



e-ISSN: 2319-8753 | p-ISSN: 2320-6710

# IJIRSET

International Journal of Innovative Research in  
**SCIENCE | ENGINEERING | TECHNOLOGY**

# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 10, Issue 2, February 2021

**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA

**Impact Factor: 7.512**

9940 572 462

6381 907 438

[ijirset@gmail.com](mailto:ijirset@gmail.com)

[www.ijirset.com](http://www.ijirset.com)

# Applying Business Process Innovation in After-sales Services for Improved Profitability of Indian Automobile Dealerships

Fateh Bahadur Singh<sup>1</sup>, Gurudutt Kakkar<sup>2</sup>, Brajesh Mishra<sup>3</sup>

Research Scholar, School of Commerce & Management, Career Point University Kota Rajasthan, India<sup>1</sup>

Professor, Career Point University Kota, Rajasthan, India<sup>2</sup>

Research Scholar, Management Development Institute Gurgaon, India<sup>3</sup>

**ABSTRACT:** The Indian automobile sector contributes significantly to the Indian economy. Automobile dealerships network acts as an interface between customers and automobile manufacturers for new vehicles sales and after-sales services. Most of the automobile manufacturers and dealerships have adopted new vehicle sales focussed approach, often under utilizing the untapped potential of after-sales services. This study applies business process innovations as an conceptual lens and a qualitative case study approach to suggest how after-sales services with improved repair orders growth can enhance overall revenue growth and profitability of automobile dealerships. It brings an insight into the service performance gap vis-a-vis earning potential in dealership territory. The study has established that the net earning of dealership from services of any vehicle during its lifespan is around 1.5 times the sales margin earned by the dealer at the time of selling it to the customer. Therefore, they must work on optimizing their service performances based on potential available for service repair order and revenue, profit growth in their territory.

**KEYWORDS:** Automobile service repair orders, RO growth, service profitability, Service Revenue

## I. INTRODUCTION

The automobile industry adds around 7% to Indian GDP [1]. It generates direct and indirect employments. Automobile dealerships act as an interface between customers and automobile manufacturers. They are assigned the role of selling of new vehicles followed by after-sales workshop services. Indian automobile dealerships continue to face pressure due to cut-throat competition between brands, increased operational costs, sluggish increase in sales volume, and low productivity. Many of dealerships find difficulty in sustaining their business operations. While the sales of new vehicles, is dependent on a plethora of factors like the industry fluctuations, brand image, competition, growth and economic environment of the location, government policies, fuel costs and other complementary product costs, taxation rules, promotional efforts, new product launches, quality of salesmen, technological changes and many others – the service/workshop operations of an automobile dealership are more consistent and safe from the fluctuation from many of the above-listed factors when it comes to profit generation. This is so because the factors that the service operations of a dealership depend upon are mostly consistent and don't change drastically. The unit in operations (existing numbers of vehicles of the brand) constitutes an important factor that affects the revenue that comes to the dealership from workshop services.

Vehicle Population or UIO (Unit in Operation) is the active no of vehicles that are operational in any territory/ city. The higher UIO means, higher the service load expected at the workshop. This is called active UIO. It has been observed that most customers used to visit authorized dealership workshops during initial 5 years more as there are warranty related conditions that get lapsed if, any customers get their vehicle repaired in outside garage or local mechanics. After few years of use, few customers do not turn up all the time for their vehicle repair at authorized service centers. This is an important factor that affects the actual vehicle reporting at the workshop on day to day basis which finally generates revenues and profits from the workshop and contributes high in overall profits of the dealership. Thus, it is first important to understand the service potential available for any dealership in a territory/area where he operates his workshop. The service potential refers to the potential number of vehicles which should come to the dealership on a routine basis for being serviced. Without a proper assessment of actual potential, the deployment of resources like the

investment in infrastructure development, service capacity, area size, manpower cost may not deliver the planned revenues, cause an increased amount of costs and lead to reduced revenues and profits.

The section II of this paper contains analysis of related academic work, while section III explains the methodology adopted in this study. The findings of qualitative case study of Indian automobile dealerships to strengthen their after-sale performance are covered in section IV. The last section V summarizes the conclusion of this study.

## II. RELATED WORK

Mukherjee & Sastry [2] identified best practices prevalent in India's automobile dealerships, in the process, exploring critical issues like desired qualities/ characteristics of an efficient dealer, etc. The authors tried to relate dealers' strategies with their respective performance to identify efficient dealers using the data envelopment analysis model. The authors identified three configurations of efficient dealers: laissez-faire dealers with minimum regulation/ control from OEMs, market leaders dealers with high investment and sales, and agile dealers with comparatively low investment, sales training. The authors also identified factors that lead to dealers' better performance: dealer expense on advertisements and promotions, dealer training, participatory decision making, and investments in sales/ after-sales facilities. Winters [3] has examined the automobile dealership by focusing on "brand architecture": its meaning and how it affects the USA's automobile industry. The research included field visits of local/regional dealerships to unravel the internal workings of automobile dealerships that are perceived successful. Lin et al. [4] analyzed twenty retailers' performance under two Taiwanese automobile dealership firms by using data envelopment analysis techniques and practical learning revealed from the automotive sector's experience.

Sharma & Raina [5] have undertaken a performance analysis of the automobile industry sector in India. The study revealed the existence of technical inefficiency in the automobile firms during the study period, particularly in those firms that operate at a scale too small or too big. The study also established a need to identify determinants that act as sources of inefficiencies for the automobile dealership firms. Pawar [6] has examined customers' preference for an automobile dealership in Pune city. The author has defined a car dealership as "a vehicle local distribution that sells new or used cars at the retail level, based on a dealership contract with an automaker or its sales subsidiary". The dealership plays a vital role in fructifying new car sales to the end customers, providing maintenance services, insurance, spare parts, and warranty facilities. This article evaluates the factors influencing automobile dealerships' performance and affects customer preference towards a specific dealer. Xu et al. [7] have evaluated relative contributions of quality of products and services in automobile dealership performance from the perspective of customer satisfaction. They also explored relations between customer satisfaction and its intention to switch within an integrated model. The study revealed that service quality might not significantly impact customer satisfaction; however, product quality significantly impacted customer satisfaction. Yadav & Joseph [8] have argued that customer satisfaction based on after-sales service quality constitutes an essential factor that impacts Indian automobile dealers' sales performance. The authors administered a customer satisfaction survey to examine the relationship between after-sale service quality and the resulting customer satisfaction. The study established that reliability, tangibility, responsiveness, empathy, and assurance positively affect customer satisfaction, thereby suggesting a model to improve customer satisfaction and sales performance.

Market orientation stands for adopting a customer-centric way to create and redesign products to satisfy customers' needs for achieving profitability. Kosuge [9] has analyzed the dynamics between market orientation and Kaizen readiness in the context of Japanese automobile dealerships. The hypothesis tested in the paper is: market orientation results in continuous performance improvement 'kaizen readiness'. The study established that market orientation exerts a strong positive correlation with 'kaizen readiness'. Ingle et al. [10] have suggested a framework for evaluating dealers' performance in the automobile industry from customer relationship management in India. If followed, this framework may help the dealers drive their market share, profitability, sales volume, and customer satisfaction. Souza et al. [11] analyzed how the adoption of TQM can improve the sales performance of automobile dealerships. The authors identified the auto dealers' sales practices in line with TQM principles for better performance in the new automobile sale segment. The study considered four TQM principles (leadership and employee involvement, strategic partnership and plan, continuous improvement, and customer focus) and four sales elements (process, people, performance, and structure). This research unveiled how TQM permeates each sales element at automobile dealers that exhibited better sales performance.



II. METHODOLOGY

This study has used qualitative case study approach [12]. The documents and performance data from the selected automobile dealerships, academic research papers, and industry reports have been used as data source for the case study. The study uses business process innovation as a conceptual lens to analyse the services related issues of automobile dealerships. The case study approach has capability to propose/verify theory or test hypotheses empirically. In total three automobile dealerships, one each of brand B1, B2, and B3 were selected as representative of the Indian automobile dealerships. Further, these three dealerships management extended all cooperation needed for execution of the study.

III. RESULTS AND DISCUSSIONS

4.1 Evaluation of the performance assessment

Service performance assessments of three identified automobile dealerships, belonging to different brands, were carried out. The results on their current performance are discussed below.

4.1.1 Analysis of dealer service performance of brand B1

B1 has got a total of 4 operational dealerships in Pune. There is one more dealership that runs only the service center and has closed its sales operations. Each dealership has got one main workshops and there are 4 service branches operational. The capacity and customer reporting is around half of the main workshop potential hence effectively 7 workshops cater to all UIO in Pune city. The total active UIO is around 1,13,000 vehicles (refer to Table 1). This consists of Passenger Vehicles (PV), Commercial vehicles (CV). The service retention of B1 in Pune was reported around 65% in PV and 53% in the CV, which is far lower than B1’s national average of 73% in PV and 67% in CV. This is due to B1 brand being weaker in Pune city being urban market. The average service visit of B1 vehicle customers is 2 times per year in the workshop for various kinds of repairs. Considering Pune city service retention, the total potential (no of vehicles visits to the workshop) available for service each year to all B1’s dealers is 1,30,100 which comes to a potential of 1549 vehicles average per dealer per month. This has got a huge scope to improve further if dealerships increase their efforts to reach to national level of service retention.

Table 1: Pune city-wise assessment for Automobile Brand B1

Pune- Potential Analysis		Retention: Pune Brand B1 (Average)		Retention: National Average of Brand B1	
Product	Vehicles(UIO)	Ratio	Nos	Ratio	Nos
PV	43000	65%	27950	73%	31390
CV	70000	53%	37100	67%	46900
Total	113000		65050		78290
Potential Per Workshop		Per month	<b>1549</b>	Per month	<b>1864</b>
Remark-1		Lack of representation, weak n/w		User network more spread in rural, less in Urban	
Remark-2		2 visits of each vehicle in a year		Pune being an urban city, Brand B1 is weaker	

Table 2: Dealer-wise service assessment

Service Load actual Analysis per Dealer in Pune: Brand B1				Duration: Jan'19-Jun'19	
Dealer	SN	Area/ Location	Type of service outlet	Service Load(MA)	% Contribution
D11	1	Wakad	Main Workshop	1400	23%
	2	Sus	Body shop	110	2%
	3	Sohar Gate	Branch	600	10%
		Total		2110	35%
D12	1	Hadapsar	Main Workshop	1200	20%
		Total		1200	20%
D13	1	Wagholi	Main Workshop	850	14%
	2	Choufula	Branch	100	2%
	3	Shikrapur	Branch	200	3%
		Total		1150	19%
D14	1	PCMC	Main Workshop	700	12%
		Total		700	12%
D15	1	MIDC Chinchwad	Main Workshop	900	15%
		Total		900	15%

Grand Total	6060	100%
Per Workshop opportunity per month(07 nos),4 branches effective	866	Branch potential is 50% of the main workshop
Opportunity loss by D14in year @165 vehicles per month	1989	
Opportunity loss in the year considering the potential of 1549 per dealer	<b>10188</b>	

The next level is to understand how the dealer D14 is performing in this opportunity size available in Pune city. The actual performance data of all Pune dealership workshops monthly average has been collected and their workshop performance is given in Table 2. As per actual vehicle reported per month during H-1(CY-2019), the average gap is around 166 vehicles per month for dealer D14 which comes to 1989 vehicles yearly service opportunity loss. When the losses are calculated based on potential available per workshop then this comes to 10188 vehicles which is a matter of serious concern as the more number of vehicles reported means more revenues and profits. This is the reason for next level of study required to understand the reason for such lower reporting of vehicles in dealer D14 workshop and action plan based on analysis has been initiated as a corrective action.

#### 4.1.2 Analysis of dealer service performance of brand B2

OEM brand B2 has got total 8 authorized dealerships in Pune city. The brand B2's vehicle population active UIO is around 91700 vehicles (refer to Table 3). The service cycle is 2.2 times in a year hence total opportunity size is around 73360 vehicles per year considering 80% service retention in Pune. This comes to an average per workshop potential per month of 1223 vehicles. The service retention of 80% in Pune is higher than brand B2's national average service retention of 75%.

**Table 3:** Pune city-wise assessment for brand B2

Pune- Potential Analysis		Retention: Pune average of brand		Retention: National average of brand	
Product	Vehicles(UIO)	Ratio	Nos	Ratio	Nos
PV	91700	80%	73360	75%	68775
Potential Per Workshop		Per month	<b>1223</b>	Per month	<b>1146</b>
Remark		2.2 visits per vehicle per year		This brand has strong urban/ semi rural reach good, Rural reach is average/ low	

**Table 4:** Analysis of dealer D28 for services

Dealership	SN	Area/ Location	Type of service outlet	Service Load (MA)	% Contribution
D21	1	Shankersheth Rd	Main Workshop	1830	13%
	2	Aundh	Branch	1074	8%
	3	Kharadi	Branch	1356	10%
	4	Shivapur	Rural service outlet	993	7%
		Total		5253	38%
D22	1	Wakad	Main Workshop	1417	10%
	2	Katraj	Branch	400	3%
		Total		1817	13%
D23	1	Ambegaon	Main Workshop	1458	11%
		Total		1458	11%
D24	1	Thermax Chowk	Main Workshop	1690	12%
	3	Bavdhan	Branch	386	3%
		Total		2076	15%
D25	1	Wakdewadi	Main Workshop	1298	10%
	2	Magarpatta	Branch	690	5%
		Total		1988	15%
D26	1	Warje	Main Workshop	226	2%
		Total		226	2%
D27	1	Manjri	Main Workshop	20	0%
		Total		20	0%
D28	1	Baner	Main Workshop	818	6%
		Total		818	6%
Grand Total				13656	100%



Dealership	SN	Area/ Location	Type of service outlet	Service Load (MA)	% Contribution
Per Workshop opportunity per month (11 nos)				1241	Branch potential is 50% of the main workshop
Opportunity loss for dealer D28 per year @423 vehicles per month				<b>5081</b>	
Opportunity loss considering the potential available per dealer				4860	

The service capacity of branches are around half of the main workshop as main workshops infra and resource capacity is far higher than branches and main workshops have got body shop also which attracts good no of customers and generated higher labor and parts revenues. There are 8 main workshops and 6 service branches in Pune city which services around 13656 vehicles per month. The effective no of workshops is 11 considering 2 branches as 1 main workshop as the potential of service branches is half of the main workshops. Here, the actual average potential per workshop is around 1241 vehicles per month.

Data analysis of dealer D28 in Pune city for service is presented in Table 4. It has been observed that dealer D28 has got one of the best infrastructures among all workshops and the resources deployed are as good as other good workshops. However, this workshop RO service number per month average is far lower than other main workshops monthly average. This results in an opportunity loss of around 5081 vehicles which is a huge opportunity loss of revenues from labor and parts business affecting the profitability of workshop and overall viability concern for the dealership. The next level of analysis was needed to understand the service performance of dealer D28 which has been selected as one of the key dealerships for research. The challenge is to ensure RO growth for the dealer D28 workshop and action plan on how this workshop can deliver the potential available per workshop and track the results further. For this, a deeper study was required to be conducted for understanding the key areas of concerns and their effect on workshop performance and the next level of further study on this.

#### 4.1.3 Analysis of dealer service performance of brand B3

The OEM brand B3 is one of the top 5 global brands which entered the Indian market in the year 1998. This foreign brand has got good acceptance and awareness in the Pune market. The brand B3 has got 4 dealerships in Pune city spread across various key potential areas. It has got active UIO of around 24500 vehicles with a service retention of 82% (refer Table 5). There are 4 main workshops & 2 service branches in Pune. The effective number of workshops is 6 as service branches capacity and actual performance are as good as the main workshop.

**Table 5:** Pune city-wise assessment for brand B3

Pune- Potential Analysis		Retention: Pune Average for brand		Retention: National average for the brand	
Product	Vehicles(UIO)	Ratio	Nos	Ratio	Nos
PV	24500	82%	20090	78%	19110
Potential Per Workshop		Per month	<b>558</b>	Per month	<b>531</b>
Remark		2.0 visits of each vehicle in a year		Semi-urban & Rural service network weak	

**Table 6:** Analysis for dealer D34 in Pune for services

Service Potential Analysis per Dealer in Pune for brand B3				Duration: Jan'19-Jun'19	
Dealer	S.N	Area/ Location	Service outlet	Service Load(MA)	% Contribution
D31	1	Chinchwad	Branch	575	18%
	2	Wagheli	Main Workshop	625	20%
	Total			1200	<b>38%</b>
D32	1	Hadapsar	Main Workshop	600	19%
	2	Warje	Branch	500	16%
	Total			1100	<b>34%</b>
D33	1	Khadi M/C Area	Main Workshop	500	16%
	Total			500	16%
D34	1	Baner	Main Workshop	400	13%
	Total			400	<b>13%</b>
Grand Total				3200	100%
Opportunity per outlet ( Total 6 Nos)				533	17%

Opportunity missed in Year for dealer D34 @133 Per month	1600	
Opportunity loss per year considering 558 vehicles potential	1896	

The analysis on the actual performance of dealer D34 in Pune (refer to Table 6) reveals that out of an average potential of 533 per workshop, the dealer D34 can attract the only average of 400 customers per month in the workshop which is far lower per month than other workshops. The actual loss comparing the average per workshop per year is around 1600 vehicles which is a huge gap. Looking at the support incentives from brand B3 this gap is quite good which is substantial opportunity loss in labor and parts and overall loss to dealership operations.

#### 4.2 Business process innovation to improve profitability from services

##### 4.2.1 Target resetting aligned with the potential, not past

In the automobile dealerships chosen for the study, the monthly business targets for the segment of Service were planned based on the past performance and the data available for the last few months. They were used to judging their potential/ capability to perform based on their past performance. However, the opportunity size comes out to be far greater than their past performance as was found through the detailed potential analysis for the location as explained above. It is suggested that an automobile dealership does not limit its targets according to how it has performed in the past, thereby setting a lower bar for achievement. Rather, the targets need to be set according to the potential available in the specific market. Hence, the first step towards optimizing the business profitability achieved through the Service part of the automobile dealerships was to reset the entire target in accordance with the potential available, found during the potential analysis.

##### 4.2.2 Benefits from segmentation of customers services

The composition of customer services is discussed below.

*Walk-in Service Customers* - Customers from nearby areas visit the workshop for running repair jobs, quick service, and other services like free service. They do not visit with prior appointment, they are just walk-in to the workshop for getting their problems fixed in the vehicle. Service Team needs to accommodate all such customers as they may visit again for services if, they are satisfied with the quality of service and quick repair.

*Through Service Appointments*- To ensure daily capacity utilization of workshop there is a need to get minimum service reporting each day and dealership cannot depend for this on the walk-in customers only. There is a dedicated department & Team that are appointed for calling customers through the database and fix their appointment for service. This helps in better planning of capacity & Manpower resource utilization and also helps in increasing service revenues and service RO growth. This process helps customers as well as the dealership for convenient time vehicle receiving and service delivery as appointments are fixed with prior consultation. The type of job which has to be done in the vehicle is also known in advance hence parts availability and requirement checked in advance, allocation of service Team become easy as appointment team has got all information well in advance. This process also helps in better customer satisfaction.

*Accidental vehicle Customers* - In case of accidents in the local area, customers bring their vehicles to the service center or workshop team also supports to toe such vehicles based on customer requirement. Many accidental vehicle leads are generated through insurance company's portals and connections. There are toeing companies that bring vehicles to the workshop after accidents. These vehicles take a lot of time to repair as the quantum of work is very high and all parts may not be available as needed so some additional days take here to manage all the required parts, hence are the most lucrative.

##### 4.2.3 Assessment of the true potential of average earning per vehicle from services

Earning margin in sales is just a one-time opportunity from the customer but the opportunity potential is far higher in service from the same customer over few years, to understand the actual average earning potential amount, an analysis was done and the outcome is as below.

- 1) During the initial 3 free services the earning per vehicle to dealership is Rs 7,000/- (1<sup>st</sup> free service 750/-, 2<sup>nd</sup> free service average around 2216/- and 3<sup>rd</sup> free service average amount is Rs 4096/-)
- 2) After free services, if customers are retained then average Rs 5000/- earning through each periodic maintenance services and running or breakdown repairs and visits of customer are around 10 times over 7 to 10 years.



3) Average reporting of accidental vehicles is around 2 to 3 times to body shop where average earning comes to around 35,000/- from each vehicle.

The total earning per vehicle from service throughout 7 to 10 years comes is at least 90,000/- (refer to Table 7). This amount is normally twice than one time earning potential in sales which is around Rs 50,000/- per vehicle. This is the reason to sell more and more vehicles to generate a higher population UIO (units in operation) of vehicles in the area. The break up earning amounts per vehicle after actual data analysis is as below. Further, the above analysis has also established the importance of increasing the vehicle population of the brand in the assigned territory as it will create additional recurring earnings opportunities from routine and accidental repair

4.2.4 Changes proposed in ongoing practices to cater to services requirements

It include – (i) Reviewed the service appointment team and increased team size and productivity; (ii) Focus on the increasing ratio of paid customers; (iii) Increased the overall repair orders; (iv) Accidental vehicles load increased; (v) Converted paid/running repair service customers to a body shop after general repair; (vi) Based on the analysis, parts order frequency was revised to ensure the availability of parts in time to reduce the turnaround time of repair.

**Table 7:** Actual earning from service after sales in 10 years of vehicle life

Sl no	Actual earning (after-sales services)			Details	Free Service			Accidental ( Body Shop) repair				
	Customer	Purchase Date	Model		1	2	3	1	2	3		
1	Mr Prakash	27.09.09	M 1	Date	23.10.09	11.04.10	9.09.10	07.07.11				
				Earnings(Rs)	550	2130	2130	11000				
2	Mr.Sanjay	05.07.12	M2	Date	04.07.12	01.06.13	30.02.14					
				Earnings(Rs)	750	2550	2850					
3	Mr Ajay	3.11.12	M2	Date	05.12.13	06.05.14	09.3.15	22.11.20				
				Earnings(Rs)	750	2560	2980	20025				
4	Mr.Paygude	01.03.16	M3	Date	10.03.16	17.12.16	10.10.17	07.07.17				
				Earnings(Rs)	600	2210	2650	35000				
5	Mrs.Shewta	30.05.17	M4	Date	03.06.17	06.10.17	01.04.18	31.05.17	04.12.17	05.09.19		
				Earnings(Rs)	650	1750	2250	1800	8500	25000		
6	Mr.Darshan	16.11.14	M5	Date	31.01.15	08.09.15	08.03.16	06.09.18				
				Earnings(Rs)	600	2400	1950	7800				
7	Mr.Langote	05.02.14	M2	Date	05.03.14	4.09.14	04.04.15	05.10.20				
				Earnings(Rs)	750	2560	10050	141000				
8	Mr.Yadav	23.10.13	M2	Date	20.11.13	05.10.14	06.04.15	11.11.16	04.04.17			
				Earnings(Rs)	750	2200	10050	33000	18500			
9	Mr.Dilip	13.06.18	M6	Date	30.07.18	18.10.18	25.11.18	13.08.20				
				Earnings(Rs)	1500	1550	3500	11200				
10	Mr.Vijay	10.08.15	M6	Date	06.09.15	11.04.16	10.12.16	10.10.15	02.03.17			
				Earnings(Rs)	600	2250	2550	10500	25000			
Grand total earnings		10 Vehicles			7500	22160	40960	271325	52000	25000		
		Per PV AVG			750	2216	4096	27132.5	5200	2500		
Total earning average per vehicle					7062			34833				
Actual earning		Paid service details									Total Earning	
Sln0	Customer	1	2	3	4	5	6	7	8	9		10
1	Mr Prakash	5650	4340	5750	1100	5520	1303	13005	11020	4300	6505	74303
2	Mr.Sanjay	7560	8930	6500	6520	13000	10697	2500	2750			64607
3	Mr Ajay	7500	10013	6000	4500	4300	9080	12541	7751	7832	200	96032
4	Mr.Paygude	4500	6500	2110	2500	750	2500					59320
5	Mrs.Shewta	4500	2200	4500	1650	4500	2500	1200				61000
6	Mr.Darshan	1800	3000	3550	9500	1005	12300	13300	4500	1150	750	63605
7	Mr.Langote	4500	12500	2700	1800	9300	5500	5600	8500	4500	6600	215860
8	Mr.Yadav	4500	12500	2700	1800	9300	5500	5600	8500	4500	6600	126000
9	Mr.Dilip	4500	3200	895	2800	700	3800	3400	2800	850	3500	44195
10	Mr.Vijay	3500	5500	3500	850	15000	5000	1850	3500	2200	3400	85200
Grand Total Earnings		48510	68683	38205	33020	63375	58180	58996	49321	25332	27555	890122
		4851	6868.3	3820.5	3302	6337.5	5818	5899.6	4932.1	2533.2	2755.5	89012.2
Total earning average per vehicle					47118						89012.2	



#### 4.2.5 Manpower restructuring and business process change in workshop/services

After a careful analysis, the head of service and body shop manager along with few more employees who were lacking the revenue target focus along with the customer satisfaction approach. To meet the increased repair order load, the workshop operations were split into two shifts to accommodate more vehicle repair and increase revenues. The management was convinced to change the profit and loss statement detailed reviews from quarterly to a monthly frequency where the management team, CA, and dealer principal jointly took a review meeting with the head-service & all HODs after month closing. Reviews meetings conducted based on planned parameters and targets decided at month beginning and corrective actions initiated immediately. Besides this weekly review through VC twice each week started (each Monday and Friday). The practice of daily performance data sharing by each HOD was introduced as per format. The reporting formats were changed, the frequency increased, the focus was on a daily business plan. The reporting formats were revised/ replaced to make their content based on priorities. This was done to increase focus on key impact areas related to revenue and growth. It resulted in an increased focus on daily performance and enhanced revenue target achievements. Usage of WhatsApp introduced for making reporting techniques more effective. It improved responsibility and ownership among team members. This also reduces communication gaps & other unnoticed lapses. This also helped the faster flow of information and sharing inputs/ suggestions from other members. The impact expected - Within 3 to 4 months, the above changes in business processes brought substantial impact on operations and workshop/services in terms of increased revenue and reduced costs.

#### IV. CONCLUSION

This research paper suggests automobile dealerships must work on optimizing their service performances based on potential available for service repair order and revenue, profit growth in their territory. Monthly and yearly business targets must be aligned with the vehicle population in that area (units in operations) across various categories of customers. They may improve processes connected with spare stock availability for faster delivery of serviced vehicles. They must focus on retention of existing customers for routine and accidental service requirements to fully realize earning potentials from workshop/services. The study has established that the net earning of dealership from services of any vehicle during its lifespan is around 1.5 times the sales margin earned by the dealer at the time of selling it to the customer. Enhancing service reminder calls to improve repair orders from periodic maintenance services is another potential technique that may covered by future researchers.

#### REFERENCES

- [1] IBEF (2020). India Brand Equity Foundation. *Automobile Industry in India*. <https://www.ibef.org/industry/india-automobiles.aspx>
- [2] Mukherjee, A., & Sastry, T. (1998). Identification of best practices: a study of passenger car dealers in India.
- [3] Winters, J. D. (2006). reExamine the American Automobile Dealership. *Theses from the Architecture Program*, 33.
- [4] Lin, T. T., Lee, C. C., & Chang, F. T. (2010, December). A performance management on automobile dealers with applying data envelopment analysis. In *2010 IEEE International Conference on Industrial Engineering and Engineering Management* (pp. 380-384). IEEE.
- [5] Sharma, S. K., & Raina, D. (2013). Performance analysis of Indian automobile sector using non-parametric approach. *International Journal of Business Excellence*, 6(5), 505-525.
- [6] Pawar, S. (2016). Customer Perception for Car Dealer in Pune City.
- [7] Xu, L. U., Blankson, C., & Prybutok, V. (2017). Relative contributions of product quality and service quality in the automobile industry. *Quality Management Journal*, 24(1), 21-36.
- [8] Yadav, S. K., & Joseph, D. (2017). After-sales service quality satisfaction in Indian automobile industry. *International Journal of Business Information Systems*, 26(3), 362-377.
- [9] Kosuge, R. (2017). Market orientation and kaizen readiness in the automobile dealership context. *Annals of Business Administrative Science*, 16(3), 115-124.
- [10] Ingle, V., Sorte, M., & Jagtap, M. (2018). Framework For Performance Evaluation Of Dealer's In Car Service Industry Using CRM-Case Study. *Vaibhav Ingle Journal of Engineering Research and Application*, 8(9), 35-45.
- [11] Souza, M. A., Borchardt, M., Pereira, G. M., & Viegas, C. V. (2018). TQM at car dealerships with better sales performance: a multiple case study. *Total Quality Management & Business Excellence*, 31(13-14), 1621-1638.
- [12] Yin, R. K. (2014). *Case study research: Design and methods (applied social research methods)*. Thousand Oaks, CA: Sage publications.



**INNO**  **SPACE**  
SJIF Scientific Journal Impact Factor

**Impact Factor:  
7.512**

**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
**INDIA**



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 **9940 572 462**  **6381 907 438**  **ijirset@gmail.com**



[www.ijirset.com](http://www.ijirset.com)

Scan to save the contact details