

# Gaming Fuel Economy

## Powered by The Great Game of Business MiniGame™ Methodology

*By Tom Bagwell & Patrick Carpenter*

### Introduction

Maximizing fuel economy in on-highway vehicles is one of the most obvious ways of increasing profitability for any trucking fleet. The challenge is that there are so many factors that influence fuel economy. From vehicle specifications, maintenance, load, traffic, weather (including wind), terrain, and of course, the driver – the number of variables can cause someone to say it is nearly impossible to single out an improvement and its impact on fuel economy. Countless manufacturers – from tires, transmissions, engines, truck makers and oil companies all make claims of superior fuel economy when their products are used. There are even snake oil salespeople that claim products like fuel additives or what I called “magic beads” you put into tires can fix all sorts of ailments. The challenge is separating fact from fiction to determining what is of value and what is not. Interestingly, no manufacturer has come to my office and ‘guaranteed’ improvement in fuel efficiency.

In my experience, techniques and methods of enrolling drivers into improving fuel economy are rare. Typical managerial role models in my past were the kind who were very good at ‘telling’ employees what to do and not very good at ‘teaching’ people what to do. Strong personalities can manage by fear and intimidation, but this technique is a challenge to employee buy-in. Research in leadership effectiveness shows people want to be led, not pushed. People want to do the right thing, not forced to do things right. It took me a long time of reflecting back on what worked and what didn’t to understand the nuance of those words. As shown in my last paper, Driving Fuel Economy, I learned that the addition of aerodynamic and fuel efficient devices without driver training is insufficient – as drivers will naturally trade speed for fuel economy, if not given a reason to do otherwise.

## We all like to Win (and make money)

I drive a GMC Terrain which continuously calculates my fuel economy and displays it on my dashboard, along with my best fifty miles MPG statistics. I find myself consistently looking at the display of the MPG over the last fifty miles. When I look at it, I want to beat my average. The inner competitive spirit kicks in – it is Game On! Better habits kick in, like coasting to red lights, using cruise control, even obeying the speed limit, all to improve my average MPG. Before focusing my effort on beating my “best” became a game, my MPG was significantly lower.

A while ago, a customer asked me to help their company improve the fuel economy on their new tractors. Working with his team, we implemented a simple reward system for fuel economy improvement. If his drivers achieved a target improvement in MPG, then they would get a barbeque and some nice jackets. We trained the drivers on some basic ways of improving fuel economy, gave them the reports from their engine (it wasn’t available on the dash at the time) every two weeks and Voila!

There was an improvement of 8% across the board for the fleet, which translated to \$30,000 in fuel savings over the year. This is clear evidence of the value of driver engagement in fuel economy. In contrast, a different customer installed an air deflection device, but we did not talk with their drivers. The resulting improvement in fuel economy was one half of one percent (.5%). To put the value of the difference in

improvement in perspective, if the fleet that saved \$30,000 in fuel through driver training had the same percentage of improvement as the air deflection device trucking company, their savings would not have been \$30,000, it would only have been \$1,800. Looking at this difference made me incredulous – something that we KNOW will improve fuel economy – aerodynamics - can have a much smaller impact than something as ‘soft’ as driver training. I have spent the last eight years at my company and as a Professor at California State University East Bay to try to understand the anomaly of physics versus human behavior demonstrated in that simple example.

## What’s at Stake:

Working with a few customers and with our own fleet, I have seen improvements in fleet fuel economy as high as 15%. Even with today’s low fuel prices, fuel costs can challenge company profitability. A truck running 50,000 miles per year, averaging 7 MPG with a fuel cost of \$3/gallon and experiencing a 10% improvement will save 650 gallons or nearly \$2,000 per truck per year. For a fleet with more trucks or miles or a bigger improvement in fuel efficiency – the savings will only compound. Consuming 650 fewer gallons in a year also means fewer stops at a fuel island, less dependency on foreign oil and fewer green house gases.

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## Why Games?

Games are fun. Brene Brown, a researcher and Professor at the University of Houston talks about the need for “Adult Play”. “The opposite of play,” she says, “is not work, it is depression”. She noticed that people were more satisfied in their life when they were at play. How many of us have worked in or are working in an environment where negativity, cynicism and sarcasm reign? The idea that play can help with profitability was a new learning for me, and was completely at odds with the traditional way I was taught to lead – “There is Work and your Personal Life – and they should be separate”. One of the most powerful books I have encountered was a book called, “The Great Game of Business” by Jack Stack. It was mandatory reading for an MBA class

at the University of Chicago. Jack had taken over a diesel engine remanufacturing plant in Springfield Missouri and realized that some major improvements were needed. One of the most significant outcomes of his work that he shares is the concept of MiniGames™. His mantra, “People support what they help create” is never more evident than in how a game can enroll entire teams of people in support of a goal. Another mantra of his company, Springfield Remanufacturing Corporation (SRC) is “it is easy to stop one; it is hard to stop 100” meaning a good idea supported by the rank and file has better chance of success than one supported only by a single manager.

Beyond the basic safety and security needs that employees need from their jobs, here is what highly engaged employees want:

1. **To Be Recognized and Appreciated**
2. **To Have Meaningful Work**
3. **To Matter and Be Relevant**
4. **To Do their Best**
5. **To Learn**

Playing games that solve business problems at work accomplish all of the above, and lead to a more

engaged work environment. What does this mean for most companies? A Gallup Management Journal Survey from January, 2015 found that only 31.5% of employees are actively engaged in their work, 51% are not engaged (they’re sleepwalking through work), and 17.5% are actively DISENGAGED – they are not only unhappy, they are planning ways to act out their unhappiness. Think back about how much time you spend correcting or dealing with poor behavior from employees versus how much time you spend developing a positive, constructive work environment. If you spend all your time managing difficult employees, you will continue to have difficult employees, because you have not changed the environment that allowed their behavior to flourish.

Games are an easily understood topic for everyone in your company. Games are considered fun and competitive. Also, everyone knows that games have rules, clear goals and players. Many companies, from SRC to Peterson Trucks to Southwest Airlines incorporate “Games” to improve employee and customer satisfaction as well as business results.

**MiniGame™ tip:**  
Play it out! We all win together or we all lose together.

## What is a MiniGame™:

MiniGames™ were developed by Jack Stack, and were described in his book *The Great Game of Business*. MiniGames™ are essentially a way to correct a weakness or pursue an opportunity in the business. A MiniGame™, like any game, has players, rules and goals. The goals chosen for the game, such as increase sales by 20%, should be key drivers for your business. MiniGames™ encourage individuals and teams set goals and solve problems together. When Peterson Trucks was trained on MiniGames™, we went over the following:

1. **Choose the Target and Goal** – make it clear and objective, narrow rather than broad
2. **Identify the Players** – Anyone who affects the number (for example, an entire department for a departmental goal)
3. **Forecast the benefits**
4. **Determine the Time Frame** – no more than ninety days, no less than thirty days
5. **Design a Scorecard** – Make it fun, create a theme. People play differently when they keep score
6. **JumpStarts** (Great Game calls them ‘Huddles’) – Regular feedback sessions
7. **Decide Rewards and Recognition** – Make it memorable and use non-cash rewards
8. **Evaluate the Results** – Did it work? If so, celebrate the win!!!

An example from my company helps to illustrate the process and impact of games. Kevin was a Manager in the parts department. He and his team identified improving the fuel efficiency of our parts delivery vehicles as a key objective for improving the profitability of the department. His team then initiated a 60 day game with weekly JumpStarts.

JumpStart meetings are essential in MiniGames™. These weekly (or daily), stand-up meetings last about fifteen minutes and have four key elements:

1. **Physical warm-up** - These help wake people up and gets them focused on the discussion to follow
2. **Review** - Did we make progress on the team's goal? What worked? What held us back?
3. **Focus** - What are we focusing on today? This week? – this is where tips and strategies are shared,
4. **Appreciations, Acknowledgments and Apologies**

JumpStarts also tie in perfectly with the four things what employees want - to learn, to do their best, to matter and be recognized and meaningful work.

The buy-in that Kevin received during these JumpStart meetings was inspiring. With a clear goal established and the knowledge that they could make a tangible difference to the company's bottom line, the drivers started to share their strategies for success. "Make sure you shut off the engine at the customer's location, every drop counts" and "Coast off the freeway when you exit – every time you touch the brake you waste fuel". Note that it is very important that the team competes to achieve a team goal, they do not compete against each other. The team either wins or loses – there are no individual winners. This helps foster collaboration, teamwork and communication.

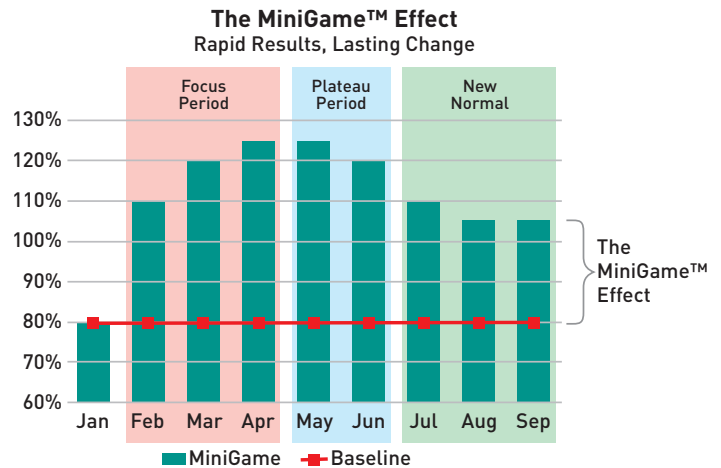
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The success of game methodology was evident in the results. After the first month of the game, the drivers improved fuel economy 11.9%. In the second month of the game, we improved *ANOTHER* 10%. Over the course of two months, fuel economy improved over 22% - without any mechanical

changes to the trucks. The only change was the perception of the drivers that their work actually matters.

## MiniGame™ Effect

When a team focuses on a goal – many times it is achieved. In one of our MiniGames™, we measured how quickly we pick up the phone. 25% of the time, we did not achieve the target – that was awful. We implemented a MiniGame™ with a target of 10% and we achieved it! 60 days later, without the focus and effort of the MiniGame™, it was back at 15%. This is the MiniGame™ effect.



After the pressure of focus on a goal by a team is relaxed, the results get worse – most of the time they don't go all the way back. Think of this as a rubber band. When you stretch a rubber band (apply pressure on a goal) – you can stretch the rubber band. When you release the pressure of the rubber band, it goes back, but not ALL the Way. This is how people learn, by stretching themselves and the organization. We ended running the same game six months later and the results improved to 5%. The last set of results stuck and has not been above 5% in over a year.

## Enrolling the Team—Getting Started

This is probably the most challenging part. You want to improve fuel efficiency in your vehicles in your trucks and now you have to figure out how to roll this plan out. "Getting Buy-in" is one of the most important leadership skills one possesses. Here are some basic considerations before getting started:

**"Why before the How" – Jack Stack.** Your team needs to know what is driving the change. It needs to



be clear and significant. People do not like change. One of the worst things a Manager can say to their team is “there’s going to be a lot of changes around here”. Change threatens survival. The voice in the head instantly goes to how this change WILL NEGATIVELY affect me. “Will I lose my job? Is my pay going to be cut? Will I be embarrassed? Am I going to fail?” Rare is the person who can thrive in change (if you can - congratulations!). Change invokes fear and uncertainty. Employees will pull back if they sense fear. The challenge is how to start a MiniGame™ without making your team push back too hard. Professor Homa Bahrami of the University of California, Berkeley says that sometimes simple word choice can make all the difference in the world, if we substituted the word “improvement or better” instead of the word ‘change’ – that simple word substitution can reduce tension. It is also important to paint a clear picture of what success looks like and how you will work hand in hand to make the team successful. That is why making sure that the ‘competition’ to these games is not a person in the company – it is a competitor or a metric that needs to be beaten. The challenge is always a person or a metric outside of an individual(s) on the team.

**Be Clear on the Rules.** No one likes to play a game when the rules change. It only takes one time to change a rule that negatively affects the rewards and recognition of a team for the team to be forever turned off. When making the rules of the game – be clear on the base line metric, how it is measured, who measures it, when it is measured and what is “in” and “out” of bounds. Likewise, the more rules you need, the less clear the game is. Keep it VERY, VERY, SIMPLE. A good practice is to write the rules out and assign an independent 3rd party to become a “referee”.

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## SOURCES AND ADDITIONAL RESOURCES:

Listed below are additional resources and readings to help make you successful in your MiniGame™. You can’t win if you don’t play.

### Sources:

Stack, Jack, and Bo Burlingham, “*The Great Game of Business.*” New York, 2013 Print  
Bahrami, Homa. “*Organization Transformation.*” Peterson Brand Ambassador, Peterson University, San Leandro. 2014  
Bagwell, Thomas. “*Driving Fuel Economy.*” White Papers. Peterson Trucks, 1 July 2011 Web.  
Adkins, Amy. “*Majority of U.S. Employees Not Engaged Despite Gains in 2014.*” Gallup 28, January 2015. Web  
Brown, Brene. “*The Power of Vulnerability: Teachings of Authenticity, Connection, and Courage.*” Audible CD

### Resources:

[www.greatgame.com](http://www.greatgame.com)  
Maritz: *Achieving dramatic bottom-line results using non-cash rewards.*  
<http://www.maritz.com/~media/Files/MaritzDotCom/White%20Papers/Motivation/Non-Cash-White-Paper-Rev.ashx>

## Selling the Idea to your Boss.

Here are some things to consider in doing that:

- **Estimate the Return on Investment (ROI).** For example, with the trucking fleet that saved \$30,000/year. The rewards cost \$1,500. Even with the MiniGame™ affect – the savings over three months equaled \$3,750. The ROI is  $(3,750-1,500)/1,500$  which is equal to 150% in two months. Even with the MiniGame™ affect – let us assume that fuel economy improvement lowered from 10% to 5%. The ROI for the entire year would be over 1100%.
- **Focus on the potential benefits** – financial results, engaged team as well as seeing if this approach can be applied to other business problems (Safety, quality, maintenance, etc...). Paint a vision of what success looks like and how success in this game will mean success for the company.
- **Understand your own motivation for introducing this to your company.** Understand why this is important to you so that you can share that to your boss and your employees. For me, I remember when my father’s company went out of business. I was twenty years old and I did not know enough to help. It was a defining moment in my life and the major reason why I dedicated my life to learning and teaching companies, employees, and students about business.
- **Understand the Environment and your boss**
  - Is the timing right? Is your business ready for this?
  - Under what circumstance would they say, ‘yes’
  - Where should you present this?
- **Give him a copy of “The Great Game of Business”**

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## AUTHORS:

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**Patrick Carpenter** is a Vice President at The Great Game of Business. He speaks and consults regularly on behalf of SRC and the Great Game of Business. Patrick's 20 year career includes senior management positions with two global fortune 100 companies and helped lead several organizations through the recent recession. Patrick is the son of the late Jill Carpenter, who helped to pioneer the concept of Open Book Management, co-authoring two books, The Power of Open-Book Management and The Field Book of Open-Book Management.





# Checklist for a Good MiniGame™

- Establishes line of sight
- Everyone has a chance to win
- Rules are clear & simple
- Easily measured & scored with a simple, meaningful scoreboard
- Frequent scoring for constant reinforcement
- Competition against a problem or opportunity, not each other
- Scoring rewards positive outcomes, rather than penalty scoring
- Limited duration, or early first round winners
- Prizes encourage participation, not competition
- Prizes reward performance, not motivate performance
- Goal is meaningful to the team's overall performance
- Scorekeeper to settle disputes
- Incorporates business training to aid understanding
- Promotes long-term change
- Doesn't cause problems for other workgroups or departments

## Potential MiniGame Targets

Billable hours	Special project sales
Product yield	Average collection days
Re-work	Invoice/service ticket accuracy
Maintenance renewals	Work-in-progress
Sales or gross margin	On-time delivery
New customers	Process time
Recruiting	Average sales
Inventory accuracy	Referrals
Response time	Add-on sales

# Create a MiniGame™

**1. Name the game:** The improvement objective/target.

**2. Set the goal:** X to Y by when.

**3. Estimate the benefit:** The potential impact/return.

**4. Identify the players:** Those that can impact the target.

**5. Determine the time frame:** Long enough to change the behavior.

**6. Create a theme and build a scoreboard:** Be creative.

**7. Decide on the reward:** Think low on dollars, high on fun.