Preserving Human Capital and Reducing Costs: Implementing Driver Safety Training

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Managing and retaining human capital is critical to the success of today's organizations. In the current business environment the Chief Financial Officer (CFO) must be able to understand and mange product-based, employee benefit and, knowledge-based costs. When employees are absent from work considerable knowledge, skills, experience and, expertise is an unrecoverable cost. Therefore, managing tangible employee benefit costs and, reducing absenteeism should be an integral part of a business's overall strategy. SMARTDRIVERTM, a specific driver training program, was developed and implemented by Gold Cross Safety Corporation. SMARTDRIVERTM has been used by major companies with large leased vehicle fleets and has produced tangible cost savings from accident reduction that are reflected in an improved experience rating for insurance and health care costs and increased productivity by reducing absenteeism.

INTRODUCTION

Dan and John had just finished another day at American Benefits Systems working with their clients on ways to reduce employee benefit costs. As John looked out the window he saw a car swerve and then heard a loud crash; this unfortunate event got both Dan and John thinking about the total cost of all vehicle collisions which would include lost productivity, lost wages, medical payments, and repairs." Dan added, "And those costs cut into the bottom line of almost every U.S. business." John then added another sobering statistic, "There were 37,107 Fatal Vehicle Crashes reported by the National Highway and Safety Administration (NHTSA) in 1998." A light then flashed in Dan's mind and he said "A tragic statistic but I wonder how many of those deaths could have been prevented?" At that point both Dan and John realized that an opportunity was available to help their clients not only reduce employee benefit costs, (medical insurance premiums) vehicle insurance costs, vehicle repair cost and, from a human capital perspective reduce absence from work which would increase productivity. Dan realized that an opportunity existed, and that driver safety program was needed. Dan said, "We identified the problem so let's thoroughly analyze the problem and develop a solution." In addition, a separate company was established separate from American Benefit systems, and so on that day in 1999 Gold Cross Safety Corporation was established.

ANALYZING THE PROBLEM

The only way to solve a problem is by fully understanding the problem. First let's understand that a company with a large fleet of vehicles is continually engaged in risk management. Management seeks to optimally mange tangible costs by obtaining:

- The best lease financing arrangements.
- The best insurance discounts.
- The best contract to maintain and repair the vehicles.

Once the control of tangible costs has been optimized, what else must be recognized in the risk management equation? The answer is the human risk factor which could be addressed with a high quality driver safety training program based on the characteristics and demographics of the organizations drivers. Dan and John also understood from their military training (both were U.S. Army Officers airborne and ranger qualified) as well as private sector work experience that for any new program to succeed management must buy into and then fully support the program. Therefore, a training program for managers responsible for company drivers must also be implemented. And, the driver safety program must not be a one shot deal; i.e. do it and forget it. Retaining the skills learned in the program is the most important element for continued success. The task was daunting, now all that had to be done is develop the program and sell it to companies with large vehicle fleets. Dan had an idea, "Let's call our finance guy Jerry and see what his thoughts are on convincing companies with large vehicle fleets that a driver safety program is the missing link in their risk management activities." As usual Jerry's answer was to the point; make management understand that driver safety training is a smart investment. In addition, Dan remembered that when Jerry was a Ph.D. candidate at NYU he published an article The Evaluation of a Management Simulation as a Method of Learning in the Business Education Forum and, Jerry can be helpful by providing input on the best methodology for our driver training program.

DEVELOPING THE PROGRAM

Dan and John had an excellent reputation with their existing employee benefit clients and they knew if they developed a driver safety training program participants had high expectations for a successful outcome. Dan remembered a highlight from Jerry's simulation article, "The benefits of the simulation experience are that it provides an opportunity to modify the participant's behavior in a realistic setting." Dan also remembers dwelling on other points made in Jerry's article, so he took it off the shelf and reread the following segments about the history of simulations using computers:

Simulations using computers were developed in business schools in the early 1960s. According to Wolf (1985), in *Simulation and Gaming*, the faculty and schools that created simulations in gaming's early years were the *UCLA Game*

No. 3, the Harvard Business School Game, and the Carnegie Tech Management Game (p. 253).

As games developed and the complexities of the games increased, educators attempted to understand the value of management games that were being used in business schools. According to Wolfe (1985), a study of the *NYU Management Game* indicated that since no actual learning measures were obtained, knowledge gains by the participants in the study could not be ascertained (p. 263). As stated by Carvalho 1991), in *Simulation and Gaming*; "Despite the growing interest in computerized business simulations, a major problem exists. There is no generally accepted theory and methodology for validating computerized business simulations" (p. 329).

Dan and John agreed that the last sentence was the key to developing a successful driver training program; quantifiable results must be obtained to convince current and future clients that the driver safety program worked. Also, a proven approach for adult education must be used for driver safety training. In addition, management's commitment to the program was essential because company management recordkeeping was required to provide quantitative cost data both before and after program implementation.

A PROVEN APPROACH TO EFFECTIVE DRIVER SAFETY TRAINING

According to internal company documents, when Gold Cross Safety first conceived the **SMARTDRIVER** TM they conducted research to find the methods of teaching that worked best with the natural recall process of the human brain. Training programs need to be more than informative; they need to insure that the participant will retain the information long term. Their research determined that the SQ3R Method and the Cone of Learning model were effective with a long, well-documented track record of success. These methods complement one another – the SQ3R Method addresses the way that information is organized and presented, while the Cone of Learning reveals how the senses work separately and together to stimulate the mind.

Gold Cross Safety has also integrated behavior modification and risk management techniques into its training to change bad driving habits into good ones, using the power of positive reinforcement. Extended psychological research has shown that if something one does results in a positive outcome, that person is likely to repeat the same activity. This is the reason Gold Cross Safety introduces self-correcting practice questions into the driver safety training program. Empirical research has shown that the brain reacts much more effectively to observable good behaviors; this concept has been imbedded into the driver safety program.

THE SO3R DIRECT EXPERIENCE

According to internal company documents, the SQ3R Method that is incorporated into the design of Gold Cross Safety Courses was developed by Dr. Francis Robinson for specialized US Army training which enabled military personnel to learn vast amounts of specialized information quickly and thoroughly. The SQ3R method is studied in psychology and education doctoral programs and is a gold standard in military and adult education models. As a matter of fact Dan (US Army Special Forces), John (US Army Airborne Ranger) and Jerry (US Army Operations & Intelligence) were effectively trained using the SQ3R method.

SQ3R is an acronym for Survey, Question, Read, Recite, and Review. The first step in this learning process is to present the reader a general summary of the material that will be presented. Next, the reader is given a set of introductory questions that will be answered in the subsequent lesson. The lesson that follows is divided into small sections, each with highlighted words, periodic questions and reviews that drive key concepts and course retention. The use of the highest percentage retention factors proven in the "Cone of Learning" methodology (developed by Dr. Edgar Dale) is combined with SQ3R for maximum learning and retention values and outcomes.

SQ3R

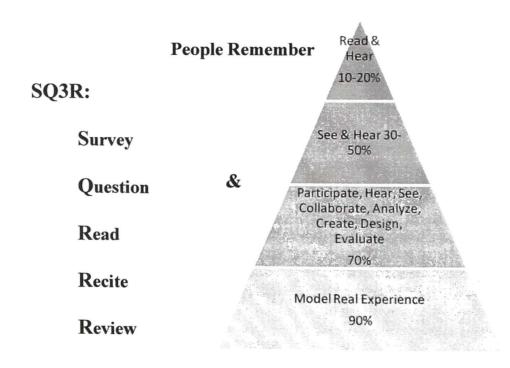
Dr. Francis Robinson Ph.D. Psychology

The SQ3R Method is analyzed, documented and taught as a "best practice" adult education model. It effectively traps information coming in for future use. The way to encode information determines where it is placed in your long term memory. When information is encoded in a well organized efficient manner, later retrieval increases dramatically.

The Cone of Learning

Dr. Edgar Dale Ph.D. Interpretive Synopsis

The model developed by Dr. Dale illustrates that more information is retained for a longer period of time when multiple senses are incorporated into the learning process. Dr. Dale has proven and documented that in training, the typical person retains only about 10% of what they read, 20% of what they hear and 30% of what they see. Viewers of movies and television retain 50% of what they hear and see. When the student is able to speak and act upon learned information the retention rate rockets to 90%



GOLD CROSS SAFETY INTEGRATES THE SQ3R AND CONE OF LEARNING METHODS

Gold Cross Safety driver safety courses use a 4-step process that stimulates the viewer in a number of ways and uses maximum senses:

- 1. Each interactive Gold Cross Safety digital course is audio-video based and begins with headlines, statistics, and charts. They serve as an overview of the information to be covered in the lesson, and allow viewers to mentally prepare to receive the content.
- Next, the subject matter is then presented using an audio-visual format, practice
 questions and other stimuli. While viewers are thinking about the topic and
 note the answers, additional content is being covered and points are highlighted
 on the screen.
- At the end of each section, there is a pause for viewers to repeat and recite the information they have learned with a series of self-correcting questions and answers.
- 4. Finally, the content is reinforced with a 20-question Smart Driver Challenge.

The result is a more impressive, interactive learning experience that stays with the viewer long after the initial lesson and evaluation is complete, and changes the participants driving habits in a positive way.

Gold Cross "Outcomes" Maxification TM

- Lower Collision Rates and Costs
- High Impact Proven Learning
- · Reduction in Injuries

Minification TM

- · Reduced Absence Rates
- The Cost with Time & Efficiency
- · Lower Financial & Human Cost
- Reduced workers Compensation
- · Reduced Liability Costs

Of course, the crash that didn't happen is the most effective outcome and does that make driver training a smart investment?

DRIVER SAFETY TRAINING A SMART INVESTMENT

Fundamental finance uses return on investment analysis (ROI) to determine capital allocation among competing projects. According to Gold Cross Safety the typical annual cost for a basic driver safety program can be provided for \$100 per year per

driver. Depending upon course intensity and delivery methodology the cost will increase accordingly. Based on data received from interested parties, the average cost of a corporate vehicle collision is approximately \$12,000 per occurrence. Of the total cost, approximately \$5% (\$10,200) is attributable to soft costs such as worker's compensation, liability costs, medical costs, rental vehicle, time out of work, replacement personnel, short and long-term disability, management time, etc. The remaining 15% (\$1,800) represents vehicle repairs. Unfortunately, it is the soft costs that are overlooked when a corporate vehicle collision happens. The good thing for Gold Cross Safety is that the cost containment environment has provided an opportunity to make corporate CFO's aware of an opportunity that will benefit their bottom line. Driver Safety Program ROI may be made clear with a simple example. Let's assume that an organization with a fleet of 500 vehicles and an average accident rate of 20% initiates an effective driver training program at a base cost of \$100 per driver per year for a total investment of \$50,000. Let's further assume that the implementation of the driver training program bring the accident rate down from 20% to 18%.

If we put together some numbers we may better see the result:

100 accidents represents a 20% accident rate (100 x \$12,000 cost per accident)	\$1.2 million total costs
90 accidents represents 18% accident rate (90 x \$12,000 cost per accident)	\$1.08 million total costs
Effect of Driver Safety Training	4.2 0.000

Accident rate reduction from 20% to 18%
Cost of Driver Safety Training
Net Savings

\$120,000 savings
\$50,000 cost
\$70,000

The accident reduction rate of 2% yields an ROI of more than 100%, and a net saving s of \$70,000. In addition the driver training program offers other significant benefits:

- Many major property and casualty insurers recognize an organization that
 has an effective driver safety training program with premium reductions
 in both the primary and excess insurance levels. This is based upon an
 underwriting analysis that takes into account effective driver safety training
 as a factor.
- Major life insurance companies are using a driver's motor vehicle record as an integral part of their underwriting process.
- Companies that have effective driver safety training programs and policies can attempt to defend themselves in lawsuits under the emerging legal doctrine of "negligent entrustment."

Moving from the hypothetical, let's take a look at a Case Study from a company that implemented the Gold Cross Safety program.

Case Study

A corporate manager from a major healthcare company with more than 3,500 vehicles implemented the Gold Cross Safety program and stated that developing an ongoing driver training program that raised driver awareness and kept driver safety training as a priority on senior management's agenda was a key to the company's success. Constant follow-up including newsletters, real-life success stories, and timely ongoing training programs became an integral part of the driver safety program. The company's driver training results include:

- 25 percent incident reduction
- 22 percent reduction in "at fault' collisions
- Decrease in driver injury rate
- 16 percent reduction in accident severity

The company in collaboration with Gold Cross Safety is defining a methodology to convert the reported statistics into quantifiable cost savings. However, it is apparent that the cost of purchasing and implementing the program has been recovered based on the previously presented ROI model.

Continuous Improvement

Since being established in 1999, Gold Cross Safety using its SMARTDRIVERTM program has trained over one million drivers from both the public and private sector; including 12 major pharmaceutical companies and 12 government agencies. At the same time, the company continues to focus on providing follow-up training and analysis. In 2010, the company received a patent from the U.S. Patent Office entitled MANAGERS DRIVER SAFETY OBSERVATION PROGRAM TM (the program). The program, using a video program and interactive workbook, enables the development of a custom tailored program in direct alignment with specific organizational fleet policies and procedures. The program can be delivered based on any corporate media requirement, including Online, Intranet, DVD, CD, VHS, and Satellite. In addition, the program will provide value to multiple organization units including Fleet safety, Risk Management, Employee Benefits, Finance, Labor Relations and Legal.

Using data from NHTSA, Fatal Crashes have declined from 37,107 in 1998 to 30,797 in 2009; Gold Cross Safety has certainly helped directly and indirectly to bring the number down.

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