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LiteTouch: Brilliant solutions in lighting: Dealer perception study

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Dealer Perception Study

Prepared by
Mountain West Research

Josh Rolph
Winnie Lo
Marcia Randall
Leslie Layman
Mark Adams
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# Table of Contents

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April 11, 2002

Angela Larson
Marketing and Communication Manager
LiteTouch, Inc.
3400 South West Temple
Salt Lake City, UT 84115

Dear Angela Larson,

We want to express our gratitude to you for allowing us to conduct marketing research for LiteTouch. Each member of Mountain West Research has benefited from the opportunity to be involved with this project.

We have made recommendations based on our findings from the research study. Our primary research has come from dealers across the nation. By dividing the research into different regions, we hope we were able to be specific concerning the data reported by geographic area. We are confident you will be pleased with the results of our hard work and effort. We also hope the research provided will prove beneficial to LiteTouch.

Sincerely,

Joshua Rolph
Marcia Randall
Mark Adams
Winnie Lo
Leslie Layman

Mountain West Research
Acknowledgements

Mountain West Research wishes to express their gratitude and appreciation to the following individuals for their help and cooperation in completing this research study.

Dr. Michael Geurts
Brigham Young University
Professor of Marketing Research

Angela Larson
LiteTouch
Marketing Manager

Don J. Buehner
LiteTouch
President

Joe Ar dovino
LiteTouch

Scott Straaten
LiteTouch
Executive Summary
Executive Summary

Introduction

LiteTouch has been in operation for over 20 years and operates from its head office located in Salt Lake City, Utah. LiteTouch offers high-end lighting control systems and these systems are designed to provide a complete lighting, dimming and integrated control system, beautifully designed to provide masterful control of all the lighting and electrical systems in fine custom homes.

Purpose of Research

The purpose of this study is to determine competitive advantage and overall customer perception of LiteTouch. The research will attempt to discover whether or not LiteTouch’s perception of its own core competencies match with customers’ opinions. Furthermore, the research is to help LiteTouch know what dealers perceive about the company’s competitors—Lutron, Vantage, and Centralite.

Methodology

Mountain West Research used exploratory and primary research to accomplish the desired objectives.

Exploratory Research

- Met with Don Buehner, Angela Larson, Joe Ardovino, and Scott Straaten to discuss LiteTouch’s business, the lighting controls industry, and the objectives of this research.
- Reviewed LiteTouch’s promotional material (CD-Rom) and the company’s website to learn more about LiteTouch’s product lines and to find out the company’s dealer names.

Primary research

- Segments the nation into five regions—East, South, North, Midwest, and California.
- Randomly selected 15 dealers from each region for telephone questionnaires. These dealers may carry one or two manufacturers’ (LiteTouch, Lutron, Vantage, and Centralite) product lines.
- A total of 75 telephone questionnaires were done in a period of one week.

Findings and Conclusions

After taking 75 telephone questionnaires and entering the data into SPSS, a statistical analysis computer program, these are the findings MWR came up with:

- There was not a company that dealers in the nation would clearly prefer one manufacturer to another.
- LiteTouch’s strengths, in the dealers’ opinion, are aesthetics of the products and something.
- The research indicates that LiteTouch’s weaknesses are warranty/guarantee, technical support, ease of installation, and best innovative products.
- **Quality:** Each of dealers seemed very pleased with the overall quality of product and service they receive from high-end lighting control manufacturers.
- **Warranty/Guarantee:** Most dealers were happy with the warranty that accompanied each product.
- **Technical Support:** Centralite rated the highest in this category because of their ability to work on a more personable level.
- **Aesthetics of Product:** This is one of the strengths of LiteTouch. Dealers commented on LiteTouch’s superior customization and aesthetically pleasing design.
- **Ease of Installation:** No one brand was easier than another, but dealers said certain types of systems within each company might have been easier to install instead of others.
- **Best Innovative Products:** Lutron was suggested to be the leading innovator in the lighting control products.
Training Seminars: There were mix responses with training seminars. Some dealers really like the extensive, all-inclusive seminars that are held on an annual basis, while others complained it was too much information in too little time.

Promptness and Accuracy of Delivery: Next-day delivery as a shipping option was desire for most dealers.

Customer Service: Customer service plays an important role when dealers are recommending a lighting-control brand to their clients. In general, dealers remarked that Lutron was consistently less friendly/personable and LiteTouch and Vantage representatives were much more genuine and caring.

Ease of Overall Process: Dealers indicated that they are more inclined to work with manufacturer who is easier to work with and trouble free.

Lowest Price: In general, dealers think prices are too high, and they want lower prices so more clients can afford to equip their houses with the lighting-control systems.

Best Value Based on Functionality and Features: In dealers’ opinion, Vantage and Centralite provide the most benefits for the amount of money customers have to pay for.

Recommendations

The following are the recommendations Mountain West Research suggests LiteTouch to work on, based on the findings we got from the telephone questionnaires:

- Continue to be innovative on products
- Increase consumer awareness
- Prices—added value to products
- Provide products for entry-level market
- Continue focusing on customer service
Introduction
Introduction - Research Objectives

LiteTouch, Inc. is a leading manufacturer of high-end lighting control systems that works with dealers across the nation. The objective of this research project is to analyze the opinions and perceptions of dealers across the nation concerning LiteTouch, Lutron, Vantage, and Centralite. The research was conducted and analyzed in five regional areas across the United States. Opinions and perceptions were calculated in the following categories:

- Quality
- Warranty/Guarantee
- Technical Support
- Aesthetics
- Ease of Installation
- Innovation
- Training
- Promptness and accuracy of delivery
- Customer service
- Ease of overall process
- Lowest process
- Best value based on functionality and features

This information is analyzed and compared with other data such as dealer location, ratio of new construction vs. retrofit, percent of total sales that come from lighting (for the dealer), and distribution of business among the above named companies.

At the request of LiteTouch, we have also included open-ended questions relating to future improvements in the lighting industry, and opinion questions about a dealer’s preferred manufacturer of choice.
No secondary research has previously been completed.

Primary research was completed by direct contact with individuals (at the dealer) who frequently recommend lighting-control systems to clients.

The survey included 75 telephone calls to dealers who purchase from more than one of the above named companies. Additional comments concerning the lighting-control industry can be found in Appendix B.
Research Methodology and Limitations
Methodology

In order to meet the research objectives, Mountain West Research conducted exploratory and primary research. Exploratory research provided MWR with background on LiteTouch's lighting control systems business and what LiteTouch wants to get out of this research project. The primary research provided MWR with data from which conclusions and recommendations could be drawn.

Exploratory Research

In order to learn more about LiteTouch, MWR began obtaining background information by meeting with Don Buehner, Angela Larson, Joe Ardovino, and Scott Straaten. This meeting was also intended to gain a better understanding of the lighting control systems industry and the objectives of the research project. Mr. Buehner took the group on a quick tour of LiteTouch's office located in Salt Lake City, and provided LiteTouch's promotional material for MWR team members. This visit provided MWR with a greater familiarity of LiteTouch and its business.

Besides meeting with LiteTouch, each MWR team member went online and looked at the company's website. By looking at the website, MWR was able to obtain a better knowledge of LiteTouch's goals as a company, its products, and the name of dealers around the nation.

Primary Research

MWR's primary research was in the form of a telephone survey. The questionnaire was designed to gather data pertaining to the research objectives. It
was developed using the information found from the exploratory research. The 
draft of the questionnaire was revised over ten times and was approved by 
LiteTouch before the actual questionnaire was used. A copy of the questionnaire 
is included in Appendix B. A primary objective of the group was to compile 
research data with a margin of error of 0.25 and a confidence level of ninety-five 
percent.

To accomplish our objectives, questionnaires were done over the phone. 
MWR divided the United States into five regions, and MWR randomly selected 
15 dealers from each region to survey. The dealers selected for the survey do not 
only deal with LiteTouch. Some dealers carry other manufacturers’ lighting 
control systems, such as Lutron’s and Vantage’s systems. This helps MWR to 
make comparisons between LiteTouch and its competitors.

A total of 75 telephone surveys were completed over a period of one week. 
We then entered the data from the questionnaires into SPSS, a statistical analysis 
program. From the program, we were able to run statistic frequencies, which 
provided us with information from which conclusions and recommendations were 
made.
Limitations

Marketing research is not an exact science and therefore has inherent limitations such as a lack of precision, cost, time, and difficulty in measuring research benefits, research bias, and technological limitations. Mountain West Research has worked hard to identify and minimize error bias. The following should be considered when evaluating the results of this study:

**Human Error**

Anytime human judgment is used, human error is a possibility and may be a biasing factor. Attempts were made to minimize human error in the design, implementation, and analysis of the survey; but this fact should still be taken into consideration.

**Non-response Error**

Another consideration to this study is the fact that respondents may not have answered all questions included in the questionnaire. Any unanswered questions would limit the reliability of the analysis that included these variables.

**Response Error**

One major challenge with the use of a questionnaire is that the questionnaire must stand alone without further explanation or help from the researcher. Due to this fact, some respondents may have misunderstood some questions and answered these questions with different intentions. This also decreases the validity of the analysis that included these variables.
Interviewer Error

This error occurs due to interaction between interviewers and respondents that affect the responses given. Although MWR has put extra effort into minimizing any error, the questionnaire process was administered through the phone; therefore, the interviewer error should be taken into account.

Random Sampling Error

Random sampling error occurs when the sample is not totally random, which means not everyone in the sampling pool has an equal chance of being surveyed. This error should be taken into account for this research due to the limited number of dealers around the nation for the lighting controls industry.
Findings
Findings

LiteTouch asked us to find out and evaluate the perceptions of lighting-control dealers across the nation. Specifically, LiteTouch wanted to find out why dealers were inclined to recommend them to clients, and why other lighting-control companies might be considered ahead of LiteTouch. To perform this evaluation, we surveyed numerous dealers across the nation and asked them to rank each of the companies they work with in various categories. (In most cases, any given dealer only worked with one or two lighting-control manufacturer.)

The categories that were ranked include the following:

- Quality
- Warranty/Guarantee
- Technical Support
- Aesthetics
- Ease of Installation
- Innovation
- Training Seminars
- Promptness and accuracy of delivery
- Customer service
- Ease of overall process
- Lowest price
- Best value based on functionality and features

In an attempt to help LiteTouch evaluate the lighting-control industry and the competing firms therein, we asked a few open-ended questions to allow dealers to give input regarding positive and negative aspects of each company. We also asked each dealer about possible improvements within the industry to help LiteTouch gain a future advantage as to the changes they should make.
Specifically, we asked each dealer

- Which manufacturer would you most likely recommend to clients and why?
- What changes or improvements, if any, would you like to see in the lighting-control industry?

Responses to these questions can be found in the appendix of this book.

We have also evaluated each of these categories and searched for trends with regard to the following information:

- % of total dealer sales that come from lighting-control systems
- % of lighting-control sales between new construction and retrofit
California Region

Quality

Average Rating

LiteTouch • Vantage • Lutron

Warranty/Guarantee

Average Rating

LiteTouch • Vantage • Lutron
California Region

Technical Support

Aesthetics of Product

[Graphs showing average ratings for Technical Support and Aesthetics of Product for LiteTouch, Vantage, and Lutron.]
California Region

Ease of Installation

Best Innovative Products
California Region

Training Seminars

Promptness and Accuracy of Delivery
California Region

Customer Service

Ease of Overall Process
California Region

Lowest Price

Best Value Based on Functionality and Features

Average Rating

- LiteTouch
- Vantage
- Lutron

- LiteTouch
- Vantage
- Lutron
In the California region, Vantage has the highest overall rating with an average score of 4.4. Lutron has the second highest rating, followed by LiteTouch. Vantage strengths in this region were warranty/guarantee, technical support, ease of overall process, lowest price, and best value based on functionality and features. The main strength for LiteTouch in California is aesthetics of product.
Midwest Region

Quality

Warranty/Guarantee
Midwest Region

Technical Support

Aesthetics of Product
Midwest Region

Ease of Installation

Best Innovative Products
Midwest Region

Training Seminars

Promptness and Accuracy of Delivery

Average Rating

- LiteTouch
- Vantage
- Lutron

Average Rating

- LiteTouch
- Vantage
- Lutron

4.2
4.5
4.5

23
Midwest Region

Lowest Price

Best Value Based on Functionality and Features
In the Midwest Region, Vantage scored the highest with an average rating of 4.5. LiteTouch and Lutron tied for second place with rating of 4.4. Vantage scored the highest out of the three companies in several categories: best innovative products, promptness and accuracy of delivery, customer service, ease of overall process, lowest price, and best value based on functionality and features. LiteTouch scored the highest in technical support and aesthetics of product.
Northern Region

Quality

Warranty/Guarantee

- LiteTouch • Vantage • Lutron • Centralite
Northern Region

Technical Support

Aesthetics of Product
Northern Region

Ease of Installation

Best Innovative Products
Northern Region

Training Seminars

Promptness and Accuracy of Delivery
Northern Region

Customer Service

Ease of Overall Process
Northern Region

Lowest Price

Best Value Based on Functionality and Features
In the Northern Region, Centralite was the best company overall with 4.8. LiteTouch was the second place, followed by Lutron and Vantage. Centralite scored the highest in eight categories such as warranty/guarantee, technical support, and ease of installation. LiteTouch's strength in this region was training seminars.
Southern Region

Quality

Warranty/Guarantee
Southern Region

Technical Support

Aesthetic of Product

LiteTouch • Vantage • Lutron
Southern Region

Ease of Installation

Best Innovative Products
Southern Region

Training Seminars

Promptness and Accuracy of Delivery
Southern Region

Customer Service

Ease of Overall Process
Southern Region

Lowest Price

Best Value Based on Functionality and Features
In the Southern Region, Lutron did the best out of the three companies. Vantage was second, and is followed by LiteTouch. Lutron scored the highest in the following categories: technical support, ease of installation, training seminars, and customer service. LiteTouch did very well in two categories in this region: ease of overall process and lowest price.
Eastern Region

Quality

Warranty/Guarantee
Eastern Region

Technical Support

Aesthetics of Product

[Graphs showing ratings for LiteTouch, Vantage, Lutron, and Centralite in both Technical Support and Aesthetics of Product categories.]
Eastern Region

Ease of Installation

Best Innovative Products
Eastern Region

Training Seminars

Promptness and Accuracy of Delivery
Eastern Region

Customer Service

Ease of Overall Process
Eastern Region

Lowest Price

Best Value Based on Functionality and Features
In the Eastern Region, Vantage has the highest overall average rating, 4.6. LiteTouch was second, Lutron was third and Centralite scored the lowest. Vantage has several strengths in this region—technical support, ease of installation, training seminars, customer service, ease of overall process, lowest price, and best value based on functionality and features. LiteTouch has the best quality rating in this region, as well as best aesthetics product and promptness and accuracy of delivery.
Nationwide

Technical Support

Aesthetics of the Product
Nationwide

Ease of Installation

Best Innovative Products
Nationwide

Training Seminars

Promptness and Accuracy of Delivery
Nationwide

Customer Service

Ease of Overall Process
Out of four lighting control system manufacturers, Centralite appeals to be the best company, as shown in the bar chart above. But because Centralite was only surveyed in two regions, the result with Centralite is not accurate. Therefore, all companies scored about the same overall in the nation. LiteTouch has an overall score of 4.2 in the nation. The results shown that LiteTouch’s strengths are aesthetics of product and promptness and accuracy of delivery. On the other hand, results tell us that LiteTouch’s weaknesses are warranty/guarantee, technical support, ease of installation, and best innovative products. Also, the company can improve on customer service and lowest price.
Dealer Recommendations

Lighting Control Manufacturers Recommended by Dealers

California Region

- Centralite: 37%
- Lutron: 18%
- LiteTouch: 18%
- Vantage: 27%

Lighting Control Manufacturers Recommended by Dealers

Midwestern Region

- Vantage: 64%
- LiteTouch: 36%
Dealer Recommendations

Lighting Control Manufacturers Recommended by Dealers

Northern Region

- Lutron: 37%
- Vantage: 14%
- LiteTouch: 14%
- Centralite: 14%
- Depends: 21%

Southern Region

- LiteTouch: 43%
- Lutron: 29%
- Vantage: 21%
- Depends: 7%
Dealer Recommendations

Lighting Control Manufacturers Recommended by Dealers

Eastern Region

- Lutron: 25%
- Vantage: 31%
- LiteTouch: 32%
- Centralite: 6%
- Depends: 6%
Regression Analysis

Warranty = x  Quality = y

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Aesthetics = x  Price = y

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### Aesthetics = x Quality = y

### Regression Statistics

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### Coefficients

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### Upper 95% | Lower 95.0% | Upper 95.0%

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Regression Analysis

\[ \text{Innovation} = x \quad \text{Quality} = y \]

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Quality = x \quad Price = y

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Upper 95% | Lower 95.0% | Upper 95.0% |
12.88     | -44.58      | 12.88     |
10.59     | -2.05       | 10.59     |
### Regression Analysis

**Price = \( x \)  \ Value = \( y \)**

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**Upper 95%** | **Lower 95.0%** | **Upper 95.0%**

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**Warranty = \( x \)  \ Price = \( y \)**

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**Coefficients**

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**Upper 95%** | **Lower 95.0%** | **Upper 95.0%**

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### Regression Analysis

**Promptness = x  Prices = y**

#### Regression Statistics

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#### ANOVA

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**Upper 95%  Lower 95.0%  Upper 95.0%**

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**Promptness = x  Value = y**

#### Regression Statistics

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#### ANOVA

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#### Coefficients

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**Upper 95%  Lower 95.0%  Upper 95.0%**

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## Regression Analysis

**Innovation = x \ Value = y**

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**Customer Service = x \ Installation = y**

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Regression Analysis

Ease of process = x
Price = y

Regression Statistics

- Multiple R: 0.74
- R Square: 0.55
- Adjusted R Square: 0.40
- Standard Error: 0.31
- Observations: 5.00

ANOVA

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Coefficients

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Upper 95% Lower 95.0% Upper 95.0%

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Price = x
Ease of process = y

Regression Statistics

- Multiple R: 0.74
- R Square: 0.55
- Adjusted R Square: 0.40
- Standard Error: 0.25
- Observations: 5.00

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
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<tr>
<td>Regression</td>
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<td>0.23</td>
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<td>Total</td>
<td>4.00</td>
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</table>

Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
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</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.04</td>
<td>1.13</td>
<td>1.81</td>
<td>0.17</td>
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<tr>
<td>Variable 1</td>
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<td>0.32</td>
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<td>0.15</td>
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Upper 95% Lower 95.0% Upper 95.0%

<table>
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<tr>
<th></th>
<th>-1.55</th>
<th>5.63</th>
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</thead>
<tbody>
<tr>
<td>1.61</td>
<td>-0.40</td>
<td>1.61</td>
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</table>
## Average Scores on Attributes by Company

<table>
<thead>
<tr>
<th>Company</th>
<th>Average of Best Value Based on Functionality and Features</th>
<th>Average of Lowest Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralite</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>LiteTouch</td>
<td>3.50</td>
<td>3.25</td>
</tr>
<tr>
<td>Lutron</td>
<td>4.00</td>
<td>3.86</td>
</tr>
<tr>
<td>Vantage</td>
<td>4.63</td>
<td>4.64</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4.04</strong></td>
<td><strong>3.92</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Average of Quality</th>
<th>Average of Aesthetics of Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralite</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>LiteTouch</td>
<td>4.50</td>
<td>5.00</td>
</tr>
<tr>
<td>Lutron</td>
<td>3.89</td>
<td>4.44</td>
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<tr>
<td>Vantage</td>
<td>4.44</td>
<td>4.44</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4.28</strong></td>
<td><strong>4.63</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Average of Technical Support</th>
<th>Average of Customer Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralite</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>LiteTouch</td>
<td>3.50</td>
<td>4.33</td>
</tr>
<tr>
<td>Lutron</td>
<td>4.67</td>
<td>4.57</td>
</tr>
<tr>
<td>Vantage</td>
<td>4.69</td>
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<td><strong>Grand Total</strong></td>
<td><strong>4.28</strong></td>
<td><strong>4.51</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Average of Best Innovative Products</th>
<th>Average of Ease of Overall Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralite</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>LiteTouch</td>
<td>4.25</td>
<td>3.75</td>
</tr>
<tr>
<td>Lutron</td>
<td>4.19</td>
<td>3.94</td>
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<tr>
<td>Vantage</td>
<td>4.44</td>
<td>4.50</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4.29</strong></td>
<td><strong>4.06</strong></td>
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</tbody>
</table>
Average Percent Sales by Region and Company

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of % Sales from L.C. Systems</th>
<th>Average of % L.C. Sales from LiteTouch</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>28%</td>
<td>18%</td>
</tr>
<tr>
<td>East</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Midwest</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>North</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>South</td>
<td>24%</td>
<td>49%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>28%</strong></td>
<td><strong>31%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of % Sales from L.C. Systems</th>
<th>Average of % L.C. Sales from Vantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td>East</td>
<td>31%</td>
<td>25%</td>
</tr>
<tr>
<td>Midwest</td>
<td>31%</td>
<td>47%</td>
</tr>
<tr>
<td>North</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>South</td>
<td>24%</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>28%</strong></td>
<td><strong>26%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of % Sales from L.C. Systems</th>
<th>Average of % L.C. Sales from Lutron</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>28%</td>
<td>40%</td>
</tr>
<tr>
<td>East</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>Midwest</td>
<td>31%</td>
<td>3%</td>
</tr>
<tr>
<td>North</td>
<td>24%</td>
<td>37%</td>
</tr>
<tr>
<td>South</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>28%</strong></td>
<td><strong>26%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of % Sales from L.C. Systems</th>
<th>Average of % L.C. Sales From Centralite</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>East</td>
<td>31%</td>
<td>12%</td>
</tr>
<tr>
<td>Midwest</td>
<td>31%</td>
<td>0%</td>
</tr>
<tr>
<td>North</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>South</td>
<td>24%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>28%</strong></td>
<td><strong>5%</strong></td>
</tr>
</tbody>
</table>
### Average Scores for LiteTouch by Region and Attributes

#### Average of Aesthetics of Product and Average of Quality

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of Aesthetics of Product</th>
<th>Average of Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>5.00</td>
<td>4.50</td>
</tr>
<tr>
<td>East</td>
<td>4.78</td>
<td>4.67</td>
</tr>
<tr>
<td>Midwest</td>
<td>4.79</td>
<td>4.57</td>
</tr>
<tr>
<td>North</td>
<td>4.33</td>
<td>4.50</td>
</tr>
<tr>
<td>South</td>
<td>4.30</td>
<td>4.50</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4.64</strong></td>
<td><strong>4.55</strong></td>
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</table>

#### Average of Lowest Price and Average of Warranty/Guarantee

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of Lowest Price</th>
<th>Average of Warranty/Guarantee</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>3.25</td>
<td>4.00</td>
</tr>
<tr>
<td>East</td>
<td>4.17</td>
<td>4.44</td>
</tr>
<tr>
<td>Midwest</td>
<td>3.43</td>
<td>4.86</td>
</tr>
<tr>
<td>North</td>
<td>3.75</td>
<td>4.33</td>
</tr>
<tr>
<td>South</td>
<td>3.20</td>
<td>4.33</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>3.56</strong></td>
<td><strong>4.39</strong></td>
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</table>

#### Average of Customer Service, Average of Quality, and Average of Lowest Price

<table>
<thead>
<tr>
<th>Region</th>
<th>Average of Customer Service</th>
<th>Average of Quality</th>
<th>Average of Lowest Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>4.33</td>
<td>4.50</td>
<td>3.25</td>
</tr>
<tr>
<td>East</td>
<td>4.43</td>
<td>4.67</td>
<td>4.17</td>
</tr>
<tr>
<td>Midwest</td>
<td>4.57</td>
<td>4.57</td>
<td>3.43</td>
</tr>
<tr>
<td>North</td>
<td>4.80</td>
<td>4.50</td>
<td>3.75</td>
</tr>
<tr>
<td>South</td>
<td>4.00</td>
<td>4.50</td>
<td>3.20</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4.43</strong></td>
<td><strong>4.55</strong></td>
<td><strong>3.56</strong></td>
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</table>
Regression and Correlation

Regression and correlation are used to determine if two variables are linked and how strong that link is. Out of the two variables being analyzed, one must be dependent (and is called the x variable) and one must be independent (and is called the y variable). Regression analysis is the technical term for the method that is used for finding whether or not this link exists. A regression analysis produces variables that stand for the results of statistical equations. The results of these equations can be analyzed by people with only the most basic math skills by just knowing how to analyze the answers given.

Three main variables are often used to evaluate the results of a regression analysis: F-test, r-squared, standard error, and df (degrees of freedom).

An F-test determines whether or not a linear relationship between the two variables being analyzed is significant. This test can be done by executing the following equation:

\[ F = \frac{MSR}{MRE} \]

The MSR and MRE can both be found when performing a regression analysis on the computer. Examples of regression analyses are in the findings section of this report, and here you will see these variables. After performing this equation the answer for F that came from the equation that is stated above should be compared to the F-statistic that is provided in the regression analysis. If the F from the equation is greater than or equal to the F-statistic in the regression analysis, then there is a significant linear relationship between x and y. If the F from the equation is less than the F-statistic in the regression analysis, there is not a significant linear relationship between the two variables.

R-squared is also called the coefficient of determination, which means that it determines how strong the linear relationship is between the dependent variable x and independent variable y. This coefficient can be any number between zero and one. The closer the coefficient is to one, the stronger the correlation is.

Degrees of Freedom tell how many observations can vary in a statistical problem. This number is also used to perform other statistical tests that are similar to the F-test. This number appears in a regression analysis, and is often symbolized by df. This number is not extremely important by itself, but it is necessary to know what it is in order to perform many of the other common equations and tests.
Cross-Tabulations

Cross tabulations, also called PivotTables or PivotCharts, are used to compare data. The tables in this report have categorical data in the first row and first column with intersecting numbers. These numbers are averages, such as average scores and percentages. If the average score of aesthetics for LiteTouch needed to be determined for the California region, this could be found by looking at the first table under the ‘Average Scores for LiteTouch by Region and Attribute’ in the cross tabulation examples section. The first step is to look for the ‘California’ region in the first column, then follow the row it is in to where the column that is headed by ‘aesthetics’ is. If desired, the average score of aesthetics for LiteTouch in the California region can also be compared to the average score of quality for LiteTouch in the California region, because this information is in the same table. All the PivotTables can be analyzed in the same manner.
Conclusions
Conclusion

Based on the findings in the previous section, we have made the following conclusions:

1. **Quality**—General opinion regarding quality has little to no variance. Each of dealers seemed very pleased with the overall quality of product and service they receive from high-end lighting control manufacturers. Some dealers mentioned a dislike for the continual software upgrades, and would like to see a more stable software program before products are released.

2. **Warranty/Guarantee**—Again, most dealers were satisfied with the warranty that accompanied each product. A few dealers stated that Vantage seemed to be the best warranty, although few system failures ever occurred.

3. **Technical Support**—Centralite rated the highest in this category, based on their ability to work on a more personable level. Some dealers felt that Centralite was able to offer a little more personal help because they are a smaller company.

4. **Aesthetics**—LiteTouch holds the edge in this category. Although other manufacturers were not rated far behind, more often than not, dealers commented on LiteTouch’s superior customization and aesthetically pleasing design. Some of the worthwhile recommendations made by dealers include the following (although they may not apply to LiteTouch): (1) lighted keypads (lighting from behind the buttons), (2) keypads that are flush with the wall.

5. **Ease of Installation**—Each of the systems is very comparable for installation. Certain types of systems within each company may have been easier to install instead of others, but no one brand was easier than another.

6. **Innovation**—Many comments suggest that Lutron is a leading innovator of lighting-control products. Dealers like innovation and want to know about up and coming products so they can convey this information along to clients. A common theme seemed prevalent among the dealers. They would like to see: (1) more integration among systems, (2) easier programming capabilities, (3) continued retrofit improvements.
7. **Training seminars**—Responses concerning varied enormously. Some dealers really like the extensive, all-inclusive seminars that are held on an annual basis while others complained it was too much information in too little time, and therefore was very difficult to learn everything on this subject. One dealer was very appreciative of on-site training he received from one of the companies.

8. **Promptness and accuracy of delivery**—Most dealers wanted to see next-day delivery included as a shipping option. Most were very pleased with the promptness and accuracy of their deliveries, with a few rare exceptions.

9. **Customer service**—With a high quality product like lighting-control, we expected to see high marks with regard to customer service, and we did. Customer service plays an important role when dealers are recommending a lighting-control brand to their clients. Many dealers mentioned the friendly treatment they received when they had technical questions (for each of the companies). Local representatives play an important role in the dealer’s decision-making process. In general, dealers remarked that Lutron was consistently less friendly/personable (but still more well known and established), and LiteTouch and Vantage representatives were much more genuine and caring. Some of the dealers shared various experiences where the local representatives went out of their way to make the dealer happy, and are now committed to continue working with that manufacturer because of the high level of satisfaction.

10. **Ease of overall process**—No major problems or concerns were found in this category. Dealers were always more inclined to work with the company who was the “least hassle,” although they usually recommended a company based on the best option for their client, not themselves.

11. **Lowest price**—Centralite scored the best in this category. Being a smaller company, they seem to be more dependants on price rather than reputation as a selling point. Dealers across the nation would like to see prices drop so more clients can afford to equip their houses with the lighting-control systems. Adding value is never enough in the eyes of the consumer, they always want to see lower prices.

12. **Best Value**—Vantage and Centralite are the best bang for your buck in the eyes of the dealers. Dealers may be more inclined to
recommend one of these two options (where available) to clients if the client is trying to pinch pennies and still live a luxurious lifestyle. Lutron and LiteTouch are better known, but Vantage and Centralite hold their niche by having lower prices and offering similar products.
Recommendations
Recommendations

Based on the comments from lighting-control dealers nationwide and the results of our survey, we propose the following recommendations:

*** (These recommendations are based on the industry at large, and comments made by dealers. Again, due to the lack of our understanding of the industry and fuller knowledge of LiteTouch, it is possible that LiteTouch is already pursuing these recommendations.)

1. **Continued innovation**—Continue to develop new and exciting product ideas. Many dealers want to see continued improvements in the lighting-control industry. A few recommendations include:
   - Universal modules
   - Better integration capabilities
   - Voice recognition systems
   - Improved touch-screen and wireless systems
   - Program flexibility (program language conflicts)
   - More retrofit options
   - Back-lit buttons
   - Flush keypads into the wall
   - Simplify programming
   - Keep dealers informed of product ideas/scheduled releases

2. **Consumer Awareness**—Create consumer awareness. According to dealers, more homeowners and clients would be willing to enhance their homes with lighting-control systems if they knew such possibilities existed. Most consumers have no idea they can create different atmospheres or provide security to their homes with the use of lighting-control. Consumers who do know about lighting control still don’t fully understand the different product options that are available. Dealers want consumers to know about the following:
   - Low-voltage capabilities
   - Retrofit capabilities
   - System capabilities (before purchase)
   - Consumer education (after purchase)

3. **Prices**—“Over-priced” products seemed to be a concern with most dealers; we could not overlook this category because it was mentioned so frequently. We feel that effective marketing does not mean lower prices (possibly leading to price wars), rather it means adding value. In the eyes
of dealers Vantage and Centralite offer lighting-control systems (albeit they are differ in certain capabilities) at lower prices, and in turn this lower price is viewed as a higher value. A system that is “almost as good” but much less seems to be a large selling point. Possibly offering a lower-end product at lower prices could entice thrifty clients to invest in a name such as LiteTouch. More expensive products will continue to sell at higher prices.

4. **Entry-level market**—A few dealers mentioned the potential market for homeowners who do not “live in mansions.” Other dealers thought that LiteTouch should not be made available for “anyone to sell” as this would make the brand name loss value. A possible niche in the market exists for entry-level homeowners who want to enhance their houses. Maybe a division of LiteTouch (such as HomeTouch) could be used for entry-level products. LiteTouch would remain a high-end “exclusive” brand, while another name could be used to target lower-level housing.

5. **Customer Service**—LiteTouch is a leader in the lighting-control industry when it comes to customer service. Dealers were very pleased with technical support, training, and local representatives. We heard several complaints about other companies who were not as friendly or personable—a few even complained that they had to work with a new person each time they called the representative. Other dealers who use LiteTouch were extremely happy with the personnel they have worked with. Continue working hard to keep customer service as a priority because many dealers are loyal to LiteTouch because of this trait.
February 19, 2002

Angela Larson
Marketing and Communication Manager
LiteTouch, Inc.
3400 South West Temple
Salt Lake City, UT 84115

Ms. Larson:

Mountain West Research Group is pleased to present the following proposal for your approval. Mountain West is excited to help LiteTouch better understand its competitors in the lighting control industry.

The enclosed proposal contains research objectives and methodology explaining how we will complete the project. We have also included a budget, tentative schedule, and agreement statement for your approval.

Please review the proposal and contact Josh Rolph at (801) 473-5662 with any questions. When the proposal meets your approval, please sign and return it so we can begin our research. We look forward to working with you and thank you for your cooperation.

Sincerely,

Mountain West Research Group

Enclosure
Purpose of Study

The purpose of this study is to determine competitive advantage and overall perception of LiteTouch. The research will attempt to discover whether or not LiteTouch's perception of its own core competencies match with customers' opinions.

Methodology

Mountain West Research will use primary research to realize the previously stated objectives. The research group will administer a nation wide telephone survey to dealers of LiteTouch product lines.

Mountain West Research will mainly use a telephone survey as our primary research. This survey entails the following:

- We will prepare a statistically valid survey, which is approved by LiteTouch, to survey a probability sample of dealers in all the regions of the U.S.

- We will perform a stratified sample by region, meaning that a probability sample of fifteen dealers in each region will be selected for our telephone survey. We have chosen to do a regional stratified sample in order to find out how the survey answers differ by region. Since we are surveying 15 dealers in five regions a total 75 dealers will be surveyed.

- We have determined (at least) 75 dealers is an accurate number of dealers to survey from a simple formula that has been proven to be statistically valid. This formula is: 

\[
\text{Z-score squared} \times \text{population standard deviation squared} \times \text{acceptable amount of sampling error squared}
\]

  - The Z-score stands for the number of standard deviations each piece of data varies from the mean. We have chosen the standard 5% for Z, which ends up equaling a Z-score of approximately 2. This means that the data will fall within 2 standard deviations of the mean, which is the equivalent of 95% of the data on a normally distributed data curve.
  - The population standard deviation is 1. We find this by first finding the range, which is found by looking at how large of a response scale you have chosen for your survey. We have chosen a scale of 5, where 1 equals not very important, and five equals extremely important. To find the range you subtract your lowest option, which is 1, from your highest option, which is 5. Consequently, you end up with a range of 5 - 1 = 4. To find the population standard deviation, you then take 25% of your range. 4 * 0.25 = 1, so the population standard deviation is 1.
  - We have chosen a margin of error of 0.25, meaning a margin of error of a quarter of a point on the response scale. Described another way, this
means that the general answers we receive may not be correct by up to a quarter of a point in either direction on the response scale.

- When you put the numbers that are described above into the sample size equation, you end up with:

\[(4 \times 1) / 0.0625.\]  
This equation equals 64, meaning we need to have a sample size of at least 64 dealers to have a quarter of a point margin of error with the kind of survey we have chosen. We have chosen to survey 75 dealers, which obviously exceeds the minimum 64 dealers determined by the sample size equation.

**Presentation**

Mountain West Research will prepare both a written and oral report for LiteTouch. This report will present and explain the data acquired and the current competitive status of LiteTouch and its respective industry.

**Tentative Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 21</td>
<td>Submit proposal to LiteTouch for approval</td>
</tr>
<tr>
<td>February 21</td>
<td>Submit rough draft of questionnaire to LiteTouch</td>
</tr>
<tr>
<td>February 25</td>
<td>Proposal approval by LiteTouch</td>
</tr>
<tr>
<td>February 25</td>
<td>Pretest questionnaire</td>
</tr>
<tr>
<td>February 27</td>
<td>Revise questionnaire and obtain final approval</td>
</tr>
<tr>
<td>February 28</td>
<td>Begin data collection</td>
</tr>
<tr>
<td>March 8</td>
<td>Begin data analysis and summarization</td>
</tr>
<tr>
<td>March 19</td>
<td>Data review and approval by Dr. Geurts</td>
</tr>
<tr>
<td>March 19</td>
<td>Begin writing final report</td>
</tr>
<tr>
<td>March 26</td>
<td>Submit report for binding</td>
</tr>
<tr>
<td>April 11</td>
<td>Presentation on findings to LiteTouch</td>
</tr>
</tbody>
</table>
**Budget**

This is a proposed budget for covering the costs of your research project. Changes to the budget after proposal acceptance must be pre-approved by Angela Larson. A payment schedule will be arranged after proposal acceptance for research to begin.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
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<tr>
<td>Printing and Binding Reports</td>
<td>$200.00</td>
</tr>
<tr>
<td>Data Collection</td>
<td>$500.00</td>
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<tr>
<td>Final Presentation</td>
<td>$200.00</td>
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<tr>
<td>Local Travel Expense</td>
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</tr>
<tr>
<td>Donation to BYU</td>
<td>$500.00</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$1,450.00</strong></td>
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</table>
Mountain West Research

Agreement Statement

Mountain West Research agrees to conduct the research outlined in this proposal for LiteTouch, Inc. The results of this project will be presented in an oral and written presentation on April 11. LiteTouch agrees to send at least one representative to attend this presentation.

Mountain West Research accepts all responsibility for the research and will turn all findings over to LiteTouch with the exception of six copies of the report to be kept for educational purposes. Brigham Young University and Professor Michael Geurts will not be held responsible for any portion of this project.

LiteTouch, Inc. will pay all costs incurred by Mountain West Research Group as outlined in the projected budget. Any additional costs must be pre-approved by Angela Larson. Unused funds will be returned to LiteTouch upon completion of the project.

Mountain West Research Group is appreciative of LiteTouch’s $500 donation to the Marriott School of Management.

LiteTouch, Inc.

Angela Larson  
Marketing and Communication Manager

Brigham Young University

Michael Geurts  
Market Research Professor

Mountain West Research Group

Joshua Rolph

Mark Adams

Leslie Layman

Winnie Lo

Marcia Randall
Appendix B - Survey
Lighting Survey

Name of Dealer

Region

Date

Person contacted

My name is _________ and I want to thank you for taking a few moments to complete this survey. Feel free to interrupt at any time with comments or questions.

I have a few brief questions concerning your business.

1. About what % of your sales come from lighting control systems? (Estimate)

2. Who are the main lighting manufacturers you work with? (Circle and cross out choices in chart on next page—additional spaces available)

3. About what percentage of lighting control sales comes from each of those manufacturer? (To determine actual business compared with specific answers given)

   Litetouch-
   Vantage-
   Lutron-
   Centralite-

4. What % of sales is for New Construction/remodels and what % is for Retrofit? (To determine product line relationship with responses)

5. Estimate your gross annual sales? $_____________

   (To estimate size of dealer and find relationships with dealer size, manufacturer preference, and geographical location).

Comments:
Now I have a few questions concerning your opinion of the lighting control manufacturers you work with—

Out of the manufacturers you work with, please rate each category on a scale from 1 to 5, where 1 is poor and 5 is excellent, again feel free to make comments at any time

(NOTE—only a few of the manufacturers will be circled as possible options)

<table>
<thead>
<tr>
<th>Litetouch</th>
<th>Nantage</th>
<th>Lutron</th>
<th>Centralite</th>
<th></th>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
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<td>2. Warranty/ Guarantee</td>
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<td>3. Reputation</td>
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<td>4. Technical Support</td>
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<tr>
<td>5. Aesthetics (physical appearance) of product</td>
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<td>6. Ease of Installation</td>
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<tr>
<td>7. Best innovative products</td>
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<td>8. Training seminars</td>
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<tr>
<td>9. Promptness and accuracy of delivery</td>
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<tr>
<td>10. Customer Service</td>
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<tr>
<td>11. Ease of overall process</td>
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<tr>
<td>12. Lowest Price</td>
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<tr>
<td>13. Best Value based on functionality and features</td>
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</tbody>
</table>

Thank you. And my last 2 questions are:

Which manufacturer would you most likely recommend to clients and why?
Or, if only use 1 dealer, what do they do really well?)

(Please write specific numbers from chart above)

(Check only if indicated by dealer, do not ask if not so indicated in their response)

- Best option, easiest for dealer (i.e. “easiest for me”). Why/how so?
- Best quality/value for client

What changes or improvements, if any, would you like to see in the lighting control industry?
(i.e. more innovation, better training, improved aesthetics, etc...)  (Please write specific numbers from chart above)

Any additional comments?
Appendix C - Dealer Comments
Introduction

During each of the phone interviews, dealer representatives made various comments about each lighting-control manufacturer that could prove beneficial in the future. While many of the comments overlap or seem very similar, several certainly stand out. Each of the comments has been separated into regions and company. Multiple comments for a particular company in a particular region are indicated in parentheses. Many of the comments may not be applicable to LiteTouch, but may still prove beneficial. 

***Most dealers only work with two lighting-control companies at the most, so some of the comments are made in comparison against only one company (i.e.—Vantage and Lutron were the only two companies used by a particular dealer, thus they may refer to the need of a change that is already offered by LiteTouch).***

***We do not understand the nature and technicality of each of the comments (due to the lack of knowledge about the industry), so we do not fully understand all of the comments, and suggestions, but have included them for your possible benefit.***

California Region

**LiteTouch**

Positive

- Largest programmable buttons
- Good at informing about new innovation, but without a time forecast

Negative

- “Clunky unit”
- Takes twice as long to resolve program problems
- Price depends on status with rep.
- Extra fees that get passed onto customer
- No next day shipments/long time to wait (2)
- Sold options that do not work well with a particular system
- High price

**Vantage**

Positive

- Good new “clip in” product
- Good ways to lower cost depending on layout
- More conservative with regards to liability and reliability
- Touch screens are nicer
- Easy to install (2)
- Well thought out innovation (2)
- Excellent reps. (3)
- “Best warranty I know of”
Negative
- Field experience would be helpful
- No next day shipment
- More knowledge of overall process is needed
- Need qualified tech. support 24/7 (2)
- Drop price a little or give higher commission to reps.
- Need closer relationship with dealers
- Keep dealers more informed about upcoming innovation (2)
- More out of Utah training

Lutron
Positive
- Interested in hearing ideas for improvement
- Good tech support—listening to understand problem—calling back
- More integration
- Nice touch screens

Negative
- No next day shipment
- 3-5 week delivery
- Lower grade of components
- High price
- Need a more specialized warranty
- Increase interfacing capability with other systems
- Limited possibilities with the number of buttons

Reason For Recommendation

LiteTouch
- Reliability
- Very centralized, easy process
- Best option for dealer (2)

Vantage
- Research and development
- Capabilities with new radio product
- Excellent knowledge (System is only as good as the programmer)
- Support
- Value
- Few system failures
- Very few pieces
- Easiest option for dealer (3)
Lutron
- More comfortable with the hardware
- Less time consuming to work with
- Reliability
- Has “graphic eye”

Industry Changes
- Speak to computer to program it
- Keep dealers informed of upcoming innovations
- Universal module
- More touch screens and wireless systems
- Program flexibility without have to know the language
- Lower prices
- Be more honest about real possibilities
- Cannot make changes to wireless systems by computer
- Interfacing with other systems (2)
- Ease of customer control
- Ease of customer changes
Midwestern Region

**LiteTouch**

*Positive*
- Other companies get so big they won’t do things custom. LiteTouch does things custom
- Great customer service
- Looks great

*Negative*
- Installation is difficult
- Delivery time is a little slow

**Vantage**

*Positive*
- Customer service knows everything about installation
- If anything goes wrong customer service will know what to do
- Easy to convert to other systems
- Great for Retrofit
- Great technical support
- Wouldn’t use any other system

*Negative*
- Technical support is weak on the weekends
- Installation is a little technical
- Technical Support is hard to get a hold of
- Installation could be easier
- Technical support is sometimes difficult to reach

**Lutron**

*Positive*
- Customer service is great
- Making a lot of improvements for retrofit

*Negative*
- Hardware keeps changing. Hard to keep pace.
- Technical is sometimes difficult to reach

**Reason For Recommendation**

**LiteTouch**
- Customer Service (3)
- Best value based on functionality and features
- Aesthetics (physical appearance)
- Great product (2)
- Customize products
- Best option/easiest for dealer (2)
- Best value/value for client (3)
- More sophisticated

**Vantage**
- Best value based on functionality and features (2)
- Quality
- Overall product better than competitors (3)
- Ease of overall process
- Best innovative products
- Technical support
- Customer service
- Can’t find anything better
- Best quality/value for client (4)
- Best option/easiest for dealer (3)
- More sophisticated

**Lutron**
- For lower end customers

**Industry Changes**
- Better pricing for consumer
- Better product availability for smaller dealers
- More product awareness
- Better education for electrical engineers
- Overall ease of the industry
- Ease of installation
- More education and Marketing. Most people don’t know of it’s existence (2)
- Wireless systems (2)
- Better technical support
- Lower prices
- Improves education for lighting designers and interior designers
- More customization
Northern Region

**LiteTouch**

Positive
- Very good customer service
- Definitely has the best value based on functionality and features
- Overall process is easier than anyone else’s
- Really good warranty/guarantee – advanced replacement
- Flexible overall process
- Great customer service
- Best innovative products
- Best lighting control system in the industry
- Excellent quality
- Does good on very thing

Negative
- Haven’t been to the training seminars
- LiteTouch can’t do what Vantage can
- Haven’t come out with any new products lately
- Lutron has better warranty and technical support
- Most expensive in the industry, “The Rolls Royce of lighting systems.”

**Vantage**

Positive
- The systems are simple to operate
- Best value for the money you pay
- Easiest to program
- Good quality systems
- Fast deliveries

Negative
- Expensive
- Some components are hard to work
- Hard to install

**Lutron**

Positive
- Good quality
- Reliable
- Has smaller systems
- Easy to work with
- Best lighting control systems in the industry
- Has more options
- Cheaper
Negative
- Very expensive
- Customer service needs to improve

Centralite
Positive
- Great customer service
- Very satisfy

Reason for recommendation

LiteTouch
- Good lighting controls
- Good qualities
- Pays your bills
- Continuous technological improvements
- Services are very good
- Use for big systems

Lutron
- Good quality products
- Reliability
- Best lighting control systems
- Better price margins
- Available options
- People less aware of LiteTouch
- Provides connections to architectural companies
- For smaller houses

Vantage
- Simplicity of operations
- Versatility, good hard ware

Centralite
- Customer service
- Does well in everything

Industry Changes
- Training and marketing to consumers.
- More systems for retrofit. The manufacturers don’t design enough systems for retrofit.
- Industry is ahead of pace, so there is not much to improve.
• Upgrade the touch screen component.
• Ability to design retrofits systems.
• Lower cost of the systems for entry-level homes.
• Prices—need to be lower.
• The industry needs to improve on the ease of installation.
• Lower the cost.
• Prices—need to be lower and more affordable.
• Educate people more about lighting controls.
• Less expensive, active involvement of training people.
• Teaching clients.
Southern Region

LiteTouch
Positive
- They are far ahead of the industry (2)
- Definitely has the best value based on functionality and features
- Overall process is easier than anyone else’s
- Easier to get pricing
- Really good warranty/guarantee – advanced replacement
- Products are always symmetrical (installation)
- Easier to use their software
- Flexible overall process
- Keypads are far more superior
- Great customer service
- Best innovative products

Negative
- Covered too much in their training seminar for the time they had
- LiteTouch can’t do what Vantage can
- Haven’t come out with any new products lately

Vantage
Positive
- The best in the business when it comes to value for the product
- They have an unconditional warranty that is better than anyone else’s warranty
- Easiest to program
- Has 3 different installation options
- Won an award for the best product in the nation
- Best quality in the industry
- Very quick at delivering the product

Negative
- Rigorous training seminars

Lutron
Positive
- Has a low failure rate
- Flexible
- Lowest cost
- Great warranty – advanced replacement
- More and better training seminars
Negative

- Overall process is confusing for the dealer
- Highest price for the least amount of product
- Cocky company
- It’s a hassle to get pricing – have to get an official quote first
- Shortfall are their keypads and user interface
- Mess up almost every order

Reason for recommendation

LiteTouch

- Have a great reputation
- Top of the line products
- More reliable than other systems
- Cost effective below 4,000 feet
- Easier overall process – easiest for the dealer (3)
- Loyalty to the company
- Experience with the company
- Great customer service

Lutron

- Overall, the product is better and has been tested
- Their products have been tested and they have a low failure rate
- Flexible for the dealer
- The product is workable
- No problems with the product
- Aesthetics of the product
- Ease of the installation
- Easiest for the dealer
- Because people don’t need that intricate of a system, therefore Lutron
- More options
- Better educated company

Vantage

- Reputation
- If the customer has money to spend
- A little cheaper than the rest
- Easiest for the dealer
- Best quality for the client
- The technology is more advanced
- Better innovative products
Industry Changes

- Buttons should be backlit, so that customer can read what the button says through the engravings in the dark.
- Manufacturers should go through electrical companies to sell their products instead of audio/visual companies because the lighting deals more with electrical companies. Manufacturers are more concerned about selling product than getting it installed correctly. (2)
- Lower prices on lower-end products.
- The industry should be software driven
- Better user interfaces (web browser interfaces)
- LiteTouch – have more than one way of wiring
- Lutron – get product to work better
- Make the product easier for the end user to use
- Lutron – have certified electricians
- LiteTouch – don’t make the product available for just any person to sell. This makes it harder to sell LiteTouch products as high-end products.
- Better seminars
- More information from the manufacturer on how to integrate systems
- Improve the retrofit market
- Make programming more simple – programming scenes and combinations
Eastern Region

LiteTouch
Positive
- Great customer service (3)
- Very good warranty, problems are repaired “in-house” and sent back in a reasonable amount of time
- Helpful 1-800 lines
- Excellent design of buttons, faceplate/excellent aesthetics (3)
- Useful 9th button (as opposed to others who offer only 8 buttons) that can be used as a master control
- Extremely easy to install (2)
- Good new product lines
- Local reps. are much better
- Unlimited possibilities

Negative
- Clients/customers haven’t heard of LiteTouch (so it does not get used)
- Sometimes a lengthy process from start to finish
- LT did not want to take away business as much as Vantage wanted to keep it
- Priced too high
- New products tested more—especially software—“Stop sending revisions of software, just test is enough to get it right the first time”

Vantage
Positive
- The best in the business when it comes to value for the product
- Great warranty
- On site training
- Wireless options are leaps and bounds ahead
- Won an award for the best product in the nation
- Best quality in the industry
- Very quick at delivering the product

Negative
- A few programming difficulties after installation

Lutron
Positive
- Good tech. support
- Good warranty (2)
- More flexible innovative options (2)
- Software is better (features and ease)
- Versatile colors, more options (than Vantage)
• C-touch—“gorgeous” custom plates
• Hybrid system is easy to install
• New products more often
• Overall process very quick

Negative
• Local reps. are not as good (3)
• Training is too intense for short time
• Priced too high
• Poor customer service
• More user friendly

Centralite
Positive
• Nice remote
• Easy to install (2)
• Good value (2)

Negative
• Does not offer training

Reason for recommendation

LiteTouch
• “Homerun package” is unbeatable
• Solid/dependable (2)
• Expandable
• Aesthetics
• Control system is robust (2)
• Overall
• More experience with LT
• Sales reps. are the best

Lutron
• Been around longer
• Best quality (extremely important factor)
• They test their products relentlessly
• Zero tolerance for product failure
• More versatile/local switching
• Is the best overall (2)

Vantage
• Better innovative products