Article

Tourism and Hospitality Research
12(4) 188–200

DOI: 10.1177/1467358413491132
thr.sagepub.com

An importance-performance analysis of food service attributes in gastro-tourism development in Western Tourist Circuit, Kenya

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Abstract
Tourism development has principally focused on the tangible tourism products thereby overlooking the intangible element such as service. This study aimed to evaluate food service attributes in gastro-tourism development in the Western Tourist Circuit, Kenya. A total of 166 top and middle level managers were selected from 62 hotels for this study using multi-stage sampling method. Several food service attributes were identified and used to structure self-administered questionnaires. The data collected were analyzed using descriptive statistics, Factor, regression and importance-performance analysis. The findings indicate that perceived importance-performance of food service attributes in gastro-tourism development varied considerably. Three factors identified were *food service output, food service input* both perceived to be important with good performance; and *food service process* perceived important but hoteliers' performance on the same was poor. The findings provide intuitively appealing strategies for hoteliers and tourism promoters in Western Tourist Circuit, Kenya to set priorities for developing gastro-tourism through food service attributes.

Keywords
Food service attributes, gastro-tourism development, importance-performance analysis, Western Tourist Circuit, Kenya

Introduction

According to the World Tourism Organization (UNWTO) tourism has seen tremendous expansion to become one of the fastest growing economic sectors in the world. To sustain this growth, various forms of tourism have been developed to meet the ever increasing and changing needs of tourists as well as improve tourists' destinations. Tourism development, however, has been conducted in a manner that only portrays tangible aspects of tourism products such as infrastructure and hospitality facilities in destinations. According to Dwyer et al. (2010), tourism development is essentially driven by hospitality and tourism business enterprises as well as other key stakeholders in the industry. A government of any touristic country is always recognized as the major player and partners in tourism development. This, according to Dwyer et al. (2010) is through government involvement in tourism planning and strategy, marketing, infrastructure development, land use planning and responsibility for parks and public and natural attractions,

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and through their role in managing environmental and community impacts of tourism. The government's focus in this instance is normally to increase the number of tourists' arrival per annum and tourists' expenditures. Performance indicators in these instances have been tied to a number of annual tourists' arrival, bed occupancy and total tourists' expenditure per annum. This approach is more general and it is unclear as to which player in the tourism industry is performing well. It is also unclear as to which strategies tourism stakeholders are adopting or should adopt in order to promote various forms of tourism both locally, nationally and internationally. Moreover, the development of gastro-tourism and other food-related tourism has focused typically on cultural aspects of food such as how, when, why and where food is prepared and consumed (Gillespie, 2002).

Other than provision of tourism products and services for the consumers (Waller, 1996), the hospitality industry being one of the tourism stakeholders can also play a crucial role in developing and promoting tourism in a destination. The hospitality industry ensures that the needs of its clients who include tourists are met if not exceeded (Cohen and Avieli, 2004; Hanefors and Mossberg, 2003). According to Meler and Cerović (2003), tourists' are constantly looking for unique varied experiences through participation in the tourism industry of adventure. Being a service-oriented industry (Waller, 1996) the hospitality industry is regarded as one of the most important contributor to the tourism industry (Assaf and Cvelbar, 2010). Meler and Cerović (2003) and the International Culinary Tourism Association (ICTA) (n.d.) for instance reported that tourists' expenses on food and beverage amount to one-third of overall tourist expenditures of the global tourism turnover. Du Rand and Heath (2006) recognizes the importance of other food tourism aspects by asserting that food-related tourism has ceased to be only concerned with the provision of food for tourists in restaurants, hotels and resorts. Service being one of the industry success factors (Waller, 1996), is therefore logical to evaluate its importance-performance towards gastro-tourism development based on food service attributes. This is because consumer satisfaction is derived from the tourism products and service experience that will be generated.

Gastro-tourism potentials in Western Kenya

Gastro-tourism is concerned with cultural, economic and social food activities of a destination. According to Hjalager and Richards (2002) gastro-tourism is generally linked to cultural or heritage tourism which is often viewed as a niche or alternative form of tourism that focus on authentic food related experience. ICTA defines gastro-tourism as the pursuit of unique and memorable culinary experiences of all kinds by tourists often while traveling. Various forms of tourism play a dominant role in shaping the socio-economic activities of various tourist destinations including Kenya. According to the Kenyan economic survey in early 2011, tourism ranked first in foreign exchange earnings thus overtaking agricultural sector which has predominantly contributed to economic activities in the country for the past years. Maintaining this growth calls for the need to promote and develop unique forms of tourism that diversify tourism products on offer in the country.

Kenya as a whole and the western region in particular is endowed with vast sociocultural diversity due to her diverse ethnic composition. Gastronomic activities in the western region are characterized by regional foods that are prepared and served at homes, restaurants, hotels, food kiosks and in various ceremonies, expositions, fairs, festivals and events (whether cultural, ethnic, sports-related. Gastronomic studies reveal a constant need for authentic tourism products and unique culinary experience by food oriented tourists. Meler and Cerović (2003) for instance observed that travelers are choosing their destinations with the local food featuring high on their list of priorities. Despite this, gastro-tourism is not well promoted and developed in the Western Tourists Circuit.

Gastro-tourism development and service attributes

According to Fyall and Garrod (2005), successful delivery of tourism products depends on close working relationships, interdependencies and interactions with numerous stakeholders in the tourism industry. This in turn would enable suppliers of tourism products such as hotels to provide seamless experiences for its customers. A similar thought is shared by Eccles (1995) who asserts that tourism development call for participation of hospitality organizations in a given destination. This is because hospitality facilities are perceived to be on the receiving end of the tourism demand. According to Eccles (1995), promotion and development of any form of tourism should be based on the requirements of the tourists and not just the marketing mix. Eccles attributes this notion to the intangible nature of the hospitality and tourism product. Tourists' requirements in this context include authentic and unique culinary products Meler and Cerović (2003) as well as food service strategies that elicit the kind of experience sought after by tourists (Hashimoto and Telfer, 2006; Henderson, 2009; Hu et al., 2009; Milman, 2009). There is therefore the

need for tourism product supplier to provide range of goods and services that will distinguish it from other destinations in order to attract a steady stream of visitors and be successful (Hashimoto and Telfer, 2006).

A number of studies have looked at the intangible and tangible aspects that impact evaluation and perception of service products in the tourism and hospitality industry. Gountas and Gountas (2003) in their study of consumers' satisfaction in the airline industry for instance identified duration of the service, the individual's personality, natural preferences and the emotional state of passengers prior to, during and after the service encounter as some of the service attributes that may impact consumer satisfaction. However, tourism development that focuses on intangible aspects of tourism has elicited varied comments:

> *Development is often concentrated on products and not services. Design of services requires a greater understanding of "service attributes" which may be physical, sensual (explicit) or psychological (implicit). In product development process, it is important to consider the opportunities that exist to add value through service, particularly the implied benefits* (*Waller*, 1996: *p.* 202).

According to Waller (1996) service is an integral part of all hospitality products; therefore, the approach to both product and service development must be similar.

Other researches such as Milman (2009) have used service attributes in evaluating and rating systems of various travel and hospitality products. Milman evaluated guest experience at theme parks using cleanliness, friendly and courteous staff, staff's knowledge about the park's features, security, value for money, quality of food, quality of entertainment and shows, variety of food prices layout of the park, number of entertainment options offered to guests, variety of entertainment options (shows, parades and music) and variety of food. Travelocity reservation system used service attributes like staff and service, cleanliness, value for money, activities, location, security and safety, dining, kid friendliness, pet friendliness, and disability friendly to rate hotels (Travelocity, 2008). Hu et al. (2009) evaluated the importance of restaurant dining experience using cleanliness, food quality, comfort, food scent, staff service, restaurant scent, interior design, service speed, services cape lighting, music, noise, price and new experience. In the hospitality research, Yuksel and Yuksel (2002) investigated restaurant selection and food service evaluation by measuring the level of tourist satisfaction with dining based on 10 factors: service quality, product quality, menu diversity, hygiene, convenience and location, noise, service speed, price and value, facilities and atmosphere. Anderson and Mossberg (2004) explored performance of hospitality facility in dining experience by six aspects: food, service, fine cuisine, restaurant interior, good company, and other customers where dining experience was regarded as an important aspect of the overall travel experience.

There is however, little evidence on hotel development of tourism products based on service elements. Majority of studies have concentrated on the rating systems (Milman, 2009; Travelocity, 2008) and customer satisfaction (Gountas and Gountas, 2003; Yuksel and Yuksel, 2002). Most of the studies have also focused on the consumption of the hospitality and tourism product in their evaluation criteria. There is also limited research on management evaluation of service attributes especially from the perspective of gastro-tourism development.

Importance-performance analysis in hospitality and tourism industry

Importance-performance analysis (IPA) was first used by Martilla and James (1977) to analyze the performance of automobile industry. The IPA method has been espoused in tourism and hospitality industry (Go and Zhang, 1997; Hollenhorst et al., 1986) to evaluate service attributes importance and customer satisfaction (Matzler et al., 2003). IPA has been used in assessment of holiday destinations (Pike and Ryan, 2003) as well as in the evaluation of restaurants dining experience attributes Hu et al. (2009). Evans and Chon (1989) used the IPA to formulate and evaluate tourism policy, while Keyt et al. (1994) and Hsu et al. (1997) adopted the IPA technique in restaurant positioning. Lewis (1985) used the IPA to identify tourists' perceptions of the hotel industry. Sheraton Hotel is also reported to have used IPA in monitoring customer satisfaction (Lewis and Chambers, 1989). Almanza et al., (1994) employed IPA grid in determining means for improving customer satisfaction. Martin (1995) examined service providers' perceptions of customers' expectations of quality service in the hotel industry using the IPA technique.

IPA has predominantly been used by researchers because of positive relationship between performance and the importance levels of attributes when it is employed (Anderson and Mittal, 2000; Matzler et al., 2003; Mittal et al., 2001; Sampson and Showalter, 1999). The IPA grid describes levels of action organization managers should consider. The grid consists of four quadrants (I, II, III, and IV – see Figure 1). Attributes located in Quadrant I are rated high in importance and low in performance. This call for managers to take immediate measures geared towards increasing the service or product

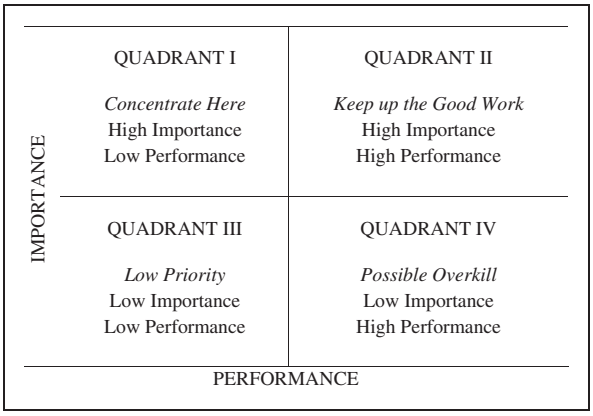

Figure 1. Importance performance analysis grid. Source: Martilla and James, (1977).

performance levels. Quadrant II represents attributes that are rated high in both performance and importance. In this quadrant the company needs to maintain the same performance levels to sustain competitive advantages and business growth. Quadrant III denotes those attributes that are high in performance but low on importance. At this level organization managers are prompted to channel resources from this Quadrant (III) to other important activities in the organization. Quadrant IV rates both performance and importance of attributes as low. Therefore, management needs not to take further action on those attributes.

It is against this background that this study aimed at evaluating food service attributes in gastro-tourism development. The study objectives included: (1) to identify hotel managers' perceived importance of food service attributes in gastro-tourism development; (2) to identify important food service factors in hotel gastro-tourism development; and (3) to evaluate performance of hotels in gastro-tourism development based on the identified service attributes and factors.

Method

The study conducted was exploratory in nature involving survey of hospitality managers in 10 counties within the Western Tourist Circuit. The counties included Bungoma, Busia, Homa Bay, Kakamega, Kisii, Kisumu, Migori, Nyamira, Siaya, and Vihiga (see Figure 2). The circuit is located in the western part of Kenya and boasts of several attraction features ranging from natural attractions and beautiful sceneries, to human activities, cultural activities (gastronomic in nature, sports related, performances), and hospitality facilities serving local regional foods. Other than being a potential destination for cultural and food-related tourism, this region hosts other forms of tourism activities such as adventure and nature-based tourism, business tourism among others.

Population and sampling procedures

The sample for this study was selected from top and middle level hotel managers in the Western Tourist Circuit using multi stage sampling procedure. Hotels were first clustered according to the 10 counties. A preliminary assessment of the hotels was done to determine their level of engagement with indigenous foods and food-related activity by looking through participant observation. Hotels to be considered for the study were then drawn purposively from the clusters whereby only those hotels engaged in regional food and food-related activities were selected. A total of 62 hotels (rated and non-rated) were drawn from the clusters. To get the actual participants for the study, stratified random sampling was used to draw at least three managers from each of the selected hotels. Only management staffs who deal with foods and food-related activities were included in the strata. To do this, a list of top and middle level managers obtained from the selected hotels was compiled to serve as the sample frame. In total, 184 managers were selected for the study.

Data collection instrument

Self-administered questionnaires were distributed to the study participants to fill. The questionnaire consisted questions on respondents' demographic characteristics, service attribute importance in gastro-tourism development and hotel performance in gastro-tourism development. Respondents were first required to indicate their position in the hotel, gender, age, and education level. Respondents were then required to rate on a five-point Likert scale food service attributes they perceived to be important in gastro-tourism development. The scale ranged from 1 = not important, 2 = slightly important, 3 = important, 4 = very important, to 5 = extremely important. Lastly, the respondents were required to rate on a five-point Likert scale the performance of the hotels in gastro-tourism development based on the same food service attributes for performance. The scale ranged from 1 = poor, 2 = fair/average, 3 = satisfactory, 4 = good to 5 = excellent. A value of 5 was given more weight in both cases.

Food service was operationalized based on existing research, researcher judgment, the respondents of the pre-test study, and the preliminary assessment of hotels engagement with local regional food. The approach used was a deductive one and exploratory in nature. After an extensive examination of the pertinent literature (Anderson and Mossberg, 2004; Gountas and Gountas, 2003; Hanefors and Mossberg, 2003; Hu et al., 2009; Milman, 2009; Travelocity, 2008; Yuksel and Yuksel, 2002),

Figure 2. Map of the Western Tourist Circuit.
Source: USGS, ESRI, GIST, (2009).

preliminary hotels assessment and the pre-test study, 20 food service attributes were generated. The creation of item pool went through an iterative process of exploratory factor analysis (EFA) after the pre-test study. Seven attributes were excluded because of low-factor loadings leaving 13. The 13 attributes were categorized as follows: service skills and knowledge, hygiene and general cleanliness, courteous and friendly staff, music and image portrayed, interior furnishings and décor, groomed service staff, service equipment, menu diversity and menu presentation, hotel facilities and dining atmosphere, speed of service delivery, food service style, food price and value for money, and finally, product serving suggestions.

Pre-test study

The questionnaire was pretested with 10% of the sample to determine flaws in the instrument and correct them (Bailey, 1982). Questionnaire pretesting was also useful in determining scale reliability. After the pre-test, the actual sample size for the study was reduced to 166. The Cronbach's alpha tested for pre-test results were 0.732 and 0.785 for importance and performance measures, respectively.

Methods of data analysis

The data collected were analyzed using descriptive statistics (frequency, mean and standard deviation) and multivariate analysis (factor and regression). Frequencies were used to reveal participants' demographic status; while means and standard deviations were used to indicate variations among 13 food service attributes for importance and performance. Cronbach's alpha was calculated to test the scale reliability while construct and factorial validity was ascertained through EFA (Conway and Huffcutt, 2003). EFA was performed using principal axis factoring (PAF) with direct oblimin rotation on the 13 food service attributes to identify their underlying dimensions. PAF was used because it represents high-quality decision in understanding latent structure for a set of variables that account for relationships among the measured variables (Hershberger, 2005). Kaiser's criterion (Eigen value > 1) and Cattell's Scree test were

used in determining the number of factors to retain for interpretation. These two criteria were considered because relying on one criterion sometimes does not give reliable number of factors to retain (Field, 2005) Only factor loadings equal to or greater than 0.50 were considered significant as any loading below 0.50 is considered low factor loading (Costello and Osborne, 2005). Bartlett factor scores from factor analysis were used in multiple regression analysis to evaluate importance of each service attribute in the factor structure.

Mean scores rating of perceived importance and performance of service attributes and food service factors were computed. The mean scores of the 13 food service and factor attributes were plotted on IPA grid to assess hotels' performance in gastro-tourism development.

Findings

A total of 157 usable questionnaires were collected back. This accounted for a very strong response rate of 94.5%. Cronbach's alpha registered for both food service importance and performance measures were 0.81 and 0.83, respectively. This was way over the minimum recommended Cronbach's alpha value of 0.7. Majority of the participants, 99 (63.06%) were males with the remaining 58 (36.94%) being females. A bigger number, 76 (48.41%), of the respondents were aged between 31 and 40 years while few participants, 13 (8.28%) were above 50 years. All the respondents were literate with varying education level. The sample mainly consisted of head chefs 60 (38.23%) followed by general managers at 42 (26.75%). Those who were categorized as others formed the least number of sample response at 26 (16.56%). Majority, 71 (45.22%) had attained college level education with either certificate or diploma. Few participants, 9 (5.73%) had postgraduate education (Table 1). Table 1 also highlights respondents' positions held with specific reference to demographic profile for education level, age bracket and gender. For education level for instance, the table shows that out of 42 general managers who responded, five had attained postgraduate education level, 26 had undergraduate education level, 11 college education level with none at the secondary level.

Ranking of perceived importance and performance of food service attributes

Respondents were asked to rate perceived importance and performance of 13 food service attributes in

Table 1. Respondents' demographic profile.

	Position held at the hotel					
Demographic characteristics	GM	FBM	HC	Others	Total	Valid%
Respondents age bracket						
21–30	3	7	8	4	22	14.01
31–40	25	13	28	10	76	48.41
41–50	10	7	18	11	46	29.30
Above 50	4	2	6	1	13	8.28
Total	42	29	60	26	157	100.00
Per cent (%) of the position held	26.75	18.47	38.23	16.56	100	
Gender						
Male	28	18	34	19	99	63.06
Female	14	11	26	7	58	36.94
Total	42	29	60	26	157	100.00
Per cent (%) of the position held	26.75	18.47	38.23	16.56	100.00	
Education level						
Secondary (KCSE or its equivalent)	0	0	12	5	17	10.83
College (Certificate or Diploma)	11	22	25	13	71	45.22
Undergraduate (BSc, BBA, B.Ed., etc.)	26	7	20	7	60	38.22
Postgraduate (MSC, MBA, PGD, etc.)	5	0	3	1	9	5.73
Total	42	29	60	26	157	100.00
Per cent (%) of the position held	26.75	18.47	38.23	16.56	100.00	

Note: GM – General manager; FBM – Food and beverage manager; HC – Head chef

gastro-tourism development on a five-point scale. The means and standard deviations of perceived importance and performance of the 13 food service attributes were calculated and ranked (Table 2). The mean score of perceived importance ranged between 4.44 and 4.03, denoting that participants ranked all the attributes as "very important." Staff service skills and knowledge ($M = 4.44$, $SD = 0.654$); hygiene and general cleanliness ($M = 4.41$, $SD = 0.688$) and courtesy and friendliness of service staff ($M = 4.38$, $SD = 0.605$) were perceived as the three most important food service attributes of gastro-tourism development in that order. The least important attributes as perceived by the participants were food price and value ($M = 4.03$, $SD = 0.771$) and guest serving suggestions ($M = 4.03$, $SD = 0.854$).

The mean scores of food service performance ranged between 4.08 and 2.63, denoting variations in performance from "fair/average," to "satisfactory," to "good." The top three performance attributes were courteous and friendly service ($M = 4.08$, $SD = 0.561$), hygiene and general cleanliness ($M = 4.04$, $SD = 0.654$) and clean and groomed service staff ($M = 4.04$, $SD = 0.609$). The least performance attributes were speed of service delivery ($M = 2.99$, $SD = 1.062$), service equipment ($M = 2.84$, $SD = 0.895$), food price and value for money ($M = 2.84$, $SD = 0.971$), product serving suggestions ($M = 2.78$, $SD = 0.922$), service style ($M = 2.71$, $SD = 0.961$) and varied menu/food presentation ($M = 2.63$, $SD = 0.908$) in that order. Only faster food service ($M = 2.99$, $SD = 1.062$) attribute exhibited a standard deviation greater than one for performance measure (see Table 2).

Food Service factors and their importance

Data for perceived importance of the 13 food service attributes were factor analyzed to identify their underlying dimensions. The result of the factor analysis suggested three-factor constructs explaining for 73.8% of the total variance. The Kaiser–Meyer–Olkin (KMO) value registered was 0.88, an indication that the variables were interrelated and they shared common factors. The communalities ranged from 0.50 to 0.89 with an average value of 0.74, suggesting that the variance of the original values were fairly explained by the common factors. All the factor loadings were > 0.7 with at least three variables loading on a factor (Table 3). Factor one (*Food service process*) explained for the greatest percentage of the total variance (38.9%) followed by factor two (*Food service output*) 21.8% and lastly factor three (*Food service* output) 13.1%.

The importance of each attribute was measured using multiple regression analysis with attribute importance as the independent and the factors generated as the dependent variables. The regression analysis result (Table 4) indicates that all the attributes had positive contribution towards their respective factor structure with all the *F*-tests and *t*-tests being

Table 2. Ranking of perceived importance and performance of food service attributes in gastro-tourism development ($N = 157$).

	Importance			Performance		
Food Service Attributes	Mean[a]	Std. Dev.	Ranking	Mean[b]	Std. Dev.	Ranking
Staff service skills and knowledge	4.44	0.654	1	3.96	.629	5
Hygiene and general cleanliness	4.41	0.688	2	4.04	.654	2
Courtesy and friendliness of service staff	4.38	0.605	3	4.08	.561	1
Music and image portrayed	4.36	0.778	4	3.96	.759	6
Restaurant interior furnishings and décor	4.33	0.779	5	3.97	.698	4
Well-groomed and clean service staff	4.31	0.629	6	4.04	.609	3
Service equipment	4.27	0.788	7	2.84	.895	9
Menu diversity and menu presentation	4.17	0.810	8	2.63	.908	13
Hotel facilities and dining atmosphere	4.11	0.808	9	3.85	.849	7
Speed of service delivery	4.10	0.841	10	2.99	1.062	8
Food service style	4.09	0.819	11	2.71	.961	12
Food price and value for money	4.03	0.771	12	2.84	.971	10
Product serving suggestions to guests	4.03	0.854	13	2.78	.922	11

[a]Mean scale: 1 = not important, 2 = slightly important, 3 = important, 4 = very important, to 5 = Extremely important.
[b]Mean scale: 1 = poor, 2 = fair/average, 3 = satisfactory, 4 = good to 5 = excellent.

Table 3. Facture analysis results and pooled means for food service attribute importance ($N = 157$).

Factors	Factor Loadings	EV	PV (73.802%)	Means (5-point scale)	
				Importance	Performance
Food service process- Factor 1 (α = 961)		5.058	38.908	4.12*	2.80*
Food service style	.926			4.09	2.71
Food price and value for money	.913			4.03	2.84
Service equipment	.834			4.27	2.84
Product serving suggestions to guests	.869			4.03	2.78
Speed of service delivery	.908			4.10	2.99
Menu diversity and menu presentation	.943			4.17	2.63
Food service output- Factor 2 (α = 904)		2.838	21.829	4.30*	3.96*
Hotel facilities and dining atmosphere	.726			4.11	3.85
Music and image portrayed	.876			4.36	3.96
Hygiene and general cleanliness	.898			4.41	4.04
Restaurant interior furnishings and décor	.869			4.33	3.97
Food service input- Factor 3 (α = 819)		1.698	13.065	4.38*	4.03*
Staff service skills and knowledge	.813			4.44	3.96
Courtesy and friendliness of service staff	.705			4.38	4.08
Well-groomed and clean service staff	.812			4.31	4.04

Note: Bartlett's Test of Sphericity ($p < .001$); Kaiser-Meyer-Olkin (KMO) = 0.88; Average communality = 0.74.
EV: Eigen value; PV: Percentage of variance explained; α: Cronbach's reliability coefficient; *: Grand mean scores of factor.

Table 4. Regression results of food service importance factor structures.

Model Structure	R^2	*F* - Statistics	Sig.	Beta values	*t* - test	Sig.
Factor 1 (*Food service process)*	1.00	227247.032	.000			
(Constant)					−1104.722	.000
Food service style				.196	99.885	.000
Food price and value				.207	100.846	.000
Service equipment				.096	60.901	.000
Guest serving suggestions				.117	73.592	.000
Speed of service delivery				.195	98.106	.000
Menu diversity and menu presentation				.271	119.956	.000
Factor 2 (*Food service output*)	.999	26899.504	.000			
(Constant)					−314.936	.000
Hotel facilities and dining atmosphere				.127	30.290	.000
Music and image portrayed				.306	56.432	.000
Hygiene and general cleanliness				.379	64.913	.000
Restaurant interior furnishings and décor				.296	53.478	.000
Factor 3 (*Food service input*)	.997	19003.135	.000			
(Constant)					−232.113	.000
Staff service skills and knowledge				.457	77.276	.000
Courtesy and friendliness of service staff				.270	50.437	.000
Well-groomed service staff				.428	73.413	.000

highly significant ($p < 0.001$). The R^2 values registered also indicated that the variables were all important in determining their respective factor structure, i.e. *food service process* ($R^2 = 1.00$, 100%), *food service output* ($R^2 = 0.999$, 99.9%) and *food service input* ($R^2 = 0.997$, 99.7%). The standardized beta value indicated varied level of contributions by each attribute towards a particular factor (Table 4).

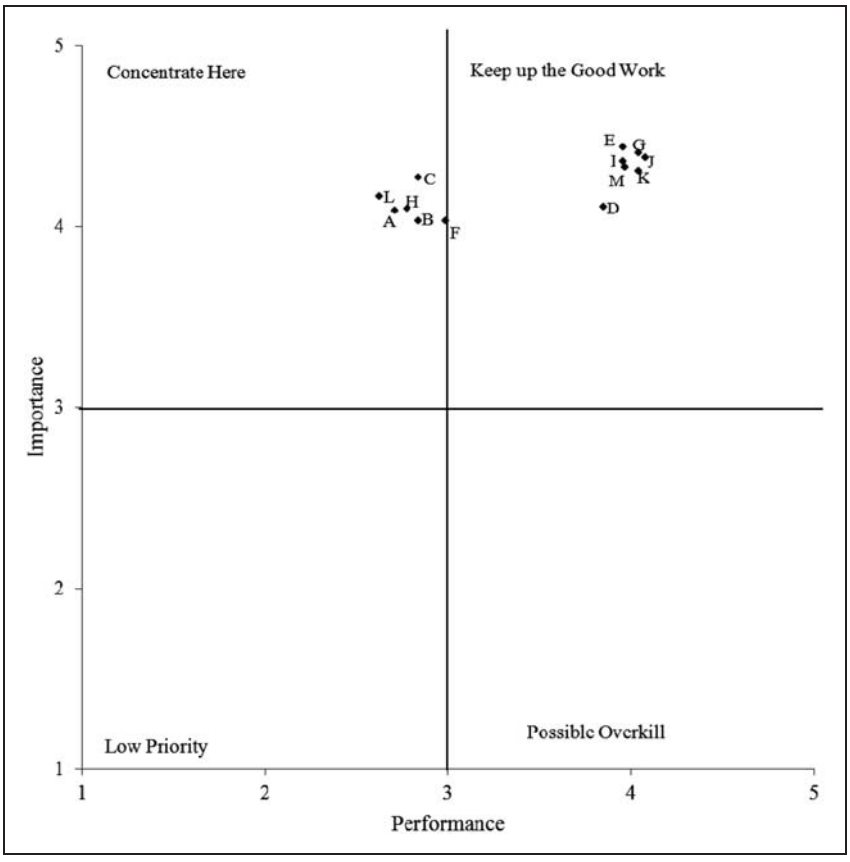

Figure 3. IPA Grid for food service attributes.
A: Food service style; B: Food price and value; C: Service equipment; D: Hotel facilities and dining atmosphere; E: Service skills and knowledge; F: Serving suggestions; G: Hygiene and general cleanliness; H: Service delivery speed; I: Music and image portrayed; J: Courtesy and friendliness; K: Well-groomed service staff; L: Menu diversity and presentation; M: Interior furnishings and décor.

Importance-performance analysis of food service attributes and factors

The IPA grid was constructed using the importance and performance measurement scale ranging from 1 to 5 for *y-axis* and *x-axis*, respectively. Cross-hairs (vertical and horizontal lines), were placed on the grid using mean values of the five-point scale for both perceived importance and performance (i.e. $M = 3.5$). The means of the food service attributes (Table 2) were then plotted on the IPA grid, importance on the *y-axis* and performance on the *x-axis*. Six service attributes: food service style; menu diversity and presentation; service equipment; serving suggestions; service delivery speed; and food price and value were registered within Quadrant I. The remaining seven service attributes were registered in Quadrant II (Figure 3).

Grand means of the variables in each of the three factors generated: *food service* process, *food service output* and *food service input* were calculated (Table 3). *Food service process* factor consisted of six variables with grand means of 4.10 and 2.80 for perceived importance and performance rating, respectively. *Food service output* factor had four variables with grand means of 4.30 and 3.90 for perceived importance and performance rating respectively. *Food service input* factor contained three variables with grand means of 4.38 and 4.03 for perceived importance and performance rating, respectively. The importance and performance grand means were then plotted on the IPA grid (Figure 4) to assess the food service factors' importance and hotel performance in gastro-tourism development. The IPA grid (Figure 4) shows *food service process* factor occupying Quadrant I, while Quadrant II captured the remaining two factors *food service output* and *food service input*. Quadrants III and IV registered no factor.

Discussion

Concentrate here (Quadrant I)

The ranking of food service attributes by hotel managers showed that all the 13 attributes were perceived as "very important" (i.e. all had a mean > 4) in

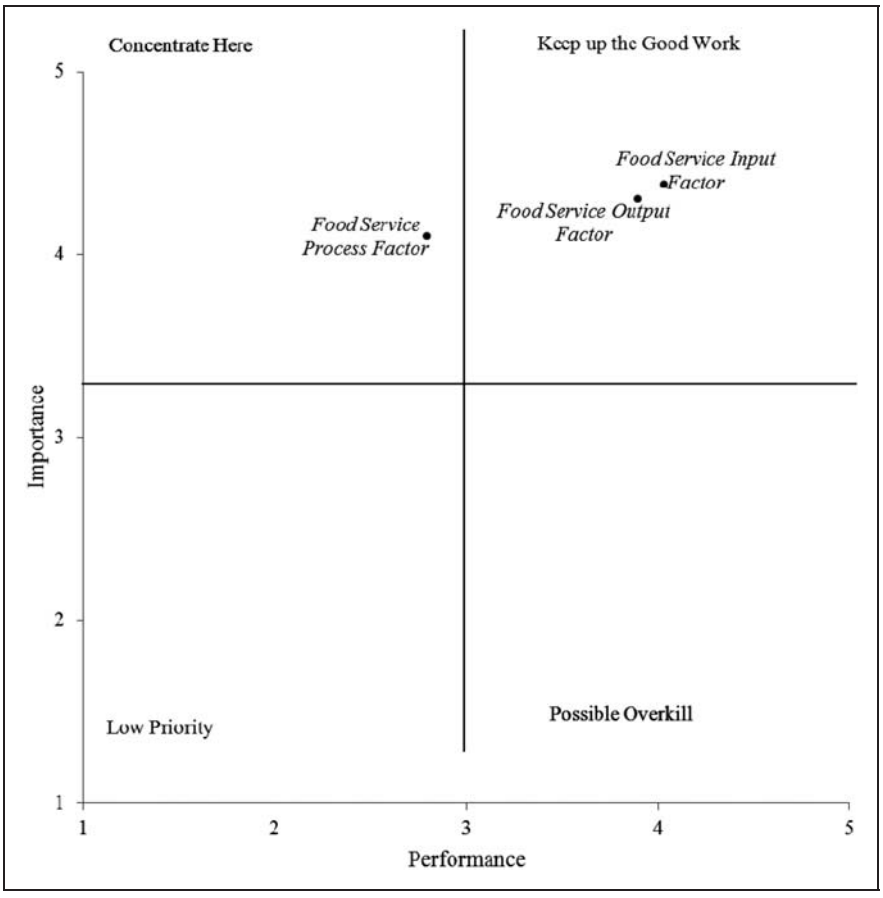

Figure 4. IPA Grid for food service factors of gastro-tourism development.

gastro-tourism development. However, certain attributes were ranked as more important than others. Regarding hotel performance on the same, only certain attributes ranked above average (Table 2). This explains the six food service attributes: food service style; menu diversity and presentation; service equipment; serving suggestions; service delivery speed; and food price and value being registered within Quadrant I (Figure 4). These attributes are the same that constitute *food service process* factor, making the factor also fall within the same quadrant. This factor explained for the greatest percentage (38.9%) of the total variance in the perceived importance food service factor structure (Table 3). The greatest percentage of the variance explained by *food service process* implies that it is one of the critical factors that hoteliers should consider in gastro-tourism development strategies within the Western Tourist Circuit.

Hospitality managers should therefore concentrate their efforts and resources in improving the speed of service delivery, food service style, offering diverse and varied menu items of local origin, getting appropriate service equipment for the local foods; offering product serving suggestions to their guests, and offering quality food products in relation to the prices being charged. These attributes are perceived to add to the unique experience often sought after by food-oriented tourists. However, hoteliers should give more focus on providing varied local and regional dishes on the menu ($\beta = 0.271$, $t = 119.956$, $p < 0.001$) of good quality in relation to price being charged ($\beta = 0.207$, $t = 100.846$, $p < 0.001$) as revealed by standardized beta values in regression analysis (Table 4). This is because providing diverse and varied tourism products assures tourists of varied unique experience thereby making their travel not monotonous. Quality authentic tourism products also play a greater role in enhancing tourists' experience and this in turn would make them want to come back again for the product. Despite all the attributes being perceived as important ($p < 0.001$) the standardized beta values indicate that management should not spend so much effort on service equipment ($\beta = 0.096$, $t = 60.901$, $p < 0.001$) as compared to the other attributes. Provision of unique authentic dishes calls for use of authentic food service equipment for a particular dish. This in turn would provide opportunity for tourists to indulge in unique experience. However, accessing and obtaining these equipment

proves challenging since they are not easily available. Hoteliers would therefore end up using modification or hybrid kind of equipment for their service delivery.

Keep up the good work (Quadrant II)

Seven food service attributes fell within Quadrant II, an indication that hotels were performing well in this regard. These attributes include interior furnishings and décor; hygiene and general cleanliness; music and image portrayed; courtesy and friendliness; well-groomed service staff; and service skills and knowledge. All these attributes were perceived important by hotel managers in gastro-tourism development (see Tables 2 and 4). In any food service establishment, hygiene and cleanliness is a must to portray that your products offering are safe for consumption. No guest would like to eat in a dirty restaurant or hotel room. The service staff must also look smart in their uniforms for the sake of clients' perceptions. These are facts that any hotel manager understands are important for success of any food and beverage establishment as well as in promoting itself as a place where gastro tourists can patronize. It is also important to know your product before selling or promoting it to consumers, a probable reason for the managers to perceive skills and knowledge as an important food service attribute. Eating out is a social affair and a good music that rhymes with the theme of the day is critical in tourists' experience. Playing local music within the establishment enhances the authenticity aspect and service image portrayed.

Two factors *food service input* and *food service output* were registered in this quadrant. It would therefore be realistic for hospitality managers to keep on focusing on these attributes in gastro-tourism development. Despite the two factors, *food service output* and *food service input,* explaining for lower percentage of variance compared to *food service process* factor (Table 3), the factors were still perceived as important. Even though management should maintain their efforts regarding factors and attributes in this quadrant, it would be more beneficial if the management geared more of their efforts towards maintaining hygiene and general cleanliness ($\beta = 0.379$, $t = 64.913$, $p < 0.001$) in *food service output* factor and in training their staffs on various service skills ($\beta = 0.457$, $t = 77.276$, $p < 0.001$) in *food service input* factor (Table 4).

Conclusions

Gastro-tourism development calls for initiatives by hospitality managers. One of the initiatives this paper looked at is food service. The results of the study clearly indicate that hoteliers can engage in gastro-tourism development initiatives in the Western Tourist Circuit. The study findings revealed that almost all the food service attributes under investigation were perceived as important by hotel in gastro-tourism development. Three food service factors: *food service process, food service output* and *food service input* were also revealed as important considerations for hotel gastro-tourism development. However, regarding the performance of hotels, hotel managers should keep up the good work concerning *food service output* and *food service input* factors and all the service attributes associated with the factors as revealed in the IPA grid. Hoteliers, however, need to concentrate more on the process aspect of service delivery by channelling more of its resources to improve *food service process* and all its associated food service attributes. The study also points out that those critical attributes within a given factor should be given precedence when it comes to resources allocation in improving performance of hotels in gastro-tourism development. This applies to even the second quadrant where management is advised to keep up the good work. Hospitality managers in the Western Tourist Circuit should therefore channel their resources and efforts where needed most, while maintaining the good work regarding other factors where they are performing well.

References

Almanza BA, Jaffe W and Lin L (1994) Use of the service attribute matrix to measure consumer satisfaction. *Hospitality Research Journal* 17(2): 63–75.

Anderson TD and Mossberg L (2004) The dining experience: do restaurants satisfy customer needs? *Food Service Technology* 4(4): 171–177.

Anderson EW and Mittal V (2000) Strengthening the satisfaction-profit chain. *Journal of Service Research* 3(2): 107–20.

Assaf A and Cvelbar LK (2010) The Performance of the Slovenia Hotel Industry: Evaluation Post-privatisation. *International Journal of Tourism Research* 12(5): 462–471.

Bailey KD (1982) *Methods of Social Research*, 2nd ed. USA: Free Press.

Cohen E and Avieli N (2004) Food in tourism: Attraction and impediment. *Annals of Tourism Research* 31(4): 755–778.

Conway JM and Huffcutt AI (2003) A review and evaluation of exploratory factor analysis practices in organizational research. *Organizational Research Methods* 6(2): 147–168.

Costello AB and Osborn JW (2005) Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation* 10(7). Available at: www.pareonline.net/getvn.asp?v=10&n=7 (accessed 20 July 2011).

Du Rand GE and Heath E (2006) Towards a framework for food tourism as an element of destination marketing. *Current Issues in Tourism* 9(3): 206–234.

Dwyer L, Forsyth P and Dwyer W (2010) *Tourism Economics and Policy.* Cheltenham, UK Channel: View Publications.

Eccles G (1995) Marketing, sustainable development and international tourism: Focus on five prominent themes in tourism. *Journal of Contemporary Hospitality Management* 7(7): 20–26.

Evans MR and Chon KS (1989) Formulating and evaluating tourism policy using importance-performance analysis. *Hospitality Education and Research Journal* 13: 203–213.
Field A (2005) *Discovering statistics using SPSS* (2nd Ed.). London: Sage Publications.
Fyall A and Garrod B (2005) *Tourism marketing: A collaborative approach*. Clevedon: Channel View Publications.
Gillespie C (2002) *European Gastronomy into the 21st Century*. Oxford: Butterworth-Heinemann.
Go F and Zhang W (1997) Applying importance-performance analysis to Beijing as an international meeting destination. *Journal of Travel Research* 35(4): 42–49.
Gountas SC and Gountas JY (2003) The influence of consumers' emotion on their service product evaluation. *Tourism Analysis* 8(2–4): 125–128.
Hanefors M and Mossberg L (2003) Searching for the extraordinary meal experience. *Journal of Business and Management* 9(3): 249–270.
Henderson JC (2009) Food tourism reviewed. *British Food Journal* 111(4): 317–326.
Hershberger SL (2005) Factor scores. In: Everitt BS and Howell DC (eds) *Encyclopedia of Statistics in Behavioral Science*. New York: John Wiley, pp. 636–644.
Hjalager AM and Richards G (eds) (2002) *Tourism and gastronomy*. London: Rutledge.
Hollenhorst S, Olson D and Fortney R (1986) Use of importance-performance analysis to evaluate state park cabins: the case of the West Virginia state park system. *Journal of Park and Recreation Administration* 10(1): 1–11.
Hsu CHC, Byun S and Yang IS (1997) Attitudes of Korean college students towards quick-service, family-style, and cuisine dining restaurants. *Journal of Restaurant and Foodservice Marketing* 2(4): 65–85.
Hu M-LM, Chen T-K and Ou T-L (2009) An importance–performance model of restaurant dining experience. *Advances in Hospitality and Leisure* 5: 207–222.
Keyt JC, Yavas U and Riecken G (1994) Importance-performance analysis: a case study in restaurant positioning. *International Journal of Retail and Distribution Management* 22(5): 35–40.
Lewis RC (1985) Getting the most from marketing research [part V]. Predicting hotel choice: the factors underlying perception. *The Cornell Hotel and Restaurant Administration Quarterly* 26(3): 82–96.
Lewis RC and Chambers RE (1989) *Marketing Leadership in Hospitality*. New York: Van Nostrand Reinhold.
Martilla JA and James JC (1977) Importance-performance analysis. *Journal of Marketing* 41(1): 77–79.
Martin DW (1995) An importance-performance analysis of service providers' perception of quality service in the hotel industry. *Journal of Hospitality and Leisure Marketing* 3(1): 5–17.
Matzler K, Sauerwein E and Heischmidt KA (2003) Importance-performance analysis revisited: the role of the factor structure satisfaction. *The Service Industries Journal* 23(2): 112–129.
Meler M and Cerovic Z (2003) Food marketing in the function of tourist product development: Food marketing and tourism. *British Food Journal* 105(3): 175–192.
Milman A (2009) Evaluating the guest experience at theme parks: an empirical investigation of key attributes. *International Journal of Tourism Research* 11: 373–387.
Mittal V, Katrichis JM and Kumar P (2001) Attributes performance and customer satisfaction over time: evidence from two field studies. *Journal of Service Marketing* 15(5): 343–356.
Pike S and Ryan C (2003) Dimensions of short break destination attractiveness – a comparison of cognitive, affective and conative perceptions. In: *CAUTHE (Council for Australian University Tourism and Hospitality Education) Annual Conference*, Southern Cross University, Coffs Harbour, February 2003.
Sampson SE and Showalter MJ (1999) The performance-importance response function: observations and implications. *The Service Industries Journal* 19(3): 1–25.
Travelocity (2008) Available at: http://www.travelocity.com (accessed 5 June 2011).
Waller K (1996) *Improving Food and Beverage Performance* (1st edn). Oxford: Butterworth-Heinemann, pp. 192–230.
World Tourism Organization (UNWTO) Why Tourism? Available at: www.unwto.org/en/content/why-tourism (accessed 15 December 2011).
Yuksel A and Yuksel F (2002) Measurement of tourist satisfaction with restaurant services: a segment-based approach. *Journal of Vacation Marketing* 9(1): 52–68.

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