

**MEASURING CUSTOMER SATISFACTION
OF SITEONE LANDSCAPE SUPPLY IN
DALLAS/FORT WORTH, TEXAS**

by

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ABSTRACT

SiteOne Landscape Supply is the largest distributor of lawn care products for professionals of the landscape industry in U.S.A. and Canada. SiteOne is aware of the importance of customer satisfaction and it is interested on increasing satisfaction by improving customer service. There is a high concentration of Latino landscapers in Texas, whom customer service needs may differ from non-Latino customers. Therefore the purpose of this project was to study customer satisfaction of Hispanic and non-Hispanic landscapers considering the following thirteen service attributes: *competitive prices, available stock, cleanliness of facilities, business follow up, timely assistance, timely deliveries, accuracy of orders, helpful staff, approachable staff, knowledgeable staff, Spanish-speaking staff, training in Spanish, and labels in Spanish*. The data was collected throughout a survey which was presented to SiteOne customers in the Dallas/Fort Worth area. A total of 224 surveys were collected. The methods used to analyze the data were importance-performance (I-P) and regression analyses.

The major differences found in the I-P grids are related to the three Spanish language attributes. *Spanish-speaking staff, training in Spanish and labels in Spanish* are statistically significant more important to Hispanic than non-Hispanic landscapers. *Available stock* is the most important attribute for non-Hispanic, and it is the second most important for Hispanic customers. SiteOne has an opportunity to improve their stock availability, especially for nursery, fertilizers and pesticides. Other factors that are very important to customers and they perceive that SiteOne is doing an excellent job are: *timely assistance, timely deliveries, accuracy of orders, and approachable, knowledgeable and helpful staff*. The importance of *competitive prices* was rated as high as the previous six

service attributes, however the mean of pricing performance was not as high as that group of attributes. From the multivariate regression analyses, it was found that pricing was the only variable with statistical significance to predict changes in customer satisfaction for the non-Hispanic group. No statistical significance was found in the regression model run for Hispanic clients. Some negative coefficients with statistical significance were found for stores #199 and #220 in the models run to analyze branch performance. It is recommended that these results be compared with other measurements to determine the nature of the issues that may be present in these locations.

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CHAPTER I: INTRODUCTION

1.1 Presentation of SiteOne Landscape Supply

SiteOne Landscape Supply is the largest supplier for professionals in the landscape industry in United States and Canada. The history of the organization starts in 2001 when Deere & Company purchased and merged two companies to create John Deere Landscapes (JDL). In October 2013, Deere agreed to sell 60% of JDL to the private equity investment firm of Clayton, Dubilier and Rice, LLC (CD&R). This strategy allowed Deere to focus on its core business of agriculture and construction equipment. It also gives it an opportunity to be part of a successful landscape distributor business by retaining 40% of the company (Golden 2013).

The organization has been experiencing changes since CD&R became the principal owner. The new partners have been working on increasing efficiency by making organizational changes, stretching operations, and acquiring other companies. They provided a smooth transition while the name of John Deere Landscapes was changed to SiteOne Landscape Supply. The name “SiteOne Landscape Supply” was officially revealed to the public in October of 2015 at the GIE+EXPO held in Louisville, KY.

1.1.1 SiteOne Landscape Supply in Dallas/Fort Worth, TX

The inventory of SiteOne Landscape Supply is characterized by the following five categories, with examples of products for each group:

- 1) Nursery: ornamental trees, bushes and flowers.
- 2) Landscape supplies: drainage, hardscape, seed, mulch, and other complementary items.
- 3) Irrigation: pipe, sprinklers, controllers, valves, and drip products.

- 4) Outdoor lighting: transformers, wire, fixtures, and accessories.
- 5) Fertilizers and pesticides: fertilizers, insecticides, fungicides and other pesticides to be used on turf care protection and to control domestic pests, such as rats, cockroaches and so on.

In the fall of 2015, when the data for this project was collected, SiteOne had 14 stores in the Dallas/Fort Worth (DFW) area. Nine of them sell every product category, except for nursery. Three stock all five categories of products, and the remaining two branches are nurseries only.

1.2 Research Problem

The main customers of SiteOne Landscape Supply are organizations that offer lawn care services. Most of these landscape companies employ managers, foremen, and laborers. Usually, owners and managers are in contact with outside sales representatives, and sometimes with branch managers of SiteOne. Foremen and some laborers are in frequent contact with customer service representatives, drivers, and sometimes with branch managers of SiteOne. According to Robert Read (an experienced Outside Sales Representative), on medium size companies¹ foremen make buying decisions for about 50% of the landscape supplies used (Read 2015). Many of these foremen are Latinos or Hispanic² and the problem is that they do not use SiteOne as their primary supplier.

Another interesting fact about the industry is that many of these foremen and laborers that work for a contractor have their own landscape business. Most of them offer

¹ In this case, Robert Read uses the amount of money spent on landscape supplies to categorize the size of a company. He considers a medium size company those that spend \$100,000 to \$300,000 on landscape supplies per year.

² The Hispanic and Latino terms are similar, but have different meaning. Some people prefer one instead of the other (Miyazaki, Lassar and Taylor 2007). In this document, the terms were used to refer to any Spanish-speaking person, and those who consider themselves to have Latin/Hispanic heritage.

lawn care services after work or on the weekends. Many of these entrepreneurs are Latinos that do not go to SiteOne to buy their supplies, and there is an opportunity for SiteOne to increase market share among this group of landscapers.

It is important to attract more Latino landscapers because they make buying decisions for their employers and they own landscape businesses. Non-Latino landscapers may have Latino employees, and the services SiteOne offers to their employees may affect their decisions on where to buy landscape supplies. In addition, it is important to analyze non-Hispanic customer satisfaction to identify any means to improve services offered to them. Therefore, the research question for this project was: How can SiteOne increase satisfaction by improving services for its Latino and non-Latino customers in the Dallas/Fort Worth area?

1.3 Objective

The objective of this project was to study customer satisfaction of Hispanic and non-Hispanic landscapers considering the following thirteen service attributes: *competitive prices, available stock, cleanliness of facilities, business follow up, timely assistance, timely deliveries, accuracy of orders, helpful staff, approachable staff, knowledgeable staff, Spanish-speaking staff, training in Spanish, and labels in Spanish*. To do so, the following sub-objectives were set:

- Analyze importance-performance grids containing the ratings Hispanic and non-Hispanic customers provided to the set of attributes. This analysis intends to provide guidance on the correct level of resource allocations, by understanding better the differences in desired service attribute levels and perceived service performance between the two sub-groups of customers.
- Conduct the following three sets of regression analyses:

- a) Regress the importance-performance ratings for each service attribute between Hispanic and non-Hispanic respondents. The goal of this analysis was to look for statistically significance differences between these two sub-groups of customers.
- b) A multivariate regression model to predict customer satisfaction from the performance level of the service attributes for Latino and non-Latino respondents. This analysis intends to identify the service attributes that will predict changes on customer satisfaction.
- c) Regress each service attribute performance against the paper surveys collected from each location. This analysis examines store level performance differences based on the observations collected from each store.

1.4 Outline

Chapter II covers literature review regarding the importance of Hispanics in the landscape industry, and the impact of customer service on customer satisfaction. Chapter III contains a summary of the survey data obtained from this project. Chapter IV includes a description and use of importance-performance and regression analyses to study customer satisfaction, as well as the results obtained. Chapter V presents limitations of this study, conclusions and recommendations based on the results.

CHAPTER II: LITERATURE REVIEW

2.1 The effect of customer service in customer satisfaction

Customers do not only focus on price and quality, service has a very important impact on customer satisfaction (Garza Quiroga 2012), and any interaction with the vendor affects customer perception. Dissatisfied customers can hurt a company's reputation; clients spread the word-of-mouth about how well or bad they are being served. People working in the landscape industry interact with their colleagues very often. Landscapers are in the social media, meet at conventions, classes, and other types of events where they express opinions. They can easily tell friends and colleagues where they are getting their supplies and why. For this reason going the extra mile to take care of any customer, in any dollar amount of transaction, is worth it. Transactions should be considered based on customers' purchase history and their anticipated future businesses with the organization (Dwyer, Schurr and Oh 1987). At SiteOne, when we make a sale, we are not just processing a transaction; we are building relationships that will affect our reputation.

Increasing customer satisfaction reduces costs because satisfying and retaining current customers can be five times cheaper than acquiring new customers (Kotler and Keller 2012). Even though, there is ample evidence regarding the relationship between customer service and customer satisfaction, service does not always receive the attention it deserves. In a study conducted with a business to business (B2B) firm, Williams and Nauman found that improvement of customer service increases customer satisfaction. They also mention the strong relationship between customer satisfaction and repurchase intent, willingness to recommend, revenues, stock price, and Tobin's q ratio. On the other hand, there are findings that show achieving higher customer satisfaction can be expensive. Therefore, some organizations only focus on high value accounts and spend little effort

trying to satisfy less valuable customers. However, the firm analyzed by Williams and Nauman decreased costs while they increased customer satisfaction. These authors recommend converting dissatisfied and neutral customers into satisfied, and satisfied into very satisfied clients (Williams and Naumann 2011).

Customer service goes beyond providing good products to buyers, especially in B2B industries. Sales associates develop relationships with clients, which will positively affect the supplier when customers perceive that the benefits of maintaining relationships are greater than the costs (Palmatier, et al. 2008). These interactions can be analogous to marriage, where complexity, social and noneconomic interests exists (Dwyer, Schurr and Oh 1987). Dwyer et. al also state that relationships start with awareness of each other and the first impression is always important. Both parties analyze personalities, beliefs, and values before starting negotiations. Conversations about needs and resources arise to decide if the relationship shall continue. Both, customers and sales associates have to trust each other to plan about the future, increase their interdependency, and make businesses. After commitments are made, the seller and buyer are willing to provide inputs, flexibility, and work through the relationship knowing that needs and resources fluctuate over time. These authors mention that dissolution is not omitted through these stages. Just like a marriage, this relationship can end at any moment. But the more interaction occurs, the less likely this bond will break. It is understandable that not all customers desire the same type of relationship with their supplier, but in many cases strong relationships are an integral part of customer service and can lead to higher levels of customer satisfaction.

2.2 Service attributes that can affect customer satisfaction of SiteOne Landscape Supply

There are marketing tools available to help strengthen the relationships between sellers and buyers. But the efficiency of these tools is affected by the trust customers have in the sales force, and organizations should not use the same tools for every customer (Palmatier, et al. 2008). It is always a challenge to determine what factors drive customers to maintain relationships, especially when their ethnicity differs. Some clients feel satisfied by maintaining relationships. Some consider business relationships a waste of time and money, and these clients are not always less profitable than those who engage in relationships. Customer relationship manager (CRM) is an excellent tool that SiteOne has available to its sales force. This tool is easy to use and provides associates the option to remind them when they should follow up with clients. In this study, we explore customer service attributes, such as *business follow up* that would presumably lead to stronger customer relationships.

Other attributes that can be very important in any business interaction, but could affect customer satisfaction different between Latinos and no-Latinos are: *approachable staff, timely assistance, and some factors related to Spanish language*. As mentioned earlier, SiteOne serves many Hispanic landscapers. Hispanics are a very collective group and they have been shown to engage more in service interactions with Hispanic salespeople (Miyazaki, Lassar and Taylor 2007). Usually, Hispanic salespeople spend more time with them trying to build a relationship (Comer and Nicholls 2000). This bond is not justified by a common language; culture can play an important role too. Most Hispanics feel comfortable talking about family or other subjects before engaging in business discussions (Comer and Nicholls 2000). For this reason Hispanic businessman may need additional

time before engaging in any business. A salesperson may visit a Latino owner more than two times before he/she decides to make business with SiteOne.

According to Robert Read, SiteOne customers also need *knowledgeable vendors* and *available stock*. Clients do not always know everything and they may need a landscape distributor who can provide advice and the product they need (Read 2015). This statement is consistent with the hypothesis that customers' relationship orientation is affected by the salesperson competence and products dependence (Palmatier, et al. 2008). Buyers will probably engage in tight relationships when buying products that require service or training to operate. In the landscape business, customers visit suppliers to get products and technical advice. If sales associates *help* customers to solve their problems by providing technical advice and the right product, most likely customer satisfaction will increase.

2.3 Hispanic presence in the Landscape Industry

In economics, the term “absolute advantage” refers to the ability of an entity to generate a service or good using fewer resources than other entities. Absolute advantage allows for “comparative advantage” that refers to generating a service or good at a lower cost than others (Pugel 2012). The landscape industry in the U.S. employs many immigrants from Latin America. Over 80% of foreign-born Latinos are working in this sector, compared to 55% of foreign-born Latinos in the U.S. workforce (Guzman, Duarte and Martínez 2011). This movement of labor, which is part of globalization, allows the U.S. to offer lawn care services at lower prices to its residents.

A study on the economic impact of the landscape industry to U.S. Latinos reveals that 56% of the people employed in the industry identified themselves as non-Latino White, 36% as Latino, and 8% as African-American. “Employment in the Landscape and Lawn Care Services industry represents less than 1% of total employment in the U.S., but

the share of Latinos employed in this industry is 2.3% of the total Latino employment” (Guzman, Duarte and Martínez 2011).

High customer satisfaction is a competitive advantage that could make a difference when the market suffers drastically (Mittal and Frennea 2010). Organizations need to pay close attention on how customization affects customer satisfaction. The percentage of Latino landscapers found in Texas is about double the percentage found nationwide (Guzman, Duarte and Martínez 2011). SiteOne Landscape Supply experiences a high concentration of Hispanic landscapers in its stores in the Dallas/Fort Worth (DFW) area. Therefore, it is very important that SiteOne knows how to satisfy and respond to this group of customers who make and affect buying decisions. The purpose of this research is to help SiteOne understand how the needs in service differ from our Latino and non-Latino customers in Dallas/Fort Worth, TX.

CHAPTER III: DATA SUMMARY

3.1 Data collection

In order to collect data for this project, a survey was presented to SiteOne's customers. The questionnaire was developed from a review of literature and discussions with professionals in the landscape industry as well as input from KSU faculty. The survey was available in English and Spanish, and addressed questions regarding buying decision patterns, importance and performance of factors affecting customer service, and demographics. Appendix A and B contain printouts of the two versions of the survey. The questionnaire was open from September 11 to September 25 of 2015. It is important to mention that in September the company had not revealed the new name of SiteOne Landscape Supply to the public, and the name used in the survey was John Deere Landscapes (JDL). The survey was delivered electronically and hard copies were available in 11 of 14 SiteOne stores in Dallas/Fort Worth (DFW). The three branches not participating in the project were incorporated to SiteOne as a result of two acquisitions made in 2015. Because these three stores had been operating differently than the other 11 SiteOne stores, it was felt that a better picture of store performance would be obtained by looking at the original 11 stores only. Table 3.1 shows the number of surveys collected from participating stores, as well as a percentage of sales from each branch to provide a sense of the size of them. As of September, 2015 there were approximately 12,000 customers' accounts that belong to the 11 participating stores, and it is important to mention that some accounts have multiple workers authorized to buy under a single account. However, only 36% of these accounts remain active. The total number of surveys collected from the 11 branches is 158. A response rate cannot be calculated since there is

not a count of how many customers walked into the stores, nor did we maintain a count of the number of people to whom the survey was offered.

Table 3.1 Number of surveys collected from each SiteOne location

Location	Branch #	# of surveys collected	% of total sales from the 11 stores in 2014
Fort Worth, TX	168	47	7.2%
Dallas, TX	199	33	4.9%
McKinney, TX	202	21	3.8%
Prosper, TX	226	12	15.1%
Benbrook, TX	134	12	5.4%
Dallas, TX	201	11	10.4%
Plano, TX	212	8	10.4%
Arlington, TX	220	6	18.7%
Lewisville, TX	205	4	6.1%
Fort Worth, TX	223	4	11.8%
Mesquite, TX	210	0	6.2%
	Total	158	100.0%

Emails containing two links to the survey -one for English and one for Spanish- were sent to customers' email addresses registered in the 11 branches of SiteOne. The emails were distributed through the SurveyMonkey survey system. Table 3.2 shows the number of emails sent, delivered, opened, how many people clicked on the link, and how many surveys were completed. The total number of surveys collected from SurveyMonkey was 66 (a 3 % response rate for the email distribution method). The total number of survey responses was 224 (158 collected in store and 66 collected online).

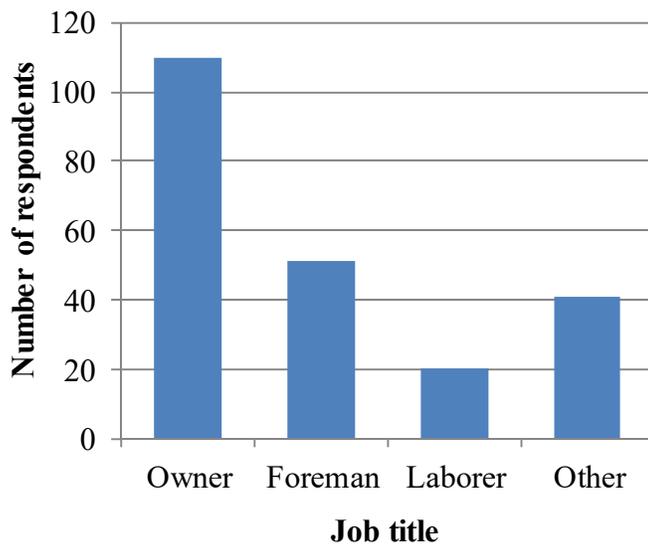
Table 3.2 Number of emails sent, received, opened, clicks on the link and surveys completed when the questionnaire was launched and when a reminder was sent

	Date sent	Emails sent	Emails received	Emails opened	Clicks on links	Surveys completed
Launched	9/11/2015	2098	2077	759	82	56
Reminder	9/22/2015	1582	1572	212	26	10

3.2 Buying decision patterns

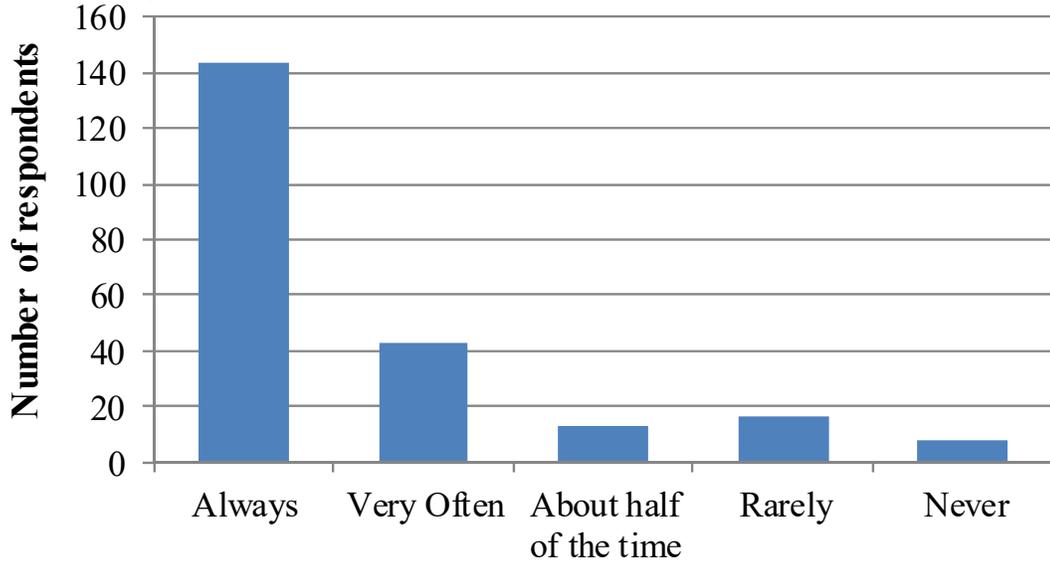
The first three questions of the survey were designed to identify the type of customer responsible for landscape supply buying decisions. This information could be helpful to have an idea of the profile of Hispanic and non-Hispanic clients. Question 1 asked about the title that respondents had when they completed the survey. The four options given were: owner, crew leader or foreman, laborer, and other. Figure 3.1 reflects the title that best described the job for the 222 people who answered this question. There was a space available to those who selected “other” to specify their job title. The option “other” was selected by 41 respondents; 15 of them fall into the foreman category and 20 fall into the manager category.

Figure 3.1 Job title selected by respondents



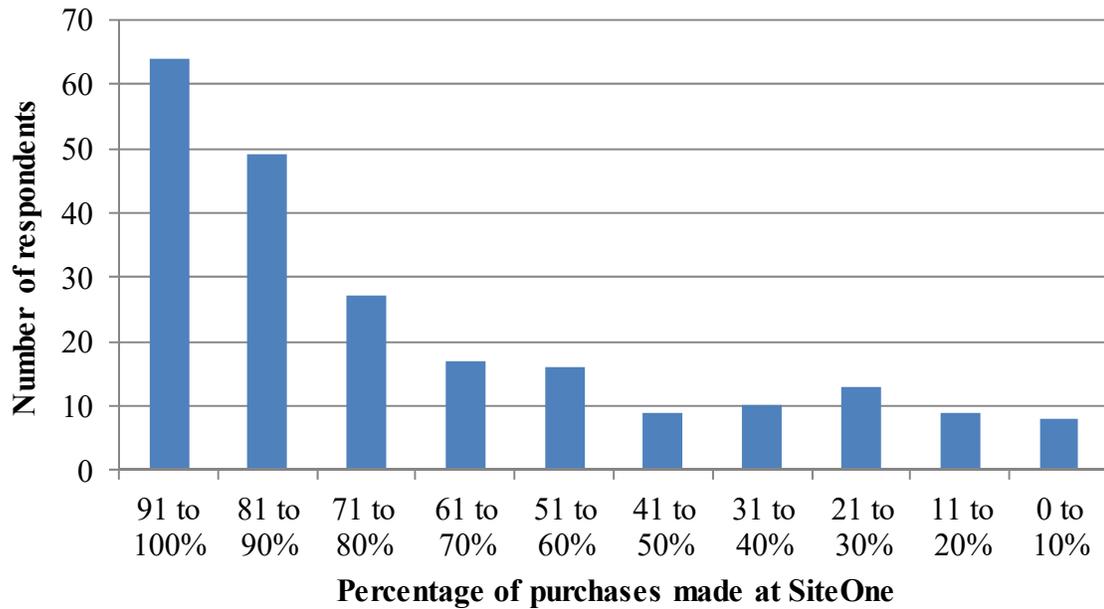
The second question asked respondents how frequently they make the decision of where to buy landscape supplies. The five options given were: never, rarely, about half of the time, very often, and always. This question was not skipped by any respondent. Figure 3.2 shows a summary of the data collected from this question.

Figure 3.2 Number of respondents reflecting how often they decide where to buy landscape supplies



The third question asked people what percentage of their total purchases came from SiteOne Landscape Supply. Options were given in multiples of ten; the first option was “0 to 10%” and the last option was “91 to 100%”. Two respondents did not answer this question, therefore 222 responses were obtained. Figure 3.3 reflects respondent’s answers.

Figure 3.3 Percentage of respondents' annual purchases of landscape supplies made at SiteOne



3.3 Customer satisfaction

The next two questions were designed to measure perceptions of the 13 customer service attributes, factors or variables analyzed in this project. Question 4 asked customers to rate the importance of each attribute, while question 5 asked about the company's performance on each variable. Table 3.3 contains the importance and performance statements customers rated for each factor. For each attribute in Table 3.3, the importance item is listed first and respondents were asked to rate how important that factor (e.g., *Competitive prices*) is to them on a five point importance scale (1=Not very important and 5=Very important). The second statement for each variable in Table 3.3 is the corresponding performance item and respondents rated how well SiteOne performed on each item by rating their level of agreement with each statement on a 5 point scale (1=Strongly disagree and 5=Strongly agree).

Table 3.3 Importance and performance statements rated by customers

Factor	Importance and performance statements rated by customers
Competitive Prices	<ul style="list-style-type: none"> • Competitive prices • JDL offers me the best prices
Available Stock	<ul style="list-style-type: none"> • Having the product I need • JDL always has the product I need
Cleanliness of facilities	<ul style="list-style-type: none"> • Having a clean facility • JDL facilities are always clean
Business Follow up	<ul style="list-style-type: none"> • Being contacted by a sales associate to follow up with my business • JDL sales associate always contact me to follow up with my business
Timely Assistance	<ul style="list-style-type: none"> • Being assisted in a timely manner • JDL staff always assist me in a timely manner
Timely Deliveries	<ul style="list-style-type: none"> • Receiving deliveries in a timely manner • JDL staff always handles deliveries in a timely manner
Accuracy of Orders	<ul style="list-style-type: none"> • Orders fulfilled accurately • Orders from JDL are always fulfilled accurately
Helpful Staff	<ul style="list-style-type: none"> • Staff willing to help me • JDL staff are always willing to help me
Approachable Staff	<ul style="list-style-type: none"> • Approachable staff • JDL staff are very approachable
Knowledgeable Staff	<ul style="list-style-type: none"> • Availability of knowledgeable staff • JDL staff are very knowledgeable
Spanish-speaking staff	<ul style="list-style-type: none"> • Availability of Spanish-speaking employees • JDL Spanish-speaking staff are always available
Training in Spanish	<ul style="list-style-type: none"> • Product training in Spanish • JDL always provides product training in Spanish
Labels in Spanish	<ul style="list-style-type: none"> • Availability of labels and/or product instructions in Spanish • JDL always have Spanish product labels and/or instructions

The first attribute, *competitive prices* was included to explore the importance customers give to prices. As mentioned earlier, customers do not just care about pricing, and it is interesting to study how SiteOne customers rate this factor relative to other service attributes. It is important to mention that frontline employees of SiteOne can play an important role on the price provided to customers. If the relationship between sellers and buyers allows for good communication, the prices for an account can be adjusted based on the information and trust sales representatives have in customers. The *available stock*

variable refers to the extent stores have useful products available for customers. This variable was included because some customers say SiteOne needs to improve its stock availability. The attribute in regard to *cleanliness of facilities* was included because at the time the survey was launched, SiteOne did not have standard procedures on how to clean their facilities. Some SiteOne stores look cleaner than others, and that might affect customer's level of satisfaction.

Business follow up refers to the extent to which customers get sales calls or visits to keep up with their businesses. This factor was included to analyze if SiteOne customers like to be contacted by associates, and how SiteOne is performing in regards to customer relationship management. By contacting buyers, associates are working on building and maintaining relationships. It is understandable that some clients do not like to be called. But, because SiteOne is a business to business organization that sells a wide variety of products, *business follow up* may be very important. The *timely assistance* variable measures the perception of customers on how quickly they are assisted. Some customers are in a rush, and some like to spend time in the stores. As such, it is interesting to explore customer satisfaction in regards to timely assistance. The *timely deliveries* attribute refers to how quickly SiteOne makes product deliveries after an order is placed. Usually workers at the job site are time constrained and they need a delivery to be able to continue their project without stopping due to a lack of supplies.

Because there are many similar products SiteOne associates deal with, it is hard to always provide accurate orders to customers, despite personnel trying their best. It is interesting to see how satisfied customers are with this variable, and if changes are needed to improve the *accuracy of order* fulfillment. It is also important to study if customers

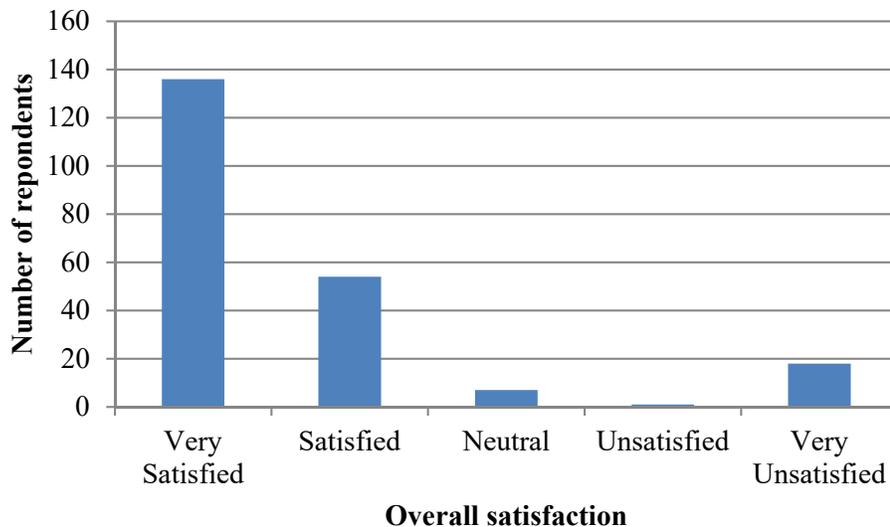
consider SiteOne to have a *helpful staff*. Helpful personnel are thought to be very important since clients often need help with technical advice, orders, invoicing, and loading trucks. A landscape supplier should have staff that is willing to go the extra mile to serve customers. The *approachable staff* variable refers to the way customers are welcomed into a store, how their inquiries are handled, and the courtesy used when interacting with them. The approachable attribute was included to analyze if there are any differences in perception of *approachable staff* between Hispanic and non-Hispanic customers. In contrast to the American culture, the Hispanic culture tends to be collective in nature and they like to interact with people, especially when dealing with services (Comer and Nicholls 2000). SiteOne associates might be used to being “short and sweet” with customers, but Hispanic landscapers may desire longer conversations. Latinos tend to say long “hellos” and “good byes”, and they often feel appreciated when someone asks about their family. Knowledge is very valuable to SiteOne customers. Customers always have technical questions, and they need advice. This attribute has been advertised by SiteOne as one of their competitive advantages. It might be interesting to analyze how *knowledgeable staff* affects customer satisfaction, and how the supplier is performing with regard to this factor.

The availability of *Spanish-speaking staff* is very important because of the high number of workers coming from Latin-America who are not fluent in English. As mentioned earlier, Hispanics like to interact with people when dealing with services, and usually they feel more comfortable if they can speak Spanish (Miyazaki, Lassar and Taylor 2007). This makes sense because customers want to be confident that they are buying the right product, and they need to understand the items they are buying before paying for their goods. The variable *training in Spanish* was included to study its importance to customers.

In Dallas/Fort Worth, the major competitor of SiteOne provides technical training in Spanish, and it is worth examining if SiteOne might benefit from doing the same. Finally, SiteOne would like to analyze the importance of *labels in Spanish* to customers.

Question 6 asked customers to rate their overall satisfaction with the service they receive from SiteOne Landscape Supply on a five point scale. The five options were: very unsatisfied, unsatisfied, neutral, satisfied, and very satisfied. It is affirming to see that 63% of the participants said they are very satisfied with the way SiteOne serves them. Followed by 25% who selected the satisfied option; together this suggests that 88% of SiteOne customers are happy with the services they are receiving. Figure 3.4 shows the frequency distribution of the 216 people who responded this question.

Figure 3.4 Number of respondents reflecting their overall satisfaction with the service they received from SiteOne Landscape Supply

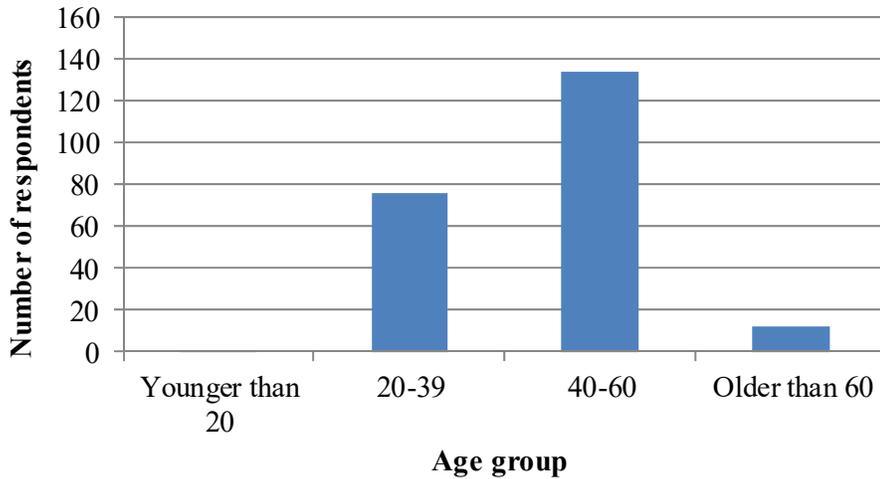


Questions 7 and 8 were open-ended type, and they were designed to identify other important factors that affect customer service. The results from these questions will be discussed in the next chapter.

3.4 Demographic characteristics

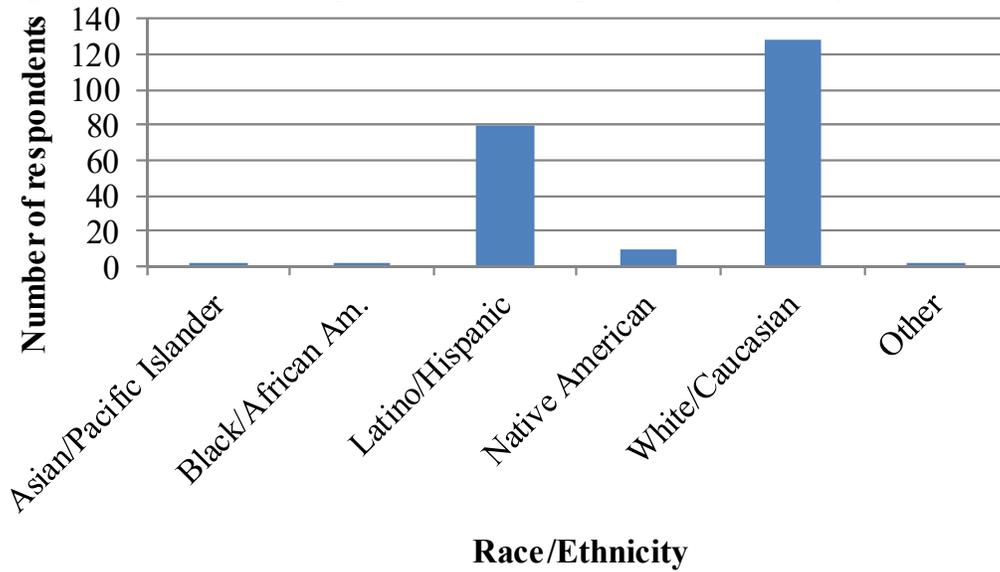
Two questions on the survey asked about demographic characteristics. One question addressed age and the other captured race/ethnicity. Question 9 asked respondents to select one of the following age groups that best describe their age: younger than 20 years, 20-39, 40-60, and older than 60. Figure 3.5 reflects the responses collected from the 223 people who filled out this question.

Figure 3.5 Number of respondents reflecting their age group



Question 10 asked respondents to select one or more of the following groups of race/ethnicity: Asian/Pacific Islander, Black/African American, Latino/Hispanic, Native American, White/Caucasian, and other. Figure 3.6 shows a summary of the data collected from the 221 respondents who provided their race/ethnicity.

Figure 3.6 Number of respondents reflecting their race/ethnicity



Nearly 58% of the respondents identified themselves as White/Caucasian, and 36% as Latino/Hispanic. These figures are similar to the numbers found nationwide, where 56% of the U.S. population employed in the industry identified themselves as non-Latino Whites, and 36% as Latinos (Guzman, Duarte and Martínez 2011). However, these numbers are almost the opposite in Texas. The percentage of non-Latino White landscapers is 28%, and 63% of the landscapers working in Texas are Latino (Guzman, Duarte and Martínez 2011). For this reason and because I had observed that SiteOne works with many Hispanic landscapers, a higher response rate from Latinos was expected. The low participation of Hispanic customers in this survey may be caused by the following reasons. First, most Hispanic workers are in the field and they do not visit SiteOne stores as often as foremen and managers do. It is less likely that a field worker's email address is stored in SiteOne's system, so they did not have access to the online survey. Additionally, some research has found that Hispanic/Latinos are less likely to participate in surveys than the non-Latinos White demographic group (Griffin n.d.). Another cause might be lower levels

of education, since approximately 30% of the Latino landscapers working in Texas pursued higher education than high school (Guzman, Duarte and Martínez 2011). This may be an indicator that many may have had difficulties reading and responding to the questionnaire, a phenomenon observed in some cases while the survey was available to customers in stores. Finally, they may find it difficult to understand the Spanish version because they may use a different style of language than the style used in the survey.

CHAPTER IV: METHODS AND RESULTS

The objective of this research project was to identify differences in service needs between Hispanic and non-Hispanic customers of SiteOne Landscape Supply to improve customer satisfaction. The data was analyzed by examining importance-performance matrices and conducting regression analyses. The results of some analyses are presented in the following three sets of data:

- 1) All responses, which includes a total of 224 surveys
- 2) Hispanic, which includes a total of 80 surveys
- 3) Non-Hispanic, which includes 141 surveys. It is important to note that 128 of these 141 respondents consider themselves White/Caucasian. Therefore this set of data is dominated by White/Caucasians.

4.1 Buying decision patterns and age comparison

Prior to conducting the analyses, it is important to present information regarding buying decision patterns and the age of respondents. This information provides an idea of the profile between Hispanic and non-Hispanic clients. As shown in table 4.1, there are more non-Hispanic owners than Hispanic, 57% and 35% respectively. Consistently, 92% of the non-Latino participants make more than 50% of their buying decisions, and 84% of Latino respondents make the majority of their buying decisions. Regarding age, 53% of Latinos are less than 40 years old, while 75% of the non-Latino respondents are older than 40 years old.

Table 4.1 Comparison of Hispanic and non-Hispanic buying decision patterns

	All Data=224		Hispanic/Latino=80		Non-Hispanic=141	
	# of Obs.	(%)	# of Obs.	(%)	# of Obs.	(%)
Owners	110	49%	28	35%	81	57%
Employees	112	50%	52	65%	58	41%
Make more than 50% of their buying decisions	200	89%	67	84%	130	92%
Make less than 50% of their buying decisions	24	11%	13	16%	11	8%
Buys more than 50% of their landscape supplies at SiteOne	173	77%	72	90%	100	71%
Buys less than 50% of their landscape supplies at SiteOne	49	22%	8	10%	40	28%
Age less than 40 years old	77	34%	42	53%	35	25%
Age between 40 to 60 years old	134	60%	38	48%	95	67%
Age more than 60 years old	12	5%	0	0%	11	8%

4.2 Importance-performance analysis

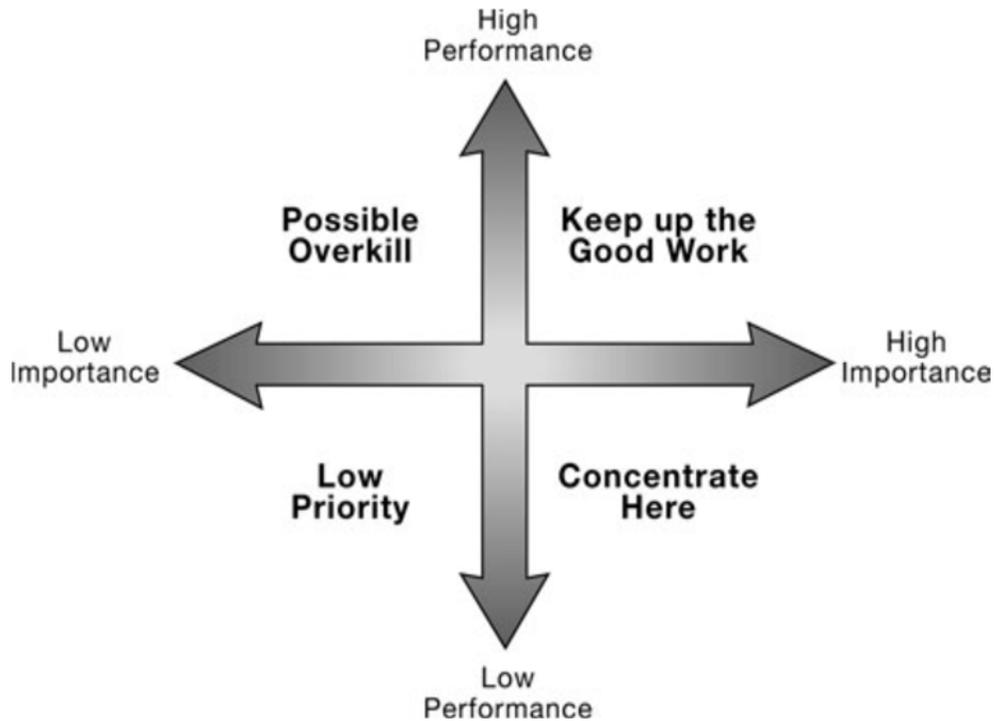
4.2.1 Introduction

It is easier for organizations to optimize resources if they analyze importance and performance at the same time (Martilla and James 1977). The importance-performance (I-P) analysis examines the importance individuals provide to a set of attributes, and the perception of those individuals on a provider's performance with the same set of attributes (Vaske, et al. 1996).

The I-P grid facilitates the interpretation of importance and performance of a given set of attributes, and provides management with some guidance on how to optimize resources (Gwinner, Andrus and Prince 2006). For example, the efforts used in the factors on the *possible overkill* quadrant could be reallocated to improve the factors on the

concentrate here quadrant. The resources used on the *keeping up the good work* and *low priority* quadrants may not need to change. Figure 4.1 is an example of an I-P matrix.

Figure 4.1 Importance-performance grid (Gwinner, Andrus and Prince 2006)



The I-P analysis is a great tool for organizations to reallocate resources when dealing with homogeneous groups. However, problems may arise when there are subgroups within the population being studied and where the perceptions of these groups may differ (Vaske, et al. 1996). In businesses, decisions made based on an I-P research grid can affect revenues and the type of customers being served. Some customers may leave because they do not like the changes made, and others may be attracted by the changes. Therefore it is important to examine the demand of the subgroups, and the consequences of each scenario when analyzing the I-P grid.

4.2.2 Importance-performance grids

The statements in Table 3.3 presented on the previous chapter were rated by customers in terms of importance and performance for the 13 service attributes. In the survey, question 4 was designed to measure importance and it was specifically listed as: “Rate the following factors in terms of importance when buying from any landscape supplier”. The rating scale given was: 1=Not very important; 2=Not important; 3=Neutral; 4=Important; 5=Very important. Question 5 was presented as: “Tell us your level of agreement with the following factors regarding John Deere Landscapes in the Dallas/Fort Worth area”. The scale given was: 1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree; 6=Non applicable (N/A). The disagreement-agreement ratings were used to calculate the means for SiteOne performance, where strongly disagree was translated into poor performance, and strongly agree was equivalent to excellent performance. Sometimes, respondents may feel they have to select an option just because they do not want to leave it blank. The “Non applicable” option was provided for the performance related questions to obtain the most honest responses possible. Not all customers deal with all 13 service attributes, therefore this option was given to avoid participants feeling forced to select a less applicable option. For the I-P and regression analyses, the observations obtained as “Non applicable” were omitted.

The I-P means for each attribute were calculated and plotted on importance-performance grids. The axes cross at the average of the ratings obtained from all 13 service attributes. As an example, the axes for the I-P graph containing all data cross at 4.08. Table 4.2 presents the importance-performance means obtained for each attribute, separated by all data containing 224 observations, 80 Hispanic respondents, and 141 non-Hispanic participants. Figure 4.2 is the I-P grid representing the means obtained from all 224

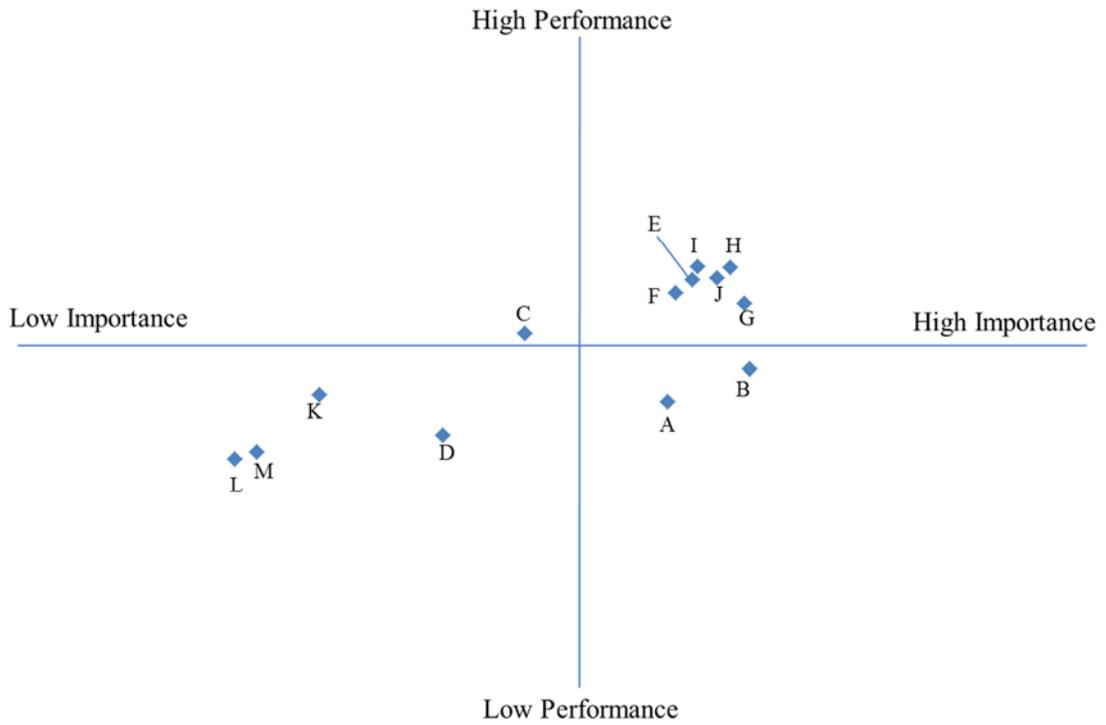
respondents. Figure 4.3 is the corresponding graph showing the gap between the importance and performance means rating for this data set.

Table 4.2 Importance-performance attribute mean separated by all data, Hispanic, and non-Hispanic data

Importance scale: 1= Not very important; 2= Not important; 3= Neutral; 4= Important; 5= Very important
Performance scale: 1= Strongly disagree; 2= Disagree; 3= Neutral; 4= Agree; 5=Strongly agree

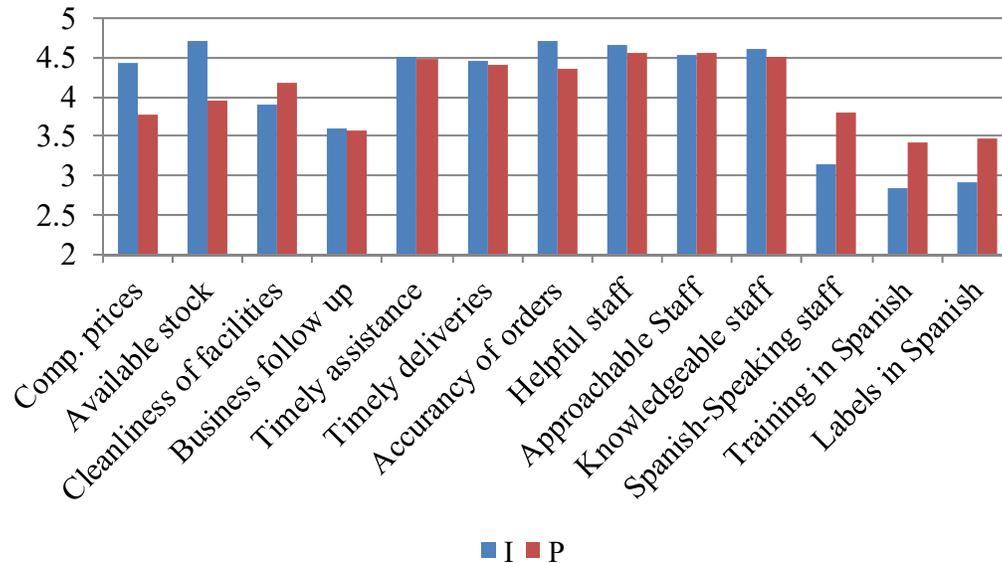
Attribute	All data=224		Hispanic/Latino=80		Non-Hispanic=141	
	Importance	Performance	Importance	Performance	Importance	Performance
A Competitive prices	4.42	3.77	4.54	3.79	4.37	3.76
B Available stock	4.72	3.96	4.64	3.95	4.76	3.96
C Cleanliness of facilities	3.90	4.17	4.31	4.18	3.68	4.17
D Business follow up	3.60	3.57	3.97	3.55	3.39	3.56
E Timely assistance	4.51	4.49	4.49	4.42	4.53	4.53
F Timely deliveries	4.45	4.41	4.31	4.25	4.53	4.49
G Accuracy of orders	4.70	4.35	4.66	4.29	4.74	4.39
H Helpful staff	4.65	4.56	4.64	4.47	4.66	4.62
I Approachable staff	4.53	4.57	4.57	4.50	4.50	4.62
J Knowledgeable staff	4.60	4.50	4.57	4.42	4.62	4.55
K Spanish-Speaking staff	3.15	3.81	3.88	4.06	2.74	3.66
L Training in Spanish	2.84	3.43	3.49	3.51	2.47	3.38
M Product labels in Spanish	2.92	3.47	3.60	3.67	2.54	3.36
Mean	4.08	4.08	4.28	4.08	3.96	4.08

Figure 4.2 Importance-performance grid reflecting the ratings from all 224 respondents



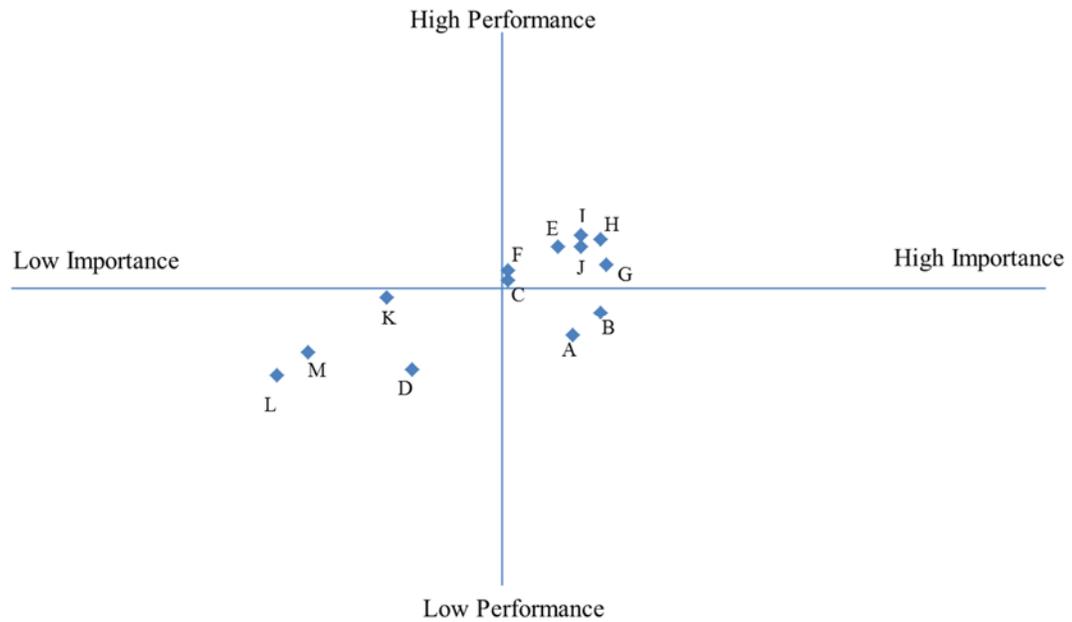
A=Competitive prices, B=Available stock, C=Cleanliness of facilities
 D=Business follow up, E=Timely assistance, F=Timely deliveries, G=Accuracy of orders
 H=Helpful staff, I=Approachable staff, J=Knowledgeable staff, K=Spanish-speaking staff, L=Training in Spanish, M=Labels in Spanish

Figure 4.3 Gap between importance-performance means containing all data



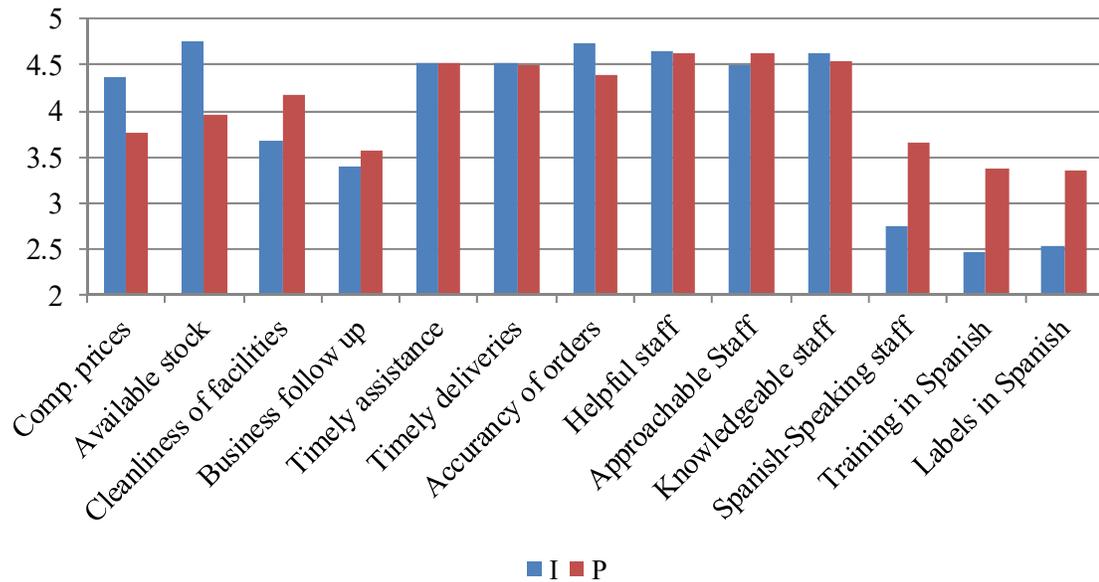
SiteOne is doing an excellent job in regards to *timely deliveries* (F), *timely assistance* (E), *approachable staff* (I), *knowledgeable staff* (J), *helpful staff* (H), and *accuracy of orders* (G). *Cleanliness of facilities* (C) is the only factor that fall under the second quadrant suggesting that no changes are needed to improve it. *Business follow up* (D) and the three attributes regarding Spanish language (K, L and M) fall into the *low priority* quadrant. *Competitive prices* (A) and *available stock* (B) are two factors that can possibly improve. The importance of *competitive prices* (A) was rated similar to *timely deliveries* (F), with a mean of 4.42 and 4.45 respectively. Nonetheless, the mean of *competitive prices* performance is 0.64 lower than *timely deliveries*. The importance of *available stock* (B) was rated similar to *accuracy of orders* (G), with a mean of 4.72 and 4.70 respectively. But the performance was rated different, 3.96 for *available stock* and 4.35 for *accuracy of orders*, with a difference of 0.39.

Figure 4.4 Importance-performance grid reflecting the ratings from 80 Hispanic/Latino respondents



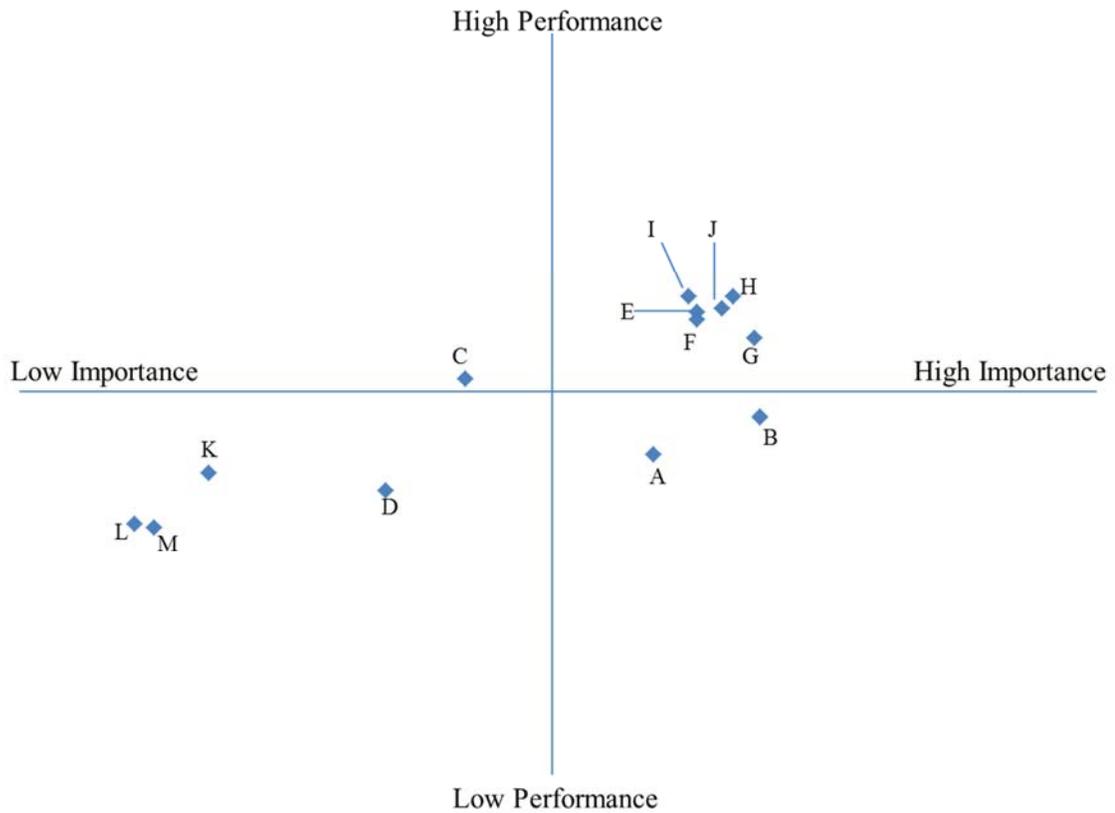
A=Competitive prices, B=Available stock, C=Cleanliness of facilities
 D=Business follow up, E=Timely assistance, F=Timely deliveries, G=Accuracy of orders
 H=Helpful staff, I=Approachable staff, J=Knowledgeable staff, K=Spanish-speaking staff, L=Training in Spanish, M=Labels in Spanish

Figure 4.5 Gap between importance-performance means for Hispanic respondents



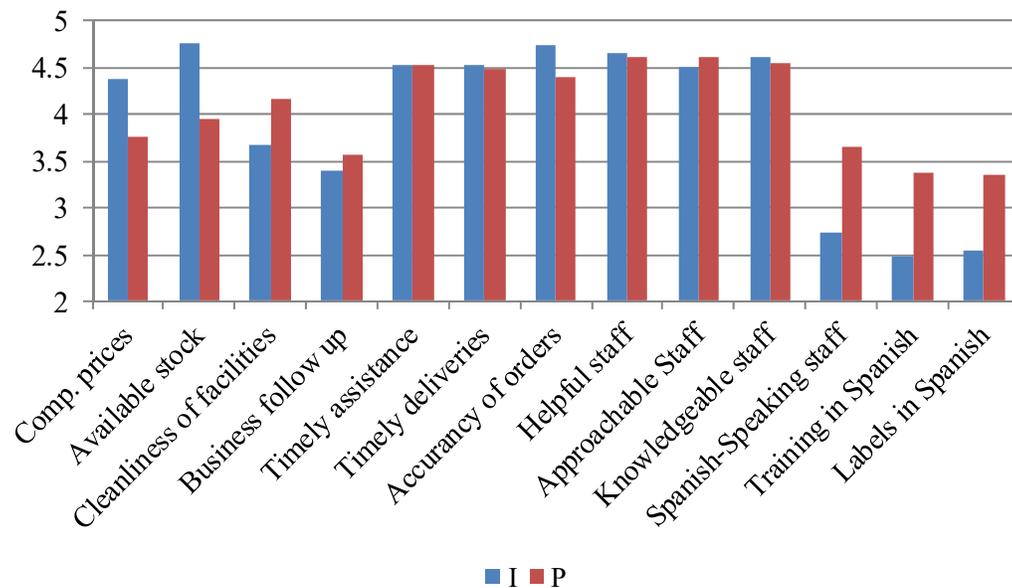
The major difference between the Hispanic and non-Hispanic grids is noted on the attributes related to Spanish language (K, L and M), *business follow up* (D) and *Cleanliness of facilities* (C), which are more important to Hispanics. It is surprising that the three factors related to Spanish language (K, L and M) fall into the *low priority* quadrant. As mentioned earlier, there are many Latino customers visiting SiteOne’s stores, and their native language is Spanish. In store observations have shown these customers feel more comfortable interacting with Spanish-speaking associates. Hispanics rated the importance and performance of *timely deliveries* (F) lower than the rest of the respondents. This result was unexpected because usually workers at the job site are time constrained, and they need supplies to continue with a project.

Figure 4.6 Importance-performance grid reflecting the ratings from 141 non-Latino respondents



A=Competitive prices, B=Available stock, C=Cleanliness of facilities
 D=Business follow up, E=Timely assistance, F=Timely deliveries, G=Accuracy of orders
 H=Helpful staff, I=Approachable staff, J=Knowledgeable staff, K=Spanish-speaking staff, L=Training in Spanish, M=Labels in Spanish

4.7 Gap between importance-performance means for non-Hispanic respondents



The matrix with the non-Latino participants is similar to the grid containing all responses. Based on previous I-P matrices, we can conclude that SiteOne has an opportunity to improve on *competitive prices* (A) and *available stock* (B). *Business follow up* (D) and the three attributes related to Spanish language are of low priority to respondents. A higher grade on importance for *Spanish-speaking staff* (K) was expected from Hispanic and non-Hispanic customers. There are many workers who would rather to speak Spanish when they visit SiteOne, and it was expected that the non-Latino owners would rate this attribute with higher importance. Owners or managers do not have to interpret for their workers if SiteOne has Spanish-speaking staff, saving money and time to these owners and managers. However, only 81 out of 141 of the non-Latino respondents are owners. And it is unknown how many of these owners employ Hispanic foremen whose native language is Spanish.

Table 4.3 contains the results from regression analyses made to find differences on importance and performance ratings between Hispanic and non-Hispanic respondents. In these models, the importance and performance were the dependent variable and a Hispanic/non-Hispanic dummy was the independent variable (Hispanic=1, otherwise=0).

Table 4.3 Differences between Hispanic and non-Hispanic respondents on importance and performance ratings of service attributes

		Importance	Performance
A	Competitive prices	0.170	0.028
B	Available stock	-0.120	0.003
C	Cleanliness of facilities	0.635 ***	0.009
D	Business follow up	0.583 ***	-0.015
E	Timely assistance	-0.038	-0.081
F	Timely deliveries	-0.218 *	-0.246 *
G	Accuracy of orders	-0.073	-0.115
H	Helpful staff	-0.019	-0.133
I	Approachable staff	0.071	-0.208
J	Knowledgeable staff	0.050	-0.160
K	Spanish-Speaking staff	1.140 ***	0.353 *
L	Training in Spanish	1.019 ***	0.153
M	Labels in Spanish	1.067 ***	0.297 *

*, *** Denotes significance at a 10% and 1% level, respectively

The results from this statistical analysis consist with previous I-P grids. The major differences found between Hispanic and non-Hispanic respondents were on importance ratings of the attributes related to Spanish language (K, L and M). The coefficient of 1.14 obtained for *Spanish-speaking staff* (K) means that this factor is 1.14 points more important for Hispanic than what it is for non-Hispanic customers. Because a 1 to 5 scale was used, this 1.14 points translates to 22.8%, meaning that *Spanish-speaking staff* is 22.8% more important to Hispanic than what it is to non-Hispanic customers. Differences between Hispanic and non-Hispanic were found on the performance of this attribute as well. Hispanic customers perceive that SiteOne's performance in regards to availability of

Spanish-speaking staff is 0.353 greater than the perception of non-Hispanic customers. The positive coefficient of importance on *business follow up* (D) is consistent with the theory that this sub-group demands more personal interaction than White/Caucasian customers (Comer and Nicholls 2000). The negative coefficients obtained for importance and performance of *timely deliveries* (F) support previous I-P grids where this variable was rated lower by Hispanic than the other sub-group.

4.3 Additional service attributes that are important to SiteOne customers

The two open-ended questions were designed to identify additional attributes affecting customer satisfaction. Question 7 was specifically presented as: “If you could change or improve one thing about the service you receive from John Deere Landscapes, what would it be?” Question 8 asked customers “What does John Deere Landscapes do best when serving you?” The responses were categorized into different attributes and are reflected in Figures 4.8 and 4.9. In the survey, there was room available for respondents to make comments after answering questions 4, 5 and 6. These comments were also included in the following two graphs.

Figure 4.8 Factors to improve

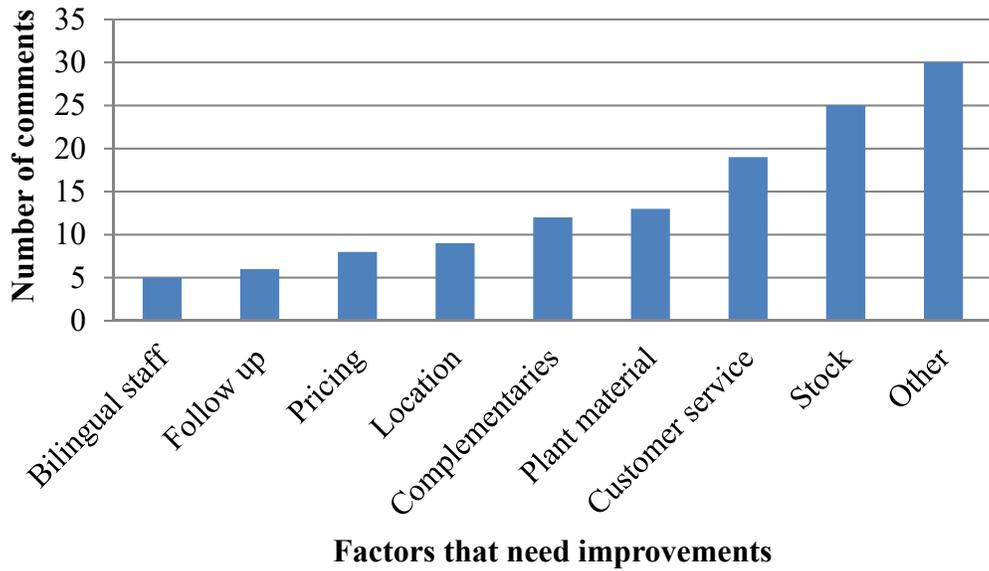
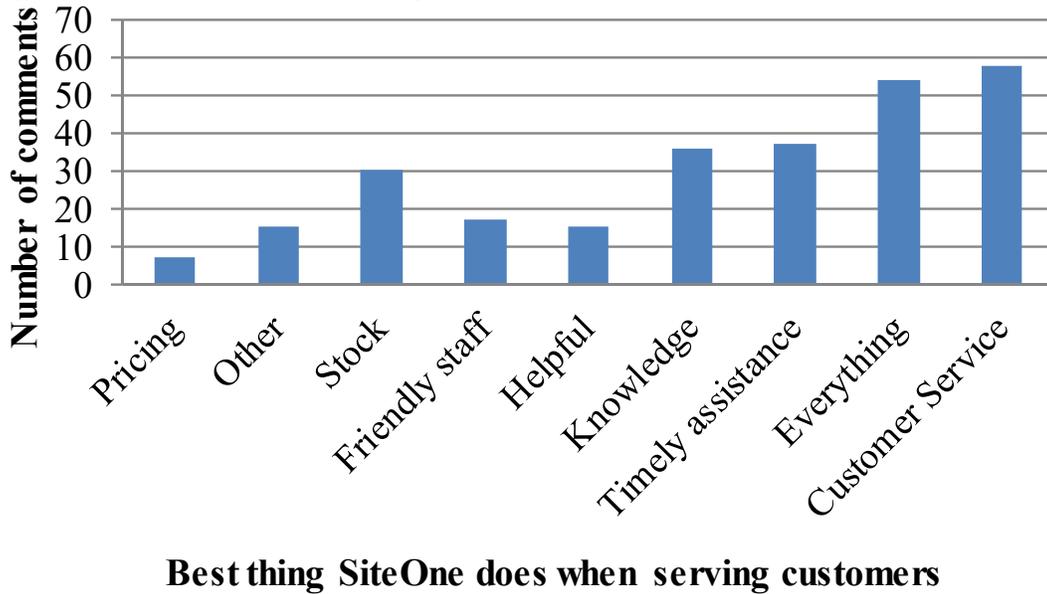


Figure 4.9 Factors that SiteOne perform best

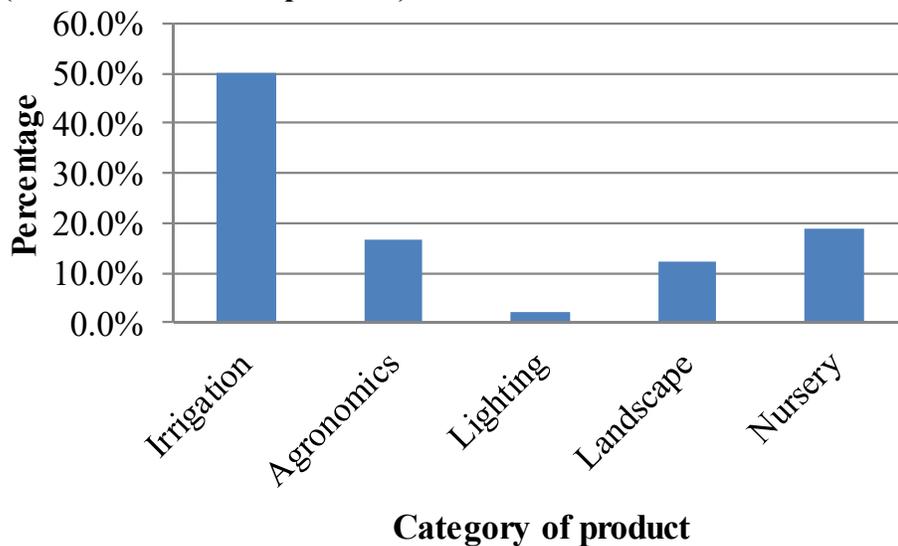


It is interesting to note that respondents wrote roughly twice as many positive comments compared to negative comments for these open-ended questions. This is another indicator that customers are satisfied with SiteOne Landscape Supply. There are 269

comments that fall under the category of *the best thing SiteOne does when serving customers*, and only 127 comments fall under the category of *things that need improvement*. In fact, 42 respondents said that SiteOne had no need to make any improvement. These comments are included in the “everything” factor in Figure 4.9.

Approximately 20% of the improvement oriented comments were related to stock. However, about the same number of comments indicated that stock was a positive aspect of SiteOne. Digging deeper into the specific comments, 15 of the positive comments regarding stock were related to irrigation parts, while 18 comments were regarding improving the selection of nursery, fertilizers and pesticides. Customers are right about the stock of SiteOne, and this is reflected in Figure 4.10 which presents the projected sales per category product for 2014 in Texas.

Figure 4.10 Percentage of projected sales per category product for Texas in 2014 (John Deere Landscapes 2015)



In addition to improving stock in some product categories, it might be worthwhile to consider further research on improving the inventory of the store located in Benbrook.

Six respondents said the stock of this store needs to improve, and this represents 50% of the surveys collected from that branch.

With regards to improve customer service, 58% of the open-ended comments revolved around the topic of the lack of helpful staff in nurseries. In Figure 4.8, the “plant material” category refers to quality and variety of product. The “complementary” category refers to free marketing/promotional tools that are given away (e.g., hats, drinks, lunch). Over a third of the surveys filled out on branch #201 mentioned that their facility space needed to be bigger, and they are included under the “other” factor that has to improve. This is another subject SiteOne management could consider to investigate in the near future.

4.4 Regression analyses based on overall satisfaction and branch performance

4.4.1 Overall Satisfaction

While many organizations conduct univariate or descriptive analysis of customer satisfaction, it is recommended to conduct multiple regression analyses whenever possible (Mittal and Frennea 2010). A multiple regression analysis predicts the change on a variable (dependent variable) based on the effect and relationship other variables (independent variables) have on it.

For this model, customer satisfaction was the dependent variable. The data for this variable was collected from question 6 of the survey, which was presented as: “Overall how satisfied are you with the service you received from John Deere Landscapes?” The original plan was to include all 13 attributes on the I-P and regression analyses. However *timely deliveries, Spanish-speaking staff, training in Spanish, and product labels in Spanish* were omitted because at least 15% of the respondents did not deal with these factors. The *approachable staff* attribute was omitted because of high multicollinearity and lack of

economic importance. *Approachable staff* got the highest multicollinearity value after *helpful staff* in most of the analyses run. However *helpful staff* is a more important attribute for SiteOne customers than *approachable staff*. Most likely clients perceive helpful associates are being approachable, but an approachable sales person is not always helpful. Therefore, the eight attributes included as independent variables are: *competitive prices, available stock, cleanliness of facilities, business follow up, timely assistance, accuracy of orders, helpful and knowledgeable staff*. Positive signs were expected for all of these variables with the idea that customer satisfaction increases when all these eight independent variables increase.

Additionally, an *owner/employee* dummy variable was created using the data collected from the first question of the survey, where owner took the value of “1”, otherwise “0”. The sign to expect for the dummy variable was unknown. There is not previous evidence of what group of customers is more satisfied, but this variable was included to study if there is a difference. Modern theories suggest that good quality of customer service should be applied to all customers, not matter if they are the owners or employees of a landscape contractor, especially if workers influence on buying decisions.

Therefore, the regression model for customer satisfaction is express as:

$$\text{Customer satisfaction} = \beta_0 + \beta_1 (\text{Owner/Employee}) + \beta_2 (\text{Competitive prices}) + \beta_3 (\text{Available stock}) + \beta_4 (\text{Cleanliness of facilities}) + \beta_5 (\text{Business follow up}) + \beta_6 (\text{Timely assistance}) + \beta_7 (\text{Accuracy of orders}) + \beta_8 (\text{Helpful staff}) + \beta_9 (\text{Knowledgeable staff})$$

After reviewing literature, consulting with colleagues, and based on my experience serving landscapers at SiteOne, I was confident about the economic importance of the independent variables to predict customer satisfaction. However, despite multiple regression models, little statistical significance was found. A lack of variance in the dependent variable,

satisfaction, made it difficult to find significant relationships. As shown in figure 3.4, 88% of the respondents selected that they are very satisfied or satisfied with SiteOne. This indicates that the observations for *overall satisfaction* are not evenly distributed.

Table 4.4 presents the results for the regression analyses separated by all data (171 observations), Hispanic (54 observations), and non-Hispanic responses (115 observations) (Appendix C). None of the coefficients for the Hispanic sub-group are statistically significant. In fact, the only variable with statistical significance at 10% level is *competitive prices* for all observations and for the non-Hispanic group. The coefficient is slightly greater for the non-Hispanic group (0.219), indicating that customer satisfaction will increase by 0.219 points if *competitive prices* increase by 1 point, when everything else remains constant. The scale used in this model was from 1 to 5. When this value of 0.219 points is converted to percentage, it equates to 4.38%. This means that non-Hispanic customer satisfaction will increase 4.38% when prices get 20% more competitive, if all other variables remain constant. The negative coefficient for the owner/employee variable for all and non-Hispanic respondents indicates that owner's satisfaction is slightly less than the employee's satisfaction; while the opposite was indicated for the Hispanic group. This may be caused by having more owners in the non-Hispanic group, and owners have higher expectations than employees. However the Owner/Employee and the other seven variables are not statistically significant for this sample.

Table 4.4 Coefficients obtained for the independent variables to predict customer satisfaction

	All	Hispanic	Non-Hispanic
Owner/Employee	-0.124	0.038	-0.093
Competitive prices	0.171 *	-0.084	0.219 *
Available stock	0.050	0.018	0.050
Cleanness of facilities	0.125	0.228	0.101
Business follow up	0.004	-0.030	0.019
Timely assistance	-0.049	-0.181	0.074
Accuracy of orders	-0.205	-0.123	-0.303
Helpful staff	0.089	0.319	-0.087
Knowledgeable staff	0.129	0.089	0.275

* Denotes significance at a 10% level

4.4.2 Branch performance

This analysis investigates the performance of ten out of the eleven participating stores. The branch located in Mesquite is not included because it did not collect any paper survey. Store #226 was treated as the baseline in regression models where the performance on each service attribute was the dependent variable. Entries in tables 4.5 and 4.6 are the estimated coefficients on dummy variables representing individual branches and can be interpreted as the difference in performance rating between that branch and the baseline branch. It is important to note that some customers visit multiple branches; therefore they could fill out the survey based on their experience on more than one location. However, this analysis can be helpful to compare these results to reality and make changes if needed.

Table 4.5 Branch performance on each service attribute, where store #226 is the baseline

	Br# 134	Br# 168	Br# 199	Br# 201	Br# 202
A Competitive prices	-0.417	-0.015	-0.365	-0.383	-0.083
B Available stock	-0.595	0.097	-0.504	-0.070	-0.081
C Cleanliness of facilities	-0.083	0.524 **	-0.195	0.556	0.600 **
D Business follow up	-0.636	-0.268	-0.609	0.091	0.035
E Timely assistance	-0.064	-0.016	-0.459 *	0.050	0.078
F Timely deliveries	0.067	0.078	-0.083	0.095	0.292
G Accuracy of orders	-0.350	-0.281	-0.643 **	-0.321	-0.017
H Helpful staff	-0.444	-0.290	-0.692 **	-0.143	-0.067
I Approachable staff	-0.333	-0.323	-0.654 **	-0.857 **	-0.067
J Knowledgeable staff	-0.430	-0.230	-0.683 **	-0.446	-0.075
K Spanish-speaking staff	-0.875 *	0.157	-0.083	1.125 **	-0.337
L Training in Spanish	-0.875	-0.442	-0.179	0.725	-0.602
M Labels in Spanish	-0.921 **	0.040	-0.260	0.389	-0.421

*, ** Denotes significance at a 10% and 5% level, respectively

Table 4.6 Branch performance on each service attribute, where store #226 is the baseline

	Br# 205	Br# 212	Br# 220	Br# 223
A Competitive prices	0.167	0.202	-0.883 *	-0.083
B Available stock	0.068	0.247	-0.382	0.068
C Cleanliness of facilities	0.000	0.286	0.000	-0.250
D Business follow up	-0.401	0.234	-1.159 *	0.091
E Timely assistance	-0.200	-0.129	-0.950 **	-0.200
F Timely deliveries	-0.583	0.238	-0.333	-0.083
G Accuracy of orders	-0.500	-0.179	-1.000 **	-0.500
H Helpful staff	-0.500	-0.286	-1.000 **	-0.500
I Approachable staff	-0.500	-0.286	-1.000 **	-0.500
J Knowledgeable staff	-0.375	-0.161	-0.625	-0.542
K Spanish-speaking staff	-0.625	0.411	-0.625	-0.208
L Training in Spanish	-0.875	-0.042	-0.875	-0.542
M Labels in Spanish	-0.778	0.222	-0.378	-0.778

*, ** Denotes significance at a 10% and 5% level, respectively

The only statistically significance difference found on *competitive prices* is for branch #220. Customers perceive that the prices in this store are less competitive than the prices at branch #226 by 0.883 points. This may indicate that the operations in regards to

price structure may differ between these two branches. Branch #220 is one of the busiest location in the area; there is often little time to follow up with customers, and sometimes associates cannot assist landscapers as soon as they wish. This is reflected on the negative coefficients for *business follow up* and *timely assistance*. Negative coefficients with statistical significance were found on *accuracy of orders*, *helpful* and *approachable staff* for stores #220 and #199. The negative coefficient on *helpful staff* for store #220 is consistent with customer's recommendations on the open-ended questions. Participants suggest that the staff of some nurseries need to be more helpful. The positive difference on *cleanliness of facilities* for branch #168 and #202 indicates that customers perceive that these branches are cleaner than the baseline. Branch #201 serves a highly Hispanic population, and the negative coefficient on *approachable staff* may reflect the desire for more *approachable staff* from Hispanic customers compared to non-Hispanic. It is not surprising to find statistical significance on the positive coefficient for availability of *Spanish-speaking staff* for store #201 since most of the associates working in this location are bilingual. The negative coefficients for branch #134 in regards to availability of *Spanish-speaking staff* and *Labels in Spanish* reflects the nature of the personnel working in this store, where none of the customer service associates speak Spanish.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

The overall satisfaction results provide a piece of mind to management knowing that 88% of the respondents said that they are satisfied or very satisfied with the landscape supplier, but there are always opportunities to improve. In today's competitive markets organizations pay more attention to customer satisfaction, and a customer satisfaction of 95% or higher can be used as a marketing tool to attract more businesses.

From the buying decision patterns, it was found that 90% of the Hispanic clients buy most of their supplies with SiteOne, while this figure is only 71% for non-Hispanic clients. These results are the opposite of management expectations, who have the perception that Hispanic landscapers do not buy much from SiteOne. A reason for this finding could be one of the following two statements. Since Hispanic customers have been shown to have a strong brand loyalty (Miyazaki, Lassar and Taylor 2007), the Hispanic group participating in this survey is reflective of this characteristic. Or Hispanic responses are not reflecting reality. The majority of the Hispanics participating in this survey are workers (65%), compared to a 41% of non-Hispanic workers. Some workers who offer landscape services after work hours may not admit that they buy supplies somewhere else. They would rather keep this information as private as possible to avoid their bosses (who are landscape contractors and SiteOne customers) finding out about their after work businesses.

In the regression analysis examining the differences among the importance-performance ratings, statistically significant differences were found on the three variables related to Spanish language (*Spanish-speaking staff, training in Spanish and labels in Spanish*). These results are also reflected on the importance-performance matrices, where Hispanics rated these attributes of higher importance than the non-Latino clients. However

these attributes obtained the lowest importance grades, locating them on the *low priority* quadrant. These results may indicate that Latino landscapers prefer excellent customer service from any person, over being served by an associate who speaks Spanish but cannot help them. If customers perceive that associates can help them solve their problems, they will go to these associates no matter if they speak English or Spanish. Nonetheless, theory suggests that those who feel more comfortable interacting with Spanish-speaking staff will communicate in Spanish, especially when dealing with services (Miyazaki, Lassar and Taylor 2007). SiteOne personnel experience this behavior in their stores. Management has noticed that those Hispanic landscapers who are not fluent in English prefer to deal with a Spanish-speaking person. Thus, Spanish-speaking staff appears to be not as important as other service attributes, but it is important to provide excellent service in areas where a high concentration of foreign-born Latinos is found.

The attributes plotted on the *keep up the good work* quadrant for Hispanic and non-Hispanic are: *timely assistance and deliveries, accuracy of orders, and approachable, knowledgeable and helpful staff*. *Available stock* obtained the highest importance mean rating from non-Latinos, and the second highest from Latinos, but it did not get the highest performance mean by any group. In the open-ended questions respondents suggested that the stock of nursery, fertilizers and pesticides should improve. Likewise, the knowledge and helpfulness of nursery staff should improve. This is consistent with issues that SiteOne management identified earlier and they are working to improve in these areas. It is recommended that SiteOne keeps track of customers' perception in regards to their performance on these attributes. Additionally, 50% of the surveys collected from the store located in Benbrook suggested that their stock availability should improve. Because only

12 surveys were collected from this branch, it is recommended to analyze this matter in more detail. Customers also recommended improvement of the facility space of branch #201.

By analyzing the importance-performance grids, we can conclude that pricing has a chance to improve. *Competitive prices* variable was the only one with statistical significance that positively affects non-Latino satisfaction. SiteOne is also working on providing a better price structure for landscapers and it is recommended to keep track of customers' perception in regards to pricing.

The regression models run to analyze individual branch performance show that stores #199 and #220 performed below average. It is important to remember that many customers visit multiple locations, and their answers may not be based on the branch performance where they filled out the survey. As such, it is recommended that these results be compared with other measurements, such as operations, employee productivity, profits or revenues from these stores to determine the nature of the issues that may be present.

The last recommendation to SiteOne is to provide a way for customers to easily share their opinions about the way they are being served. This could be done with an email address, social media site, or a suggestion box in each store. Customers often provide their opinion to SiteOne associates, but sometimes the feedback is not handled properly. Additionally, a tool that enables associates to follow up on customers' feedback should be provided. It can be a hotline, an email address, and/or a subdivision of customer relationship management (CRM). In fact, a CRM subdivision can be categorized by some of the 13 service attributes included in this project.

5.1 Limitations of the project and recommendations for future similar projects

A higher number of observations is desirable for this study. The number of surveys collected from the 11 participating stores was 158. If we divide 158 by the 12 business days while the survey was open, and divide that number by 11 stores, it equals to 1.196. This number indicates that on average, only 1.196 surveys/day/branch were collected, and this figure is small considering the size of the SiteOne stores in the DFW area. Response rates of surveys can increase by providing incentives. The incentive used for this survey was a chance to win one out of four \$50 coupon. A greater prize or an increase of the possibilities to win could have been a more effective way to motivate people to fill out this survey. Additionally, more training of SiteOne associates about the importance of measuring customer satisfaction would motivate them to be more involved in this type of project. Because only 30% of the Latino landscapers in Texas pursued higher education after high school (Guzman, Duarte and Martínez 2011), it is recommended to design shorter surveys and have people available to help those that need assistance in filling out the questionnaires.

Another way to gather feedback without using surveys is by interviewing several “key customers”, who can be selected based on different characteristics. When using this approach, the data gathered could be more informative than conducting surveys (Comer and Nicholls 2000) because it is easier to follow up and go into greater detail.

With regard to improving the multivariate regression analysis based on overall performance, it is advised to include other variables such as the “Partners Program”, which is a tool designed to reward loyal customers. Also, it is recommended to conduct surveys at industry expos, conventions and similar events in order to increase the variability of the sample.

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APPENDIX A

Survey Presented to Customers in English

Dear customer:

John Deere Landscapes (JDL) would like to better understand your level of satisfaction with our service. Please fill out this survey to be entered in a drawing of four \$50 JDL coupons.

Mark with an "x" the circle that best indicates your answer. Use the blank spaces for comments and/or suggestions. You can write additional comments on the other side of the page if you need more space.

1. Select the title that best describes the job you currently hold with a lawn care services company.

- Owner
- Crew leader/Foreman
- Laborer

Other (please specify)

Please respond to the remaining questions from the prospective of the position you indicated above.

2. How frequently do you make decisions on where to buy landscape supplies?

- Never
- Rarely
- About half of the time
- Very often
- Always

3. If you make any buying decisions on where to buy landscape supplies, what percentage of your purchases comes from John Deere Landscapes?

- 0 to 10%
- 11 to 20%
- 21 to 30%
- 31 to 40%
- 41 to 50%
- 51 to 60%
- 61 to 70%
- 71 to 80%
- 81 to 90%
- 91 to 100%

4. Rate the following factors in terms of importance when buying from any landscape supplier. Please mark only one circle for each factor

	Not Very Important	Not Important	Neutral	Important	Very Important
Competitive prices	<input type="radio"/>				
Having the product I need	<input type="radio"/>				
Having a clean facility	<input type="radio"/>				
Being contacted by a sales associate to follow my up with my business	<input type="radio"/>				
Being assisted in a timely manner	<input type="radio"/>				
Receiving deliveries in a timely manner	<input type="radio"/>				
Orders fulfilled accurately	<input type="radio"/>				
Staff willing to help me	<input type="radio"/>				
Approachable staff	<input type="radio"/>				
Availability of knowledgeable staff	<input type="radio"/>				
Availability of Spanish-speaking employees	<input type="radio"/>				
Product training in Spanish	<input type="radio"/>				
Availability of labels and/or instructions of products in Spanish	<input type="radio"/>				

Comments:

5. Tell us your level of agreement with the following factors regarding John Deere Landscapes in the Dallas/Fort Worth area. Please mark only one circle for each factor.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
JDL offers me the best prices	<input type="radio"/>					
JDL always has the product I need	<input type="radio"/>					
JDL facilities are always clean	<input type="radio"/>					
JDL sales associate always contact me to follow up with my business	<input type="radio"/>					
JDL staff always assist me in a timely manner	<input type="radio"/>					
JDL staff always handles deliveries in a timely manner	<input type="radio"/>					
Orders from JDL are always fulfilled accurately	<input type="radio"/>					
JDL staff are always willing to help me	<input type="radio"/>					
JDL staff are very approachable	<input type="radio"/>					
JDL staff are very knowledgeable	<input type="radio"/>					
JDL Spanish-speaking staff are always available	<input type="radio"/>					
JDL always provides product training in Spanish	<input type="radio"/>					
JDL always have Spanish product labels and/or instructions	<input type="radio"/>					

Comments:

6. Overall how satisfied are you with the service you receive from John Deere Landscapes?

- Very Unsatisfied
- Unsatisfied
- Neutral
- Satisfied
- Very Satisfied

Comments:

7. If you could change or improve one thing about the service you receive from John Deere Landscapes, what would it be?

8. In your opinion, what does John Deere Landscapes do best when serving you?

9. Which of the following best describes your age group?

- Younger than 20 years
- 20-39
- 40-60
- Older than 60 years

10. What is your race/ethnicity? You can select more than one option.

- Asian/Pacific Islander
- Black/African American
- Latino/Hispanic
- Native American
- White/Caucasian

Other (please specify)

11. If you are interested in being part of the drawing for one of the four \$50 JDL coupons, please provide your contact information. You do not have to have an account with John Deere Landscapes to participate in the drawing.

Name:

Company:

JDL Account Number:

Phone Number:

APPENDIX B

Survey presented to customers in Spanish

Estimado Cliente:
A John Deere Landscapes (JDL) le gustaría entender mejor su nivel de satisfacción con nuestros servicios. Por favor llene esta encuesta y participe en la rifa de cuatro cupones de JDL, con el valor de \$50 cada uno.

Marque con una "x" el círculo que mejor indique su respuesta, y use los espacios en blanco para escribir cualquier comentario y/o sugerencia. También puede usar el reverso de la hoja para escribir más comentarios si lo necesita.

1. Seleccione la posición que mejor refleja el trabajo que tiene con una compañía de servicios de jardinería.

Dueño(a)

Mayordomo(a) a cargo de un grupo de trabajadores

Trabajador(a) de campo

Otro

Por favor responda las siguientes preguntas basadas en la posición que indico en la pregunta anterior.

2. ¿Con qué frecuencia toma decisiones acerca de dónde comprar productos de jardinería?

Nunca

Raramente

Más o menos la mitad del tiempo

Muy frecuente

Siempre

3. Si usted toma decisiones acerca de dónde comprar productos de jardinería, ¿Qué porcentaje de sus compras proviene de John Deere Landscapes?

- 0 to 10%
- 11 to 20%
- 21 to 30%
- 31 to 40%
- 41 to 50%
- 51 to 60%
- 61 to 70%
- 71 to 80%
- 81 to 90%
- 91 to 100%

4. Use la siguiente escala para indicar que tan importantes son los factores presentados en la tabla cuando compra productos de jardinería en cualquier distribuidor. Por favor marque solo un círculo para cada factor.

	No es muy importante	No es importante	Neutral	Es importante	Es muy importante
Buenos precios	<input type="radio"/>				
Abastecimiento de productos	<input type="radio"/>				
Una apariencia limpia de la tienda	<input type="radio"/>				
Ser contactado(a) por el personal de ventas para hablar de negocios	<input type="radio"/>				
Ser asistido a un momento oportuno	<input type="radio"/>				
Recibir entregas en el lugar de trabajo a una hora razonable después de haber pedido mi orden	<input type="radio"/>				
Recibir mi orden sin errores	<input type="radio"/>				
Personal que muestre interés en ayudarme	<input type="radio"/>				
Sentirme cómodo(a) cuando interactué con cualquier empleado de mi distribuidor	<input type="radio"/>				
Disponibilidad de personal con conocimiento acerca de jardinería	<input type="radio"/>				
Disponibilidad de personal que hable Español	<input type="radio"/>				
Clases de productos de jardinería en Español	<input type="radio"/>				
Disponibilidad de etiquetas y/o instrucciones de productos en Español	<input type="radio"/>				

5. Exprese que tan de acuerdo esta con los siguientes factores acerca de John Deere Landscapes en el área de Dallas/Fort Worth. Por favor marque solo un círculo para cada factor.

	Muy desacuerdo	Desacuerdo	Neutral	De acuerdo	Muy de acuerdo	No aplica
John Deere Landscapes me ofrece los mejores precios	<input type="radio"/>					
JDL siempre tiene los productos que necesito	<input type="radio"/>					
Las tiendas de JDL siempre están muy limpias	<input type="radio"/>					
El personal de JDL siempre me contacta para hablar de negocios	<input type="radio"/>					
El personal de JDL siempre me asiste de manera oportuna	<input type="radio"/>					
El personal de JDL siempre hace entregas al lugar de trabajo en un momento razonable	<input type="radio"/>					
El personal de JDL siempre me entrega el pedido correctamente	<input type="radio"/>					
El personal de JDL siempre muestra interés en ayudarme	<input type="radio"/>					
El personal de JDL siempre me hace sentir cómodo	<input type="radio"/>					
El personal de JDL tiene mucho conocimiento acerca de jardinería	<input type="radio"/>					
El personal de JDL que habla Español siempre está disponible	<input type="radio"/>					
JDL siempre ofrece clases de los productos que vende en Español	<input type="radio"/>					
JDL siempre tiene etiquetas y/o instrucciones de los productos en Español	<input type="radio"/>					

6. En general, ¿Qué tan satisfecho esta con el servicio que John Deere Landscapes le ofrece?

- Muy insatisfecho
- Insatisfecho
- Neutral
- Satisfecho
- Muy Satisfecho

7. Si usted podría cambiar algo para mejorar el servicio al cliente ofrecido por John Deere Landscapes, ¿Que sería?

8. En su opinión, ¿Cuál es la mejor característica que tiene John Deere Landscapes al servirle?

9. ¿Cuál de las siguientes opciones describe mejor su edad?

- Menor de 20 años
- 20-39 años
- 40-60 años
- Mayor de 60 años

10. ¿Cuál es su raza/origen? Puede seleccionar más de una opción.

- Asiático(a)/originario(a) de las islas del Pacífico
- Negro(a)/Africano(a)-Americano(a)
- Hispano(a)/Latino(a) de cualquier raza
- Nativo(a) de América
- Blanco(a)/Caucásico(a)

11. Provea su información para incluirlo en la rifa de los cuatro cupones de JDL con el valor de \$50 cada uno. Usted no tiene que tener una cuenta con John Deere Landscapes para incluirlo en la rifa.

Nombre:

Nombre de la compañía
para la que trabaja:

Numero de cuenta con
John Deere Landscapes:

Tel. #:

APPENDIX C

Results from the multiple regression model using all data

Number of observations	171
R-squared	0.065
Adj. R-squared	0.0128
Sum squared model	13.1233404
Sum squared residual	188.66613
Total sum squared	201.789474

	Coefficient	Std. Err.	t-value	p> t
Owner/Employee	-0.123769	0.1688431	-0.73	0.465
Competitive prices	0.170805	0.1032113	1.65	0.100 *
Available stock	0.0497931	0.1161548	0.43	0.669
Cleanliness of facilities	0.1251342	0.138549	0.9	0.368
Business follow up	0.0040146	0.0850057	0.05	0.962
Timely assistance	-0.04888	0.1789621	-0.27	0.785
Accuracy of orders	-0.205203	0.1713805	-1.2	0.233
Helpful staff	0.0894516	0.1982622	0.45	0.652
Knowledgeable staff	0.1289188	0.1761495	0.73	0.465
Intercept	3.190472	0.6100046	5.23	0.000

* denotes significance at a 90% level of confidence

Results from the multiple regression model using the data from those who identified themselves as being Latino/Hispanic

Number of observations	54
R-squared	0.1099
Adj. R-squared	-0.0722
Sum squared model	6.31710605
Sum squared residual	51.1828939
Total sum squared	57.5

	Coefficient	Std. Err.	t-value	p> t
Owner/Employee	0.0380799	0.3144548	0.12	0.904
Competitive prices	-0.084232	0.2175664	-0.39	0.701
Available stock	0.0181141	0.2046296	0.09	0.930
Cleanliness of facilities	0.2283249	0.2621269	0.87	0.388
Business follow up	-0.029776	0.1809851	-0.16	0.870
Timely assistance	-0.180567	0.3121588	-0.58	0.566
Accuracy of orders	-0.122576	0.2904918	-0.42	0.675
Helpful staff	0.3191806	0.3453467	0.92	0.360
Knowledgeable staff	0.0888586	0.2819395	0.32	0.754
Intercept	3.399178	0.8374741	4.06	0.000

Results from the multiple regression model using non-Hispanic data

Number of observations	115
R-squared	0.0664
Adj. R-squared	-0.0136
Sum squared model	9.48365228
Sum squared residual	133.246783
Total sum squared	142.730435

	Coefficient	Std. Err.	t-value	p> t
Owner/Employee	-0.0928557	0.2286955	-0.41	0.686
Competitive prices	0.2188228	0.1301537	1.68	0.096 *
Available stock	0.0499082	0.1522299	0.33	0.744
Cleanliness of facilities	0.1006461	0.1771273	0.57	0.571
Business follow up	0.0186999	0.1054747	0.18	0.860
Timely assistance	0.073979	0.2439175	0.3	0.762
Accuracy of orders	-0.3027861	0.2541584	-1.19	0.236
Helpful staff	-0.0867762	0.2774449	-0.31	0.755
Knowledgeable staff	0.2745535	0.2798048	0.98	0.329
Intercept	3.021383	0.9931144	3.04	0.003

* denotes significance at a 90% level of confidence