1. **PROJECT TITLE**
Lodging Forecasting Using an Executive Sentiment Index

2. **PROJECT DESCRIPTION**

This project develops a unique index that assesses the sentiment of key lodging executives about the present and future conditions in the US lodging industry. The relationship of this index to key economic variables such as employment, GDP growth, and the stock market is then analyzed, and the usefulness of this index as a leading indicator for future conditions in the lodging industry is tested. This project requires the close and sustained participation of over 20 executives representing the leading US lodging companies such as Marriott International, Starwood Hotels and Resorts, Hilton Hotels, major franchisees of these major brands as well as franchisors of the same.

3. **BACKGROUND INFORMATION/STATEMENT OF THE ISSUES/PROBLEM**

Forecasting is of great importance to lodging executives for setting strategic plans, developing budgets, and measuring performance. However, developing accurate forecasts is a notoriously difficult task. “Forecasting for the lodging industry is at best a chancy business, somewhat like predicting the weather.” (Smith, R. A, and Lesure, J. D. 1996, p. 87).1

A number of forecasting techniques have been developed, ranging from very simple and informal methods based on intuition to extremely complex econometric models. Formal forecasting methods fall into two general categories: quantitative methods and qualitative methods. The quantitative methods can further be divided into time-series approaches and causal methods. Time series approaches attempt to identify patterns in historical data and use these patterns to forecast future values. The causal approaches assume that the behavior of a given variable is determined by other variables. Qualitative methods rely more on human judgment. They include market research, sales force estimates, the Delphi method, and the jury of executive opinion the method

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used in this study with the Lodging Executives’ Sentiment Index. The LESI replicates the same methodology used by the Institute for Supply Management (formerly the Purchasing Managers’ Index) with the specific audience and survey respondents representing executives in the lodging sector of the hospitality industry. Developing a forecasting tool that provides accurate predictions is important as it provides lodging managers confidence in their financing, development, and human resource plans and reduces the risks in their decision making.

4. PROJECT DETAILS

Goals and Objectives
To assess the usefulness of the Lodging Executive Sentiment Index as a leading indicator of the future conditions in the US lodging industry.

Target Population/Audience
Because of the importance of accurate forecasts, this project is of interest to all involved in the lodging industry, including hotels owners and investors, hotel managers, hotel franchisees, real estate developers, builders, city planners, etc. This project is also of interest to researchers as it presents a new way of forecasting lodging conditions.

Methods
Every month for the last 10 years, 15 to 25 executives representing most of the US lodging companies are surveyed about their opinions on present and future conditions in the US lodging industry. These executives work for leading companies such as Marriott International, Starwood Hotel and Resorts, Hilton Hotels, Hyatt, Best Western, Ocean Properties, American Best Value, Morgan’s Hotel Group, Capital Asset Management, etc. These companies own or manage hotels with a total of 2.5 million rooms. The opinions of these executives are collected monthly through a questionnaire (see sample below). The questionnaire records their opinions about present and future general business conditions for their companies, future hotel supply, room reservations trends, and future hiring. These opinions are then transformed into five different indices:
- Lodging Executive Sentiment Index
- Present Situation Index
- Future Expectations Index
- Reservations Expectations Index, and
- Employment Expectations Index
MONTHLY QUESTIONNAIRE

Please complete this brief questionnaire reflecting your business conditions for last 30-45 days in August-October for this year, 2009. You might choose to highlight the survey below with your mouse, hit “Reply,” fill it in, and hit “Send.” Thank you.

Raymond

Privacy Statement: Please note that I hold your quote and your responses in strictest confidence; only the final summary analysis is reported in our Press Releases, and that summary analysis encompasses a composite of over 2 million hotel rooms.

Your name: _______________ Title _______________________
Company_________________ Number of Hotel Rooms ________________
Voice_____________________ Fax _________________________

LESI--Lodging Executives Sentiment Index [Please check one response for each question]:

1. How would you rate the present general business conditions for your company:
   - Good__________  Normal__________  Bad__________

2. 12 Months from now, do you think they will be:
   - Better__________ the Same__________ Worse__________

3. Regarding construction over the next 12 months, do you expect to:
   - Add rooms__________
   - Keep room inventory about the same__________
   - Take rooms out of inventory permanently__________

4. As compared to the last 12 months, do you expect your rooms reservations over the next 12 months to:
   - Increase__________ Stay about the same__________ Decrease__________

5. Over the next 12 months, do you expect to:
   - Add non-management employees_________________
   - Keep the total number non-management employees about the same__________
   - Reduce the total number of non-management employees__________

6. Over the next 12 months, do you expect the fear of terrorist threats to:
   - Increase Occupancy__________
   - Stay about the same/have no effect__________
   - Decrease Occupancy__________

Thank you for your responses.

Raymond J.Goodman, Jr. Ph.D.
Voice: 603-674-3321 Fax: 603-862-3383
Lodging Executives Sentiment Index
At a Glance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Current Index</th>
<th>Last Period</th>
<th>Last Year</th>
<th>Direction of Current Business Activity</th>
<th>Speed of Change in Business Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESI</td>
<td>51.7</td>
<td>55.4</td>
<td>75</td>
<td>Expanding</td>
<td>Sl. Slower</td>
</tr>
<tr>
<td>Present Situation Index</td>
<td>46.6</td>
<td>53.6</td>
<td>81.5</td>
<td>Declining</td>
<td>Sl. Faster</td>
</tr>
<tr>
<td>Future Expectations</td>
<td>56.9</td>
<td>57.1</td>
<td>68.5</td>
<td>Expanding</td>
<td>V. Sl. Slower</td>
</tr>
<tr>
<td>Reservations Expectations</td>
<td>50</td>
<td>48.2</td>
<td>77.8</td>
<td>Flatlined</td>
<td>V. Sl. Faster</td>
</tr>
<tr>
<td>Expectations Index</td>
<td>55.4</td>
<td>59.3</td>
<td>70.4</td>
<td>Expanding</td>
<td>Sl. Slower</td>
</tr>
</tbody>
</table>

Regression models will be built to statistically analyze the relationship of these indices to lodging industry metrics (Occupancy rates, Average Daily Rates, and Revenue per Available Room), as well as to national economic variables such as GDP growth, unemployment rate, and the S&P 500 Index. The purpose is to test the predictive power of these indices and their correlation with the national economic variables.

**Evidence of External Collaboration and Partnership**

This project can only be done as a collaboration and partnership with lodging industry executives as they are the source of the primary data used to build the indices. As mentioned above, every month for the last 10 years, 15 to 25 executives representing leading US lodging companies participate in this project by submitting their opinions via a questionnaire.

**Expected Impact**

If we are able to conclusively show that the Lodging Executive Sentiment Index is a leading indicator of the main lodging metrics, this project will have a significant impact on both academic research and business practice. First, academic research on lodging forecasting will be advanced. In addition, the LESI can be used by lodging managers as a forecasting tool that helps them develop better strategic and business plans, make better investment decisions, and reduce the inherent riskiness of their business.

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**Scholarly Connection**

I am working in collaboration with another Hospitality Management faculty to turn this project into a scholarly paper that we can publish in a peer-reviewed academic journal. We may also share the results of this project with other academics at professional conferences.

5. **EVALUATION PLAN**

The success of this project will be determined by three criteria:
1. Conclusively demonstrating the positive performance of the LESI as a leading indicator of the main lodging industry metrics;
2. Publishing the results of this project in a tier 1, peer-reviewed academic journal; and
3. Getting lodging managers to use the LESI as an important tool for planning and decision making.