

# Application of Strategy Dynamics: Starbucks Corporation

Pascal Gambardella, Ph.D.

CSC

12708 Chilton Circle

Silver Spring MD, 20904

301-346-5398

[pgambard@csc.com](mailto:pgambard@csc.com)

*Strategy Dynamics (Warren, 2008) provides a quantitative, resource-based approach to understanding a firm's performance over time. This paper describes a strategy analysis of Starbucks Corporation using Strategy Dynamics. It demonstrates the usefulness of this approach in addressing business performance issues for a real-world company. The strategic architecture, a key artifact of the approach, is a model that captures the interactions of a firm's tangible resources, management decisions, and external factors. Starbucks's strategic architecture for its retail store business was developed using employee, store, and financial data from Starbucks's annual report; and, other public information. The strategic architecture and related models were used to explore several issues that can influence Starbucks's strategy: customers with less discretionary income, expanding too fast, impact of staff layoffs on the quality of service, getting and maintaining loyal customers, and rivalry with competitors.*

**Keywords:** strategy dynamics, strategy, strategic architecture, Starbucks

## Part 1. Starbucks

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*"To inspire and nurture the human spirit— one person, one cup, and one neighborhood at a time." Starbucks Mission, Starbucks website*

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### 1.1. Background and Scope

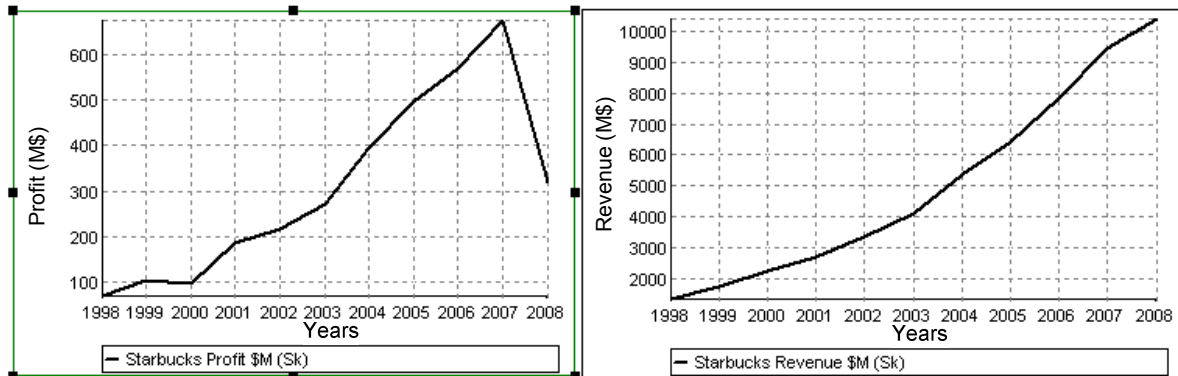
Starbucks is a public company that operates a chain of stores that sells high-quality coffee. Its typical company-owned store has a pleasant, coffee-house atmosphere replete with couches and Wi-Fi. Starbucks also licenses stores, not to individuals, but to other businesses. For example, in the US Starbucks licenses stores to Barnes and Noble booksellers. Some of these establishments provide similar Starbucks atmospheres; others just have a counter to sell coffee and pastries. Starbucks's stores account for about 90% of Starbucks's revenue.

This paper describes a strategy analysis of Starbucks using Strategy Dynamics (Warren, 2008). The scope of the analysis was Starbucks's company-stores. The

results are illustrative. Data from Starbucks annual reports and other public sources were used in the analysis, however many assumptions needed to be made to fill in gaps in the information. So rather than provide detailed numbers that Starbucks can use to define their strategy, this report provides a useful approach that Starbucks, if using the approach, would need to fill in the necessary details to make the analysis more realistic.

## 1.2. Starbucks Issues

As illustrated below, Starbucks profit (net earnings) dropped significantly in 2008 and its rate of revenue increase began to slow.



**FIGURE 1-1**  
**Starbucks Profit and Revenue**

Starbucks lists the average sales growth increase each year in comparable stores, which are stores that have been opened 13 months or more. To better understand the meaning of this growth assume a store made one million dollars in 1997, then the following plot illustrates how much it would make per year over the years based on the percent growth reported by Starbucks. The percent became negative for the first time in 2008.



**FIGURE 1-2**  
**Illustrative Example of Comparative Store Growth**

From a profit, revenue, and comparative store view Starbucks’ business appears to be stalling. No one issue may be responsible for Starbucks’ current problems. Also there may be no simple cause and effect. For example, Starbucks may have benefited early in its history by word of mouth (positive feedback): the snowballing effect of potential customers becoming loyal customers after being told of the great coffee and atmosphere from loyal customers. On the other hand (negative feedback) if Starbucks fires many employees or begins having a higher attrition rate, quality of service may decline, resulting in fewer customers who will tell their friends not to come thus reducing the number of potential customers.

The following sessions discuss three possible issues confronting Starbucks.

### 1.2.1. Less Discretionary Income?

Because of current, poor economic conditions, customers may have less discretionary income to spend. The pool of potential and active Starbucks customers may decrease based on these conditions.

Yet other companies are doing well despite the poor economy. Lauren Shepherd of AP reported that McDonald’s same store sales rose 8.5% in October 2008. She speculated that people were “seeking value” and going to McDonalds. McDonalds and Starbucks *do* cater to different market segments with some overlap. However, perhaps Starbucks can also improve its performance despite the current economic crisis.

### 1.2.2. Expanding too Fast?

Has Starbucks’ expanded too fast by opening too many stores each year? In 2008, Starbucks decided to close 600 stores in the US – that is about 8% of US company-owned stores. One way to increase the number of customers is too keep opening new stores. However what is a good rate to do this?

Are there too many Starbucks stores in any given location? I went to the Starbucks’ website and found the stores within an ever increasing area around my home. The results were:

- 2 miles from home = 2 stores
- 5 miles from home = 12 stores
- 10 miles from home = 60 stores
- 20 miles from home = 253 stores

By increasing the density of stores each year Starbucks may be reaching customer saturation.

### 1.2.3. Increased Competition?

Starbucks faces increased competition from fast-food chains. According to Morningstar, although Starbucks competes with similar coffee shops that have a coffee-house environment, its major competitors for the coffee itself are the fast-food firms McDonalds and Dunkin' Donuts. Starbucks has about 11500 US locations and its nearest coffee-house rival is Caribou Coffee with 500 US stores.

After a disappointing 4<sup>th</sup> quarter in 2008, Morningstar analyst John Owens (November 11, 2008) said:

“Starbucks still dominates specialty coffee retailing, and fears of from rising competition from the fast food sector are overblown, in our view.”

Starbucks does face competition from the fast-food industry. Owens goes further and states:

“We believe McDonalds, Dunkin' Donuts, and other fast food chains compete more on price, while Starbucks caters to customers aspiring to a higher-end experience, with baristas handcrafting and customizing the drinks. Another source of differentiation is Starbucks' stylish cafes, offering customers a “third place” where they can relax and work.”

Starbucks started making breakfast dishes like McDonalds, but stopped after customers complained that the smell detracted from the coffee house atmosphere.

## Part 2. Strategic Approach

### 2.1. Introduction

Part 1 discussed Starbucks current issues of decreasing profit and slowing revenue. It also indicated some possible factors that may have contributed to these issues. What approach can Starbucks use to create, implement, and maintain a recovery and growth strategy?

Strategy Dynamics provides a quantitative, resource-based approach to understanding a firm's performance over time:

- Why a firm has reached its current state.
- Where it will go if it retains the same approach.
- How it can set appropriate objectives to improve performance.

Strategy Dynamics provides a language for the quantitative expression of strategy and enables “what if” scenarios. The approach is taken in a series of steps, which are documented in detail as worksheets in the Technical Appendix. Each worksheet describes a model that can illustrate different strategic approaches. The following discussion summarizes the approach and illustrates results using simulations. The

Mystrategy software was used to generate the models and many of the figures in this paper.

## 2.2. Performance over Time – Principal Objective

Starbucks's principal objective is an increase in profits over time. Figure 2-1 represents actual profits through fiscal 2008. The decrease in profits in 2008 represents what Starbucks hopes is a temporary setback. The figure also indicates a preferred future profit profile and a feared profile if Starbucks's policies and/or the current economic climate remain on their current course. Despite current economic conditions, a presupposition of Strategy Dynamics is that a firm may be able to greatly improve its performance through a change in its strategies and policies.

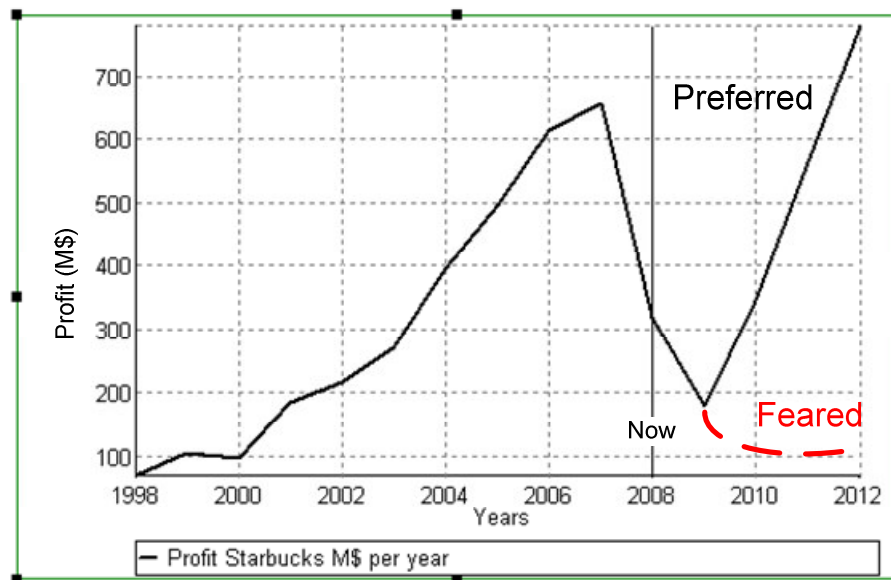
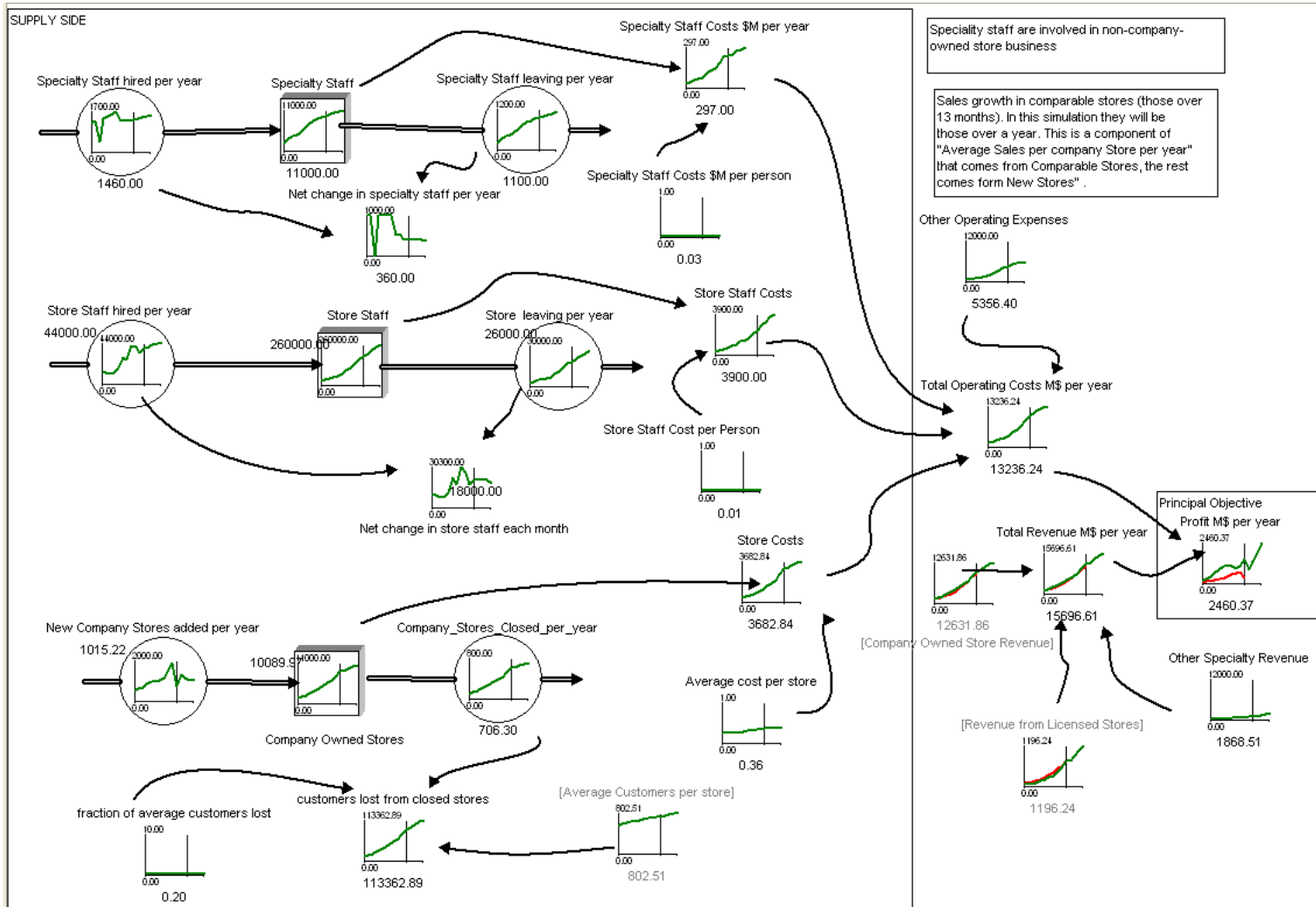


FIGURE 2-1  
Starbucks Profit (Net Earnings)

## 2.3. Strategic Architecture

The strategic architecture is a model that captures the interactions of a firm's tangible resources, management decisions, and external factors. Starbucks's strategic architecture for its retail store business was developed using employee, store, and financial data from Starbucks's annual reports.

Figure 2-2 lists the supply side of this architecture. It consists of three major resources: store staff, specialty staff, and company-owned stores. Specialty staff supports non-store activities such as dealing with licensed stores and processing coffee at Starbucks's coffee plants. Each resource has an inflow and outflow. Starbucks strategy decisions influence these flows. For example, Starbucks decides how many stores to increase each year and how many people to hire. Also, its employee policies influence the rate staff leave. It has had an 80% employee turnover rate compared with 300% for fast food chains.



**FIGURE 2-2**  
**Supply Side of Strategic Architecture**

Figure 2-3 illustrates a major part of the Demand Side of the strategic architecture. The principal resource is Starbucks's store customers. Even though this resource is not "owned" by Starbucks, Starbucks can behave in ways that both increase or decrease its stock of store customers.

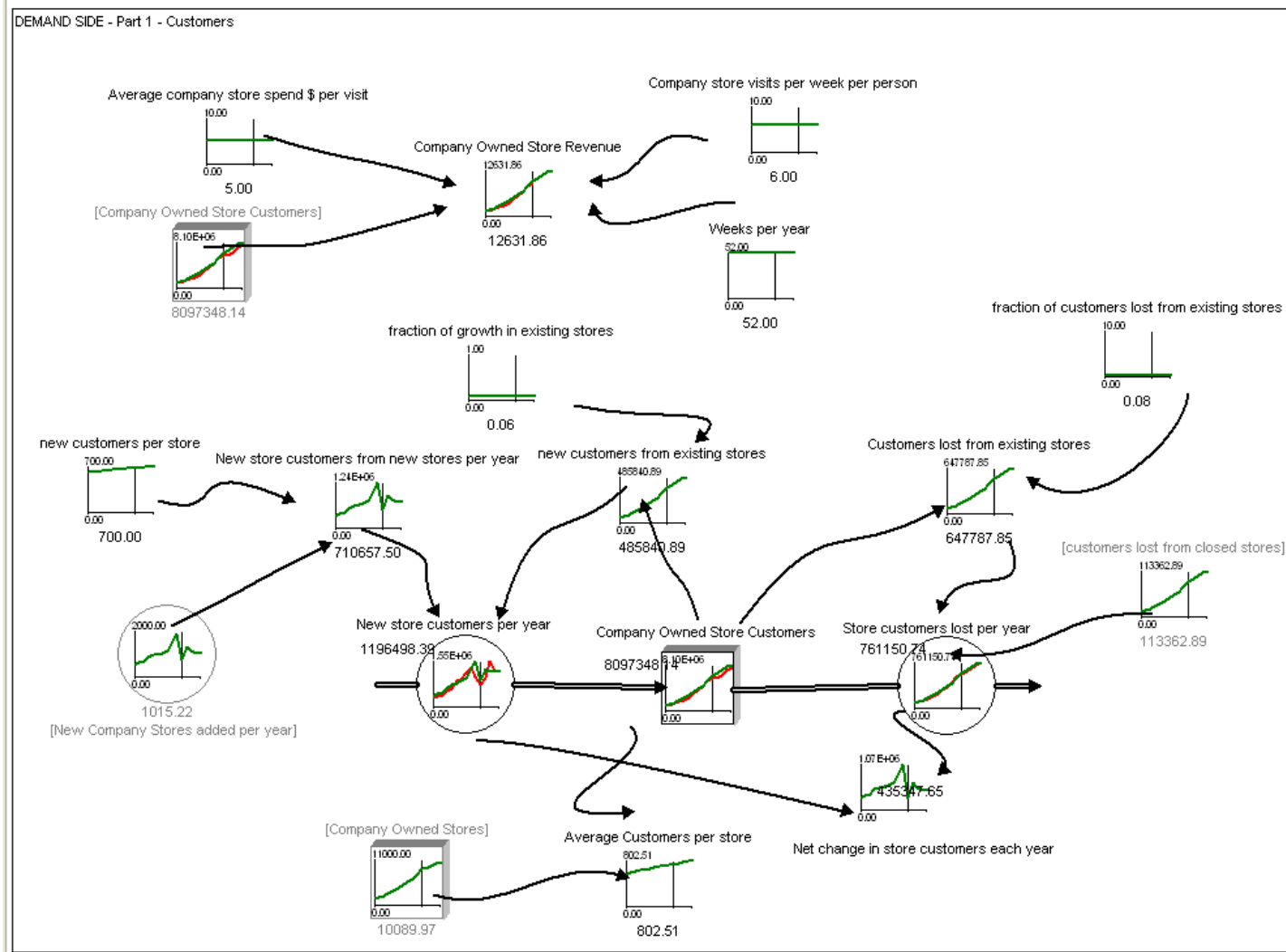


FIGURE 2-3  
Demand Side - Customers



### 2.3.1. Discretionary Income

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*“Starbucks, a brand that encouraged consumers to trade up, is changing its tack after discovering that its most faithful customers are saving money in part by making fewer visits to the chain” – Janet Adamy, Wall Street Journal, December 5, 2008*

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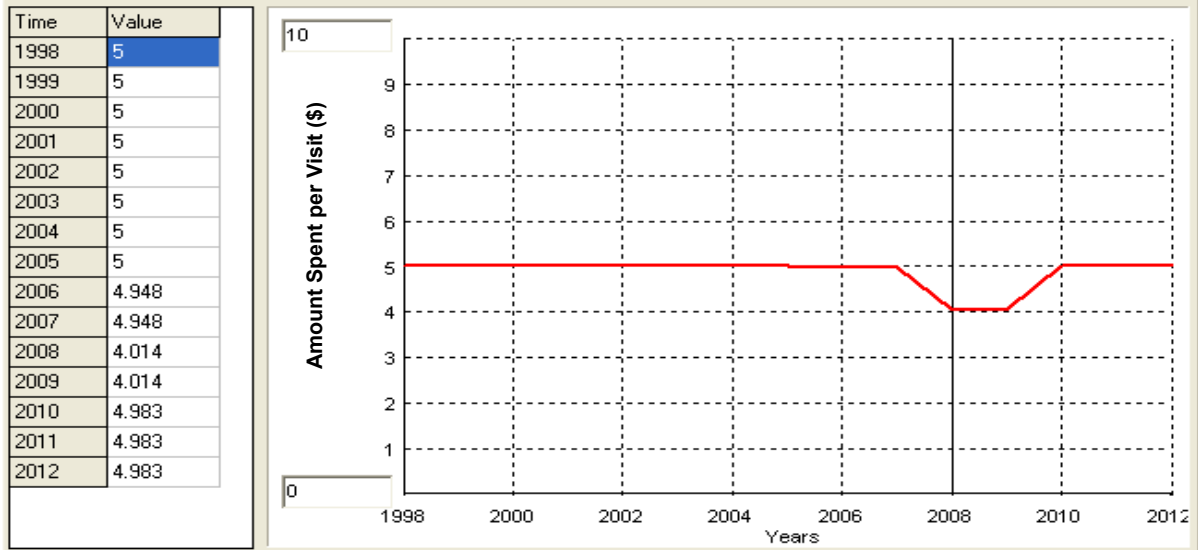
In section 1.2.1, I mentioned that customers may have less discretionary income to spend because of current economic conditions (e.g., many have had a 35% drop in their investment portfolios and others are losing their jobs).

To illustrate the type of “what if” scenarios to run using the Strategic Architecture, let’s assume that because of economic conditions loyal Starbucks customers visit Starbucks the same number of times each week, but spend 20% less. The following diagram shows the results of two runs. I tried to mirror current conditions by assuming:

- The rate of store expansion was fixed for both runs with a leveling off in 2008 and 2009 and an increase in subsequent years.
- The rate of customer growth drops slightly in 2008 and 2009, but continues to grown at a faster rate in subsequent years.

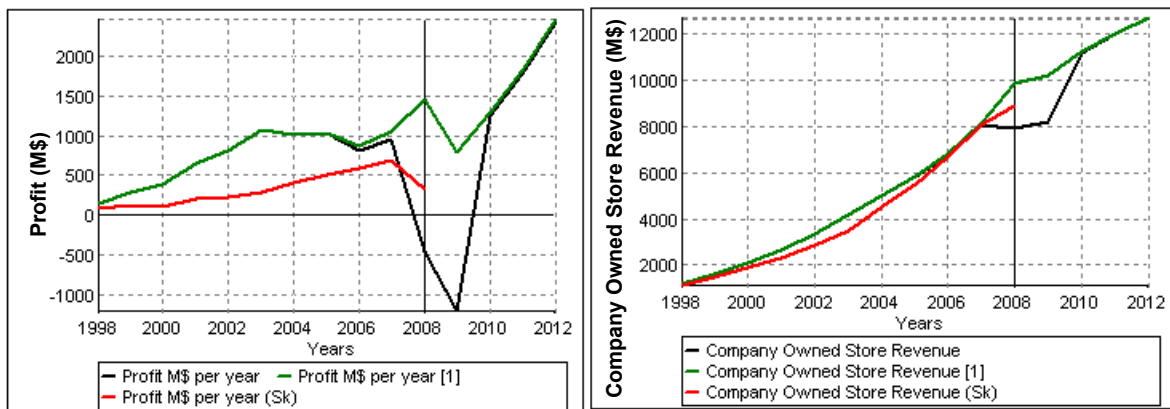
The following runs were performed:

- **Run 1 - Business as Usual** – Customers spend an average of \$30 a week from 1998 to 2012. The average number of customer visits per week is 6 and the amount spent per visit is \$5
- **Run 2 - Impact of Less Discretionary Income** - Customers begin spending less in 2007, down to an average of \$24 per week, and then back to \$30 in 2010 as illustrated in Figure 2-4. The average number of customer visits per week is still 6.



**FIGURE 2-4**  
Amount Spent Per Visit

Figure 2-5 illustrates the results. The **green** lines correspond to Run 1 (business as usual) and the **black** lines to Run 2 (customers spend 20% less). The red line was derived from actual Starbucks data. The **red** plotted data has the letter “Sk” after the description in the plot; this means sketched data versus simulated data. The sketched data is derived from Starbucks fiscal reports.



**FIGURE 2-5**  
Results of a 20% Decrease in Loyal Customer Purchases in 2008 and 2009

A 20% decrease in customer spending significantly impacts the bottom line going from positive to negative profit. Beverage sales account for 75% of Starbucks revenue. Perhaps this is the reason why Starbucks does not want to lower the price of its \$4 coffee drinks. However, other alternative may exist to increase profit, e.g., winning more customers and cutting costs. Also, through different marketing campaigns, Starbucks may find a way to effectively lower its beverage prices while gaining more customers to compensate.

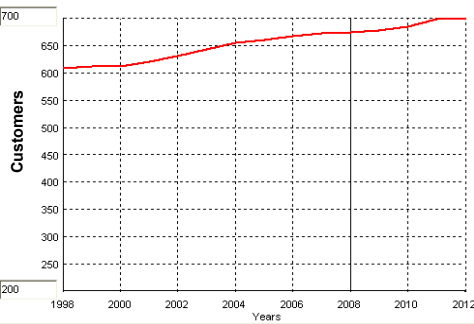
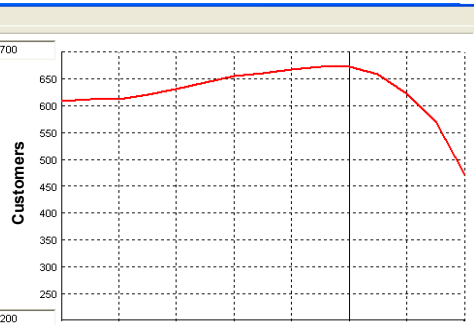
**Recommendation to Starbucks:** Consider the effect of lowering your beverage prices to deal with the current economic crisis, or cutting costs. Other alternatives may be to find ways to increase your loyal customer base.

The above model was created in November 2008. On March 18, 2009 Starbucks announced that it was focusing its attention on increasing profits in existing stores by: “aligning the company’s cost structure to its current business strategy with a planned \$500 million structural expense reduction in fiscal 2009” It is also “improving operational efficiencies.” So rather than significantly lower its beverage price, it is choosing to find ways to cut costs through less structural expansion and improved operational efficiencies.

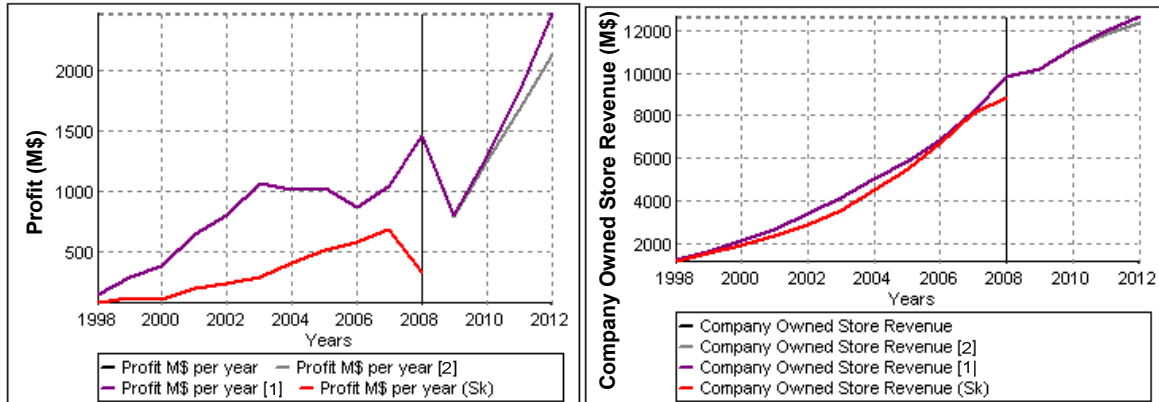
### **2.3.2. Increasing Density of Stores**

In section 1.1.2 I mentioned that the number of Starbucks stores per unit of area may be becoming too dense. In this situation the number of new customers won per new store may drop. The strategic architecture can be used to see the possible effects of this issue. Table 2-1 lists plots of the number of customers/year brought in by new stores each year for two situations. The first situation (Run 1) is more of a hope that every time a store opens Starbucks gains more customers at an increasing rate. In the second situation (Run 2) for year 2008 and beyond stores bring in less and less new customers because the number of stores has become too dense and customers could easily visit many stores.

TABLE 2-1. Runs that Examine the Effect of Store Density

Plots of Number of Customers/year brought in by new stores																																	
<p><b>Run 1 –</b> More Customers are brought in each year by new stores</p>	<table border="1" data-bbox="581 384 711 705"> <thead> <tr> <th>Time</th> <th>Value</th> </tr> </thead> <tbody> <tr><td>1998</td><td>607.958</td></tr> <tr><td>1999</td><td>610.381</td></tr> <tr><td>2000</td><td>610.381</td></tr> <tr><td>2001</td><td>620.069</td></tr> <tr><td>2002</td><td>629.758</td></tr> <tr><td>2003</td><td>641.869</td></tr> <tr><td>2004</td><td>653.979</td></tr> <tr><td>2005</td><td>658.824</td></tr> <tr><td>2006</td><td>666.09</td></tr> <tr><td>2007</td><td>670.934</td></tr> <tr><td>2008</td><td>673.356</td></tr> <tr><td>2009</td><td>675.779</td></tr> <tr><td>2010</td><td>683.045</td></tr> <tr><td>2011</td><td>697.578</td></tr> <tr><td>2012</td><td>700</td></tr> </tbody> </table> 	Time	Value	1998	607.958	1999	610.381	2000	610.381	2001	620.069	2002	629.758	2003	641.869	2004	653.979	2005	658.824	2006	666.09	2007	670.934	2008	673.356	2009	675.779	2010	683.045	2011	697.578	2012	700
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<p><b>Run 2 -</b> Customers brought in by New Stores decreases because of a greater density of stores. It drops by about a third in four years.</p>	<table border="1" data-bbox="581 772 711 1094"> <thead> <tr> <th>Time</th> <th>Value</th> </tr> </thead> <tbody> <tr><td>1998</td><td>607.958</td></tr> <tr><td>1999</td><td>610.381</td></tr> <tr><td>2000</td><td>610.381</td></tr> <tr><td>2001</td><td>620.069</td></tr> <tr><td>2002</td><td>629.758</td></tr> <tr><td>2003</td><td>641.869</td></tr> <tr><td>2004</td><td>653.979</td></tr> <tr><td>2005</td><td>658.824</td></tr> <tr><td>2006</td><td>666.09</td></tr> <tr><td>2007</td><td>670.934</td></tr> <tr><td>2008</td><td>670.588</td></tr> <tr><td>2009</td><td>656.747</td></tr> <tr><td>2010</td><td>620.415</td></tr> <tr><td>2011</td><td>568.512</td></tr> <tr><td>2012</td><td>469.896</td></tr> </tbody> </table> 	Time	Value	1998	607.958	1999	610.381	2000	610.381	2001	620.069	2002	629.758	2003	641.869	2004	653.979	2005	658.824	2006	666.09	2007	670.934	2008	670.588	2009	656.747	2010	620.415	2011	568.512	2012	469.896
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The following figure illustrates the results of these runs. The purple line corresponds to Run 1 (increasing customers brought in) and the green line to Run 2 (decrease in customers due to higher store density). The red line illustrates data based on derived data from Starbucks fiscal reports.



**FIGURE 2-6**  
**Runs Illustrating the Effect of Having a Higher Store Density**

In these runs the effect of increasing the density of stores decreases profits and revenues. If we compare the profits in 2012 with those in 2008, the change is \$347 million.

This model was a rough way to estimate the effect increasing store density.

**Recommendation to Starbucks:** Consider the effect of store density on gaining new customers when deciding where to place a new store.

## 2.4. Staff and Staff Experience

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*Starbucks has been my home now for a number of years. It has been a fantastic place to work for, one I wouldn't hesitate to enthusiastically recommend to anyone. I can't do that anymore. ... Here's the thing, we are as busy as ever. Yet the powers that be have told us we have to cut labor, be more efficient, sales are down. Less experienced baristas are having their hours cut to near or below the level of even making them worth having around. That puts more weight on the experienced baristas. But they are cutting the margins on the experienced baristas and shift supervisors as well. And the weight on the managers is intense by this point. Basically without saying it, they are telling us to work off the clock." Unknown Starbucks Barista, December 10, 2008 (<http://starbucks-gossip.typepad.com/>)*

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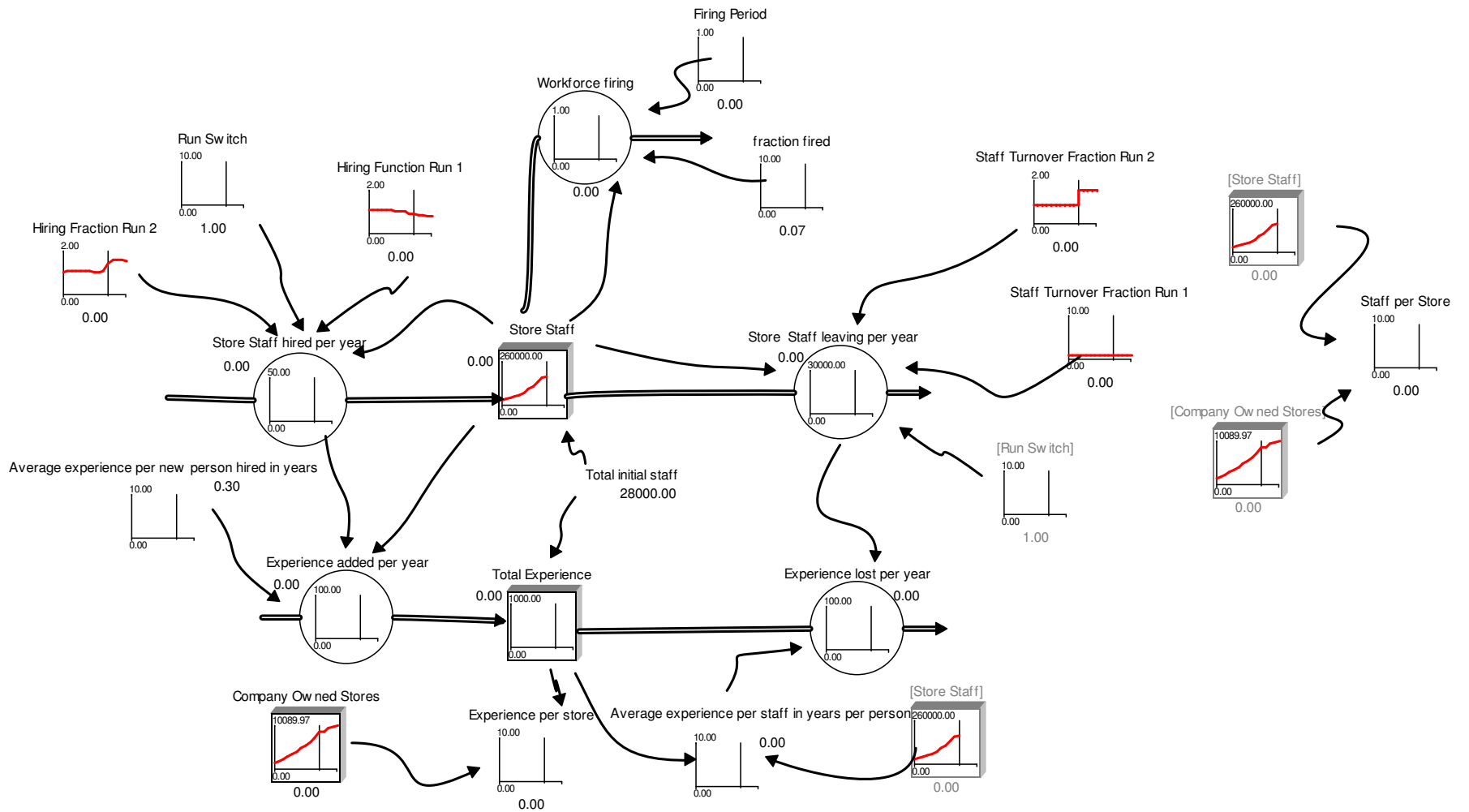
Starbucks is changing some policies regarding its staff. It is considering laying-off people and asking other people to commit to working more hours per week. Starbucks wants to increase barista hours to at least 32 hrs each week (only managers get to work 40 hrs). They also want the baristas to commit to be available to work 70% of the available store hours. My local Starbucks is open 110 hours a week, so for this store a barista would need to be available to work during 77 hrs per week. Many feel it is unfair to demand so much availability because Starbucks has not guaranteed that baristas will actually work at least 32 hrs/week. To be fair to Starbucks, they think that this new approach will result in lower turnover and lower training costs (Adamy, October 2008). The short term effect, however, could be a higher turnover as unhappy workers leave or are fired.

The figure below implies an experienced staff is needed to make perfect coffee. Suppose baristas are unhappy and have a higher turnover rate. What could be the effect of this be on the quality of service?



**FIGURE 2-7**  
**Starbucks Ad on Side of Chicago Building**

The model illustrated in the figure below examines Starbucks staff and the associated attribute of total experience. The model can also be used to compute “experience per store” which can be related to the quality of service: the less “experience the less the quality of service (and vice versa).”



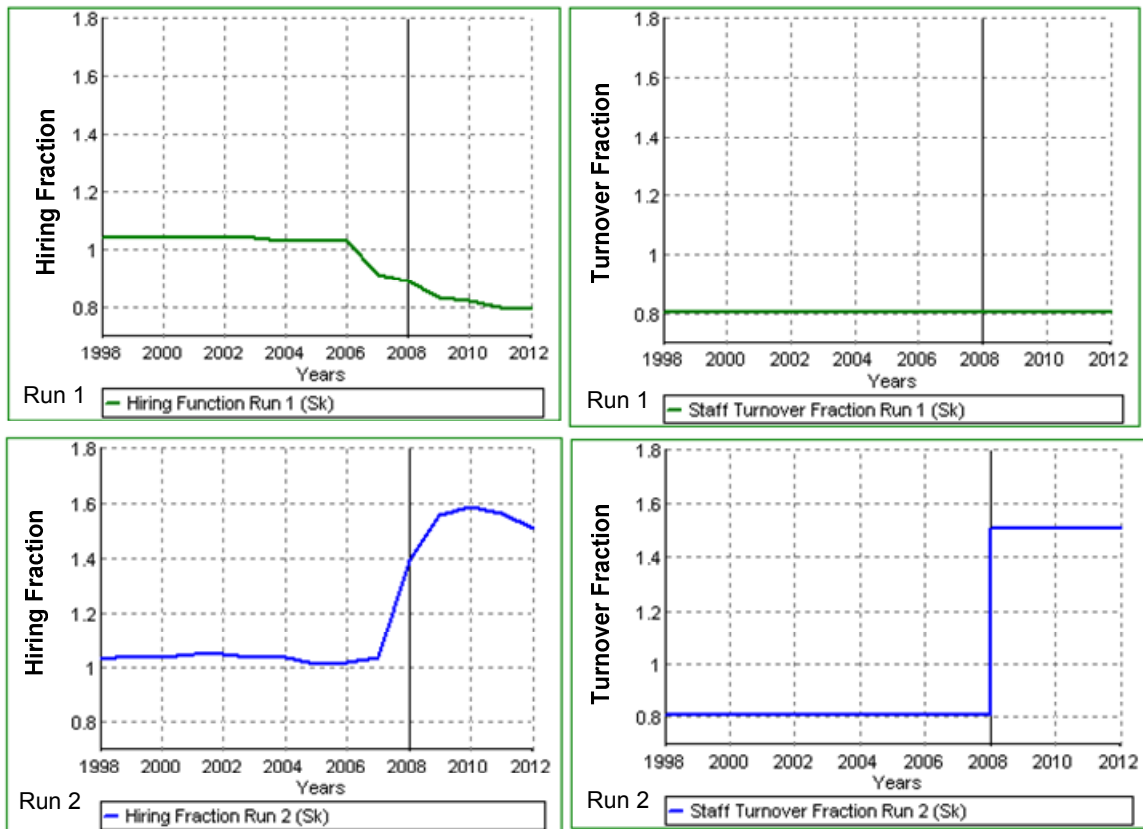
**FIGURE 2-8**  
**Store Staff and Total Experience**

Using this model we can conduct an experiment to gauge the affect of a larger staff turnover due to staff unhappiness. The unknown barista above suggests that “we are as busy as ever”, so let’s assume roughly the same number of staff per store is needed. If the turnover is higher, then more staff needs to be hired. This experiment has the following runs. In both runs hiring was constrained to provide a reasonable staff per store range from 2007 to 2012.

**Run 1 – Maintaining an 80% turnover rate.**

**Run 2 – Staff turnover increases to 150% beginning in 2008 and in subsequent years.**

The hiring fraction (= hiring rate/100) and turnover fraction (= turnover rate/100) assumed for both runs are listed in the following figure. Notice that Starbucks has started to decrease the hiring rate in Run 1 while hopefully still maintaining an 80% turnover rate. On the other hand in Run 2, Starbucks has had to increase the hiring rate because of a larger turnover rate.

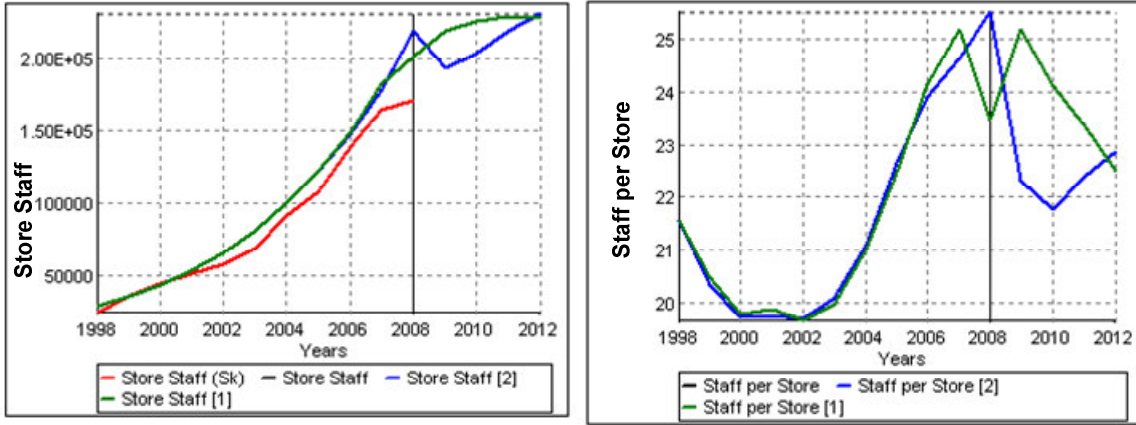


**FIGURE 2-9**  
**Hiring and Turnover Fractions for Run 1 (upper plots, green) and Run 2 (lower plots, blue)**

The following figure illustrates the store staff and the staff per store for the two runs. The red line in the Store Staff plot corresponds to Starbucks staff estimated from Starbucks employee data. The green lines correspond to Run 1 (80% turnover) and the blue lines to Run 2 (150% turnover post-2008). The left plot illustrates the results

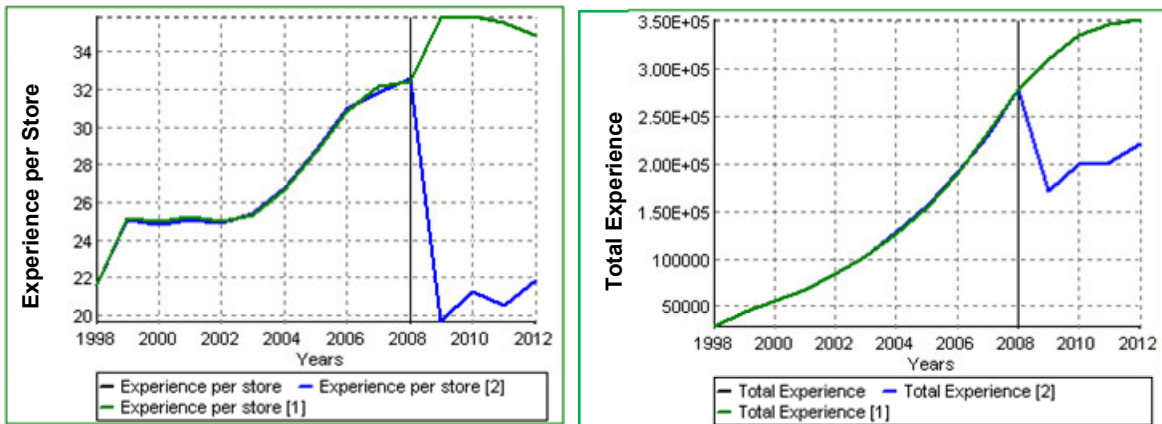


of our goal to be close to our estimate of store staff from 1998 to 2007. The estimate (i.e., red line) was based on Starbucks fiscal report data. The right plot illustrates the results of our goal to constrain the staff per store to be close (e.g. within 3 people) for both runs from 2007 through 2012.



**FIGURE 2-10**  
**Store Staff and Staff per Store**

The next figure illustrates the “Experience per Store” and “Total (Staff) Experience” for each run. Notice that the experience drops significantly when turnover is higher (blue lines). It does not appear that it will get to previous levels any time soon! Hence, the quality of service per store may drop and many loyal customers may stop coming to Starbucks. Then, Starbucks may need to close more stores. How “quality of service” affects other resources such as store customers, staff, and number of stores can also be incorporated into the models.



**FIGURE 2-11**  
**Staff Experience**

This was a simplified situation to illustrate the approach. A more refined model would need to change the time scale from years to months to provide better monitoring and control. The extent of staff training and many other factors may also

need to be considered. Starbucks can use this approach to evaluate the effectiveness of its new policies.

**Recommendation to Starbucks:** Monitor the effect of staff turnover on staff experience and quality of service in stores.

## 2.5. The Customer Pipeline

The customer choice pipeline provides a mechanism for Starbucks to develop one of its most important resources: its customers. The pipeline looks at the following mutually exclusive groups. At any give time an individual may belong to only one of these groups:

- **Aware but not Interested.** Potential Store Customers aware (of Starbucks) but not interested
- **Interested but not Buying.** Potential Store Customers interested but not buying.
- **Disloyal (and Buying).** Starbucks Store Customers buying but disloyal. Being disloyal means that customers will frequent both Starbucks and competitor's stores.
- **Loyal.** Loyal Starbucks Store Customers. They just frequent Starbucks. One of my son's friends worked at Starbucks. He said 90% of the customers came in 2-3 times a day.

Figure 2-12 illustrates the customer choice pipeline (see the Technical Appendix for assumptions and details). The goal is to move customers from “**Aware but not Interested**” to “**Loyal Customers.**” The strategy entails deciding how best to do this. In this pipeline we look at 12 months in the past and plan what to do for 24 months in the future. For the pipeline:

- **Customer Movement.** Customers can either go up or down the chain.
- **Spend.** Total Marketing Spend = Value Ad Spend + Trial Promotions + Loyalty Promotions
- **Present.** Month 12 is the present.

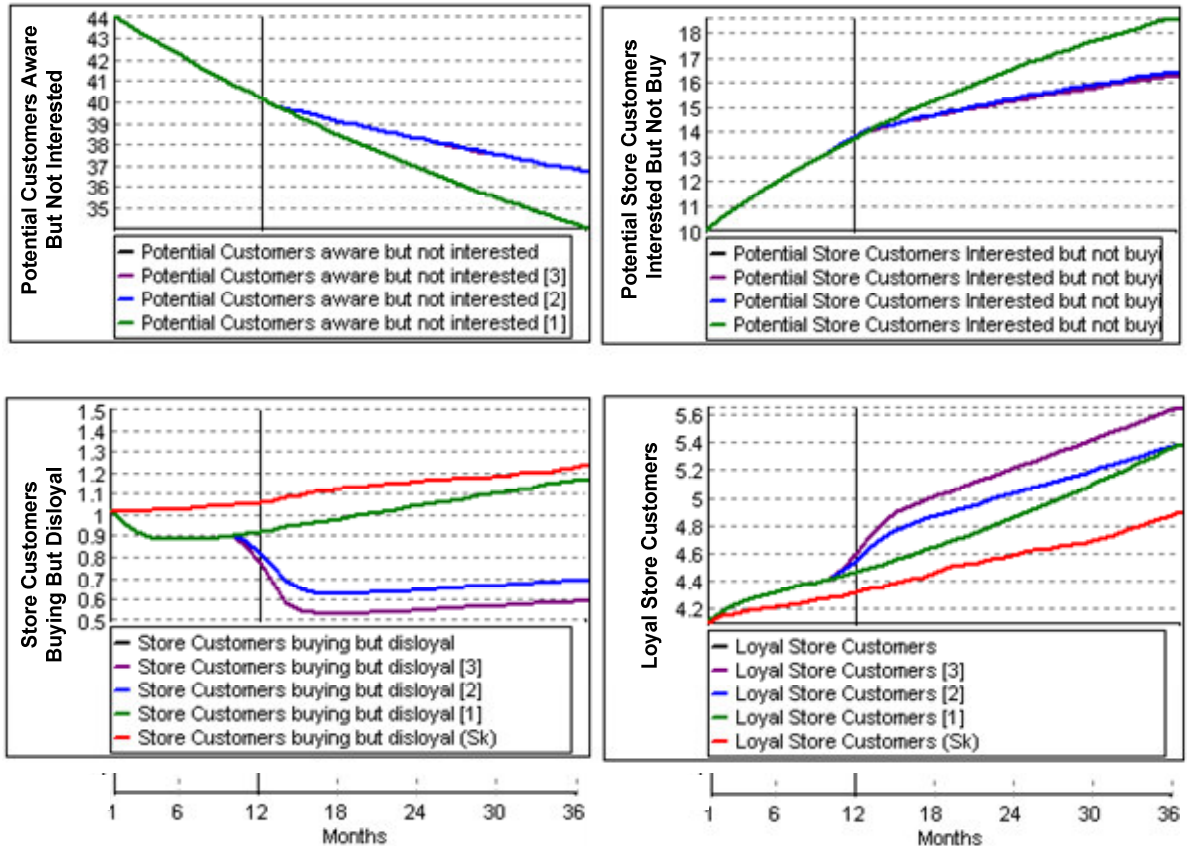
What is the best way to allocate the advertising dollars? To illustrate the approach, I considered three situations, which are described in Table 2-2.



**TABLE 2-2. Starbucks Customer Choice Pipeline Run Descriptions**

<b>Runs</b>	<b>Description</b>	<b>Total Marketing and Ad Spend per Year</b> (\$ Million)	<b>Value Ad Spend to move “Aware but not interested” to “Interested but not buying”</b> (\$ Million)	<b>Trial Promotions to move “Interested but not buying” to “Disloyal”</b> (\$ Million)	<b>Loyalty Promotions to move “Disloyal” to “Loyal”</b> (\$ Million)	<b>Color Line in Result Plots (Figure 2-13)</b>
1	Same spend for 36 months	14	<ul style="list-style-type: none"> <li>• 4.5, Month 1 through 36</li> </ul>	<ul style="list-style-type: none"> <li>• 4.5, Month 1 through 36</li> </ul>	<ul style="list-style-type: none"> <li>• 5 - Month 1 through 36</li> </ul>	<b>GREEN</b>
2	Increased spending to get more Disloyals to Loyal and less on other groups	14	<ul style="list-style-type: none"> <li>• 4.5, Month 1 - 12</li> <li>• 3, Month 13 - 36</li> </ul>	<ul style="list-style-type: none"> <li>• 4.5, Month 1 - 12</li> <li>• 3, Month 14 - 36</li> </ul>	<ul style="list-style-type: none"> <li>• 8 – Month 1 - 12</li> </ul>	<b>BLUE</b>
3	Same as Run 2, except using \$2M more to get Disloyals to Loyal	<ul style="list-style-type: none"> <li>• 14, Month 1-12</li> <li>• 16, Month 13-36</li> </ul>	<ul style="list-style-type: none"> <li>• 4.5, Month 1 - 12</li> <li>• 3, Month 14 - 36</li> </ul>	<ul style="list-style-type: none"> <li>• 4.5, Month 1 - 12</li> <li>• 3, Month 14 - 36</li> </ul>	<ul style="list-style-type: none"> <li>• <b>10</b> – Month 1 - 12</li> </ul>	<b>PURPLE</b>
Data estimated from Starbucks data						<b>RED</b>

The results are given in the following figure. Notice that Run 2 eventually leads to the same number of customers as Run 1; however Run 3 does provide a decided advantage.



**FIGURE 2-13**  
**Starbucks's Customer Choice Pipeline Run Results**

Marketing costs could be broken out in the strategic architecture and its effect on adding new customers on profit can be assessed

**Recommendation to Starbucks:** Use a customer choice pipeline to help decide how to spend marketing dollars to best move customers up along the pipeline.

## 2.6. Rivalry

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*“Michelle Gass, a Starbucks executive vice president, said the company is paying keen attention to McDonald’s Corp. restaurants in Detroit and Kansas City, the first markets where the fast food chain sold lattes, cappuccinos and other espresso drinks. She said that Starbucks locations in those markets haven’t seen a change in their performance trends, a sign that McDonalds may not cut into Starbucks sales.” Janet Adamy, Wall Street Journal, December 5, 2008*

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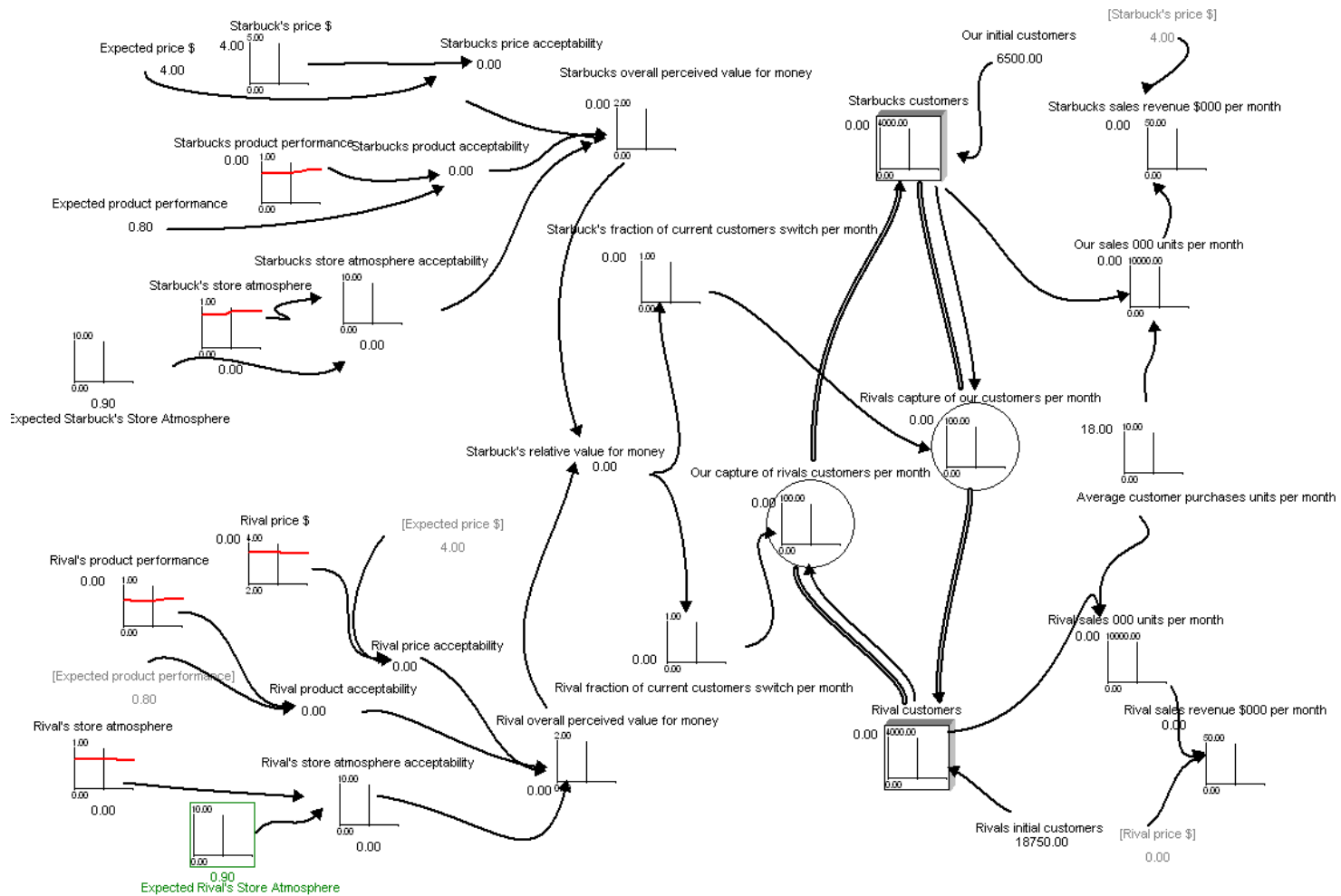
In the US (and maybe internationally), Starbucks’ main competitors are Dunkin’ Donuts and McDonalds. These companies are actively seeking to take Starbucks coffee business. For example, earlier this year when Starbucks closed all their stores to retrain baristas, Dunkin’ Donuts offered a \$0.99 cup of coffee during the hours of closure. A recent McDonald’s billboard is featured in the following figure.



**FIGURE 2-14**  
**Recent Billboard outside Starbucks’ Seattle Headquarters**

In its stores, Starbucks sells “user experience” and not so much a product; so others like McDonald may find it harder to compete. These competitors don’t have the coffee house atmosphere of Starbucks. Yet in small college towns like Annapolis Maryland (St Johns College, US Navy Academy) or Boulder Colorado (University of Colorado) Starbucks has competition with many other establishments that do provide a coffeehouse atmosphere.

I provide one example of a model that deals with rivalry by considering the competition of Starbucks with other coffee-houses in the college town of Boulder Colorado. Figure 2-15 illustrates the model (with the assumptions and details discussed in the Technical Appendix).



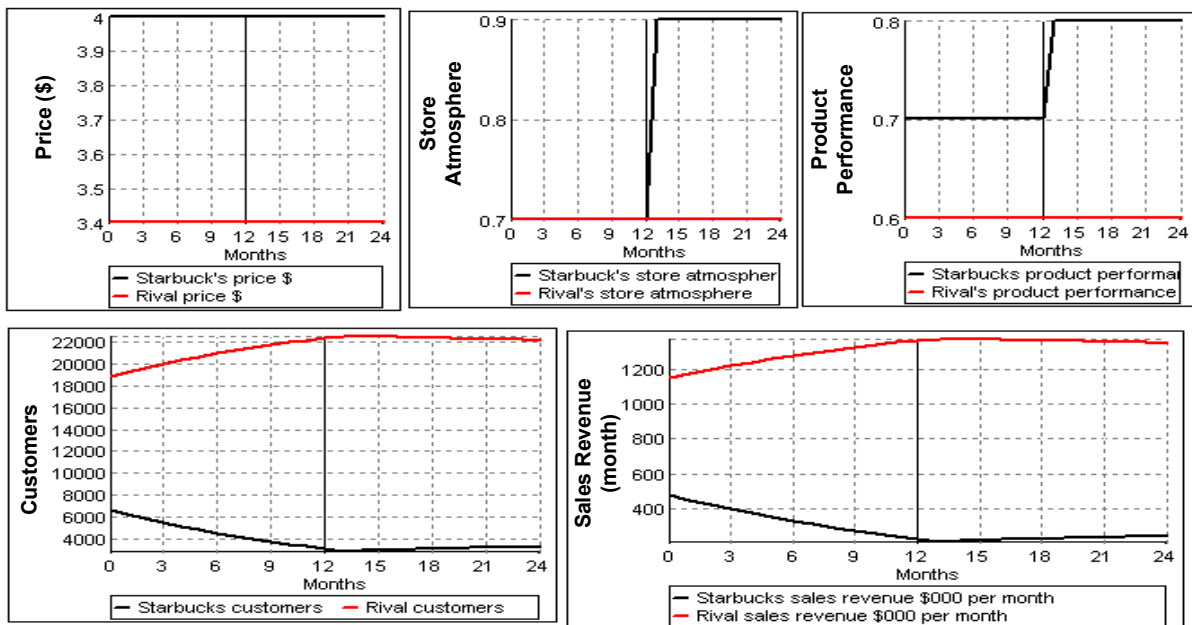
**FIGURE 2-15**  
**Rivalry between Starbucks and Other Coffee Houses in Boulder Colorado**

The rivalry is evaluated according to three criteria:

- **Price.** Starbucks (usually) maintains the high price of its special beverages. On occasion Starbucks has lowered the price of a regular cup of coffee. During the US presidential election Starbucks offered a free cup of regular coffee to anyone who voted
- **Product Performance.** This includes the many product options.
- **Store Atmosphere.** Starbucks has WI-FI and comfortable seating in many stores.

Each of the following runs assumes a fictitious Starbucks scenario and is illustrative of how this model works. In all the runs, month 12 corresponds to the present.

**Run 1: Starbucks increases Store Atmosphere and Product Performance.** Figure 2-16 illustrates the first run. In the past Starbucks was losing customers to rivals during the previous 12 months so it decided to improve its product portfolio and increase special events held at its stores. However, it kept the price of its special beverages (e.g., Decaf Grande Skim Lattes) fixed. The result is that it managed to prevent any more losses to rivals; however, it did not make any gains either. This assumes that its rivals did nothing to respond to Starbucks's changes.



**FIGURE 2-16**  
Run 1 Results of Starbucks Increasing Atmosphere and Product Performance

**Run 2 – In addition to Starbucks's actions in Run 1, Starbucks drops price by \$0.20 for about six months. Rivals don't respond.** In this run Starbucks also decided to effectively lower its price for special beverages by giving college students and faculty discounts for 6 months (month 12 through 18) and discontinue discounts after that time. Figure 2-17 illustrates the results. Starbucks does gain more customers from its rivals and maintains that gain after month 18.



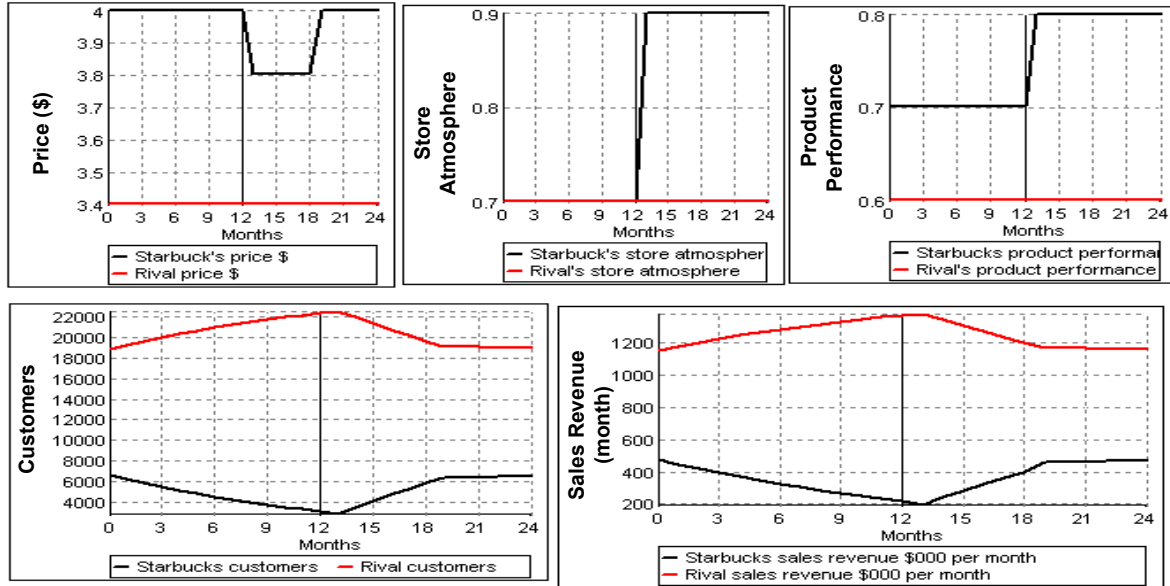


FIGURE 2-17  
Run 2 Results of Starbucks Cutting Effective Price for 6 Months

**Run 3 – Starbucks acts as in Runs 1 and 2. However, after the Starbucks price cut rivals respond a few months later with a \$0.40 price cut. In this run, Starbucks rivals realize that Starbucks is giving discounts and do the same for 6 months beginning in month 14.**

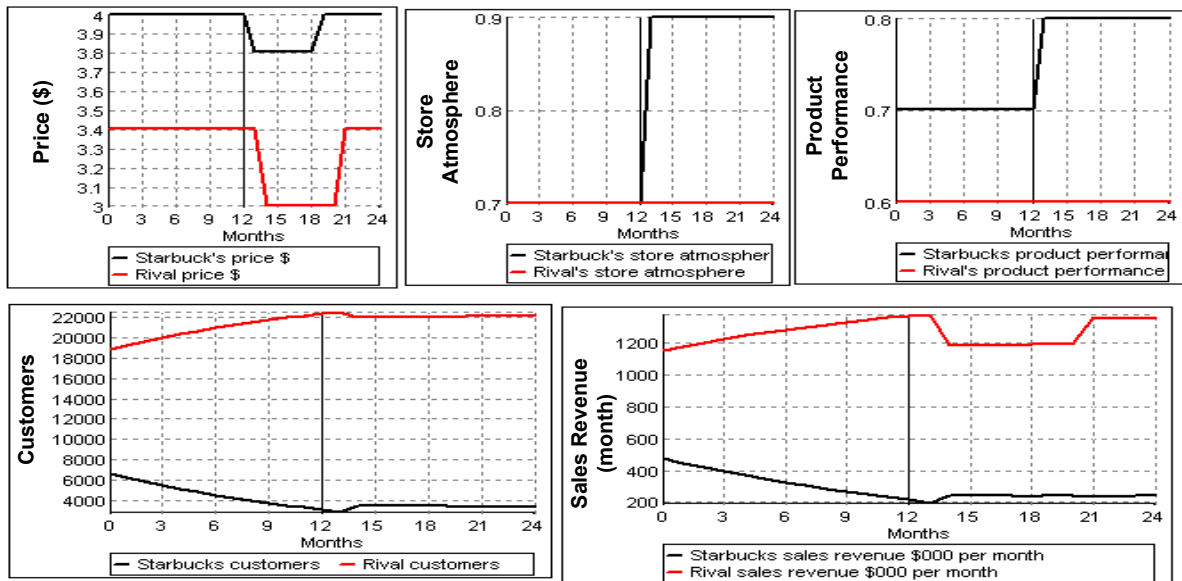


FIGURE 2-18  
Run 3 Results of Rivals Responding to Starbucks Price Cut

The following table summarizes the results of these runs. In Run 1 by increasing Store Atmosphere and Product Performance, Starbucks managed to win some

customers from rivals over a 12 month period despite maintaining a higher price for special beverages. In Run 2, Starbucks decided to also lower its price by \$0.20. It still maintained a higher price than its rivals. It brought in significantly more customers. In Run 3, rivals respond to Starbucks's Run 2 strategy by lowering their price by \$0.40. However, that is not enough to get customers back from Starbucks. On the other hand, Starbucks did much worse than in Run 2 and only ended up slightly ahead of its rivals.

TABLE 2-3. Type 2 Rivalry Results

Run	Description	Change in Starbucks Customers (from Month 12 to 24) (\$)	Change in Rival's Customers (from Month 12 to 24)	Change in Starbucks Revenue (from Month 12 to 24)	Change in Rival's Revenue (from Month 12 to 24)
1	Starbucks increased Store Atmosphere and Product Performance.	220.77	-220.77	15.9	-13.51
2	In addition to actions in Run 1, Starbucks drops price by \$0.20 for about six months. Rivals don't respond.	3433.36	-3433.36	247.2	-210.12
3	Starbucks acts as in Runs 1 and 2. After the Starbucks price cut rivals respond a few months later with a \$0.40 price cut.	302.66	-302.66	21.79	-18.52

**Recommendation to Starbucks:** In rivalry with similar coffee houses, consider monitoring your revenue and customer visits and consider improving store atmosphere and product performance with respect to these rivals. More importantly, consider lowering the effective price on special beverages for a short period to win customers and revenue from rivals.

## 2.7. Conclusion

Strategy Dynamics is a resource-based approach to understanding and improving a firm's performance over time. Its central theme is that resources (whether owned or not by a firm) drive performance. This paper presented an application of Strategy Dynamics to the Starbucks Corporation and used several scenarios to illustrate the approach.

Using public data I created resource-based models and posed and asked questions about how Starbucks could improve its performance, including:

- How can Starbucks deal with customers having less discretionary income to spend?
- When is it appropriate to open new stores to bring in new customers and when is it time to cut back on store expansion?
- What are the consequences of an increased turnover in staff? How will an increased turnover rate affect overall staff experience (which in turn can affect quality of service)?
- How can Starbucks spend marketing dollars to best create loyal customers?
- How can Starbucks deal with rivals?

Starbucks could do better than I have with this approach. With the information they have about their company and customers, they could provide a quantifiable strategic approach to their business. Furthermore, just going through the process of creating

systems dynamics diagrams can help stimulate new ideas about their strategy and improve their business performance.

Here are some final observations about the Strategy Dynamics approach:

- Not just one model was used, but several related ones; each model addressed a particular issue.
- Models can be used as a communication and brainstorming vehicles (e.g., customer pipeline)
- Strategy Dynamics would be great in creating business school case studies. Even a financial analyst who follows a particular company would benefit.

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## **Author's Note**

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I am a current student in the System Dynamics Masters program at Worcester Polytechnic Institute (WPI) and also a Senior Business Architect, Methodologist and Principal at CSC. I also have a PhD in theoretical physics (1977) from SUNY at Stony Brook. This is my first paper in System Dynamics, a field that I find intellectually stimulating. My primary interest is the application of system dynamics in the business world, specifically in the areas of innovation, strategy and information technology.

The initial version of this paper was done as an assignment for the Strategy Dynamics SD560 course taught by Kim Warren at Worcester Polytechnic Institute (WPI) during the fall 2008 semester. The model templates come from Kim's work on Strategy Dynamics. I want to thank him for his comments and recommendations on that version of the paper. I also want to thank the anonymous reviewers for their comments.

The information, views and opinions expressed in this paper constitute solely the author's views and opinions and do not represent in any way CSC's official corporate views and opinions.

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