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## After-sales service as a driver for word-of-mouth and customer satisfaction: insights from the automotive industry

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### Abstract

This study aims to study the effect of the after-sales service experience and its quality on overall customer satisfaction and word-of-mouth (WOM) within the automotive industry. Based on the additional marketing mix elements required for service marketing (people, process and physical evidence, respectively), we investigated the effects of after-sales service experience quality on both satisfaction and WOM. Data were collected through a survey of 210 customers in the automotive industry. Respondents were asked to evaluate several items related to their after-sales service experience for car maintenance services provided by authorised dealers. Data were analysed using a linear regression model and R software.

The results showed evidence of a relationship between satisfaction and the desire to recommend, and supported the fact that after-sales service satisfaction represents an antecedent of consumer satisfaction and WOM. However, not all elements of the after-sales experience had a significant impact on the two output dimensions (satisfaction and WOM). This might lead managers to consider which of the main elements of the after-sales service consumers consider more when evaluating their satisfaction with the dealer and what elements they are more willing to talk to other people about. This study contributes to enriching the existing knowledge regarding after-sales experiences and the impact of this phase of the consumer's decision process on their overall satisfaction and the related WOM.

Key words: after-sales, service quality, customer satisfaction, WOM, automotive industry

### Introduction

One general trend in the automotive industry is that products become more of an enabler for beginning relationships with customers. Car sales become a reason to establish relationships, and various services help companies maintain them in order to ensure additional income. However, the prolonged economic downturn is driving a greater number of original equipment manufacturers (OEMs) to place renewed attention on the after-market as consumers put off new purchases and hold on to their cars longer (Accenture 2010). New car sales growth is slowing, but a more promising and less obvious opportunity is the after-sales market, including that for spare parts, service, used car sales and financing, which serves as an integral component of brand-building and sales management. New passenger car registrations have continued on the generally downward trend that first appeared in 2007; since that year they have fallen from 15.6 million to 12.0 million, a decline of 23%. This trend reflects the close relationship between vehicle sales and the economic climate. Accordingly, it is most pronounced in southern Europe, where vehicle sales have decreased by 60% in Spain and 45% in Italy since 2007 (ICCT 2013). The current business environment is changing dramatically and forcing automotive

companies to find sustainable strategies to preserve and increase their market share in a challenging after-sales market (Coyle et al. 2011, p. 6).

To enable dealer excellence in servicing customer needs, service operations require complex capabilities in terms of tools, processes and systems, with no or limited revenue opportunity for OEMs. Despite the significant financial and customer satisfaction impacts of the after-sales business, OEMs have historically given little attention to after-sales business and done little to improve the performance of their after-sales functions (Accenture 2010). For a car manufacturer in the after-sales business, the customer 'dealer' is often bound by a contract, but the competition is growing fiercely, and cheaper and faster after-market providers will become a real threat in the future (Thomas & Esper 2010). Many automotive companies constantly expand their service business and scope: traditional after-sales maintenance and repair services are supplemented with finance and insurance services and re-formulated into service bundles (Godlevskaja, Iwaarden & van der Wiele 2011). Additionally the importance of the after-sales market has been stated by Hecker et al. (2010, p. 10), who believe that it will be the most enduring and important business for car manufacturers in the future. In summary, while profit margins for new car purchases are low, after-sales service allows potentially high returns when dealers and OEMs provide tailored offers and customised services to customers. In an automotive context, after-sales service becomes a vital source of brand-building, as it represents continuous contact between car producers and customers through their authorised dealer networks during the product life cycle.

This paper contributes to the literature by investigating the importance of after-sales service quality in achieving high levels of customer satisfaction and positive WOM. This study is also important to practitioners, since measurable awareness of customer perception of after-sales service based on intangible elements can lead to changes in firm profitability and customer loyalty. This can be achieved through the determination of what has been evaluated as right or wrong from the customer's perspective, and what should be modified. Moreover, after-sales services are taking a substantive position in overall satisfaction with the augmented product offered.

The paper opens with a selection of literature on after-sales service and the impact of service elements on customer satisfaction and WOM. Next, the methodology will be described and the main findings highlighted. Finally, the conclusions, limitations and implications of the study will be discussed.

## Literature Review

### After-sales experience in service marketing

In the field of product services, the outstanding classification is based on whether the service (and the transaction) is offered before, during or after the sale (Lalonde & Zinszer 1976). After-sales service has been widely used to describe services that are provided to the customer after products have been sold or delivered. Support entails all activities undertaken by service support providers to ensure that consumers continue to enjoy trouble-free use of the product over its life cycle. An after-sales support strategy associated with a product may include elements such as warranty provision, extended service contract provision, availability of repair services, maintenance, spare parts (management), loan availability, toll-free phone support and a returns policy. Some scholars have shown that the revenue generated from the provision of after-sales service

and spare parts sales exceeds three times the value of the initial purchase (Saccani et al. 2007).

Levitt (1983) sees the initial sale of a product only as the start of a seller–buyer relationship; a point at which the after-sales function of a company becomes crucial. Various terms are used in the literature for what here is labelled ‘after-sales service’. For example, Goffin and New (2001) list the following: customer support, product support, technical support and services. Several other definitions of after-sales service can be found in the literature (La Londe et al. 1977; Sterling & Lambert 1989; Loomba 1996; Johansson & Olhager 2004; Kurata & Nam 2010). Building on these definitions, and keeping a general perspective, we can state that after-sales services for manufactured goods encompass the set of activities taking place after the purchase of the product, devoted to supporting customers in the usage, maintenance and/or disposal of the product. Earl and Khan (1994) classify after-sales service as a business network process, since it has a direct impact on business performance and on the creation of competitive advantage. They might provide complementary services (e.g., field assistance and customer care) as well as competing services (e.g., field assistance provided by sales points and repair centres or by authorised and unofficial assistance networks). Moreover, the diffusion of the Internet and other technologies ‘expands the number and variety of customer touch points and service delivery channels’ (Hill et al. 2002), and, when looking at the supply chain structure, makes the picture even more complex.

Several scholars suggest that well-executed service recoveries increase perceptions of customer satisfaction, build relationships and prevent customer defections (Keaveney 1995), whereas poorly executed recoveries can decrease a customer’s loyalty to a firm (Mattila 2004). Well-handled service recovery considerably increases the association between customer satisfaction and both trust and commitment to the service provider (Tax, Brown & Chandrashekar 1998). The level of after-sales service is not only critical for a customer’s decision process, but is also a source of significant revenue for the dealer; furthermore, after-sales service offers differentiation and positioning in the competitive context (Russo & Cardinali 2012).

Manufacturers may make provisions for after-sales service support either by offering it directly at the plant, through their own network of service centres, through channel intermediaries, through authorised independent third-party service centres or by some combination of these organisations (Loomba 1996; Russo, Confente & Omar 2013). Product-based differentiation in the automotive industry is increasingly difficult and firms cannot compete on products alone. Many automotive companies have realised enormous growth opportunities in the service area. One additional trend in the automotive industry is changing customer requirements for services, growing service complexity and the need to customise services (Godlevskaja, Iwaarden & Wiele 2011; Gaiardelli, Songini & Saccani 2014). Thus, it is reasonable to assume that the significant interactions during the after-sales process provide a basis for customer satisfaction. Increasingly, after-sales customer service is becoming the order-winning criterion for most firms, and is now being recognised as an important research priority.

#### The impact of service quality on customer satisfaction and WOM

Customer satisfaction is defined as the ‘customer fulfilment response’, which refers to customers’ post-consumption evaluation of whether the service provided was at a satisfying level of consumption-related fulfilment, or either under- or over-fulfilment (Oliver

1997). Operationally, satisfaction is similar to attitude, as it represents the sum of several attribute satisfaction judgements (Maxham III 2001). From this perspective, satisfaction is a transaction-specific measure (Bitner 1990; Parasuraman et al. 1988). Others view service-related satisfaction somewhat differently. Cronin and Taylor (1992) define satisfaction as a cumulative evaluation and an outgrowth of service quality. In their view, satisfaction represents a global judgement rather than a transaction-specific measure. Satisfaction is also thought to have an affective element that is experiential and probably is most appropriately assessed after consumption (Ostrom & Iacobucci 1995).

Our perspective supports the large volume of research confirming the fact that service quality is an antecedent of consumer satisfaction (Cronin & Taylor 1992; Dabholkar et al. 2000). A further step in our study is to understand the impact of satisfaction on WOM. WOM is especially important for service providers whose offerings are largely intangible and experience- or credence-based. For these services customers rely heavily on the advice and suggestions from others who have experienced the service (Kinard & Capella 2006; Confente 2014). There is evidence from the literature supporting the relationship between satisfaction and the desire to recommend (Parasuraman et al. 1988; File et al. 1994; Shemwell 1998; Söderlund 1998; Sivadas & Baker-Prewitt 2000, Hennig-Thurau et al. 2002; Chaniotakis & Lympelopoulos 2009). In fact, potential consequences on customer behaviour from a very high or low level of satisfaction might be:

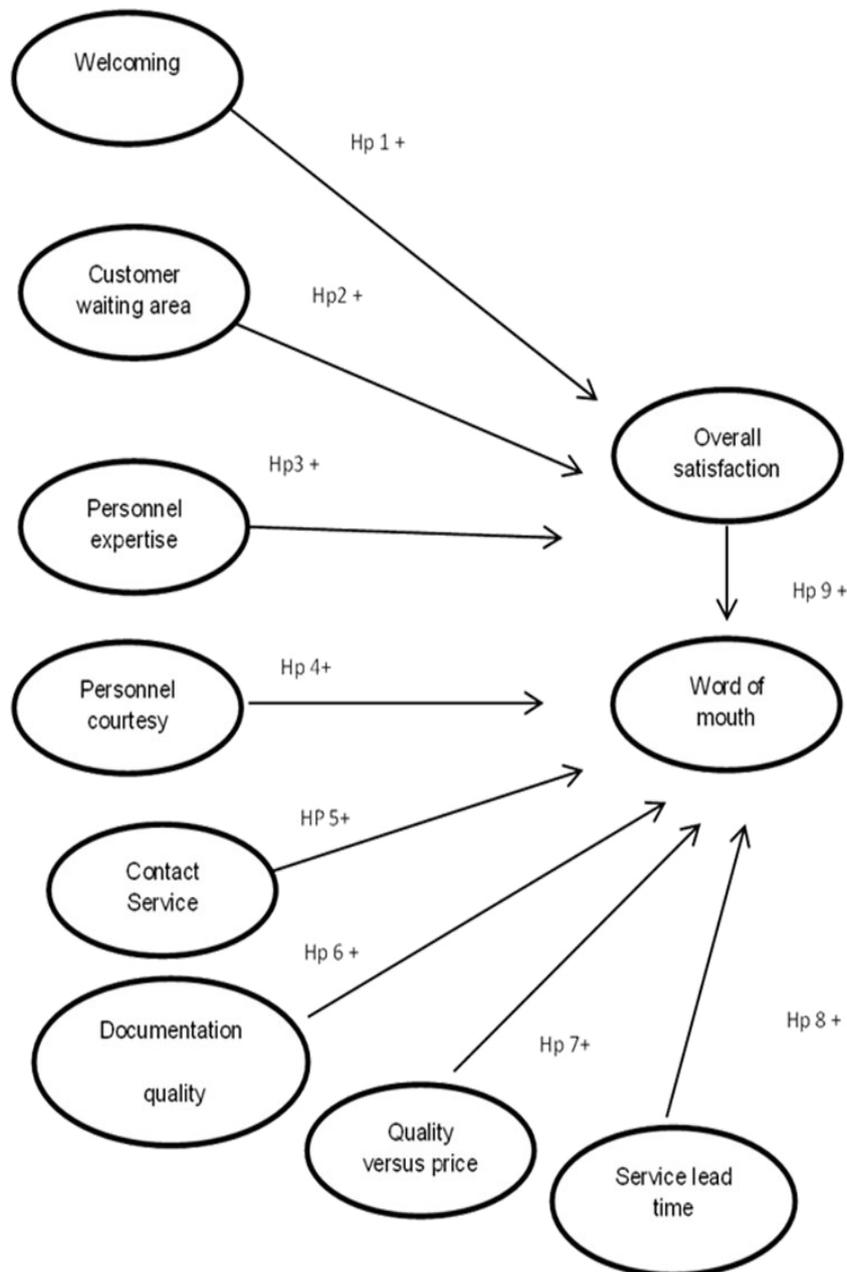
- complaining behaviour
- positive/negative WOM
- repeat purchasing and loyalty (Szymanski & Henard 2001).

More specifically, positive comments from satisfied customers can increase purchases, while negative comments from unsatisfied customers can decrease purchases (Ennew et al. 2000). Companies need to enhance customer satisfaction in order to lead clients to repeat their purchases and to positively recommend these products and services to other potential customers. By doing so, these behaviours might benefit in terms of both retention and acquisition (Gremler & Brown 1996). After-sales service offers differentiation potentials that a producer can use to strengthen their brand equity (Cavalieri et al. 2007).

While there are several studies investigating the effect of service quality on satisfaction and the impact of satisfaction on WOM, there is limited research related to the effect that service quality dimensions have on satisfaction and WOM (Arasli 2005; Macintosh 2007; Chaniotakis & Lympelopoulos 2009; Ferguson et al. 2010). Even fewer articles refer to the direct relationship between service quality and behavioural intentions, such as WOM (Zeithmal et al. 1996; Olorunniwo et al. 2006, Ng et al. 2011). In addition, these previous studies have considered whole service provision, such as banking services, travel agency experiences or healthcare treatments, not the after-sales experience, an integrated phase subsequent to the purchase of tangible goods. Hence there is little research into determining if the intangible elements in the after-sales offering impact on customer satisfaction (Hypothesis A) and on customer's willingness to spread WOM (Hypothesis B).

Figure 1 shows the research model and hypotheses. Each item and scale will be described in the Research Methods section.

Figure 1. Research model and hypotheses



## Research Method

### Data sample and collection

Data collection focused on after-sale service evaluations as by customers of the automotive industry. The aim was to explore the importance of each of the intangible after-sales elements, such as the role of personnel, process and physical evidence, and their impact on overall customer satisfaction and WOM. The automotive industry was selected for several different reasons. The first is the complexity of the products in this market, which drives customers to seek advice from trustworthy sources. Secondly, the European automotive market has faced a crisis over the last decade, and the number of new cars sold has halved (UNRAE 2013). Thirdly, the block exemption regulation has required European manufacturers to undertake performance improvements. Changes that manufacturers have been confronted with since this regulation came into force in 2003

include sharply reduced control over their distribution networks, as well as increased competition in the parts and after-sales businesses.

We chose to investigate after-sales services in one of the largest authorised car dealers in the north-east of Italy, a country where there is the highest number of cars in terms of density. However, due to the automotive crisis, the country's cars are ageing and need increased maintenance. Under these circumstances, car maintenance services become an effective way for car dealers to increase customer loyalty and revenue beyond car sales. Assistance centres are responsible for repairing and maintaining cars, and several channels can be identified: those authorised through contractual agreements to sell and repair (dealers), or to repair only (authorised garages), generic centres (independent garages), specialised services (tyre repairers, electrical workshops etc.), fast fitters (independent or authorised) specialising in handling minor repair work and the soft franchise network (independent, owned by a component supplier or by a distributor). In most cases, only dealers, and to a minor extent authorised garages, maintain direct and continuous relationships with the manufacturers (Gaiardelli, Sacconi & Songini 2007). In our case we collected data from a fully authorised after-sales service provider totally integrated with the car dealer. Data was collected through an on-site self CASI (Computer Assisted Self-Interview) survey using a tablet tool. This was useful for collecting real-time feedback a few minutes after the provision of assistance services.

Questions were developed with a focus group from the car dealership that included the dealership personnel, two researchers and ten customers. The goal was to summarise in a short survey the main activities and services that can be identified in the after-sales experience. A ten-question survey was finally structured. These questions were divided into two main sections: a) demographic characteristics of respondents; and b) after-sales service items evaluated by adopting a 1–10 Likert scale (1=highly dissatisfied to 10=highly satisfied) and two questions about overall satisfaction (1=highly dissatisfied to 10=highly satisfied) and the willingness to recommend the company (1=highly disagree to 10=highly agree).

Respondents were asked to evaluate their satisfaction for the following after-sales elements. These might be labelled as being from the 'physical evidence' dimension, such as the customer waiting area (the atmosphere, colours and furniture of the area where customers receive their car assistance and maintenance services) (Hp 2a), and the documentation quality (if the documents provided to customer, such as invoices or instructions are clear and well written) (Hp 6a). Other items related to the after-sales service may fall under the 'process' dimension; for instance, welcoming activities (Hp 1a), the contact service used to order the assistance (Hp 5a) and the service lead time (Hp 8a). Finally, the 'people' dimension may play an important role for the perception of high satisfaction. In this study, this dimension is represented by personnel expertise (Hp 3a) and staff courtesy, (Hp 4a) which provide added value to the overall offering. In addition to the '3Ps' of service marketing, the perception of quality over price was included in the survey (Hp 7a) in terms of its relationship with overall satisfaction.

The relationship between these items and their impact on willingness to spread WOM were explored. The following items were considered in this analysis: welcoming activities (Hp 1b), the customer waiting area (Hp 2b), personnel expertise (Hp 3b), personnel courtesy (Hp 4b), the contact service (Hp 5b), documentation quality (Hp 6b), and quality over price (Hp 7b). A pilot survey was administered to a convenience sample of 105 customers. Later the questionnaire was administered to a convenience sample of Italian

customers. Data collection started in November 2012 and ended in December 2012. Within this time period, the car dealer counted 649 customers receiving an after-sale assistance/service. We obtained 210 completed surveys, with a return rate of 32.4%; 27.6% of the respondents were females and 72.4% males. The majority of respondents stated their age was between 35 and 64 years old (77%).

### Data analysis

The data were analysed with descriptive statistics and a linear regression model exploring the impact of the after-sales elements on overall customer satisfaction and WOM. The outcomes of satisfaction and WOM were each measured using a single item adapted from Huntley (2006). Table 1 summarises the items selected for the analysis:

**Table 1. Intangible services in the after-sales experience**

Items	Min	Max	Mean	Std. dev.
Welcoming	2	10	8.733	1.216
Customer waiting area	2	10	8.676	1.260
Personnel expertise	5	10	8.9	1.074
Personnel courtesy	5	10	9.067	1.083
Contact service	5	10	8.786	1.189
Documentation quality	3	10	8.790	1.223
Quality versus price	1	10	7.5	1.578
Service lead time	2	10	8.348	1.508
Overall satisfaction (Hp A)	4	10	8.586	1.204
WOM (Hp B)	1	10	8.576	1.453

The following regression models were elaborated, using R software:

a)

$$\text{overall satisfaction} = \beta_0 + \beta_1 \text{welcoming} + \beta_2 \text{waiting area} + \beta_3 \text{expertise} + \beta_4 \text{courtesy} + \beta_5 \text{contact service} + \beta_6 \text{documentation} + \beta_7 \text{quality} + \beta_8 \text{service lead time} + \epsilon$$

b)

$$\text{word of mouth} = \beta_0 + \beta_1 \text{welcoming} + \beta_2 \text{waiting area} + \beta_3 \text{expertise} + \beta_4 \text{courtesy} + \beta_5 \text{contact service} + \beta_6 \text{documentation} + \beta_7 \text{quality} + \beta_8 \text{service lead time} + \epsilon$$

In order to assess reliability, the internal consistencies were assessed. The normalised value of Cronbach's alpha was 0.8, in line with the minimum value of 0.7 suggested by Cortina (1993).

### Findings

All the after-sales items were perceived positively, and customers were extremely satisfied. In fact, all elements had an average mean above 8, except for quality over price, which received an average mean of 7.5–10. The item that received the highest satisfaction was personnel courtesy (M=9.06). In addition, the overall satisfaction reported by customers for their after-sales experience was very high (M= 8.586), and this was also the

case their willingness to report their experience to other people, as the likelihood to spread WOM was on average 8.576.

The first regression analysis focused on the impact of after-sales intangible elements on overall customer satisfaction (Table 2). The results showed that some of these elements positively affected the evaluation of customer satisfaction. This was the case for welcoming activities, personnel courtesy, the quality of the service over its price and the service lead time. The perception of the contact service almost reached significance at  $p=0.05$  ( These elements belong to the 'process' and 'people' 'Ps' of service marketing, while the elements belonging to the 'physical evidence' of the '3Ps' of service marketing (in our case the customer waiting area and the documentation quality), seem not to affect overall satisfaction. As a consequence, Hp 1a, Hp 4a, Hp 7a and Hp 8a are supported.

**Table 2. Regression analysis for customer satisfaction**

	Estimate	Std. Error	T Value	Pr(> T )	Hypothesis
Intercept	-0.278	0.426	-0.653	0.514	
Welcoming	0.114	0.054	2.097	0.037*	Hp 1a supported
Customer waiting area	0.070	0.044	1.600	0.111	Hp 2a not supported
Personnel expertise	0.032	0.070	0.457	0.648	Hp 3a not supported
Personnel courtesy	0.303	0.069	4.371	1.98 e-05***	Hp 4a supported
Contact service	0.095	0.052	1.814	0.071	Hp 5a not supported
Documentation quality	0.015	0.032	0.047	0.743	Hp 6a not supported
Quality versus price	0.256	0.033	7.572	1.31 e-12***	Hp 7a supported
Service lead time	0.157	0.037	4.221	3.69 e-05***	Hp 8a supported

Significance codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
 Residual standard error: 0.6383 on 201 degrees of freedom  
 Multiple R-squared: 0.7297, Adjusted R-squared: 0.7189  
 F-statistic: 67.83 on 8 and 201 DF, p-value: <2.2e-16

Regarding the impact of after-sales service on customers' willingness to recommend the company to other people, the courtesy of the personnel positively affects WOM (Table 3). In addition, the contact service plays a positive role in influencing the willingness of customers to spread positive WOM about their after-sales experience. The quality of the service compared to its price and the time of service delivery still represent the most important elements for customers. This is confirmed both for their impact on overall satisfaction and on WOM, and so Hp 4b, Hp 5b, Hp 7b and Hp 8b are fully supported.

**Table 3. Regression analysis for WOM**

	Estimate	Std. Error	T Value	Pr(> T )	Hypothesis
Intercept	-0.526	0.654	-0.804	0.422	
Welcoming	-0.018	0.083	-0.219	0.827	Hp 1b not supported
Customer waiting area	0.048	0.067	0.711	0.477	Hp 2b not supported
Personnel expertise	0.108	0.107	1.003	0.317	Hp 3b not supported
Personnel courtesy	0.270	0.106	2.541	0.011*	Hp 4b supported
Contact service	0.171	0.080	2.119	0.035*	Hp 5b supported
Documentation quality	0.009	0.072	0.013	0.989	Hp 6b not supported
Quality versus price	0.311	0.051	5.998	9.16 e-09***	Hp 7b supported
Service lead time	0.188	0.057	3.308	0.001**	Hp 8b supported

Significance codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
Residual standard error: 0.9789 on 201 degrees of freedom  
Multiple R-squared: 0.5635, Adjusted R-squared: 0.5461  
F-statistic: 32.44 on 8 and 201 DF, p-value: <2.2e-16

Our study confirms the relationship between customer satisfaction and WOM. In fact, they are strongly and positively correlated ( $r=0.714$ ), and customer satisfaction impacts on the propensity of customers to spread WOM (As a consequence, Hp 9 is supported).

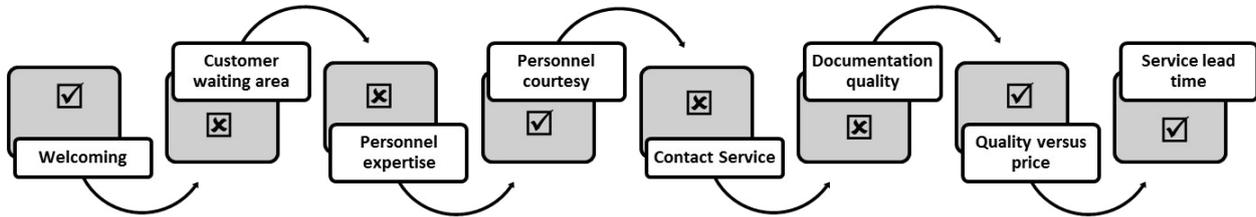
### Conclusions and Implications

To meet the complex needs of customers and to respond to the increased challenges from competitors, firms have developed a growing interest in using product services throughout their life cycle of their products (after-sale services, financial services, warranties, etc.) as a source of competitive advantage. The automotive industry is one of the most competitive industries in the world, and is probably one of the most changed industry sectors over the last decade. Moreover, in Europe, competition is increasing due to market liberalisation actions taken by the European Commission, globalisation and rising customer demands. Automotive companies have found it difficult to compete when offering products alone, and therefore many firms have turned to services as a means to achieve strategic advantages. This trend, known as service infusion into manufacturing, servitisation, outsourcing or transition to service-led business, can be observed in the automotive industry (Godlevskaja, Jos van Iwaarden & Ton van der Wiele 2011). After-sales services have become closer to the core business that enables dealers to achieve sustainable development in the competitive arena that has resulted from the gradual fall in profits from new car sales.

Our study contributes to understanding the role and impact of after-sales service based on the perception of service quality. In particular, we have investigated the role of the three 'Ps' of service provision on overall satisfaction and customer WOM. The results show that

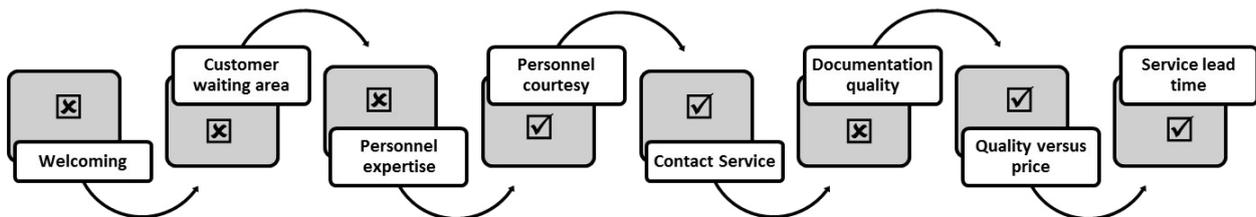
the welcoming process, personnel courtesy and the quality of service (over price and the quality of lead time) represent drivers of overall satisfaction (Figure 2).

**Figure 2. Customer satisfaction and after-sales elements**



Thus, customers are willing to recommend a service provider when they are highly satisfied with regards to the provider's personnel, contact service, quality versus price of the service and the lead time (Figure 3).

**Figure 3. WOM and after-sales elements**



One limitation of this study is the focus on one dealership, belonging to one industry. This might be further expanded to other industries by comparing the after-sales experiences between them. Future research might compare the impact of each of the different steps of product offering, from the pre-purchase stage, the purchasing experience and through to the after-sales service experience, on customer satisfaction and WOM. This might provide a better understanding of the most relevant activities that will enable manufacturers to build customer satisfaction and consequently customer loyalty, with WOM representing one element of loyalty.

## References

- AA.AA. (2013). "European Vehicle Market Statistics", International Council on Clean Transportation Pocketbook.
- AA.AA. (2013). L'auto 2013-Sintesi Statistica UNRAE, Unione Nazionale Rappresentanti Autoveicoli Esteri, is the Association of foreign car makers.
- AA.AA. (2010). Aftersales and Services Parts for the Automotive Industry, Accenture.
- Arasli, H., Mehtap-Smadi, S. and Katircioglu, S.T. (2005). Customer service quality in the Greek Cypriot banking industry. *Managing Service Quality*, 15(1), pp 41-56.
- Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, 52, pp 69– 82.

- Cavaliere, S., Gaiardelli, P. and Ierace, S. (2007). Aligning strategic profiles with operational metrics in after-sales service, *International Journal of Productivity and Performance Management*, Vol. 56 Nos 5/6, pp 436-55.
- Chaniotakis, I. E., and Lympieropoulos, C. (2009). Service quality effect on satisfaction and word of mouth in the health care industry. *Managing Service Quality*, 19(2), pp 229-242.
- Confente, I. (2014). Twenty-Five Years of Word-of-Mouth Studies: A Critical Review of Tourism Research. *International Journal of Tourism Research*. DOI: 10.1002/jtr.2029.
- Coyle, J.; Langley, C.; Gibson, B.; Novack, R. and Bard, E. (2009). *Supply Chain Management: A Logistics Perspective: A Logistics Perspective*. 8th edition. Mason. South-Western.
- Cronin, J.J., Taylor, S.A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56, pp 55– 68.
- Dabholkar, P.A., Shepherd, C.D. and Thorpe, D.I. (2000). A comprehensive framework for service quality: an investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*. 76(2), pp 139–173.
- Earl, M., and Khan, B. (1994). How new is business process redesign?. *European Management Journal*, 12(1), pp 20-30.
- Ennew, C.T., Banerjee, A.K. and Li, D. (2000). Managing word of mouth communication: empirical evidence from India. *International Journal of Bank Marketing*, 18(2), pp 75-83.
- Ferguson, R. J., Paulin, M., and Bergeron, J. (2010). Customer sociability and the total service experience: antecedents of positive word-of-mouth intentions. *Journal of Service Management*, 21(1), pp 25-44.
- File, K.M., Cermak, D.S.P. and Prince, R.A. (1994). Word-of-mouth effects in professional services buyer behavior. *Service Industries Journal*, 14, pp 301-14.
- Gaiardelli, P., Sacconi, N., and Songini, L. (2007). Performance measurement of the after-sales service network—Evidence from the automotive industry. *Computers in Industry*, 58(7), pp 698-708.
- Gaiardelli, P., Songini, L., and Sacconi, N. (2014). *The Automotive Industry: Heading Towards Servitization in Turbulent Times*. In *Servitization in Industry* (pp. 55-72). Springer International Publishing.
- Godlevskaja, O., Iwaarden, J. V., and Wiele, T. V. D. (2011). Moving from product-based to service-based business strategies: Services categorisation schemes for the automotive industry. *International Journal of Quality and Reliability Management*, 28(1), pp 62-94.
- Goffin, K., and New, C. (2001). Customer support and new product development-An exploratory study. *International Journal of Operations & Production Management*, 21(3), pp 275-301.

- Gremler, D.D. and Brown, S.W. (1996). Service loyalty: its nature, importance, and implications. in Edvardsson, B., Brown, S.W. and Johnston, R. (Eds), *Advancing Service Quality: A Global Perspective*, International Service Quality Association, Jamaica, NY, pp 171-80.
- Hecker, F.; Hurth, J. and Seeba, H.-G. (2010). Einführung. In: F.Hecker, J. Hurth, H.-G. Seeba (eds) *Aftersales in der Automobilwirtschaft: Konzepte für Ihren Erfolg*. 1st edition. München. Springer Automotive Media. pp 8-12.
- Hennig-Thurau, T., Gwinner, K.P. and Gremler, D. (2002). Understanding relationship marketing outcomes: an integration of relational benefits and relationship quality. *Journal of Service Research*, 4, pp 230-47.
- Hill, A. V., Collier, D. A., Froehle, C. M., Goodale, J. C., Metters, R. D., and Verma, R. (2002). Research opportunities in service process design. *Journal of Operations Management*, 20(2), pp 189-202.
- Huntley, J. K. (2006). Conceptualization and measurement of relationship quality: linking relationship quality to actual sales and recommendation intention. *Industrial Marketing Management*, 35(6), pp 703-714.
- Johansson, P., and Olhager, J. (2004). Industrial service profiling: Matching service offerings and processes. *International Journal of Production Economics*, 89(3), pp 309-320.
- Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of marketing*, 59(2).
- Kinard, B. and Capella, M. (2006). Relationship marketing: the influence of consumer involvement on perceived service benefits. *Journal of Services Marketing*, (6), pp 359-68.
- Kurata, H., and Nam, S. H. (2010). After-sales service competition in a supply chain: Optimization of customer satisfaction level or profit or both?. *International Journal of Production Economics*, 127(1), pp 136-146.
- La Londe, B. J., Zinszer, P. H., and National Council of Physical Distribution Management. (1977). *Customer service: meaning and measurement*. National Council of Physical Distribution Management.
- Lalonde, B. and Zinszer, P.H. (1976). *Customer Service: Meanings and Measurement*, National Council of Physical Distribution Management, Chicago, IL.
- Levitt, T. (1983). After the sale is over. *Harvard business review*, 61(5), pp 87-93.
- Loomba, A. P. (1996). Linkages between product distribution and service support functions. *International Journal of Physical Distribution & Logistics Management*, 26(4), pp 4-22.
- Macintosh, G. (2007). Customer orientation, relationship quality, and relational benefits to the firm. *Journal of Services Marketing*. 21(3), pp 150-9.

- Mattila, A. S. (2004). The impact of service failures on customer loyalty: the moderating role of affective commitment. *International Journal of Service Industry Management*, 15(2), pp 134-149.
- Maxham III, J. G. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research*, 54(1), pp 11-24.
- Ng, S., David, M. E. and Dagger, T. S. (2011). Generating positive word-of-mouth in the service experience. *Managing Service Quality*, 21(2), pp 133-151.
- Oliver, R.L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. McGraw-Hill, New York, NY.
- Olorunniwo, F., Hsu, M.K. and Udo, G.J. (2006). Service quality, customer satisfaction, and behavioral intentions in the service factory. *Journal of Services Marketing*. 20(1), pp 59–72.
- Ostrom, A, Iacobucci, D. (1995). Consumer tradeoffs and evaluation of services. *Journal of Marketing*, 59, pp 17–28.
- Parasuraman, A, Zeithaml, V.A., Berry, L. (1988). SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, pp 12–40.
- Russo, I., and Cardinali, S. (2012). Product returns and customer value: a footwear industry case. In *Modelling Value* (pp. 79-97). Physica-Verlag HD.
- Russo, I., Confente, I., and Omar, A. (2013). Understanding the Value Drivers for Intermediaries: An Exploratory Study in the Heating Industry. *Contemporary Management Research*, 9(1).
- Saccani, N., Johansson, P. and Perona, M. (2007). Configuring the after-sales service supply chain: a multiple case study, *International Journal of Production Economics*, 110, pp 52-69.
- Shemwell, D. (1998). Customer-service provider relationships: an empirical test of a model of service quality, satisfaction and relationship-oriented outcomes. *International Journal of Service Industry Management*, 9(2), pp 155-68.
- Sivadas, E. and Baker-Prewitt, J. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*, 28(2), pp 73-82.
- Söderlund, M. (1998). Customer satisfaction and its consequences on customer behavior revisited – the impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International Journal of Service Industry Management*, 9(2), pp 169-88.
- Sterling, J. U., and Lambert, D. M. (1989). Customer service research: past, present and future. *International Journal of Physical Distribution & Logistics Management*, 19(2), pp 2-23.

Szymanski, D.M., Henard, D.H.. (2001). Customer Satisfaction: A Meta-Analysis of the Empirical Evidence. *Journal of the Academy of Marketing Science*, 29(1), pp 16-35.

Tax, S. S., Brown, S. W., and Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of marketing*, pp 62(2).

Thomas, R. W., and Esper, T. L. (2010). Exploring relational asymmetry in supply chains: the retailer's perspective. *International Journal of Physical Distribution & Logistics Management*, 40(6), pp 475-494.

Zeithaml, V.A. Berry, L.L. and Parasuraman, A. (1996). The behavioural consequences of service quality. *Journal of Marketing*. 60, pp 31–46.