

# Effectiveness of Automobile Salesperson Training

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## Abstract

Are the training programs for automobile dealership employees successful in increasing automobile sales? A combination of training program data and automobile registration data, for new car sales, is used to tackle this question. Training program times and dates make up the training program data. The automobile registration data is used to determine sales rates, new car sales per day. These rates are used to determine individual sales performance and the relationship to training programs and also to compare an individual to a standard sales rate.

**Key Words:** Automobile, sales, sales rate, training, effectiveness

## 1. Topics for Discussion

The training problem is how to best train employees for sales purposes. In the automotive industry the available data for this analysis consists of employee's records, dealership sales and training records. There are many data quality issues as these records are not always as accurate as one may like. For example, the training records were not collected for this purpose and hence may not include relevant information such as a way to uniquely determine the employee or precisely when a training course was conducted.

The analysis for this problem requires the matching of all of the data by employee, determining precise dates for training, hire, sales and termination of employees. The matching of the sales made by the employee will include when in relation to the training the sale was made. A complicating factor is that employees may move from one selling dealer location to another selling dealer location.

The final result of the analysis is will consist of descriptive statistics controlling for as many factors as is possible with the available data.

### 1.1 The Training Problem

There is a difference in kinds of training programs. The different trade areas of the various dealers mean that there is a variability of sales preferences and individuals related to the different market areas. The salespeople themselves differ in many aspects including: seniority, training history and individual abilities. Each salesperson will thus have a training record which is likely different from that of any other salesperson.

## **1.2 Available Data**

Who was trained by which method and when? Training Programs – Type, Start and End Dates, Performance. Sales performance over time. Market.

## **1.3 Data Issues**

Training program data integrity. Salespeople data integrity. Sale performance data integrity. Control groups?

## **1.4 Analysis**

Time coordination. Sales performance over time. Training over time. Before, during and after training. Descriptive Statistics.

## **1.5 Estimates**

Sales per salesperson per month.

## **2. Assessment Methodology**

### **2.1 Data, Answers, Analyze and Opportunity**

Validate data – review, question, cleanse. Analyze - attempt to find trends/relationships in the data. Answers - Determine an Outcome to Questions Posed. Opportunity - Identify Other Potential Areas of Valuable Information.

#### *2.1.1 Recommendations/Considerations*

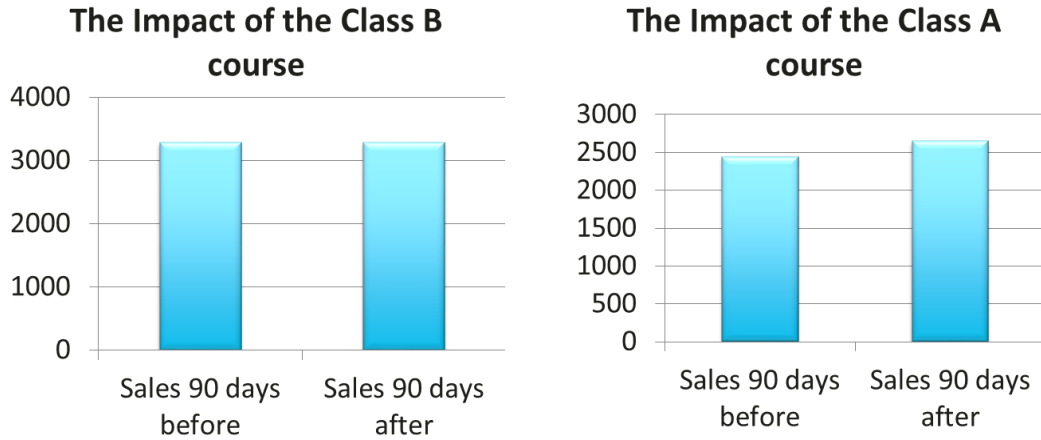
Analyze the impact in these dimensions by region/market. Isolate specific classes for analysis. As people take more courses, the time range must expand. Data is suspect – missing quantities for training dates; unknown work histories. May be salesperson selection bias (good employees get more training). Training value will depend on training costs small increases of sales at high training may not be valuable. Training is on-going – hard to determine specific impact.

#### *2.1.2 Question 1 – Training Impact*

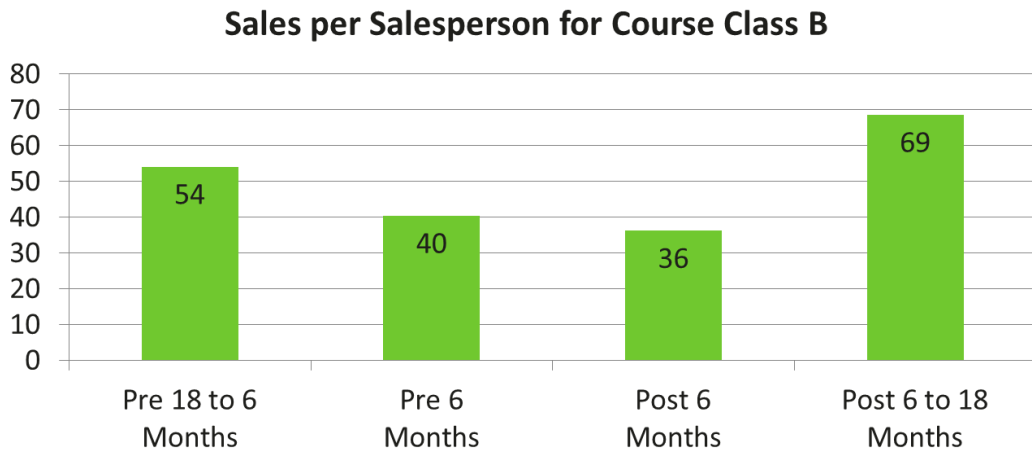
When is training impactful? When in a salesperson's career is training the most impactful? Class A 3-5 years after versus Class B 6-18 months after – what is the course's impact? The comparison is based upon % of all manufacturer sales before training to % of all manufacturer sales after training. Additional Considerations: Using only Class B, compare three groups before and after, 0-6 months, 6-18 months and 18 months +.

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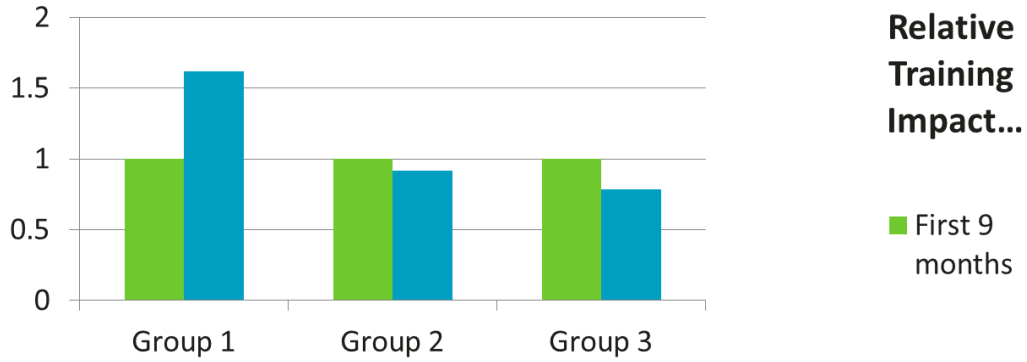
**Figure 1:** Class B vs. the Class A: Over a 200 unit increase (>8%) was realized in the period following the Class A course, but no increase was seen after Class B.



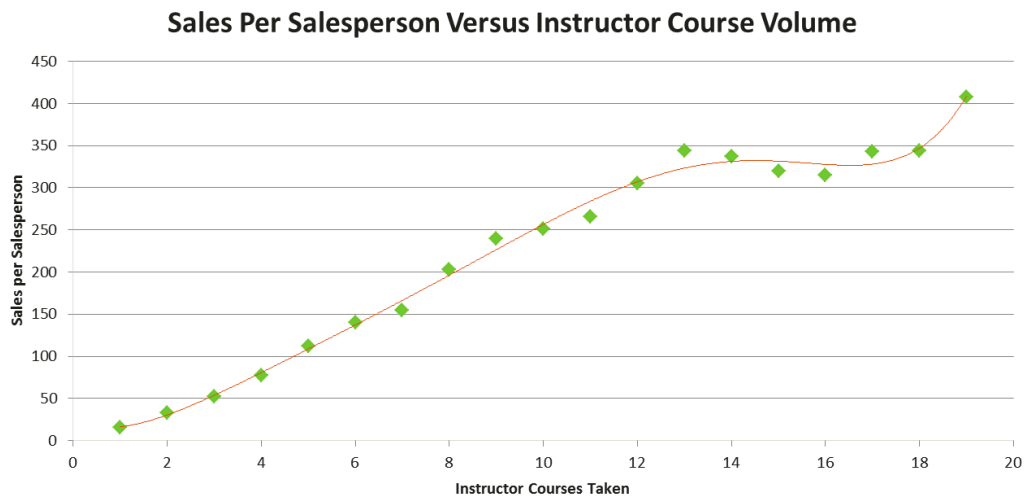
**Figure 2:** The long term impact of the Class B course appears to be significant.

#### 2.1.4 Question 2 – Training Volume

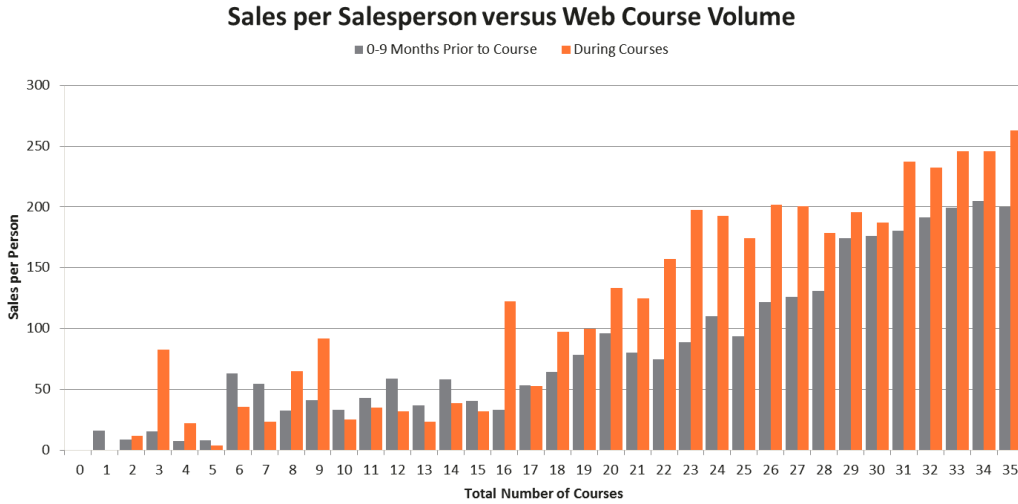
How much training is most impactful? How much training results in an optimal return for the dealer. Compare those with a specific mix of training in higher quantities to those that have not. Analyze different training or training types. Additional Considerations: Cut the data finer - Basically a web vs. instructor set, knowing that there will be overlap. Have a 0 group – i.e. no training at all: 1 instructor only, 2 instructor courses only, 3 instructor courses only, 1-5 web courses, 6-14 web courses, 15+ web courses. Keep these same groups as displayed, only add a 0 group as well. Average retention time after the 12 months displayed. (i.e. Group 1 employees were employed an average of 20 months after the analysis period group 2 were employed an average of 10 months etc.). Findings – How Much Training is Most Impactful?



**Figure 3:** Could too much training be wasteful or take up too much salesperson time? How are the people in these groups selected?



**Figure 4:** It appears that more instructor training results in more sales per salesperson; however, over 13 courses appears to not have quite the same impact.

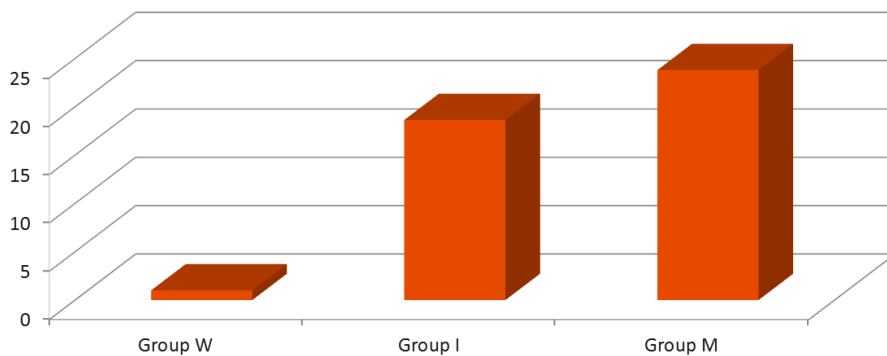


**Figure 5:** Having less than 18 web courses is uncertain to have a positive impact on performance. Over 22 course, the average rises above 150 sales.

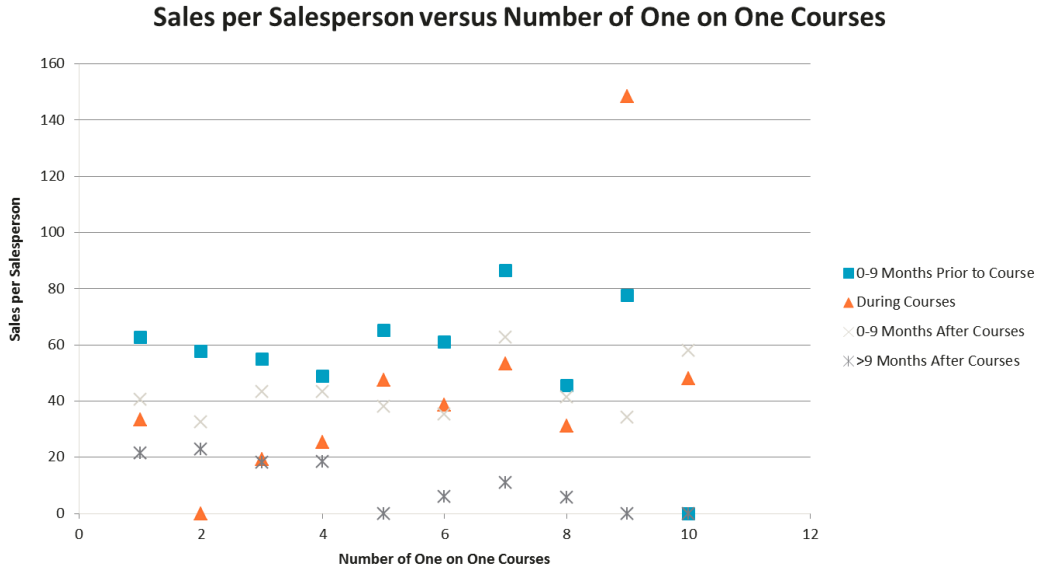
*2.1.5 Question 3 – Training Type*

What method of training is the most impactful? Determine what combination of delivery methods drive the best results. Compare those taking only web vs. only instructor vs. those with a mix. Additional Considerations: Show numbers/volumes. Can we add a tutoring component? Findings – One on One Impact.

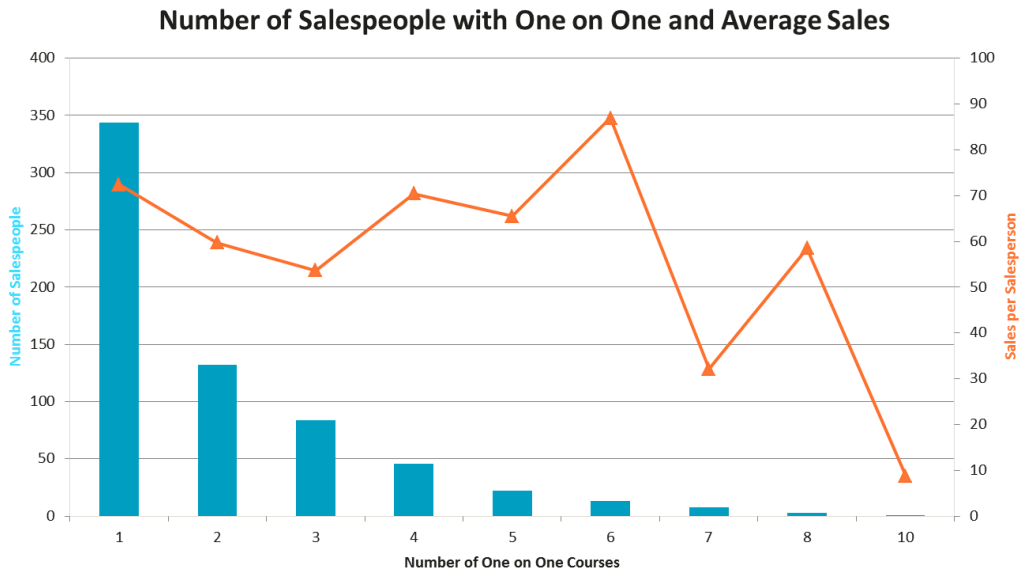
**Relative sales volumes, comparing before and after classes**



**Figure 6:** For employees that were employed at least 360 days after hire date:  
 Group W = Participated in web courses ONLY (655)  
 Group I = Participated in instructor courses ONLY (697)  
 Group M = Participated in a mix of instructor and web courses (2666).



**Figure 7:** Before/after one on one analysis is inconclusive without a control group. There is no obvious improvement after being tutored.



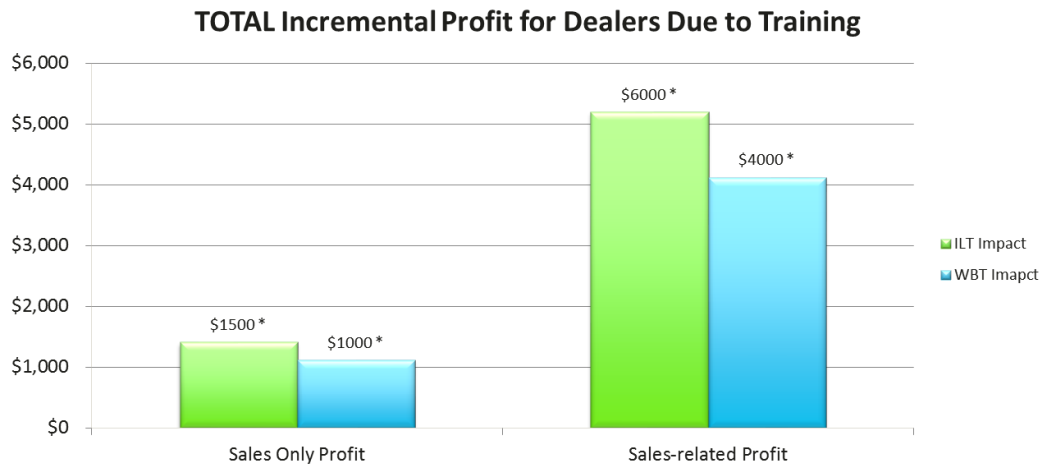
**Figure 8:** Six One on One Courses appears to provide the ideal result of sales per salesperson. Few people took more than that but those that did had fewer sales.

It appears that those that take the tutoring sooner in their career see a better after result.

*2.1.6 Question 4 – Training Financial Impact*

What is the financial value of training? Determine a dollar value on training to market it as an investment. Identify increases in sales as a result of training scenario mix (timing,

form, and volume). Apply National composite Gross Profit per New Vehicle Revenue for sales money.



**Figure 9:** Per incremental instructor course: approximately 3 sales per month = \$6000 \* total; \$1500 \* sales only

Per incremental web course: over 22 courses, approximately 2 sales per month = \$4000 \* total; \$1000 \* for sales only

### 3. Findings – What is the Financial Value of Training?

#### 2.1 Financial Impact Assumptions

Every vehicle sold has a long-term impact that covers many different aspects. Gross profit on the new manufacturer vehicle sale. Holdback. Manufacturer Performance Bonuses. Finance and Insurance and other items related to the new vehicle sale. Therefore, the total estimate on each incremental vehicle sold is \$1,000 \* all inclusive or \$300 \* just for the sale itself. Dollar values have been changed from the actual study result numbers.

#### 2.2 Optimal Training Scenario

Number of web courses: 23. Number of instructor courses: 13 (6 with one on one). When to take Training: Start with several web courses to obtain enough understanding to be effective (>22). Tutor those that will be impacted by that form of instruction (up to 6 courses over the time period of data provided for this analysis). Provide consistent instructor courses over time but do not overburden salespeople with them (less than 14 over time period of data provided for this analysis). Allow for web courses to be taken approximately monthly to keep training fresh.

#### **4. Conclusion**

In conclusion: some of the training methods are superior to others, it matters when the training occurs in the salespersons tenure and some of the salespeople benefit more than others from specific types of training. It is left to trade off the value of the specific training to specific individuals versus the cost of the various training types.