Chapter VI
Discussion and Conclusions

This chapter contains a discussion of and conclusion to the data analysis and research findings in Chapter IV and Chapter V. The first section includes a discussion of the research findings followed by a development of hypotheses that relate to the original research propositions. Next, recommendations for the study are developed based on the discussion and conclusions. Finally, the significance of the research, limitations, and future research are presented.

Discussion Related to Hypotheses Development

Many points warrant discussion, which relate to the development of research hypotheses. These points are the following: 1) the construct of level of accuracy of the sales forecast, 2) the level of managers' satisfaction with the sales forecasting process, 3) consistency of the results, and 4) developing procedures for sales forecasting.

The first point of discussion is the level of accuracy of the sales forecast construct. The research model began with six constructs and eight proposed relationships. The level of accuracy of the sales forecast construct did not receive enough support from the interviews to be continued as a construct. It appeared the participants viewed the level of accuracy of the sales forecast construct and the performance measurement construct as the same. In addition, the concepts of effectiveness of the forecast and ease of use were prevalent in the performance measurement construct. The research supports that the level of accuracy of the sales forecast construct could be collapsed into the performance measurement construct and is used as one method of measuring the performance of the sales forecast. Thus, five of the original constructs were supported in the research findings.

The second point of discussion concerns the level of managers' satisfaction with the sales forecasting process. The level of managers' satisfaction varied greatly from manager to manager. The issues that impacted the level of managers' satisfaction included ease of use, how the forecast fit into the bigger picture of each restaurant company, specified uses for the forecast, and the means of evaluating the sales forecast.

The ease of use refers to the procedures to conduct the sales forecast as well as the systems, models, timeline, and support used to accomplish the forecast. The sales forecast also must have a strategic purpose within the company. The managers that are conducting the sales forecast must understand why they are conducting the forecast. How does the sales forecast affect other departments? How do these departments exchange and share data? How does the company benefit from doing the exercise of conducting the sales forecast? This satisfaction should extend beyond the fact the forecast was correct for managers who have a high level of satisfaction in the sales forecasting process. The sales forecast must be shared at the property level so that these managers can benefit from the information. For the managers that are not as satisfied, the forecast must be rewarded with more than a manager's bonus. The other reward is actually seeing the forecast used throughout the company and assisting in the decision-making process. Finally, the level of managers' satisfaction is impacted by whether or not the sales forecast is actually evaluated. Again, this is related to why the sales forecast is being conducted and to what is the sales forecast compared. Is the sales forecast only being compared to the prior year's data or is the forecast being evaluated for effectiveness? These are the issues that affected the managers' level of satisfaction with the sales forecasting process.

The third point of discussion is the consistency of the results. Figures 5.1, 5.2, 5.3, and 5.4 depict the stages into which each company falls with regards to functional integration, approach, systems, and performance measurement dimensions and level of managers' satisfaction with the sales forecasting process. When examining these figures, the diagrams are very similar. A dispersion of companies exists across stages of the dimensions as well as across levels of managers' satisfaction with the sales forecasting process. The consistency of these results gave support to the propositioned relationships between the dimensions of the sales forecasting benchmarking model (functional integration, approach, systems, and performance measurement) and the level of managers' satisfaction with the sales forecasting process. The consistency of these results gave support for the development of research hypotheses for these proposed relationships.

The fourth point of discussion is the procedures for developing the sales forecast. The procedures should be standard and precise so that individuals at all levels understand what is expected. Along with standard procedures would come company-wide forecasting training. Investing in manager training would pay off later in more effective forecasts and more effective utilization of the forecasted information.

Hypotheses Development

The hypotheses will be discussed based on the original research propositions. After careful investigation, Proposition 1 with its four sub-propositions was not confirmed in the research. The level of accuracy of sales forecast construct was not found to be viable in the data. Therefore, no hypotheses were developed for this proposition.

After careful investigation of Proposition 2, this proposition found support in the research findings. A directional hypothesis with four directional sub-hypotheses emerged from the interview results. The basis for the support of these hypotheses can be found in Figure 5.1 through Figure 5.4.

The primary research hypothesis is:

H1: There is a positive correlation between the dimensions of sales forecasting benchmarking model and the level of managers' satisfaction with the sales forecasting process.

The four sub-hypotheses are:

H1a: There is a positive correlation between the stage in the functional integration dimension and the level of managers' satisfaction with the sales forecasting process.

That is to say that as a company evolves to a higher level of functional integration the manager's satisfaction level increases.

H1b: There is a positive correlation between the stage in the approach dimension and the higher the level of managers' satisfaction with the sales forecasting process.

That is to say that as a company evolves to a higher level of approach the manager's satisfaction level increases.

H1c: There is a positive correlation between the stage in the systems dimension and the level of managers' satisfaction with the sales forecasting process.

That is to say that as a company evolves to a higher level of systems the manager's satisfaction level increases.

H1d: There is a positive correlation between the stage in the performance measurement dimension and the level of managers' satisfaction with the sales forecasting process.

That is to say that as a company evolves to a higher level of performance measurement the manager's satisfaction level increases.

Scenarios Relating Training

Training emerged as a possible construct during the data analysis. This new construct had an impact on the sales forecasting process for several participants. The new construct needs to be developed further by asking more specific questions of the participants relating to training. Two scenarios were developed to discuss the relationship that training may have with the original research constructs.

Scenario 1

Training may have a direct impact on the functional integration of the company, the approach used in sales forecasting, the systems/technologies used for sales forecasting and the performance measurements used to evaluate the sales forecast. This impact may be an antecedent to the functional integration, approach, systems, and performance measurement constructs. It could be proposed that the higher the level of training, then the higher the stage within each construct. There was support for this notion; however, further research that asks more specific questions surrounding training would reinforce the predicted relationships.

Scenario 2

The second scenario developed to explain the relationship that training has with the functional integration, approach, systems, and performance measurement constructs is that training is embedded in each of these constructs. It is believed that if there is a training component within the constructs functional integration, approach, systems, and performance measurement, then the higher the level of managers' satisfaction with the sales forecasting process.

Adding additional questions to the protocol that are more directly related to training will assist in determining the impact that training has on the original research constructs.

Additional Discussion Points

Two other points of discussion are not related to the development of the research hypotheses; however, these points became evident when the data transcripts were reviewed. Thus, these points deserve to be mentioned. The points are the following: 1) the separation of the budgeting and sales forecasting functions, and 2) the information systems and technologies used.

The first point of discussion is the separation of the budgeting process from the sales forecasting process. These functions need to be distinct at the corporate office. Budgeting and allocation of resources are a definite outcome of the sales forecasting process; however, the processes are not the same. The sales forecasting process at the corporate level can "tie into" and assist with the development of other operational functions at both the corporate and property level including labor scheduling, and food and beverage cost controls. The sales forecast can assist in developing the yearly budget or business plan. The budget process is the allocation of resources while the sales forecasting process is the prediction of future performance based on past data.

The next point of discussion is the information systems and technology used. There is an understandable concern that, before a company can convert to a new system, the current system has to be depreciated off the books. If the book value were still very high, investing in a new system would not be cost effective. However, there needs to be an integrated approach to determine the systems and technology needs of the company.

Technologies such as real-time capability and Intranets would encourage an increased amount of data sharing on all levels of the company. Formulating a corporate information systems department that can support all company technology via wide area networks would reduce the amount of field visits for technology, and upgrades would be more efficient. The corporate office would be assured that company-wide software and technologies were consistent. Finally, the information systems department would be responsible for supplying the necessary hardware to facilitate the software.

The above-mentioned points emerged while reviewing the transcripts and warranted some exploration in the discussion of the sales forecasting process.

Recommendations and Conclusions

Recommendations

Five strategies are recommended to practitioners based on the research findings of the study. These recommendations are the following: 1) develop a company-wide forecasting training program, 2) determine a forecasting champion, 3) utilize a consensus approach to sales forecasting, 4) develop standard performance measurements, and 5) improve the forecasting systems/ technology. Each recommendation is discussed below.

1. **Develop a company-wide forecasting training program**. A company wide training program for sales forecasting is needed. In this program, individuals in all areas that are affected should be trained. The training should outline the company's expectations of the sales forecast and how it "fits into" the bigger picture of the company. The training program can be used at all levels of the company. There should company standards, clear and precise instructions, and a timeline for when things should be accomplished.

2. **Determine a forecasting champion**. A sales forecast champion should be determined at the corporate level that would integrate sales forecasting processes in other functional areas (e.g., marketing, human resources, purchasing, planning, and finance). This person's primary responsibility should be sales forecasting. This is a missed opportunity in the restaurant

industry. The sales forecasting function should be viewed as a primary function within the company's business strategy. Making sales forecasting a secondary or tertiary function shows the priority that is placed on such an essential management tool to the company (Mentzer, Moon, Kent, & Smith, 1997).

3. **Utilize a consensus approach to sales forecasting**. Islands of information and the isolation of departments should be eliminated by developing a forecast that has input provided by all the departments that are affected. This forecast can be disseminated throughout the company. A company-wide Intranet could give access to the sales forecasting information to all department; however, access to change and adjust the forecast should be limited to those who created the forecast.

4. **Develop standard performance measurements**. A standard metric should be used to evaluate performance. Evaluating the effectiveness and accuracy of the sales forecast is important. However, a clear reason must be stated for why the effectiveness and accuracy are being measured. Tying the sales forecast into the managers' reward system is good; however, the sales forecast can be used for more, such as providing history and feedback, and developing strategies to reach targeted goals based on the sales forecast. The company must determine the following: 1) How does the forecast fit into the business plan?, 2) Can other departments benefit (e.g. human resources for labor scheduling)?, and 3) Can a company predict new restaurant openings and estimated sales? Lastly, increased purchasing power with banks and boards of directors may be an added benefit.

5. **Improve the forecasting systems/technology**. The companies that participated in the study illustrated a wide range in their sophistication of forecasting systems and technology. The companies should invest in a system that addresses the company's particular needs. There may be a cost vs.

benefit trade-off for the smaller companies. These companies may be impacted more by the initial cost of such a system. However, the future benefits will eventually outweigh the initial cost. Software and hardware are available to assist in database management, and storing and retrieving of information, as well as assisting maintaining the models necessary to accomplish the sales forecasting.

Conclusions

In conclusion, overall, the interviews were very informative and have presented questions for future research. The research provided an opportunity to explore a phenomenon in the commercial restaurant industry that had not previously been explored. The sales forecasting procedures that were discussed raised issues. These issues included the need for formal training and a clear and precise forecasting process, the importance of maintaining an up-to-date information system, the amount of resources that a company possesses, the amount of resources allocated to sales forecasting, and whether the sales forecasting function is a separate and unique function within the corporate office.

The above mentioned issues that were raised around these procedures will provide the opportunity to continue to examine them in the hopes of presenting research that is both scholarly and industry applicable.

Significance of the Research

The current research has both scholarly and practical implications. The first scholarly implication is to provide external validity to the original Mentzer et al. (1996; 1999) studies. Taking the results of the original research out of the manufacturing, retailing, and distribution industries and applying them to the service industry, more specifically, the restaurant industry provided external validity. The second scholarly implication is the development of scenarios that explain the impact of training on the dimensions of the sales forecasting benchmarking model. The third scholarly implication is to develop a stream of research in commercial restaurant forecasting. This will add to the current body of knowledge of foodservice forecasting in the noncommercial environment and will add to the limited research in the commercial restaurant industry.

The practical implications are just as significant. The participants were asked at the conclusion of the interviews whether they found merit in this type of research. The responses were favorable. It appears that the current research was timely in nature and centered around an issue that many corporate managers with sales forecasting duties have been tackling. The research is practical in nature, and managers on all levels of the corporation can review the results and conclusions and apply them in everyday business strategy.

Limitations

All research has specific limitations that warrant some discussion and this research was no different. The first limitation was participants of the study were asked to recommend other participants for the study. This was a limitation because the participants may have selected a similar company to recommend as an additional participant. Another limitation was that none of the interviewed companies exhibited characteristics of the fourth stage in any of the dimensions of the sales forecasting benchmarking model. Stage 4 is extremely difficult to achieve; however, a company in this stage may provide additional insight into the sales forecasting process. The third limitation was the types of companies that participated in the study. Only full-service companies participated in the study. The study was limited because limited-service restaurant companies (fast food or quick service) may have different sales forecasting processes than full-service companies. Finally, the subjective nature of qualitative research was a limitation. Utilizing an external reviewer guarded against this limitation; however, the results are the interpretation of the researcher.

Future Research

Three future research topics stem from this research. The first topic consists of one major hypothesis and four sub-hypotheses developed from a portion of the original propositions. This would determine if any significant relationships exist between the level of manager's satisfaction and dimensions of the sales forecasting benchmarking model..

A second research study could expand this research to include limited-service commercial restaurant corporations. The participants from this study were all from full-

service restaurant companies. Significant differences may exist in the sales forecasting process between full-service restaurant companies and limited-service restaurant companies.

Finally, this research should be conducted on a larger number of restaurant companies. This would require that the interview protocol be quantified. The seven company participants provided the exploratory research. Significant interest was found in this particular line of research. Expanding the research to several companies to obtain a broader perspective on the sales forecasting practices of the larger restaurant industry would encourage more industry applicable research.

Chapter Summary

The discussion and conclusions of the research findings were presented in this chapter. Hypotheses that were developed based on the propositions in the research methodology and design chapter were also presented. Recommendations and conclusions for restaurant sales forecasting managers were developed and presented based on the discussions. The significance of the research was discussed along with limitations to the study and future research.