. in detail chapter 4.1

<sup>83</sup> Cf. in detail Dicke, R. (2007) Cf. also Kreikebaum, H. (2018), page 26.

<sup>84</sup> Substitution products are products that are technically and qualitatively equivalent to one's own product and can thus replace it. Cf. Gabler economic encyclopedia (2018), term: substitute goods

<sup>85</sup> The acronym SWOT stands for: Strengths, Weaknesses, Opportunities and Threats. Cf. Gabler economic encyclopedia (2018), term: SWOT

<sup>86</sup> Cf. Schreyögg G. / Koch J. (2015), page 73

<sup>87</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 233

<sup>88</sup> Cf. Schreyögg G. / Koch J. (2015), page 74

<sup>89</sup> Cf. ibid.

comparing them to those of the external competition, highlighting competitive advantages and disadvantages.<sup>90</sup>

The SWOT analysis following these before mentioned analyzes establishes links between the individual test results and thus represents the ideal template for deriving conclusions and developing recommendations for action.<sup>91</sup>

From the analysis of the strategic starting position described in the previous section, a model for determining the market position of Daimler AG for the product group of wheel balancing weights is derived below. The practical implementation of the worked-out theoretical principles is presented in chapter 3.

As illustrated in figure 5, the model analysis first includes an environmental analysis in the form of a structural analysis according to Porter and a company analysis as an actual investigation of the current status within the Daimler AG. Their results are then summarized in a SWOT analysis and used to draw concrete conclusions about the competitiveness of Daimler AG in this segment.

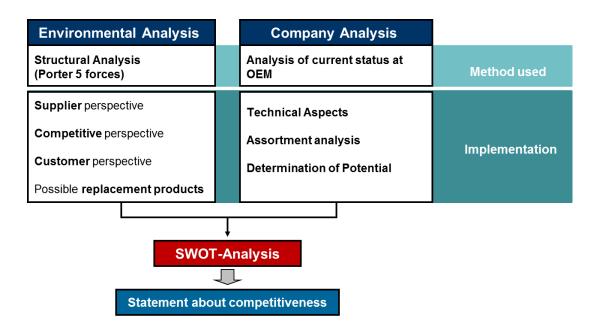


Figure 5 Model for determining the market position of Daimler AG Source: Own illustration

<sup>90</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 234

<sup>91</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), pages 236f

The environmental analysis basically includes all external factors having an impact on the investigated OEM. 92 Accordingly, this analysis would also need to incorporate external factors that the company cannot influence, or whose consideration would tie up a lot of time and resources. 93 For example political, economic or social conditions could be of importance to the company. 94 Porter omits these conditions in his model of the branch structure analysis, since these forces generally affect all companies in the market. He limits his considerations to the five basic competitive forces shown in figure 6.95

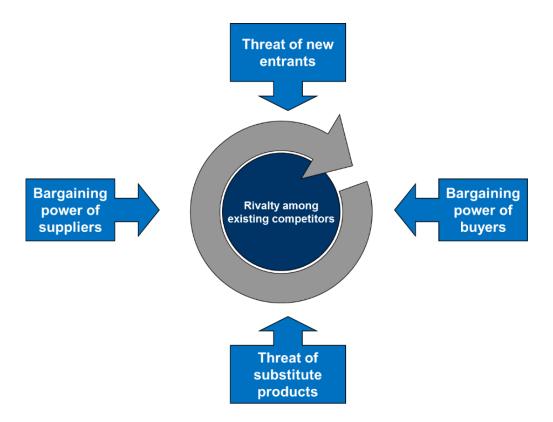


Figure 6 The five forces model by M. Porter

Source: Own illustration based on Porter, ME (2012), page 36

The aim of the company should be to develop a competitive strategy that will help to make the best use of the forces involved. As a result of this process

<sup>92</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), pages 45f.

<sup>93</sup> Cf. Kreilkamp, E. (1987), page 76

<sup>94</sup> Cf. in detail Kreilkamp, E. (1987), pages 78f.

<sup>95</sup> Cf. Porter, ME (2012), pages 35, 36

development, both the strengths and weaknesses of the company and potential opportunities and risks of the industry are revealed.<sup>96</sup>

The starting point for the analysis is a demarcation of the relevant market for the respective business segment.<sup>97</sup> This is delimited by spatial, temporal and factual dimensions.<sup>98</sup>

Spatial demarcation limits the space within which the product can be obtained at reasonable cost and at a minimum level of comfort.<sup>99</sup> An example of this could be the limitation of a market to a specific region or country.

The time limit is determined by a distinction between actual and potential market participants, whereby actual participants already participate in the market and potential participants will be able to enter the market in the future due to the starting position of their company.<sup>100</sup>

The factual delimitation draws particular attention to substitute goods<sup>101</sup>, which seems to make sense especially in the case of the product group of balancing weights handled in the context of this Thesis.<sup>102</sup>

Following on from the analysis of the relevant market, a closer examination and description of the forces represented by Porter (five forces) will be outlined.

According to Porter, the risk of **potential market entry of new competitors** is lower the higher the barriers for a potential market entry are set. Exemplary, two important sources of market entry barriers are mentioned here:<sup>103</sup>

 Operating size advantages: Potential new competitors would have to enter the market in large numbers in order to compete with the unit costs of participants already established in the market.

<sup>&</sup>lt;sup>96</sup> Cf. Porter, ME (2012), page 36

<sup>97</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 51

<sup>98</sup> Cf. ibid.

<sup>&</sup>lt;sup>99</sup> Cf. Kreilkamp, E. (1987), page 93

<sup>&</sup>lt;sup>100</sup> Cf. ibid.

<sup>&</sup>lt;sup>101</sup> Cf. Chapter 3.2.4

<sup>&</sup>lt;sup>102</sup> Cf. chapter 1.1 and chapter 1.2

<sup>&</sup>lt;sup>103</sup> Cf. Porter, ME (2012), pages 39 ff

 Product differentiation benefits: Many customers have already established a loyalty relationship with the existing company. To reach this level, new competitors would have to invest large sums of money.

Moreover, the measures taken by the current competitors to prevent market entry of new competitors counteract the risk of market entry.<sup>104</sup> Possible indicators for this would be, for example, a crackdown on new competitors in the past.<sup>105</sup>

The **supplier analysis** establishes a relation between the company and its procurement markets.<sup>106</sup> According to Porter, this is particularly dangerous for the company if there are no substitute goods on the market or the market is only dominated by a few suppliers.<sup>107</sup> If these conditions are met, the suppliers can fully exploit their bargaining power and freely determine the prices.

In addition to suppliers, its **potential customers**, whose requirements and wishes must be observed, are also of great importance to the company. Decisive in the analysis of this influence group is their buying behavior and market power.<sup>108</sup>

According to Porter's theory, the price and benefits of the product count first and foremost for the customer.<sup>109</sup> The buyer's market power depends, among other things, on the choice of possible substitute products and the costs incurred by the customer when switching suppliers.<sup>110</sup>

Porter also provides an analytical approach to potential **replacement products**. These have the same features as the respective company's own product, but may provide better value for money to the customer. <sup>111</sup> If the customer now decides to purchase one of these replacement products, the company incurs sales and therefore also profits.

<sup>&</sup>lt;sup>104</sup> Cf. Porter, ME (2012), pages 39 ff

<sup>&</sup>lt;sup>105</sup> Cf. Dicke, R. (2007), page 68

<sup>&</sup>lt;sup>106</sup> Cf. Kreikebaum, H. (2018), page 37

<sup>&</sup>lt;sup>107</sup> Cf. Porter, ME (2012), pages 62f

<sup>&</sup>lt;sup>108</sup> Cf. Kreilkamp, E. (1987), page 131

<sup>&</sup>lt;sup>109</sup> Cf. Porter, ME (2012), pages 59f

<sup>110</sup> Cf. in detail Porter, ME (2012), page 61

<sup>&</sup>lt;sup>111</sup> Cf. Porter, ME (2012), pages 58, 59.

22

The last and most important analysis step of the environmental analysis involves the examination of the competitiveness of the company. The core of this analysis is a comprehensive view of the **competitors** in the market. In this competitive analysis, Porter emphasizes possible reactions of the competition to, for example, price changes and the rivalry between the individual companies. It

Kotler differentiates Porter's approaches and focuses on first capturing and then comprehensively assessing the strengths / weaknesses of all competitors in the market.<sup>114</sup> In doing so, he limits himself to the viewing space previously delimited by the spatial, temporal and factual factors.<sup>115</sup>

These market and company factors, as analyzed by Porter and Kotler, are transferred into practice in chapter 3 as part of the competitive analysis conducted in this Master's Thesis.<sup>116</sup>

The company analysis based on the environmental analysis shows the performance potential of the Daimler AG. As with the competitor analysis and the model of Kotler and Porter, a profile of strengths and weaknesses is created in which advantages and disadvantages regarding the market position of the company are highlighted.<sup>117</sup>

Because the approach is similar to the concept of the competitive analysis and due to the limited scope of this work, a further detailed description is omitted. The model studies that are treated in theory are also used in company analysis in chapter 3.<sup>118</sup>

<sup>&</sup>lt;sup>112</sup> Cf. Kreilkamp, E. (1987), page 167

<sup>&</sup>lt;sup>113</sup> Cf. Porter, ME (2012), pages 67, 72

<sup>&</sup>lt;sup>114</sup> Cf. Kotler, P / Bliemel, F. (2015), page 660

<sup>&</sup>lt;sup>115</sup> Cf. limited scope of investigation

<sup>&</sup>lt;sup>116</sup> Cf. in particular chapter 3.2.1 customer perspective, chapter 3.2.2 supplier perspective, chapter 3.2.3 competition perspective and chapter 3.2.4 possible substitutes

<sup>&</sup>lt;sup>117</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 238

<sup>&</sup>lt;sup>118</sup> Cf. in particular chapter 3.3

Through combining and evaluating the results of both analyzes in the SWOT analysis, strategies and recommendations for action can be derived afterwards.<sup>119</sup>

# 2.4 Development of a methodology for market analysis

The starting point for a successful market analysis is an estimation of the market share. According to Diez, this represents "the most important factor for determining the position of a company in the competitive environment within the relevant market".<sup>120</sup>

In the context of this Master's Thesis, this market share assessment was carried out with the help of the so-called Marketing Research After-Sales (MRA) tool. This Daimler-internal database system enables the output of the most important After-Sales parameters via the evaluation of actual data of the retails, mainly via billing data of the workshops.

In the case of the balancing weights, in particular all the data that could be directly linked to the "balancing of tires" noted on the customer's invoice of the workshop was of particular interest. Each balance operation can be assigned one of eight predefined Mercedes-Benz work numbers<sup>121</sup>. The respective turnover numbers and so-called "number of sold service hours"<sup>122</sup> are available in the MRA system for these job numbers. Since a balancing process per wheel is assigned an average workload of about 1 AW<sup>123</sup> across all model series and an average of two balancing weights per wheel is used<sup>124</sup>, it was possible to determine the consumption of balancing weights in the workshops.

<sup>&</sup>lt;sup>119</sup> Cf. chapter 5

<sup>&</sup>lt;sup>120</sup> Cf. Diez, W. (2015), page 55

<sup>121</sup> Each service activity in the workshop is assigned an eight-digit work number, which is used to settle it.

<sup>&</sup>lt;sup>122</sup> The measure number of sold service hours indicates the time in hours that was required for a specific service activity in the workshop as a whole.

<sup>123</sup> Specified time for the extent of work (1AW = 5 minutes)

<sup>&</sup>lt;sup>124</sup> Cf. Root, R. (2000), page 937

This value was then compared with the number of balancing weights sold by Daimler via GLC<sup>125</sup> to Mercedes-Benz dealers (dealerships and authorized service partners).<sup>126</sup> Based on the ratio of both values, the overall market share of original Mercedes-Benz balancing weights was derived for the respective market.

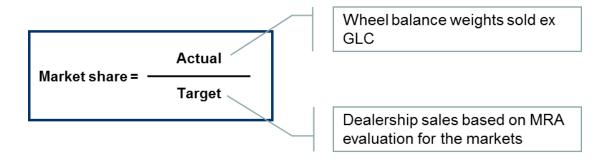


Figure 7 Scheme for calculating the estimated market share

Source: Own illustration

Since not all workshops in the respective countries are affiliated to the MRA, the market share calculation was carried out as an example for Spain, as the market coverage ratio<sup>127</sup> here is relatively high at 77%.<sup>128</sup>

<sup>125</sup> The Global Logistics Center (GLC) in Germersheim is a global central warehouse for parts of Daimler AG

<sup>&</sup>lt;sup>126</sup> The numbers are derived from Parts Prisma, a web-based reporting and analysis tool for the After-Sales business

<sup>127</sup> The market coverage rate indicates what percentage of workshops/dealerships in a country feed their data into the MRA system.

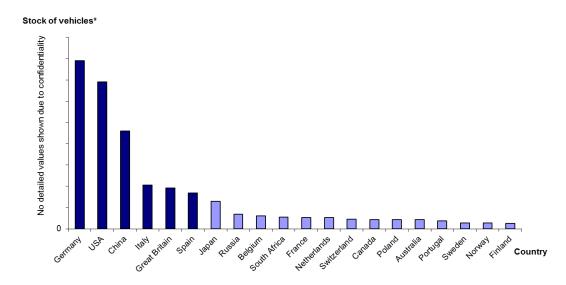
<sup>&</sup>lt;sup>128</sup> Cf. chapter 3.3.2

# 3. Actual analysis for the assortment of wheel balancing weights

# 3.1 Definition of the scope of investigation

In the following, the scope of investigation to be considered in the context of this Master's Thesis is delimited.

Initially, a spatial demarcation based on a measurable criterion, in this case the stock of all Mercedes-Benz vehicles worldwide was carried out. Figure 8 shows the distribution of this vehicle fleet across the top 20 markets. The respective stocks include all vehicle age groups.<sup>129</sup>



 $<sup>^{\</sup>star}$  Derived from the Vehicle Parc Management database, all branches and age groups, year 2016

Figure 8 Stock of Mercedes-Benz passenger cars worldwide Source: Own illustration

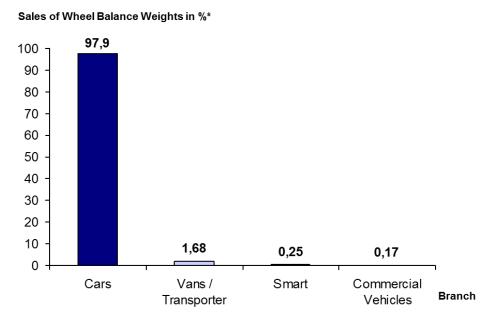
The top 6 markets, according to the size of the vehicle stock, are selected out of the top 20 markets, making Germany, USA, China, Italy, Great Britain and Spain the relevant markets for the following considerations. The reason for this prioritization is above all the fact that Germany has a high degree of market

<sup>&</sup>lt;sup>129</sup> The stock of vehicles is divided into four age groups: 1. segment: 0 to 4 years; 2. segment: 4 to 8 years; 3. segment: 8 to 20 years; 4. segment: over 20 years.

transparency as a lead market<sup>130</sup> and is thus predestined for a closer look at competitors and prices. The remaining markets are primarily used to estimate the market share<sup>131</sup> of balancing weights.

The further factual restriction of the scope of investigation was carried out by examining the sales volume of balancing weights in the car, smart, van and truck divisions managed by GSP.

As shown in figure 9, almost 98% of all balancing weights sold to workshops belong to the passenger cars division. They are thus the main sales driver in this segment, which is why all subsequent investigations are limited to the area of passenger cars. In terms of time, the scope of the investigation is limited to the participants currently established on the market, because only in this way is it possible to carry out a competition analysis as well as a performance and cost comparison.



\*Data Base: System evaluation based on the total sales of wheel balance weights in 2017

Figure 9 Sales of wheel balancing weights per Daimler AG branch in percent Source: Own illustration

<sup>&</sup>lt;sup>130</sup> A lead market is a country that is the starting point for technical innovation. At Mercedes-Benz, this is Germany, as all technical innovations, such as the airbag, were first presented here. Cf. in detail Beise, M. (2006) pages 1-25 and 74-79

<sup>131</sup> Cf. in detail chapter 3.3.2

<sup>&</sup>lt;sup>132</sup> The high sales of car wheel balancing weights also results in a correspondingly large net turnover achieved with these parts compared to, for example, VAN parts.

# 3.2 Environmental analysis

In order to be able to estimate opportunities and risks, an environmental analysis of the parts business is carried out in the area of balancing weights. Thereby, the methods of competition and branch structure analysis defined by Porter, which have been discussed in the theoretical fundamentals, are applied practically.<sup>133</sup>

#### 3.2.1 Customer perspective

For the analysis of the assortment of balancing weights and the subsequent derivation of recommendations for action, an exact definition of the customers of balancing weights is required.

At first, a distinction is made between the primary (direct) and the secondary (indirect) customer as well as the workshop and counter business. Primary customers can be directly associated with the procurement of the replacement part, while secondary customers ask the parts only indirectly.

The workshop business covers all parts that are installed in the vehicle due to maintenance or repair work while the counter business covers all parts that are distributed via the workshops to private end-customers or other independent repairers.

The primary customers for the assortment of balancing weights are therefore, on the one hand, the Mercedes-Benz workshops, who receive the balancing weights at the net list price<sup>134</sup>, as well as independent workshops, which buy spare parts over the counter business at the end-customer price<sup>135</sup>.

Private end-customers act as secondary customers when they have their tires balanced in a Mercedes-Benz workshop. This usually happens with every tire change.

<sup>&</sup>lt;sup>133</sup> Cf. in particular Chapter 2.3 Development of a methodology for the analysis of the actual situation

<sup>134</sup> Cf. figure 13

<sup>&</sup>lt;sup>135</sup> Cf. ibid.

They become an indirect customer if the required balancing weights are shown on the invoice when changing tires. However, many Mercedes-Benz dealerships and authorized service partners calculate the balancing process as a complete price, so that the individual balancing weights do not appear as a separate item on the bill.

As a result, the private end customer does not immediately perceive the respective prices for the balancing weights and consequently a low price sensitivity of the private end customer can be derived. For him/her<sup>136</sup>, only the total price of the balancing process and the associated benefits count.<sup>137</sup> A price increase of the gross list price<sup>138</sup> would therefore hardly be perceived by the customer or only indirectly by a possible slight overall price increase of the balancing process.

The main customers and thus primary customers of the balancing weights product range are the Mercedes-Benz workshops, since these require larger quantities of balancing weights each time a tire is changed on a vehicle. A visit to a contractor showed that in particular the ease of handling when ordering and billing the different balancing weight types<sup>139</sup> is important. All parts ordered via Mercedes-Benz must be billed individually using so-called A-part numbers<sup>140</sup>, while at wholesalers such as Würth GmbH & Co. KG, several parts can be billed together using a specific Q-part number<sup>141</sup> generated by the respective contract partner.

Thus, the dealerships and authorized service partners use external sourcing to aggregate the balancing weights of different weight classes (5g, 10g, etc.) into one single order. The parts are purchased externally from Würth on an aggregate Q-part number specific to the partner. Unlike the original parts, it

139 Cf. chapter 3.3.1 Technical aspects of balancing

<sup>&</sup>lt;sup>136</sup> In order to improve readability, subsequently only the male form is used in the text, nevertheless all data apply to members of both gender.

<sup>&</sup>lt;sup>137</sup> Cf. chapter 3.3.1 Technical aspects of balancing

<sup>&</sup>lt;sup>138</sup> Cf. figure 13

<sup>&</sup>lt;sup>140</sup> A-part numbers are part numbers specified by Mercedes-Benz for spare parts. For each part, a specific part number is assigned, which must be listed on the customer invoice.

<sup>&</sup>lt;sup>141</sup> Q-part numbers bundle several part numbers specified by the manufacturer; for example, the assortment of balancing weights can be used to summarize all part numbers of adhesive weights under one Q-part number.

does not differentiate between the different weight classes, but instead calculates all balancing weight types using a Q-part number.

Moreover, the contracting party purchases the individual weight classes in bulk packages<sup>142</sup> of at least a thousand pieces, so-called big packs, which brings an additional handling advantage with regard to the order frequency.

As a second important aspect, the dealer mentioned significant price differences between the balancing weights offered by the wholesaler and those sold directly by Mercedes-Benz. Consequently, there is the opportunity to regain market share by introducing big packs and differentiated pricing.<sup>143</sup>

#### 3.2.2 Supplier perspective

According to Porter, dangers arise for the company if and only if the respective procurement market is controlled by just one or a few suppliers.<sup>144</sup>

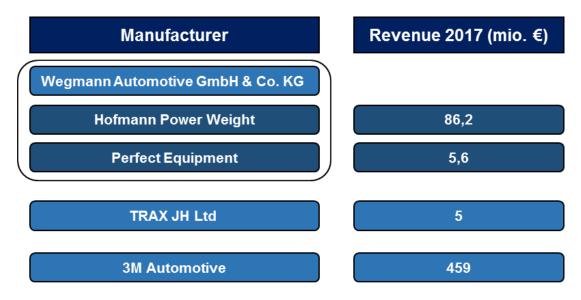
This thesis will be discussed in the following via competition research.<sup>145</sup> The following figure represents the suppliers of balancing weights and their annual revenues identified as a result of the analysis.

144 Cf. Porter, ME (2012), pages 62 ff, Cf. also chapter 2.1.1 and chapter 5

<sup>&</sup>lt;sup>142</sup> Big packs are understood to mean large packs, to which the customer receives higher discounts

<sup>143</sup> Cf. chapter 4

<sup>&</sup>lt;sup>145</sup> Cf. various competitive databases such as Bisnode (2018), Dun & Bradstreet (2018), CRIF Bürgel (2018). Cf. also IndustryStock (2018)



All values rounded / sorted descending by relevance for German market

The revenue displayed for 3M Automotive represents the total revenue for the 3M Automotive business sector and could not be limited to a specified revenue for balancing weights only.

Figure 10 Overview of manufacturers of balancing weights and their annual revenues Source: Own illustration on the basis of balance sheet data banks Cf. Bisnode (2018), Cf. also CRIF Bürgel (2018), Cf. also 3M (2017)

The market for wheel balancing weights is dominated by the Wegmann Automotive group<sup>146</sup> in Europe and especially in Germany. The Group consists of two mayor brands: First, the global market leader Hofmann Power Weight, who serves the premium segment with his product portfolio. Second, there is Perfect Equipment, which produces balancing weights for the US market. Overall, the group produces about one billion balancing weights each year<sup>147</sup> and supplies both the OEM and After-Sales markets.<sup>148</sup> According to own data two out of three vehicles in Western Europe drive with balancing weights of the enterprise.<sup>149</sup>

In addition, there are other small niche manufacturers, such as Trax JH Limited, a manufacturer from England, which supplies the German market only

<sup>&</sup>lt;sup>146</sup> Cf. also chapter 3.2.1

<sup>&</sup>lt;sup>147</sup> Cf. Wegmann Automotive (2018)

<sup>&</sup>lt;sup>148</sup> Cf. ibid.

<sup>&</sup>lt;sup>149</sup> Cf. Yogeshwar, R. (2014)

in small quantities<sup>150</sup>, having specialized in adhesive and steel clamping weights<sup>151</sup>. Furthermore, there is 3M Automotive, which produces innovative adhesive weights that allow for balancing accurate to the gram.<sup>152</sup>

Following the analysis approach of Porter, the company has a high level of supplier risk in the balancing weights segment, as the market is dominated by only one group of companies (Wegmann Automotive).

This group currently has a kind of "monopoly position" in the market and, as a consequence, can set prices for balancing weights almost freely due to a lack of competition.<sup>153</sup>

#### 3.2.3 Competition perspective

In the following, the wholesale level is illuminated as this level is supposed to be the main competitor for Daimler AG in the area of After-Sales, as the dealership is allowed to choose freely, whether they want to buy their balancing weights via the OEM channel or directly from the wholesale for repair and maintenance.<sup>154</sup>

The more attractive an industry, the stronger the competition usually is.<sup>155</sup> Therefore, a competitive analysis will be carried out to identify the existing competitors on the market, to record their product portfolio and to carry out a first price comparison of the assortment of balancing weights with a competitor. As within the supplier analysis, this is done through the use of competition research.<sup>156</sup> The analysis takes place within the framework of the scope of investigation defined in chapter 3.1.

<sup>&</sup>lt;sup>150</sup> All major automobile manufacturers in Germany are supplied by the Wegmann Group. Trax JH Ltd only supplies online retail in general. Cf. Wegmann Automotive (2018); Cf. also IndustryStock (2018)

<sup>&</sup>lt;sup>151</sup> Cf. chapter 3.3.1 Technical aspects of balancing

<sup>&</sup>lt;sup>152</sup> Cf. chapter 3.2.4

<sup>&</sup>lt;sup>153</sup> Cf. also Heiny L. / Hegman G. (2010), pages 136-142; Cf. also chapter 3.2.2

<sup>154</sup> Cf. Figure 3

<sup>&</sup>lt;sup>155</sup> Cf. Barkawi, K / Baader, A. / Montanus, S. (2006), page 4

<sup>&</sup>lt;sup>156</sup> Cf. various competitive databases such as Bisnode (2018), Dun & Bradstreet (2018), CRIF Bürgel (2018). Cf. also IndustryStock (2018)

The following chart shows the competitors identified as relevant during the competition analysis, their annual sales and a brief overview of their balancing weights product portfolio.



All values rounded / sorted descending by revenue - In the case of non-availability of values for the year 2017, those of the previous year were used

Figure 11 Overview of competing distributors for the assortment of wheel balancing weights

Source: Own illustration on the basis of balance sheet data banks: Cf. Bisnode (2018), Cf. also CRIF Bürgel (2018)

As part of the competition analysis, the product portfolio of the individual wholesalers in the balancing weights segment<sup>157</sup> was worked out and compared with the balancing weights and accessories for the balancing operation sold by Mercedes-Benz. It was found that the wholesaler's portfolios cover virtually the entire range sold by Mercedes-Benz and in some cases also offer other accessories such as pliers for attaching and removing the balancing weights. 158 In particular, the offered rolling system for adhesive weights, in which the balancing weights can be separated individually from a large role depending on weight requirements, thereby allowing for a simpler handling in the workshop, should be mentioned. 159

<sup>158</sup> Cf. ibid.

<sup>&</sup>lt;sup>157</sup> Cf. Figure 10. Cf. also online shops of the various suppliers, such as Würth Online Shop (2018)

<sup>&</sup>lt;sup>159</sup> Cf. among others Würth Group (2017)

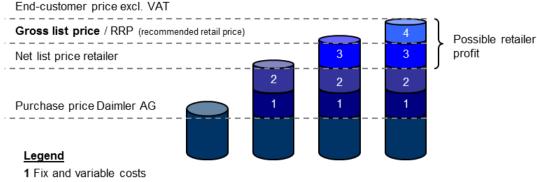


Figure 12 Unwinding system for adhesive weights

Source: Pneugo (2018)

This system is already offered by various wholesalers 160 but is not available in the Mercedes-Benz range. Thus, a possible inclusion of this system in the product portfolio of Mercedes-Benz should be examined in order to meet the workshop needs and to generate continuing sales opportunities.

The analysis of the competition price level was carried out by comparing the dealership price of Daimler AG with that of a competitor.



- 2 Contribution margin Daimler AG
- 3 Discount based on discount groups
- 4 Surcharges by the dealer (not mandatory)

Figure 13 Composition of the retail price in the aftermarket

Source: Own illustration

<sup>&</sup>lt;sup>160</sup> Cf. figure 11

34

The Adolf Würth GmbH & Co. KG was identified as a suitable competitor because, in comparison to other competitors, it generated one of the highest sales in the defined scope of investigation<sup>161</sup> and has been supplying many authorized service partners and dealerships of Mercedes-Benz with balancing weights for years.<sup>162</sup>

The company was founded in 1945 by Adolf Würth and currently sells about 80,000 different types of fastening material. 163 It also has its own division for the automotive spare parts market offering both wear parts and also chemical products such as lubricating paste for tire assembly. 164 Würth has 3.5 million customers around the world and employs 76,000 people, almost half of whom are sales representatives. 165

Via an external price inquiry, the parts prices of the competitor Würth could be determined for some balancing weights. Subsequently, a comparison of these parts prices with the dealership price<sup>166</sup> of the Mercedes-Benz contractors could be worked out. As figure 14 illustrates, the competitor Würth offers balancing weights for an average of 30% of the Mercedes-Benz dealership price.

<sup>&</sup>lt;sup>161</sup> Cf. figure 11

<sup>&</sup>lt;sup>162</sup> Base: internal system evaluation

<sup>&</sup>lt;sup>163</sup> Cf. Würth Group (2017)

<sup>&</sup>lt;sup>164</sup> Cf. Würth Online Shop (2018)

<sup>&</sup>lt;sup>165</sup> Cf. Würth Group (2017)

<sup>&</sup>lt;sup>166</sup> Cf. figure 13

Part	Retailer aquisition price*	Piece price Würth**
Adhesive weight 40g	100 %	29,4 %
Adhesive weight 45g	100 %	30,8 %
Adhesive weight 50g	100 %	31,5 %
Adhesive weight 55g	100 %	32,1 %
Adhesive weight 60g	100 %	32,5 %

<sup>\*</sup>Database: Parts Prima Database; the retailer acquisition price is set as 100%

Figure 14 Price comparison of competitive balancing weights in the market Source: Own illustration

The price differences are significantly noticeable for the authorized service partners and dealerships, making a high proportion of external procurement understandable from an economic point of view. Based on the experience of the dealers concerning the – especially in comparison to the competition/wholesale - high price level of Mercedes-Benz parts, a further extension of external sourcing to other subgroups is possible and therefore needs further investigation in the future. 168

#### 3.2.4 Possible substitutes

In addition to the conventional balancing weights sold by Hofmann or Trax, there are other, partly innovative ways of balancing wheels on the market. Since these substitution products can potentially also be hazardous to sales according to Porter<sup>169</sup>, some of these replacement products are listed below.

<sup>\*\*</sup>Database: Price inquiry via MBVD; the Würth piece price shows the percentage price of the wheel balancing weight in comparison to the retailer acquisition price.

For reasons of confidentiality, only normalized (percentage) values have been specified in this chart.

<sup>&</sup>lt;sup>167</sup> E.g. from wholesalers like Würth

<sup>&</sup>lt;sup>168</sup> Cf. chapter 5

<sup>&</sup>lt;sup>169</sup> Cf. chapter 2.3

**3M adhesive weights** are made of an extruded<sup>170</sup>, zinc-enriched polymer.<sup>171</sup> This allows, with the aid of a suitable device, an individual cut with the exact weight required for the balancing operation.

In addition, this system is characterized by its high flexibility and the associated optimal adaptability to the rim curvature. 172

In addition to the aftermarket<sup>173</sup>, the system can also be used in automated form in the production of the vehicle manufacturer itself. In the future, a manual balancing of the wheels in the production is to be omitted, whereby cost savings are made possible.<sup>174</sup>

In the US, the system is already actively advertised by 3M and also distributed to workshops.<sup>175</sup> The system is currently undergoing technical validation, during which possible applications within the plants and in the aftermarket are examined. Overall, the 3M system can certainly be used as a potential replacement and substitution product to the conventional balancing weights in the future.

**Balancing powder** consists of mineral earth and is inserted in the cavity between the tire and rim during tire assembly.<sup>176</sup> Since it only reduces vibrations and has no compensation function as the conventional balancing weights, it is only suitable for – in comparison to cars - slowly moving trucks. However, when using the balancing powder, there are sometimes serious disadvantages. On the one hand, there is the danger of the valve of the tire being clogged by the powder.<sup>177</sup> In addition, metal chips have already been found in the powders in the past, which can lead to serious damage to the inner layer of the tire and, in the worst case, to tire blowouts.<sup>178</sup>

<sup>&</sup>lt;sup>170</sup> Extrusion describes a procedural process in which viscous materials are pressed through a nozzle. Cf. Brockhaus (2006); Term: extrude

<sup>&</sup>lt;sup>171</sup> Cf. 3M Automotive (2018)

<sup>&</sup>lt;sup>172</sup> Cf. ibid.

<sup>&</sup>lt;sup>173</sup> As aftermarket one refers to as the replacement and service market

<sup>&</sup>lt;sup>174</sup> Cf. Automobil Industrie (2014)

<sup>&</sup>lt;sup>175</sup> Cf. 3M Automotive (2018)

<sup>&</sup>lt;sup>176</sup> Cf. Easy Balance (2018)

<sup>&</sup>lt;sup>177</sup> Cf. Motor-Talk (2015)

<sup>&</sup>lt;sup>178</sup> Cf. ibid.

For the passenger car market, so-called **balancing beads** made from silicone-coated micro glass balls<sup>179</sup> are also offered in retail. According to the manufacturer's advertising, they are, just like the balancing powder, mostly used in off-road vehicles, motorcycles and trucks and are not very common among cars.<sup>180</sup>

In summary, the adaptive adhesive tape model developed by 3M could at least partially impact the balancing weights market in the future as it is already being actively marketed in the US. In contrast, balancing powders and balancing beads are more likely to occupy a niche position in the market and, at least for the large car manufacturers, will not prevail as a substitute for the conventional balancing weights.

#### 3.2.5 Conclusion - Presentation of five forces model

"Understanding the competitive forces, and their underlying causes, reveals the roots of an industry's current profitability while providing a framework for anticipating and influencing competition (and profitability) over time." 181

Taking into account the market definition<sup>182</sup> and the environmental analysis carried out before, the results are now summarized in the five forces model according to Porter.

The model gives a clear and structured overview about the external forces that affect the company's business and simplifies their understanding through visualization.

<sup>181</sup> Cf. Porter, M. E. (2010)

<sup>&</sup>lt;sup>179</sup> Cf. Counteract Germany (2018)

<sup>&</sup>lt;sup>180</sup> Cf. ibid.

<sup>&</sup>lt;sup>182</sup> Cf. in detail chapter 3.1

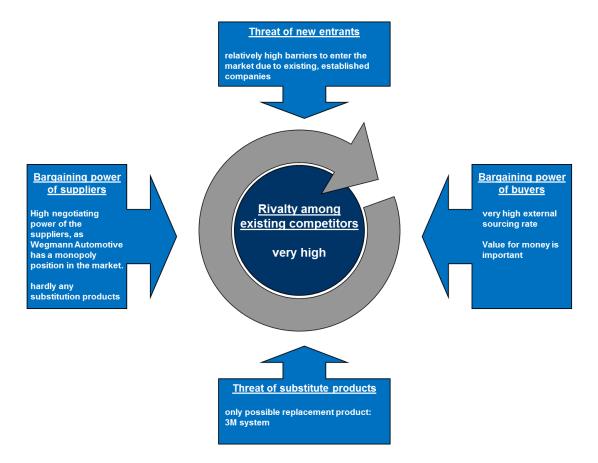


Figure 15 Results of the environmental analysis, presented in Porter's five forces model Source: Own presentation based on Porter, ME (2012), page 36

The risk of entry of **potential new competitors** into the balancing weights market is generally low. The barriers to market entry (operating size benefits and product differentiation benefits) identified by Porter<sup>183</sup> prevent new competitors from entering the market quickly.

The strong price/performance oriented (value for money) thinking of the **customers**, as already stated in Porter's theory, could be confirmed by the practical analysis in the segment of balancing weights. Significant price differences between the parts sold by Mercedes-Benz and the parts offered by Würth could be identified, although the parts sold by the OEMs do not offer any benefits over those sold by the wholesale. The resulting high proportion of external procurement reveals clear potentials, the realization of which could be

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<sup>&</sup>lt;sup>183</sup> Cf. in detail chapter 2.3

achieved in the future through the recommendations for action elaborated in the context of this Master's Thesis. 184

As the findings from the analysis show, there are no **replacement products** in the market offering the same functionalities as conventional balancing weights with the exception of the system developed by 3M<sup>185</sup>. Thus, the risk posed by this factor for the OEM can be defined as low.

Due to the de facto monopoly position of the Wegmann Automotive Group and the lack of replacement products, the bargaining power of the **suppliers** definitely presents a risk potential. The high purchasing costs<sup>186</sup> for balancing weights within Daimler AG resulting from the high level of external sourcing of dealers and the associated low purchasing volume at the suppliers represent a serious challenge. Lower purchasing costs could be realized in the future through higher sales volumes.

Overall, the **intensity of competition** within the industry is considered high. This is mainly due to the bargaining power of suppliers and customers. Added to this is the high density of competitors<sup>187</sup> represented on the market, combined with the high price level of Daimler AG compared with the competition.

## 3.3 Company analysis

"Before you can create a strategy, you need a vision of the company. Before you set that vision for the future, you have to understand your current position in the market as well as your limitations." 188

<sup>&</sup>lt;sup>184</sup> Cf. in detail chapter 5

<sup>&</sup>lt;sup>185</sup> Cf. in detail chapter 3.2.4 Possible substitutes

Due to the low purchase quantity of balance weights of the Daimler AG the unit costs of the purchase rise, since the fixed costs per produced unit of the manufacturer fall with increasing production volume (fixed cost degression)

<sup>&</sup>lt;sup>187</sup> Cf. figure 11

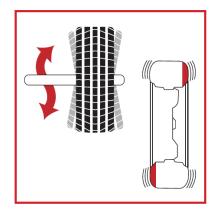
<sup>&</sup>lt;sup>188</sup> Quote given in 1996 by Stan Shih, former CEO of the Acer Group. Cf. Strategy-Business (2018)

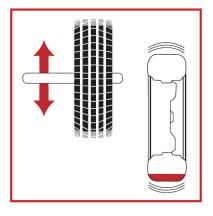
Following the above quote by Stan Shih and subsequent to the environmental analysis, the company analysis follows to highlight the potential of the own company compared to the competition. As in the case of the environmental analysis, the theoretically developed model is subsequently applied practically according to Kotler and Porter<sup>189</sup> and a company's strengths and weaknesses profile is created.

#### 3.3.1 Technical aspects of balancing

To uncover existing strengths and weaknesses of the company in terms of balancing weights, the technical aspects and importance of balancing will be outlined below.

Technically, a distinction is made between the so-called dynamic and static imbalance. In the dynamic imbalance, the wheel tends to wobble while it tends to jump in the static imbalance.<sup>190</sup>





dynamic imbalance

static imbalance

Figure 16 Representation of the static and dynamic imbalance in the tire Source: Wegmann Automotive GmbH & Co. KG (2018)

To compensate for these imbalances, three types of balancing weights can be attached to the rim in principle. 191

<sup>189</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 238. Cf. also chapter 2.3

<sup>&</sup>lt;sup>190</sup> Cf. Sclar, D. (2011), page 329

<sup>&</sup>lt;sup>191</sup> Cf. ibid.

- 1. **Impact weights**, which are struck to the rim from the outside. However, these are not released by Mercedes-Benz, since the impact on the rim can lead to scratches and thus to corrosion of the rim.
- 2. **Clamping weights**, which are attached outside of the rim by means of a retaining spring. This type is mainly used for steel rims.
- Adhesive weights, which are glued from the inside to the rim base.
   This type finds its application especially with aluminum rims.

These balancing weights are available in different weight classes (5g, 10g ... 60g), allowing accurate wheel balancing with the least possible number of balancing weights.

Until just around 15 years ago, most of the balancing weights produced were made of lead, the use of which for cars and trucks has been prohibited under EU law since 1 July 2005.<sup>192</sup>

Today, balancing weights consist of zinc against the background of the greatest possible corrosion stability, only in rare cases (see JH Trax Ltd.) steel is used.

As the development of ever more modern and faster vehicles and the associated need for precise suspension tuning increase, the vehicle's sensitivity to imbalances increases.<sup>193</sup>

If the wheels are not sufficiently balanced, they initially show vibrations in the steering wheel and, if not rectified, can have further influence on the chassis and axle parts. An imbalance of only 10g at a speed of 100km / h generates the force of a sledgehammer. In addition to an increased tire wear this also extends the braking distance at high speeds. Balancing weights can thus be classified in the group of safety-relevant parts.

<sup>&</sup>lt;sup>192</sup> Cf. Kantonales Laboratorium Thurgau (2016)

<sup>&</sup>lt;sup>193</sup> Cf. Nunney, M.J. (2016), pages 348 ff

<sup>&</sup>lt;sup>194</sup> Cf. Wegmann Automotive GmbH & Co. KG (2018)

<sup>&</sup>lt;sup>195</sup> Cf. ibid.

#### 3.3.2 Assortment analysis for wheel balancing weights

Subsequently an analysis of the assortment of wheel balancing weights will be performed. In order to be able to carry this out in full, it was first necessary to create transparency with regard to the balancing weights and their part numbers currently and historically contained in the Mercedes-Benz portfolio. The individual part numbers could then be assigned the associated annual sales figures via GLC, retailer acquisition prices<sup>196</sup>, discount rates for the dealers and the variable costs via evaluations in the Parts Prima System.

As the evaluations showed, a significant decline in the volume of each type of balancing weight was evident, which led to the theory that this could be due to a steady increase in dealer acquisition prices. In the following, this thesis had to be checked for correctness considering the following premises:

#### Assumptions:

- The sales of all wheel balancing weights and retaining springs via GLC were included in the calculations.
- To calculate the average retailer's aquisition price of all parts per year, the individual dealer prices were weighted according to the sales volume.
- The variable costs were assumed to be constant over the years, as purchasing costs were also constant over this period.
- Contribution margin = retailer acquisition price variable costs
- The discount rate is valid for the German market.

From the values obtained, the respective average values were determined and all data was visualized in a diagram (see figure 17). For reasons of confidentiality, this does not contain any numerical data.

<sup>&</sup>lt;sup>196</sup> Cf. figure 13

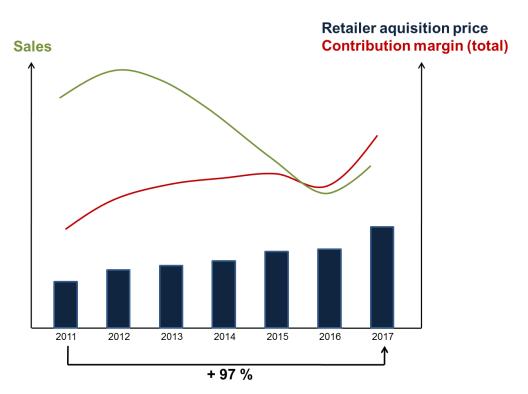


Figure 17 Overview of the sales of wheel balancing weights for the years 2011-2017, the associated dealer prices and contribution margins

Source: Own illustration; Database: Parts prism system evaluation

As the diagram illustrates, the established thesis has been confirmed. Sales of car balancing weights fell by 30% between 2011 and 2017. In the same period, the dealer price has increased by 97%, and thus almost doubled. The loss of sales could be offset by the strong increase in retailer prices, resulting in a slightly increased contribution margin over the years.

Nevertheless, it can be deduced from the graph that, despite the slightly higher contribution margin compared to 2011, there is a considerable additional potential for sales of balancing weights and thus a correspondingly high contribution margin potential. This should be realized by the application of new marketing approaches<sup>197</sup> in the future.

In order to be able to carry out a valid estimation of the potential, three separate approaches for determining the sales potential are presented below.

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<sup>&</sup>lt;sup>197</sup> Cf. chapter 4 Possible marketing approaches

#### 1. Estimation of market share via MRA

The methodology for determining market share according to MRA, which was already presented in chapter 2.4, is subsequently applied in practice, taking into account the premises of labor cost.

The following figures show an example calculation to determine the market share for the assortment of balancing weights.

Number of sold service hours: 10.000h

1 time unit = 5 min

Time units needed per wheel: 1 Weights per wheel: 2

10.000h = 600.000min

600.000 min / 5 min per wheel = 120.000 wheels

120.000 wheels x 2 weights/wheel = 240.000 weights

Figure 18 Sample calculation for determining the balancing weights used in the workshops

Source: Own illustration

Mercedes-Benz wheel balance weights sold ex GLC:

Wheel balance weights used at dealerships:

10.000 pcs. 240.000 pcs.

Market share:

10.000 pcs./240.000 pcs. x 100% = 4,1%

Figure 19 Exemplary market share calculation

Source: Own illustration

Analogous to this example calculation, the market share for balancing weights in the Spanish market was estimated. The corresponding calculation showed a market share of 15%, for the year 2017.198 As a result, the market share can be used to derive significant sales potential for the Spanish market and other European markets. Due to the limited time frame of this Thesis as well as missing available data from these markets, these could not be further investigated in detail.

#### Performance Analysis

In the performance analysis, the number of balancing weights sold via GLC is divided by the vehicle inventory of the respective country and multiplied by one

<sup>198</sup> Specific figures that form the base for the calculation cannot be presented within this Thesis for reasons of confidentiality

#### thousand.

This gives the number of balancing weights sold per country and one thousand vehicles and can thus draw standardized comparisons between different countries. <sup>199</sup> Within the defined scope of investigation, the analysis was limited to the top six markets, with the German market serving as the reference market due to its highest performance value (around 300 parts per 1000 vehicles). Using an Excel spreadsheet, three scenarios have been presented with increases in the sales levels of balancing weights of the remaining five markets to the performance levels of 150, 200 and 250 parts per thousand vehicles.

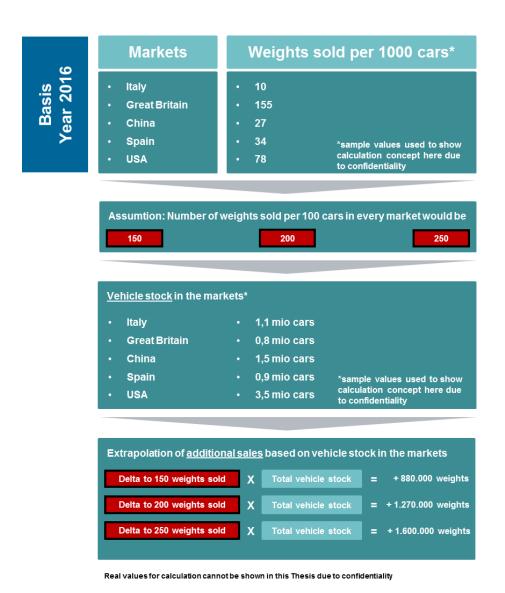


Figure 20 Calculation overview for extrapolated additional sales of weights Source: Own illustration; Database: System evaluation

<sup>199</sup> Cf. figure 20

When extrapolated to the country's fleet of vehicles, this results in an increase in sales of around 880,000 parts, with a level increase to 150 parts, or of around 1.27 million parts with an increase to 200 parts and up to 1.6 Million parts with a level increase to 250 parts.

These increases can be achieved by marketing measures such as price reductions or assortment adjustments<sup>200</sup> and concretely illustrate the sales potential existing in the market for the assortment of wheel balancing weights.

#### 3. Analysis of external procurement

Following the definition of the customers of the balancing weights and their preliminary analysis, it turned out that the share of external procurement<sup>201</sup> of parts in the assortment for balancing weights is very high. Therefore, in the next step, an external procurement reference analysis was carried out for the assortment of balancing weights in the American market. This market is particularly suitable for this analysis due to its high Mercedes-Benz vehicle fleet<sup>202</sup> and the associated high spare parts sales. For this purpose, the sales of the balancing weights sold by Mercedes-Benz<sup>203</sup> were compared to the total sales of all NON-Mercedes-Benz balancing weights in the USA listed on the customer invoice.<sup>204</sup> This analysis showed that NON-Mercedes-Benz Balancing Weights generated around 15 times more revenue than Mercedes-Benz OEM parts.<sup>205</sup> As a result, only about 6% of the revenue in the assortment of balancing weights is made with Mercedes-Benz parts. Dealerships and authorized service partners have an external purchasing share of 94%, again highlighting the attractiveness of a potential increase in market share for the realization of further sales potential in this segment.

<sup>200</sup> Cf. in detail chapter 4 possible marketing approaches; Cf. also chapter 5 Recommendations for action

<sup>&</sup>lt;sup>201</sup> External procurement refers to the purchase of spare parts at independent part retailers (for example wholesalers such as Würth)

<sup>&</sup>lt;sup>202</sup> Cf. figure 8

<sup>&</sup>lt;sup>203</sup> The figures are derived from parts prism, a web-based reporting and analysis tool for the After-Sales business.

<sup>&</sup>lt;sup>204</sup> The data is derived from an company-internal system report from the US

<sup>&</sup>lt;sup>205</sup> Exact figures are not mentioned here for reasons of confidentiality.

In addition to the described potential for increasing sales, there is also potential with regard to the purchase price of the balancing weights at the supplier Hofmann. Increased sales volumes allow economies of scale to be used, resulting in lower purchase prices.

The three methods presented in the context of the assortment analysis point out that there is a clear sales and thus contribution margin potential for the assortment of balancing weights. Nevertheless, all methods must still be verified in the future and extended to other markets as soon as the required data is available.

## 3.4 SWOT analysis

In the following SWOT analysis, the insights gained from the environmental and company analysis are summarized and linked together.

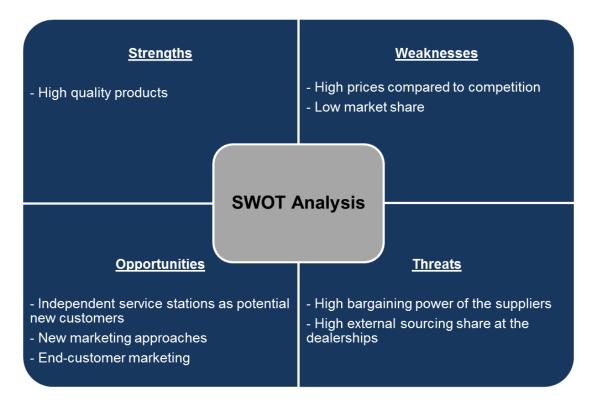


Figure 21 SWOT analysis for the assortment of wheel balancing weights Source: Own illustration

The preceding investigations have shown that the wheel balancing weights offered by Mercedes-Benz are high quality products. In comparison to the direct competition offered by the wholesalers, they are substitutable without any effect on quality.

High prices in comparison to competition and an overall low market share form the main weaknesses identified in the SWOT analysis.<sup>206</sup>

The need for new marketing approaches and an efficient end-customer marketing could be identified as opportunities within the business area. Moreover, independent service stations should be targeted as potential new customers for MB balancing weights via sales over the counter.<sup>207</sup>

The investigated business area is mainly threatened by the high bargaining power of the manufacturers and suppliers as well as the high external sourcing share at the dealerships, which mainly results from the substitutability and high prices of the balancing weights.

Summarized, it can be concluded that the assortment for balancing weights is severely endangered by competitors, as they can sell their parts to the Mercedes-Benz workshops at significantly better terms and with less handling for dealers.

From the results of the analysis, the marketing approaches presented in chapter 4 can be derived, which enable the realization of the potentials identified in the actual analysis. In addition, the findings also serve to provide recommendations for action in chapter 5 that can function as a guide to the company's future strategic alignment regarding successful marketing strategies in the field of balancing weights.

<sup>&</sup>lt;sup>206</sup> Cf. chapter 3.2.3 and chapter 3.3.2

<sup>&</sup>lt;sup>207</sup> Cf. figure 3

## 4. Possible marketing approaches

This chapter presents possible marketing approaches for increasing sales in the assortment group of balancing weights. These are discussed in terms of the marketing mix and its four areas: product, pricing, placing and promotion.<sup>208</sup>

Finally, subchapter 4.5 will give a brief overview about selected competitor's marketing approaches used in After-Sales, which may be adapted by Daimler AG after further feasibility testing.

The following figure illustrates the marketing approaches identified in the context of this Master's Thesis, the detailed implementation of which is described in the succeeding subchapters.

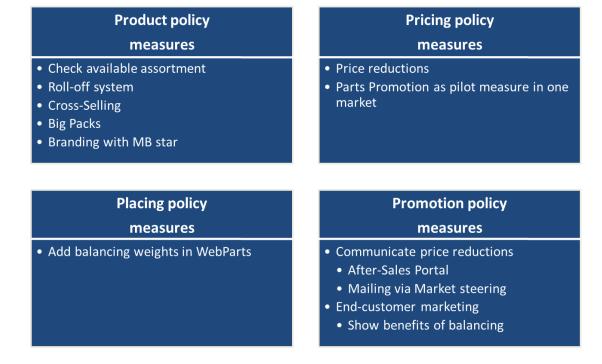


Figure 22 Presentation of the marketing mix

Source: Own illustration

The marketing approaches clarify that despite the weaknesses and threats that were discovered in the course of the SWOT analysis, there is still high potential for an improvement in the business area.

<sup>&</sup>lt;sup>208</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 22

## 4.1 Product policy

The product policy can contribute significantly to an increase in sales through an attractive design of the product as well as through continuous innovation and product differentiation measures.<sup>209</sup> The developed product policy measures can be divided into two directions: forming product bundles<sup>210</sup> and generating product innovations<sup>211</sup>.

For example, the formation of balancing weight assortments, i.e. a compilation of balancing weights of different weight classes<sup>212</sup> according to individual customer needs would be economical as it generates handling benefits for the workshops and reduces handling costs at the logistics center.



Figure 23 Set of balancing weights of different weight classes offered by the competitor Würth

Source: Würth Online Shop (ed., 2018)

According to a request from a Mercedes-Benz authorized service partner, there is also a marketing potential with regard to the roll-off system for balancing weights already offered by the competitors (see chapter 3.2.3). This makes it easier to handle the balancing weights in workshop operation and

<sup>&</sup>lt;sup>209</sup> Cf. Meffert, H. / Burmann, C. / Kirchgeorg, M. (2015), page 397

<sup>&</sup>lt;sup>210</sup> A bundle of products is the combination of several individual products into one product set. Ever according to embodiment, different product bundle types can be distinguished. Cf. Pepels, W. (2013), pages 608ff

<sup>&</sup>lt;sup>211</sup> A product innovation in the present Thesis is understood as a generation of new products, which have not yet been offered within the existing parts range.

<sup>&</sup>lt;sup>212</sup> Cf. figure 23

thus contributes significantly to customer benefit. From this, a correspondingly high sales potential for this system can be derived.

Furthermore, a cross-selling with so-called tire mounting pastes, which are used for mounting the tire on the rim, as well as tools or tire bags are to be examined with regards to their sales potentials.<sup>213</sup>



Figure 24 Potential cross-selling products (mounting paste and cutting knives for adhesive weights) offered by the competitor Würth

Source: Würth Online Shop (ed., 2018)

Further product marketing approaches result from the compilation of big packs, i.e. large packs that are offered to the dealer at a discounted price. Like the roll-off system, they are already being used in the workshops of some authorized service partners (see Appendix A).

In addition, a re-launch of the marking of the balancing weights in the form of an imprinted Mercedes-Benz star is to be considered for the future (see Appendix B). As a result, the quality impression of the balancing weights and thus the attractiveness of the product can be further increased.

## 4.2 Pricing policy

An examination regarding the respective purchasing terms and conditions for the dealerships should be made for the spare part assortment of balancing

<sup>&</sup>lt;sup>213</sup> Cf. figure 24

weights. With the help of a targeted conditions policy, the dealership loyalty can be stabilized and an increase of the sales volume on the basis of monetary incentives for the dealer can be achieved. For this purpose, the instruments of discounting<sup>214</sup> and bonus systems<sup>215</sup> should be used.

Currently, the discount applied generally is the same for all spare parts of the total product assortment in After-Sales offered by the Daimler AG.

Some assortment groups like factory-standard parts – on which Daimler has a de facto monopoly position - may only be purchased via the Mercedes-Benz channel. For these assortment groups, low discounts are an option in order to achieve an EBIT improvement from the point of view of Daimler AG.

However, the actual analysis in chapter 3 revealed that especially the part group of balancing weights is exposed to high competitive risks and that the effective part prices for Mercedes-Benz balancing weights are very high in relation to those of competitors. An increase in the sales volume can thus also be realized via a corresponding discount of the current parts prices. Thus, a differentiated discounting of the different parts assortment groups is appropriate, which should be adapted to each groups' respective market position.

A corresponding model test could be piloted as parts promotion<sup>216</sup> with reduced prices in a closed market. The American market is suitable for this because the external sourcing share is particularly high here.<sup>217</sup> Thus, price reductions could create incentives for dealers to buy their balancing weights from Mercedes-Benz in the future.

The amount and scope of benefits must be decided in cooperation with pricing<sup>218</sup> in the United States.

<sup>&</sup>lt;sup>214</sup> Discount is a rebate based on a single order in the form of a percentage or absolute discount on the retail price, which is granted immediately upon purchase of the product. Cf. Meffert, H./Burmann, C./ Kirchgeorg, M. (2015), pages 544f

<sup>&</sup>lt;sup>215</sup> Bonus is a rebate based on the turnover of a customer within a period and thus represents a subsequent discount and aims at the long-term commitment of the customer. Cf. Meffert, H./Burmann, C./ Kirchgeorg, M. (2015), page 545

<sup>&</sup>lt;sup>216</sup> Parts promotion describes marketing activities for a certain segment / group of parts in After-Sales

<sup>&</sup>lt;sup>217</sup> Cf. chapter 3.3.2

<sup>&</sup>lt;sup>218</sup> Pricing is a department of Daimler AG responsible for determining a price

A bonus system in the spare parts business for Mercedes-Benz authorized service partners, which grants subsequent benefits to the workshops for a certain period depending on their monthly sales volume, could also further incentivize those partners to buy via the Mercedes-Benz channel. A corresponding integration of wheel balancing weights into the bonus program represents a further marketing approach to increase the overall sales and must be examined accordingly with regard to a possible implementation.

## 4.3 Placing policy

Another marketing approach in the assortment of balancing weights consists in the utilization of placing-political potentials that are already existent within the company.

So far, the distribution of Mercedes-Benz balancing weights is limited to authorized service partners and dealerships of Daimler AG. However, an expansion of sales to independent workshops allows additional sales potential that has not yet been fully exploited, to be realized. Via the online tool WebParts operated by Daimler AG, independent workshops can order Mercedes-Benz genuine parts online via selected dealerships and authorized service partners. An active integration of the Mercedes-Benz balancing weights would increase their sales and thus contribute to an overall increase of sales in the After-Sales business in the long term.

Generally, the distribution channels that are available at Daimler AG can be considered as well organized. Through the nation-/worldwide dealer network and with the help of the central logistic center in Germersheim, parts can be made available for both dealerships and authorized service partners as well as the respective end customers within a short timeframe. As the actual analysis has shown, optimizations could be made in terms of unit packaging and batch sizes. Wheel balancing weights are used frequently, especially during peak seasons in spring and autumn, when customers have their wheels changed in the workshops. Limiting the available lot sizes for balancing weights in Germersheim to bulk packages would result in lower costs for

handling of the parts in the central spare parts warehouse as well as in lower purchasing costs due to higher purchase quantity.

## 4.4 Promotion policy

The presented marketing approaches and measures to increase sales can only achieve a lasting effect if at the same time a comprehensive communication to end-customers and dealerships takes place. All measures require a communicative support to convince the workshops regarding the respective product advantages of the present assortment. For this purpose, a corresponding advantage argument must be created in the first step. For the Mercedes-Benz authorized service partners, it must be clear why it is advantageous for them to purchase the parts of this product range via the Mercedes-Benz channel. The following section outlines a possible chain of reasoning that can be used to communicate convenience.

The price cuts discussed in chapter 4.2 are ineffective if the dealerships are not informed about it and continue using parts bought from the competition as a consequence. Conceivable media for such price communications would be, on the one hand, the Daimler AG After-Sales portal<sup>219</sup> and, on the other, targeted mailing<sup>220</sup> of the information to the market control.

In order to increase the sales of balancing weights, targeted end customer marketing is also required. The customers should be addressed directly when visiting the workshop and made aware of the importance of balancing. This can be done by setting up a billboard with a small display<sup>221</sup> in which a marketing spot<sup>222</sup> makes the customer aware of consequences of imbalanced tires.

<sup>&</sup>lt;sup>219</sup> The After-Sales Portal enables the OEM to post information that can then be retrieved online by the dealerships / service partners.

<sup>&</sup>lt;sup>220</sup> Mailing describes the sending of emails with specific information, e.g. about price changes, to the markets.

<sup>&</sup>lt;sup>221</sup> Cf. figure 25

<sup>&</sup>lt;sup>222</sup> Short film that draws customers' attention to a product or its advantages



Figure 25 Exemplary counter display for tire and wheel sales promotion in the workshop Source: Idee-Sign (2018)

This leads to a better understanding of the customer for the importance of the balancing process when changing tires, so that additional sales potential can be realized.

Moreover, a stand at the biennial Automechanika<sup>223</sup> trade fair can serve to particularly draw attention to the product advantages of genuine Mercedes-Benz spare parts in general and thus also to the investigated group of wheel balancing weights.<sup>224</sup>



Figure 26 Mercedes-Benz exhibition stand at Automechanika Source: Blaufisch (2010)

<sup>&</sup>lt;sup>223</sup> Automechanika is the world's leading trade fair for the automotive service industry and takes place in Frankfurt, Germany.

<sup>&</sup>lt;sup>224</sup> Cf. figure 26

## 4.5 Competitor's marketing approaches in After-Sales

Subsequently, a brief overview about selected, disruptive competitor's marketing approaches used in After-Sales will be given. The competition analysis was mostly carried out through online research.

The **BMW Group** is putting a clear focus on digitalization of their After-Sales business. In 2016, the group launched a new After-Sales online shop, where both dealerships and authorized service partners as well as end-customers can shop for spare parts. While similar eCommerce<sup>225</sup> systems are available throughout most OEMs on the market, BMW's model offers a unique opportunity of selecting only relevant parts to the respective car owned by the customer, thus reducing complexity significantly.<sup>226</sup>

In addition to that, BMW's marketing department also uses big data evaluation services provided by the start-up VEACT. Based on customer data and their analysis, the company provides participating BMW dealerships with tailored modules such as customer vitality analysis, using billing data from the workshops and automated marketing campaign success evaluations through an easy-to-use software tool.<sup>227</sup>

As part of their "economy service program", that is targeting customers driving cars that are at least four years old, **Volkswagen** is offering and actively promoting so-called "economy parts and packages". Besides an overall service adjusted appropriately to the vehicle's market value, economy parts are specially developed, easily adapted series parts. The range includes common wearing parts such as brake pads and discs, silencers, starter batteries, pollen filters, wiper blades and shock absorbers.<sup>228</sup>

Those programs help to win back price sensitive customer groups like owners of used cars into the OEM's dealerships, allowing for additional cross-selling of parts and services.

<sup>&</sup>lt;sup>225</sup> eCommerce as a term summarizes all segments of electronic business, which involves the purchase and sale of goods and services via electronic links. Cf. Gabler economic encyclopedia (2018), term: eCommerce

<sup>&</sup>lt;sup>226</sup> Cf. BMW Group (2016)

<sup>&</sup>lt;sup>227</sup> Cf. Autohaus (2018)

<sup>&</sup>lt;sup>228</sup> Cf. Volkswagen (2018)

**Tesla**, known as one of the industry's most disruptive car manufacturer, follows an approach similar to BMW when it comes to their After-Sales business. Their entire focus is based on digitalization and online services, starting from the opportunity to actually buy the car online to over-the-air software and feature updates. Compared to standard combustion engine cars, Tesla's electric vehicle fleet does not require any traditional oil changes, filter or spark plug replacements<sup>229</sup>, which also has an impact on sales contribution of this highly profitable After-Sales part business. To compensate for that, Tesla is offering its customers so-called maintenance plans, which are basically contracts covering all necessary service and repair works for a certain time period at a fixed price. This helps to gain planning security for the company on the one hand and to also bind customers to dealerships on the other.

After facing several customer complaints regarding service performance in the past, the company is also offering an in-app solution to escalate an unsolved service issue directly to a company executive. While this opportunity might increase problem solving and thus customer satisfaction in the first place, it will also be very costly in terms of necessary employee man hours to keep that service running, especially looking at the growing numbers of Tesla vehicles in the market.<sup>230</sup>

Abovementioned competitor's marketing strategies may support and complement the company-internal approaches that were worked out in the course of this Thesis. Although Mercedes-Benz also offers various eCommerce systems for parts sales as well as price reductions on services for older cars already<sup>231</sup>, a further investigation of the selected competitor's approaches regarding a possible implementation or adaption within the After-Sales business of Daimler AG is recommended.

<sup>&</sup>lt;sup>229</sup> Cf. Tesla (2018)

<sup>&</sup>lt;sup>230</sup> Cf. Inc. (2017)

<sup>&</sup>lt;sup>231</sup> The so-called Mercedes-Benz service advantage card offers a price advantage of up to 20% for selected maintenance work as well as for the necessary original parts. The card is only offered to customers owning older models of Mercedes-Benz cars (10+ years)

#### 5. Recommendations for action

The analysis results elaborated in the context of this Master's Thesis can be further verified in the future by an extension of the investigation scope. In addition to the analysis already carried out for the Cars division, it makes sense to also consider the VAN and truck divisions. In principle, like in the passenger car segment, similar conditions apply to both divisions from which an analogous competitive situation can be derived. Consequently, there are also considerable potentials for these sectors, which should be revealed by the analytical methods presented in this Master's Thesis.

At the same time, the market share assessment carried out by way of example for the Spanish market can be extended to other countries as soon as a suitable database is available on the system side. It can be assumed that the external sourcing share in all European markets is very high and thus there is a large sales potential for Mercedes-Benz balancing weights.

In parallel to the extension of the scope of investigation to different company sectors and markets, one should also try to adapt the methodology described within this Thesis to other part assortments within the After-Sales segment, such as small parts (screws etc.), as similar results with regards to market share and pricing seem plausible at present.

The visit of authorized service partner has shown that the handling effort of the Mercedes-Benz balancing weights is very high compared to the competition.<sup>232</sup> This knowledge will have to be verified through surveys of additional service partners and dealerships in order to identify further marketing approaches and to incorporate the concrete needs of the workshops into product management.

Furthermore, future price reductions should be presented in a business case<sup>233</sup> to assess their consequences for the company. In general, there is certainly a purchase price potential with regard to the pricing of the balancing weights, which results from the manufacturer's increasing purchasing volumes

<sup>233</sup> Considering the economic consequences of a decision Cf. Gabler economic encyclopedia (2018), term: business case

<sup>&</sup>lt;sup>232</sup> Cf. chapter 3.2.1 Customer perspective

following-on from the price reductions. This potential should be realized in cooperation with the purchasing department of Daimler AG.

Moreover, looking at the product management structure within Daimler AG, the formation of a so-called interdisciplinary product team for each type/assortment of spare parts must be initiated. A product team consists of specialists (for example, purchasing, communication, market support, pricing, and logistics). The product team should serve to support the development of the product management as well as to ensure market-driven processing through their interdisciplinary point of view.

In addition to the recommendations for action listed so far, the use of the balancing system offered by 3M<sup>234</sup>, which is currently undergoing technical testing after consultation with the purchasing department, must also be examined in the future. An adaptation of this automatable system may allow further cost savings, especially in the field of in-plant tire assembly.

Finally, in addition to the previous remarks, the following strategic recommendation is given. The currently valid BER 461/2010 expires on May 31, 2023. The EU Commission envisages a specific regulation for the aftersales market beyond this reporting date. To this end, the relevant developments with regard to a possible design of this ordinance should be monitored on an ongoing basis, so that a corresponding alignment of the product assortment of spare parts can take place proactively.

<sup>&</sup>lt;sup>234</sup> Cf. chapter 3.2.4 Possible substitutes

## 6. Summary of the core results

Within the defined scope of investigation, the following results can be summarized from the analyzes carried out for the assortment of wheel balancing weights:

The strategic actual analysis has shown that the balancing weights distributed by Mercedes-Benz can be categorized to be part of a highly competitive segment. This is primarily attributable to the high bargaining power of the suppliers and strong competitors established on the market whose price level is significantly lower than that of Daimler AG. The high external sourcing share of the Mercedes-Benz dealerships and authorized service partners can be attributed to the higher pricing of Daimler AG for the assortment of balancing weights in addition to a simpler parts handling for dealerships when buying the balancing weights from external wholesalers.

By means of the potential and market share analyzes, considerable sales and thus also contribution margin potential could be identified. In addition to the Mercedes-Benz workshops as primary customers, it will also be possible to supply independent workshops with balancing weights in the future, generating additional sales. These potentials can be realized by the product managers on the basis of the presented marketing approaches through new marketing concepts, assortment adjustments and price reductions.

In addition, the listed recommendations suggest an extension of the scope of investigation to other branches of the Daimler AG as well as to different markets and part assortments. To increase overall sales and to regain dealerships and authorized service partners as customers, a price repositioning for this part assortment is suggested.

In general, the conducted analyzes and the corresponding measures derived from this provide an important approach for the future strategic direction and planning of the product management within the company. Appendix

## **III** Appendix

# List of appendices

Α	Use of big packs for balancing weights at the dealership	.VIII
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# A Use of big packs for balancing weights at the dealership



Source: Own photo

# B Older clamping weight with embossed Mercedes-Benz star



Source: Own photo

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