THE USE AND PERCEIVED EFFECTIVENESS OF E-MARKETING TECHNOLOGIES IN RESTAURANTS

Introduction

The purpose of this research study is to examine the use of and the perceived effectiveness of e-marketing technology in restaurants. Information technology (IT) serves many purposes in a restaurant including helping control costs, increasing the efficiency of operations, and increasing marketing effectiveness (Cobanoglu, Erdem, & Nusair, 2010). An important factor in the implementation of IT is a perceived usefulness of IT which leads to a higher intention to use (Ham, Kim, & Forsythe, 2010). Therefore a multitude of useful functions is integral to make IT worth investing time and capital in.

The objective of this study is to determine which e-marketing technologies are most used, and which methods are perceived to be most effective to the restaurant industry. Split between quick service restaurants (QSR), fast/casual, casual/family dining restaurants, and fine dining restaurants, the importance of e-marketing technologies will determine which methods are most effective to each respective restaurant section.

The research questions in this study are:

1. Which e-marketing technologies are used in QSR, fast/casual, casual/family, and fine dining restaurants?

2. What is the perceived effectiveness of these e-marketing technologies in QSR, fast/casual casual/family, and fine dining restaurants?

Definitions

The following section defines some key terms used in this paper:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Audio/Video Podcasting</td>
<td>Digital media in either audio or video format that is available for download and can be stored on mp3 devices. (pcreview.co.uk)</td>
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<tr>
<td>Information Technology</td>
<td>Information systems used to gather data relevant to</td>
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</table>
business operations through computer and automated processes. (techterms.com)

Meta-tags

A special HTML tag that stores information about what program was used to generate a webpage. (techterms.com)

Online Blogs

Informational entries posted onto a webpage with the intention of others reading. Can contain photos, text, audio, and video information. (techterms.com)

SMS Messaging

Text-based messaging on cell phones that can transmit automated messages. (techterms.com)

Social Networking

An association of people connecting based on any number of interests or family ties. Includes companies using online resources to keep in touch with customers. (techterms.com)

Twitter

A mini-blogging tool/website. (techterms.com)

Web-seal certification

Works as a reverse proxy to receive HTTP/HTTPS requests from a browser and transmit them to its own browser or application server. (webopedia.com)

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**Review of Literature**

**The use of technology in restaurants**

The presence of technology in restaurants has enabled a much more pleasant experience for both ends of the dining spectrum, and for both the consumer and restaurant employees. Point-of-sale (POS) systems have allowed management to better track sales, employees actions, improve management controls, provide a more efficient guest experience, reduce errors, keep tighter control of inventory, and monitor each employee's progress (Price, 2009). Inventory control software has allowed managers to more effectively manage employees by providing more time to observe operations directly and save the time that would otherwise be spent physically keeping track of each order (Severt, DiPietro, &Hererra, 2010). Personalization is also an important part of the guest experience. In the
quick service/casual dining scene personalizing the guest experience has led to ideas such as television
sets with individual control in each booth, and self-service kiosks (Price, 2009).

**The use of e-marketing technologies in businesses**

The reasons any business takes advantage of e-marketing technologies, and other emerging
technologies is, among others, to increase community and social interaction, find professional
networking opportunities, share data, blog, and micro blog (Saeks, 2011). The interaction between
consumer and business, consumer and consumer, and the ability to create a connection with the
community has been enhanced through these tools (Saeks, 2011).

**The use of e-marketing technologies in restaurants**

Currently restaurants are seeking many ways to use these emerging technologies to their
advantage. In 2010 the most common uses of e-marketing technology were social networking (57.6%),
including website address in email signature (52.8%), meta-tags for search engines (47.2%), and email
newsletters (46.4%) (Cobanoglu, Erdem, & Nusair, 2010). Companies are also using forms of these
technologies that better match with their style. Many traveling foodservice businesses that operate out
of vans are using Twitter to alert consumers of their presence in their city increasing the turnout rates
(Social Media and Technology in U.S. Foodservice, 2011). Also many sous chefs are connecting with
patrons through Twitter to reveal more about their personality, and what it is that inspired them to
choose foodservice for a career (Young, 2010). The most innovative improvements to the restaurant
experience are coming through smart-phone applications. A notable application is TabbedOut which
allows customers to keep track of and pay their bar tab through their phone, which also helps to
streamline the checkout process (Social Media and Technology in U.S. Foodservice, 2011).

**Marketing effectiveness of e-marketing technologies**

These e-marketing technologies have their own significance to the effectiveness of marketing in
the foodservice industry. Chipotle Mexican Grill and Starbuck's are great examples of leveraging the
power of Facebook and Twitter to create a high level of consumer engagement. “Among the 84
restaurant chains included in the Summer 2010 Experian Simmons NCS, only Starbucks has a higher Facebook engagement [than Chipotle],” (Social Media and Technology in U.S. Foodservice, 2011). These means of communication and marketing solidify the bond between brand and consumer by allowing the consumer to voice their opinions. Consumers feel what they have to say is actually taken into account by the brand as well as other consumers (Saeks, 2011). The most common referral is a recommendation from a friend, and retaining 5% more customers leads to a 25-125% increase in profits (Price, 2009).

**Significance of this study**

Even though there are many articles about the use of e-marketing technologies in the restaurant industry, there is not an academic and representative study of restaurants' use and effectiveness of e-marketing technologies.

**Methodology**

In this study, a descriptive, online survey research design was employed. The survey had two sections. The first section listed e-marketing technologies and asked the respondents to indicate if they utilize this technology. If they do, then it asked the level of effectiveness (1= Ineffective; 7= Very effective). The list of e-marketing technologies was obtained through extensive review of literature. The second section of the survey asked questions about respondent and company information. The reliability of the instrument was examined with Cronbach’s Alpha score. The overall reliability score for the e-marketing tool instrument was 0.916, concluding that the instrument was highly reliable (Hair, Anderson, Tatham, & Black, 1998).

The sample consisted of 3000 randomly selected restaurant technology managers who are current subscribers of *Hospitality Technology* magazine as of January 2011. Three hundred twenty respondents agreed to complete the survey with a 10.6% response rate. This year’s study represented 190,966 restaurant units. Of this number, 155,656 are quick service restaurants, 32,633 are casual/family restaurants, 554 are fine-dining restaurants, and 2,153 respondents represent fast-casual
restaurants. All of the sample members had an email address, therefore, only an online version of the survey was conducted.

Whenever there is less than 100% participation in a survey, there is a question of non-response bias that is the likelihood of data being changed if all members of the population would have responded to the survey. We have conducted a non-response analysis using wave analysis (early versus later respondents) to answer (1) whether non-respondents and respondents differed significantly, (2) whether equivalent data from those who did not respond would significantly altered findings. Rylander, Propst, and McMurtry (1995) suggested that late respondents and non-respondents were alike and wave analysis and respondent/non-respondent comparisons yielded the same results. Therefore, we conducted an independent t-test on the means of e-marketing technologies effectiveness to see if early respondents’ responses are different from late respondents’. Our analysis indicated that there was no significant difference in any of the e-marketing tools, concluding that this survey did not suffer non-response bias and therefore, representative of the population which is Hospitality Technology subscribers who are in charge of information technology in restaurants.

Findings

Twenty-nine (29%) percent of the respondents’ companies are national restaurant chains; 23% are regional restaurant chains; 17% are independent restaurant management companies without a franchised brand; 14% are global restaurant chains; and 6% are franchisors. In terms of job functions, 38% of respondents are information system/technology managers; 19% are in the corporate management; 19% are owners or operators; 8% are financial managers, and 5% are food and beverage managers. Although the respondents fall under a number of job functions, all have information technology responsibilities as a part of their job descriptions. In terms of overall annual revenue, 30% of respondents reported yearly revenue of less than $50 million; 15% reported $50 million to $99 million; 26% reported annual revenue of $100 million to $499 million; 10% reported $500 million to
$1 billion; and 13% reported more than $1 billion. About 6% did not answer this question.

**The Utilization of E-Marketing Tools by Restaurants**

As Table 1 shows, on average, the top five e-marketing tools used by restaurants are: Social networking tools (81.1%), including website address in email signature (77.5%), actively monitoring social network chatter (71.5%), actively participating in social media efforts (71.3%), and registering with search engines (70.2%). The least utilized tool was virtual tours (15.6%).

The next section reports the most utilized e-marketing tools by different restaurant types. Among QSR restaurants social networking tools (74%), including website address in email signature (69.2%), actively monitoring social network chatter (67.5%), actively participating in social media efforts (66.7%), and registering with search engines (65.4%) were the most utilized tools. The least utilized tool was virtual tours (11.7%).

Among fast-casual restaurants including website address in email signature (83.3%), social networking tools (75%), Twitter for marketing (75%), email newsletter (75%), and actively participating in social media efforts (66.7%) were the most utilized tools. The least utilized tool was virtual tours (16.7%).

Among Casual/Family restaurants social networking tools (87.8%), including website address in email signature (81.9%), registering with search engines (76.8%), actively monitoring social network chatter (67.5%), and actively participating in social media efforts (75.6%) were the most utilized tools. The least utilized tools were virtual tours (15.9%) and web seal certification (15.9%).

Among fine dining restaurants including website address in email signature (100%), social networking tools (88.9%), Twitter for marketing (88.9%), meta-tags for search engines (88.9%), and registering with search engines (77.8%) were the most utilized tools. The least utilized tool was advertising in online blogs (33.3%).
<table>
<thead>
<tr>
<th>E-Marketing Tools</th>
<th>Type of Restaurant</th>
<th>QSR (%)</th>
<th>Casual/Family (%)</th>
<th>Fine Dining (%)</th>
<th>Fast Casual (%)</th>
<th>Total (%)</th>
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<tr>
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<td>81.1</td>
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<td>77.8</td>
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<td>71.3</td>
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<td>Actively monitor the social network chatter (e.g. checking your restaurant’s comments in customer review website)</td>
<td></td>
<td>67.5</td>
<td>76.5</td>
<td>77.8</td>
<td>58.3</td>
<td>71.5</td>
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</tbody>
</table>

Table 1: The Frequencies of Use of E-Marketing tools by Restaurants

**Effectiveness of e-marketing tools**

As Table 2 shows, on average on a 1-7 point Likert scale, the top five tools deemed most effective by the restaurant industry are: actively monitoring social network chatter (M=5.37), social networking tools (M=5.24), actively participating in social media efforts (M=5.21), registering with search engines (M=4.99), and including website address in email signature (M=4.97). The least effective tool was web seal certification (M=3.08).

Among QSR restaurants actively participating in social media efforts (M=5.2), actively monitoring social network chatter (M=5.19), social networking tools (M=5.12), registering with search engines (M=4.86), and Twitter for marketing (M=4.83) were deemed most effective. The least effective tool was virtual tours (M=2.86). Among fast-casual restaurants actively participating in social media
efforts (M=5.6), actively monitoring social network chatter (M=5.56), social networking tools (M=5.56), Twitter for marketing (M=5.22), and including website address in email signature (M=5) were deemed most effective. The least effective tool was advertising in online blogs (M=3.11).

Among casual/family restaurants actively monitoring social network chatter (M=5.46), social networking tools (M=5.36), including website address in email signature (M=5.21), actively participating in social media efforts (M=5.16), and registering with search engines (M=5.12) were deemed most effective. The least effective tool was web seal certification (M=3.02). Among fine dining restaurants actively monitoring social network chatter (M=5.71), actively participating in social media efforts (M=5.17), registering with search engines (M=5.13), meta-tags for search engines (M=5.13), and including website address in email signature (M=5.0) were deemed most effective. The least effective tool was cell phone messaging (M=3.25).

**Conclusions and Recommendations**

The findings show that the e-marketing tools are utilized heavily by restaurants regardless of their type. However, there are some differences in the tools that are utilized by different restaurant types. The social networks dominate the e-marketing tool use in the restaurant industry for each type of restaurants. Fine-dining restaurants seem to utilize search engine optimization tools more than QSR, Fast Casual and Casual/Family dining restaurants. Similarly, but surprisingly, fine dining restaurants use twitter more frequently than the other type restaurants. QSRs tend to utilize e-marketing tools the least among all type of restaurants. Virtual tours are utilized the least among all type of restaurants. It is surprising that online security tools such as web seal certification is not widely used. However, security is one of the most important factors that impact guest purchase and return intentions. Search engine optimization should be fully utilized by restaurants. Using social media tools for restaurants seems to be “fashion.” There is a gap between usage and perceived effectiveness. Best
practices are needed for the effectiveness of social medial tools.
<table>
<thead>
<tr>
<th>E-Marketing Tools</th>
<th>QSR Mean</th>
<th>QSR SD</th>
<th>Fast Casual Mean</th>
<th>Fast Casual SD</th>
<th>Casual/Family Mean</th>
<th>Casual/Family SD</th>
<th>Fine Dining Mean</th>
<th>Fine Dining SD</th>
<th>Total Mean</th>
<th>Total SD</th>
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<td>5.00</td>
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Table 2: The effectiveness of e-marketing tools by restaurant types
*Mean: 1=Ineffective  7=Very effective
References


http://www.pcreview.co.uk/articles/Internet/What_is_PodCasting/ --Becky 06/09/2005

http://www.techterms.com

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