The efficacy of Servqual constructs to code online hotel guest reviews: A content analysis

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Abstract

Three-hundred online reviews for 60 geographically diverse lodging properties were coded using Servqual constructs. A total of 1,600 guest comments were coded under; tangibility, reliability, responsiveness, assurance, and empathy. Tangibles were the most frequently coded and represented 57% of the total. Servqual was a useful starting point for the analysis. However, the data revealed a more robust nature to customers’ service perceptions than the Servqual constructs. Sixty-two percent of the coded statements were positive. This study indicated a dynamic different from proprietary hospitality comment card/survey results where the dissatisfied are assumed to be more likely to share their experiences.

Key words: e-WOM, service, management, online, reviews, Servqual

Problem Statement

Over the past 15 years distribution and communication of hospitality products have changed significantly. Currently 93 million U.S. adults use the internet for travel planning purposes (U.S. Travel, 2010). The Internet is used to search for information, comparative pricing, evaluate service quality, read reviews, and make comments on past travel, lodging, and dining experiences. The Internet facilitates hundreds of thousands of hospitality related transactions each day.

E-Marketer (2007) reported 70% of American adults had access to the Internet in 2006 and of those, 73% researched hospitality related services and products online. E-Marketer projected online Hospitality related internet sales in 2010 would top $146 billion. Anyone who has booked lodging through an Online Travel Agent (OTA) receives email notifications to share their experience. Word of mouth takes on an entirely new meaning in the age of instant communication. Electronic word of mouth (e-WOM) is described as positive or negative communication by possible current or past customers about a product or service that is posted on the internet (Karakaya and Barnes, 2010). Accordingly, e-WOM can take place in many ways such as Web-based opinion platforms, OTA websites, discussion forums, and news groups (Hennig-Thurau et al., 2004).

Consumers have embraced the communication qualities of the Internet. Because of the newness of online customer reviews the research stream is still in its infancy. However, businesses continue to focus on data collection through proprietary survey techniques which may not capture the robust nature of the customer experience (Goodman, 2009). The nature of internet information is difficult to analyze and the origin of online materials often difficult to trace. However, content analysis techniques are uniquely suited for just such circumstances (Krippendorf, 1980). This content analysis will utilize the Servqual dimensions developed by Parasuraman et al. (1988) as a first step in the organization and analysis of e-WOM for lodging properties.
Review of Literature

Travel sites and OTA’s enable customers to evaluate price, efficiency, and quality. Important aspects of these sites are the ability to compare prices and qualities of different offerings quickly to inform decision making. E-WOM has inherent face validity. Customers believe what other customers have posted (Huang and Chen, 2006). Online reviews can have positive impacts for businesses and customers. Online reviews empower customers when making purchasing decisions (Mudambi and Schuff, 2010; Wagner, 2008; Harrison-Walker, 2001). Those involved in online communications gain a sense of self worth and community (Crotts et al., 2009). Businesses often utilize positive reviews as a marketing tool to increase sales and boost reputation. Negative reviews enable evaluation and performance improvement (Wagner, 2008). Unfortunately 70% of consumers who experience service failures do not complain (Harrison-Walker, 2001). However, customers who experience successful service recovery rate service performance higher and are eight percent more loyal (Cranage, 2004; Kelley et al., 1993; Lee and Hu, 2005; Maxham, 2001). When businesses encourage complaints, 94% of customers will communicate their concerns instead of just four percent (Singh and Wilkes, 1996) and three-quarters of the dissatisfied customers can be won back (Scarborough and Zimmerer, 1991).

Online commentaries and communications are a rapidly expanding internet phenomena. Crotts et al. (2009) identified five motivators for online commentaries:

1. Documenting life experiences
2. Providing commentary and opinions
3. Expressing deeply felt emotions
4. Articulating ideas through writing
5. Maintaining community forums.

However, whereas customers’ online reviews may be based on one experience, professional reviewers commonly visit a business three or more times before writing a review if the review is negative (Titz, et al., 2004).

Online ratings have negative effects on business as well. TARP (2001) reported customers’ dissatisfaction spreads twice as fast online as traditional word of mouth and dissatisfied customers are four times more likely than satisfied customers to share their experiences (Lee and Hu, 2004). Other businesses or disgruntled employees can take advantage of rating sites by posting fake reviews (Maxwell, 2007). Whereas, owners and employees can write positive reviews in attempts to boost business. Walsh and Swinford (2006) reported on chefs and restaurant proprietors writing glowing reviews about their restaurant in violation of most sites’ standards. This is an emerging area of law and fertile ground for litigation (Maxwell, 2007).

Customers are becoming more sophisticated in their interpretation of reviews, reviewers, and business in general. Detailed reviews gain greater credibility and have a stronger effect on purchase decisions (Black and Kelley, 2009). An online reviewer usually posts short comments about a service provider lacking important contextual information about their experience (Xie et al., 2011). These effects can be unfair to a company and confusing for customers researching services online.

On-line reviews are often mixed with positive and negative messages about a specific service provider (Xie et al., 2011). Although perceived as negative by the customer, constructive reviews can be valuable tools for improving service, addressing and correcting service failures and enhancing performance (Wagner, 2008). This means customers will not be as strongly affected by a single negative review. The good news is evaluation of online reviews involves looking at a larger sample of opinions before forming an impression or making a purchase (Black and Kelley, 2009).

The hospitality industry cannot ignore the evolution of online customer comments. This study examined customers’ service experience as expressed in their own words. Rather than boxing customers into the customary “comment card/survey” format, newer online platforms for sharing experiences shift the locus of control to the
customer. The present research used the Servqual constructs to organize customers’ comments using a content analysis methodology (Parasuraman et al., 1988). Similar to focus groups, content analysis is a preliminary step to understanding a phenomenon from the participants’ point of view.

Methodology

Content analysis is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorf, 1980). The “categories must be mutually exclusive and exhaustive” (U.S. General Accounting Office, 1996). Coding was based on the five Servqual dimensions (Parasuraman et al., 1988).

Data collection and preliminary analysis for this study was incorporated into the course requirements for an undergraduate and graduate service management course. Property selection was based on two criteria:

1. Properties were geographically balanced with equal representation from each region of the United States.
2. Hotels had a minimum of five customer reviews posted within the previous six months of data collection on independent websites such as Trip Advisor, Expedia, and other independent online resources

Each undergraduate student was assigned a single hotel and required to code five online customer comments. No comments from the properties’ web site were used in the analysis. To achieve some consistency in customers’ expectations, budget and extended stay lodging were excluded from the current study. Coding was based on the following definitions:

**Tangibles**: Physical facilities; food in a restaurant; cleanliness; functionality of equipment; appearance of personnel; comfort and quality of furniture, fixtures, and equipment; product quality; ambient characteristics such as lighting, sound, temperature, location; value

**Reliability**: Ability to perform the promised service dependably, accurately, and consistently; inspired trust and confidence that needs were met; accuracy of transaction and information

**Responsiveness**: Willingness to help customers; provide prompt service; response to individual requests and preferences; personalization and flexibility; anticipation of customer needs

**Assurance**: Competence, courtesy, credibility and security; knowledge and ability to inspire trust and confidence.

**Empathy**: Access; quality of communication; understanding the customer; caring individualized attention

The graduate class was divided into three student groups. Each graduate group was assigned the task of consolidating comments from 20 mutually exclusive hotels. The student groups consolidated the coding for their respective properties. The findings were presented in a frequency table format. Further, each student group developed a set of variables based on their observations and categorization of the data. The researchers then consolidated all of the hotel coding. The resulting data set represents 300 online comments for 60 US based lodging properties.

Results and Discussion

Three hundred online customer reviews were coded resulting in 1,600 coded comments. Table One represents the number of customer comments coded for each Servqual construct. Tangibles were the most frequently coded observations. This would be expected because people can see, feel, touch, smell, and
Table One
Coded Comments for Each Servqual Construct

<table>
<thead>
<tr>
<th>Construct</th>
<th>Coded</th>
<th>%</th>
<th>Positive</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible Comments Coded</td>
<td>912</td>
<td>57%</td>
<td>573</td>
<td>63%</td>
</tr>
<tr>
<td>Reliability Comments Coded</td>
<td>131</td>
<td>8%</td>
<td>48</td>
<td>37%</td>
</tr>
<tr>
<td>Responsiveness Comments Coded</td>
<td>179</td>
<td>12%</td>
<td>92</td>
<td>51%</td>
</tr>
<tr>
<td>Assurance Comments Coded</td>
<td>213</td>
<td>13%</td>
<td>163</td>
<td>77%</td>
</tr>
<tr>
<td>Empathy Comments Coded</td>
<td>48</td>
<td>3%</td>
<td>28</td>
<td>58%</td>
</tr>
<tr>
<td>Other</td>
<td>117</td>
<td>7%</td>
<td>80</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Total Comments Coded</strong></td>
<td>1,600</td>
<td>100%</td>
<td>984</td>
<td>62%</td>
</tr>
</tbody>
</table>

Tangibles were the most frequently occurring customer observation and in some ways the easiest to code. Table Two reflects a representative sample of the 912 coded comments under Tangibles. Tangibles could be further broken into the following subcategories:

1. Value
2. Cleanliness
3. Comfort
4. Location
5. Technology
6. Ambient Conditions
7. Appearance

An outbreak of bedbugs at select properties was captured in guests’ comments during this data collection period. Certainly, this is the exception and not the rule for U.S. lodging properties. However, this is just one example whereby reviews can take on a life of their own without managerial feedback when allowed.

Reliability accounted for eight percent of the coded comments. Comments coded under reliability were based on action or inaction. Table Three represents a sample of customers’ comments coded under reliability. Reliability can be subcategorized by:

1. Reliability of Information
2. Proactive Management

http://scholarworks.umass.edu/refereed/ICHRIE_2011/Friday/10
3. Practice and Policy
4. Fulfillment of Brand Promises
5. Communication

Table Three
Representative Reliability Coding

| The bus service was the absolute best | Didn’t make the beds or clean bathroom |
| Housekeeping went above and beyond | Seemed as if they would rather be elsewhere |
| The concierge is a great resource | Web Price does not reflect extra fees and charges |
| Check in and checkout was fast | Hotel is NOT 10 MIN from downtown |
| Everyone knows about everything | |
| Our rooms were not ready at check-in | |

One-hundred-seventy-nine comments or 12% of the coded reviews included comments on responsiveness. Responsiveness comments were coded based on response or non–response to requests or an expected action (see Table Four).

Table Four
Representative Responsiveness Coding

| Never had to stand in line for over 15 min | No one helped us with our luggage |
| Requested a change, there was no problem | I have now been home a week, heard nothing |
| Manager called and sent a fruit basket | No one ever came |
| Requested amenities delivered within 3 min | Seemed bothered by our inquiry |
| They all took a genuine interest in your stay | |
| Does not provide basic things like toothpaste | |

Responsiveness comments could be subcategorized by:

1. Housekeeping Requests and Response
2. Front desk Requests and Response
3. Maintenance Requests and Response
4. Management, Response, and Oversight Systems

Assurance was characterized by overt actions staff and management took. There appears to be an awareness of security reflected in customers’ comments that is not reflected in proprietary hotel feedback loops (see Table Five). Assurance accounted for 13% of the coded customer comments.

Table Five
Representative Assurance Coding

| All associates say hello to you | Raphael stated not his problem but security |
| Safest hotels I have been in for a while. | Bill incorrect - FD wanted to fight about it |
| Darrel helpful and knowledgeable of area | Customer service unfriendly to horrendous |
Empathy accounted for three percent of the coded comments. Differentiating empathy from assurance is related to context and notification. However, a warm welcome or feeling a cold shoulder without sufficient context were coded under empathy. Table Six is a representative sampling of the Empathy coding.

| We were treated with "southern hospitality" | We were never given an apology or explanation |
| Staff is excellent with great pride and customer focus | No smiles seen friendlier factories |
| Treated me well - not like a young broke bargain hunter | Concierge and other staff seemed apathetic |
| Apologized profusely and compensated me | Rude staff, very rude management |
| Everyone working here was all-smiles | They tell "white" lies about why things are |

**Conclusions**

This research evaluated 300 online customer reviews for 60 geographically diverse lodging properties located in the United States. Sixteen hundred customer comments were coded using the Servqual constructs (Parasuraman et al., 1988). Tangibles were the most frequently coded comments. The use of Servqual constructs for coding customer comments was a methodologically sound beginning for organizing the customer experience. However, the researchers found Servqual to be less than robust in capturing and organizing the guest service experience through e-WOM commentary. Sub texts and categories were found and identified for each of the Servqual constructs which should be further explored. Differentiating between reliability and responsiveness and assurance and empathy were made difficult when the comments made were without context.

The limitations of this project are based on the veracity of the coded e-WOM comments. Assuming Servqual a priori as an organizational model limited the robustness in coding customer commentary. The definitions of Servqual are not sufficiently complete to capture everything guests are communicating in e-WOM communications.

However, that overall positive experiences outnumber negative experiences, should be good news to lodging proprietors. This study focused on full-service lodging properties with a minimum of five online customer reviews posted in the six months prior to data collection. A similar methodology might be applied to limited service, budget, and extended stay properties to determine if a similar or different distribution of comments exists. Future analysis of e-WOM might employ any of a variety of service theories including the GAP Model (Parasuraman, et al., 1985) and Servicescapes (Bitner, 1992).

E-WOM offers hospitality professionals a unique insight into guest expectations, priorities, and experiences. The value of safety, the prevalence of bedbugs, and customers’ appreciation of service friendly employees and management offers practitioners and researchers a unique window into the guests’ world on their terms instead of the boxes offered by traditional “comment card/survey” data collection techniques. Recognizing this shift, companies should consider employing the online reputation manager (Craig, 2011).

**References**


