# Journal of Contemporary Management Volume 11



# Key success factors in managing a visitors' experience at a South African international airport

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#### **Abstract**

These days, visitors to airports are more discerning than before and continuously seek new and meaningful experiences. This approach has caused airports to evolve from being, simply, a point of transit for visitors into elaborate attractions; providing much more facilities and services. The notion of experiences is, however, an abstract concept which makes it difficult to measure and, furthermore, experiences differ from individual to individual. In this context, it is important that airport management should understand the type of experiences that visitors seek within an airport environment in order to create higher levels of satisfaction which, ultimately, would result in increased revenue.

The purpose of this exploratory research was to identify the key success factors that influence the experience of visitors in the context of an international airport. Determining the key success factors (KSF) may provide management with knowledge of those key areas within an airport that are viewed as necessary for a memorable airport experience by the visitors. Quantitative research was conducted by means of a self-administrated questionnaire and a total of 490 (n) questionnaires were obtained during the research period.

A factor analysis identified seven KSFs which will facilitate airport management in creating and managing a memorable experience for visitors.

#### Key phrases

international airport; key success factors; management; visitor experience

#### 1. INTRODUCTION

These days, visitors are likely to seek experiences rather than products (Gao, Scott, Ding & Cooper 2012:215). As a result, organisations in the service sector have become increasingly interested and focussed on creating and managing experiences for visitors (Oh, Fiore & Jeoung 2007:119; Pullman & Gross 2004:551; Zomerdijk & Voss 2010:67). Airports, being service providers, are no exception to the above statement. Indeed, airports have progressed over the past decades from being simply elementary terminals that serve as a point of transit into sophisticated market entities that entail a 'multipoint service provider firm' (Jarach

2001:104; Martin-Cejas 2006:874). In this manner, airports aim to create a memorable experience for airport visitors.

New functions have, for example, been introduced at airports over and above the usual traditional services and such initiatives have transformed airports into ultra-modern shopping and entertainment centres that are continuously seeking opportunities to enhance visitors' airport experience (Farahani & Törmä 2010:2; Jarach 2001:120; Magri & Alves 2005:10). According to Fodness and Murray (2007:503); Magri and Alves (2005:10); Paternoster (2008:219); and Yeh and Kuo (2003:35), managing and creating a memorable experience for airport visitors could include the following advantages for an airport:

- Airport management could be more customer-focussed in their management philosophy.
- Visitors could experience higher levels of satisfaction.
- Knowledge on visitor experiences could provide management with guidelines for future development and planning.
- Airport management could provide effective service quality management.
- Benchmarking of the airport against other airports in the same size/category is possible.
- Results can be used as a performance indicator.
- The higher levels of satisfaction experienced by visitors could lead to increased revenue of the airport.
- Research on visitor experiences could provide management with guidelines for strategic management.

However the diversity of airport visitors particularly complicates identifying visitors' perceptions of what a memorable airport experience should be; and furthermore raises the question of which key success factors will contribute towards a memorable airport experience (Fodness & Murray 2007:492; Freathy & O'Connell 2000:104; Popovic, Kraal & Kirk 2010:2; Seyanont 2012:33).

Visitors have their own interpretation of experiences during an encounter – interpretations are based on their cultural background, prior experiences and moods. Investigating and understanding the experience preferences of a variety of airport visitors (such as the case of an international airport in South Africa) will provide management with a clear understanding as to those experiences that visitors specifically seek so that management can design and orchestrate appropriate management actions to provide for these identified experiences.

Airports, specifically in South Africa play a vital role in the economy by contributing towards the economy and the tourism industry. In 2012, 9.2 million international tourists were welcomed to South Africa of which the majority travelled by air (Motlanthe 2013).

Therefore, the aim of this article is to present the identified key success factors that influence visitors' experiences, based on airport attributes and visitors' reasons for being at the airport. This article also engages with the demographic profile of visitors to a South African international airport; and sets out to test whether there are significant correlations between the demographic characteristics and the key success factors that influence visitors' experiences. To achieve the above mentioned this article is structured as follows: firstly, a literature review is presented as a conceptual framework for the study, after which the research method is explained. This is followed by a presentation of the results. Lastly, the findings and implications of the research are dealt with.

# 2. LITERATURE REVIEW

### 2.1 The nature of the airport environment

The traditional notion of an airport having to take responsibility only for the delivery of goods and services is no longer sufficient, because presently visitors are continuously searching new experiences. To meet this emergent demand, service providers (such as airports) are challenged to provide value-added services and products, and also to incorporate retail outlets to address the needs of experience-orientated visitors (Holbrook 2000:178; Oh *et al.* 2007:119; Pine & Gilmore 1998:97).

Airports are regarded by Popovic, Kraal and Kirk (2010:1) as some of the most complex systems of the 21<sup>st</sup> century, due to the involvement of many diverse components and stakeholders. This state of affairs means that managing airport visitors' experiences is an intricate business. Figure 1 illustrates the complexity of the airport environment based on the services they render.

The complexity of the airport environment is divided into a number of *primary* or *core services* (that is, services aimed at facilitating travellers from check-in to boarding), as well as *secondary services* – these comprise of shopping (convenience stores and duty free shopping); travel facilities (such as airport lounges, travel consultants and travel information bureaus); entertainment (for example expositions, museums, spas, casinos, theatres, skating rinks, nature trails, golf courses, driving ranges, cinemas and indoor children's playing areas); restaurants; financial services (banks and foreign exchange) and aspects pertaining to

managing access to the airport (such as car rentals; and other modes of transport connected to the airport) (Farahani & Törmä 2010:2; Flughafen Zurich AG 2010; Fuerst, Gross & Klose 2011:278; Jarach 2001:123; IIAC 2011; Peneda, Reis & Macario 2011:1).



FIGURE 1: The airport environment

Source: Authors' own compilation based on the literature review

Thus, apart from being the facilitator that assists with the transportation of travellers from Point A to Point B, an airport also has the task of managing the secondary services in order to provide experiences to visitors – and of course, also to seek opportunities for generating additional revenue.

Torres *et al.* (2006:363) propound that the role of airport management is often compared to running a business with a strong focus on increased commercial orientation of the airports' operations facilities that also fulfil the experience needs of their visitors. Therefore, it is important to understand what these visitors regard as important.

#### 2.2 Visitor motivations

In addition to understanding the type of airport experiences visitors seek, it is necessary to investigate visitors' motivations (how and why they spend time at the airport) (Devesa,

Laguna & Palacios 2010:547; Kinley, Forney & Kim 2012:268). Motivations refer to the manifestation of a need that has been created by cultural and personal factors. Motivations are the primary driving force behind an individual's behaviour, and create desire within a visitor to reach some ideal state of experience (Snepenger, King, Marshall & Uysal 2006:140; Solomon 2004:114).

Generally, motivations are discussed in terms of their relationship to visitor behaviour (Crompton 1979:408) rather than visitor experiences. However, since visitor motivations can be argued to contribute to the experience sought and the choices made by visitors, these remain an important element in the visitor experience as emphasized by Cutler and Carmichael (2010:11). The most prominent visitor motivations as verified by previous service-related research are: escape, novelty, relaxation, adventure, education and enhancements of relationships (Cutler & Carmichael 2010:12; Kruger & Saayman 2010:95; Oh *et al.* 2007:34).

# 2.3 Key success factors

In order to identify the area of management which specifically addresses those factors that enhance visitors' experiences at an airport (based on their motivation), it is essential for management to be knowledgeable about the Key Success Factors (KSFs). Avcikurt, Altay and Ilban (2011:153) describe key success factors as: 'the few key areas where things must go right for the organization to flourish and for the goals of management to be met.

Earlier descriptions of KSFs are based on the work of Bullen and Rockart (1986:385) who stated that KSFs are specific factors in which satisfactory results will ensure competitive performance for departments, individuals and organisations. These factors are described by Caralli (2004:2); Finney and Corbett (2007:330); Lee, San and Hsu (2010:628); Lennon (as cited by Leask 2010:158); Slabbert and Saayman (2003:8) and Wali, Deshmukh and Gupta (2003:3) as management tools which influence the ability of an organisation to thrive in the marketplace; to identify problem/key areas that need improvement, for performance measurement purposes, and as tools for obtaining a competitive advantage.

Brotherton (2004:20) additionally explains that KSFs are the key result areas that consist of a number of factors – the number must be greater than three and less than ten – which assist managers to narrow their focus specifically on those factors identified.

Therefore, KSFs are the specific areas inside the organisation that are essential for management to be able to accomplish the mission and goals of the organisation. According to Engelbreght (2011:30), key success factors are those aspects that are indicated by

visitors as important in influencing their experiences. Management should identify those key success factors that visitors consider as important if they were to achieve the ultimate visitor experience at airports and direct the appropriate operational activities that will facilitate the accomplishment of the organisation's goals (Caralli 2004:2). Below is a summary in Table form of previous research concerning KSFs from various sectors of tourism in the South African context (Table 1).

None of the previous research presented in Table 1 has focused on a South African airport. Previous research on KSFs has however been conducted on different tourism operations. These studies indicate that the management of tourism organisations should not neglect the provision of basic services and facilities.

The only studies focussing on KSFs in South Africa from the demand side were undertaken by Engelbrecht (2011); Erasmus (2011) and Marais (2009). These authors categorically emphasise the importance of identifying KSFs from the perspective of visitors.

Moreover, it is noticeable from the KSFs presented in Table 1 that managing visitors differ from one organisation to another, and therefore one set of KSFs cannot be regarded as universal. The lack of a universal list of KSFs therefore necessitates primary research.

**TABLE 1:** Previous studies on critical success factors

Source	Study title	Identified key success factors
Engelbrecht (2011)	Critical success factors for managing the visitor experience at the Kruger National Park	<ol> <li>General management</li> <li>Wildlife experience</li> <li>Facilities</li> <li>Green management</li> <li>Leisure and hospitality facilities</li> <li>Interpretation</li> <li>Variety activities</li> <li>Accommodation facilities</li> <li>Luxuries</li> </ol>
<b>Erasmus</b> (2011)	Key success factors for managing the tourist experience at the Klein Karoo National Arts Festival	<ol> <li>Safety and personnel</li> <li>Marketing and accessibility</li> <li>Venues</li> <li>Accommodation and ablutions</li> <li>General aspects and social impact</li> <li>Parking and restaurants</li> <li>Shows and stalls</li> </ol>

Source	Study title	Identified key success factors
Manners (2011)	Critical success factors for managing the visitor experience at a major music event	<ol> <li>General management</li> <li>Souvenirs</li> <li>Marketing</li> <li>Venue and technical aspects</li> <li>Accessibility and parking</li> <li>Amenities and catering</li> </ol>
Williams (2011)	Key success factors for managing the visitor experience at the Cape Town International Jazz Festival	<ol> <li>Hospitality factors</li> <li>Quality venues</li> <li>Information dissemination</li> <li>Marketing and sales</li> <li>Value and quality</li> </ol>
<b>Appel</b> (2010)	Critical success factors for managing hotels in South Africa	<ol> <li>Organisational management</li> <li>Quality and customer satisfaction management</li> <li>Marketing and experience management</li> <li>Human resource management</li> <li>Logistics management</li> <li>Risk and policy management</li> <li>Green management</li> </ol>
<b>Marais</b> (2009)	Critical success factors for managing the Wacky Wine festival.	<ol> <li>Quality and good management</li> <li>Wine farm attributes</li> <li>Effective marketing</li> <li>Route development</li> <li>Festival attractiveness</li> <li>Entertainment activities</li> <li>Accessibility, including comfortable wine farm facilities, clear directions to farms and well managed farms</li> </ol>
<b>De Witt</b> (2006)	Critical success factors for managing special events: The case of wedding tourism	<ol> <li>Strategic planning and performing a SWOT analysis</li> <li>Operational services that</li> <li>Human resource management, and creating a positive organisational behaviour</li> <li>Financial management</li> <li>Marketing aspects</li> </ol>
Kruger (2006)	Critical success factors for managing a conference centre in South Africa	<ol> <li>Functional layout and providing the right variety of facilities</li> <li>Performing of good marketing management</li> <li>Having the proper operational aspects in place</li> <li>Conducting proper planning before any conference</li> </ol>

Source	Study title	Identified key success factors
		5. Providing an attractive venue
		Perform human resource management
Van der Westhuizen	Critical success factors for developing and managing a guesthouse	Owner-manager establishes and upholds a high standard of quality
(2003)		Human resource management
		Owner-manager must inspire, motivate and praise employees
		Self-sufficient owner-manager
		5. Good leadership qualities
		6. Ability to share positive information freely
		7. Providing services and facilities guests need
		8. High levels of hygiene
		9. Guests welcomed in a personal manner
		10. Well trained employees
		11. Attractive natural surrounding landscapes

Source: Author's own based on literature review

Determining the KSFs for managing visitors' experience at an international airport will not only address the gap in literature concerning KSFs, but could also make a valuable contribution towards improving effective airport management. This is likely to result in memorable airport experiences which are based on what visitors consider as important factors for a memorable airport experience at a South African international airport.

#### 3. RESEARCH METHODOLOGY

Quantitative research was conducted using a structured self-administrated questionnaire to collect the primary data needed for the purposes of this study.

The research method followed for the purpose of this exploratory research study is dealt with under the following three headings: (i) the questionnaire; (ii) sampling method and survey; and (iii) statistical analysis.

#### 3.1 The questionnaire

The questionnaire used to survey the visitors at an international airport in South Africa was specifically developed and is based on the work of Coghlan and Pearce (2010:48); Cutler and Carmichael (2010:12); Fodness and Murray, (2007:495); Kim (2009:130); Fernandes and Pacheco (2010:559); and Skytrax (2013) who all focussed on airport service-related

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research as well as visitor experience research. The questionnaire consisted of the following three sections:

**Section A -** Capturing the demographic profile of respondents, as well as their general travel-related characteristics.

**Section B** – Consisting of three sub sections focussing on (i) measuring visitors' current emotions at the airport, (ii) rating the airport's attributes, and (iii) evaluating the motivational factors.

**Section C** – Focussing on future developments that could contribute towards a more memorable airport experience.

To achieve the main aim of this specific study, only data obtained from Section A and B is applicable and was used.

The questionnaire was tested prior to the main survey by means of a pilot study involving 16 respondents. This was undertaken in order to test the viability of the questionnaire i.e. content of face validity.

# 3.2 The sampling method and survey

Following a quantitative research methodology, questionnaires were distributed at a South African international airport over a period of 5 days (10 June 2013 – 14 June 2013). A non-probability sampling method was followed and stratified sampling was employed.

Three groups of people were targeted to participate in this survey: *firstly*, the questionnaire was distributed at the international departure hall amongst visitors flying internationally; *secondly*, the questionnaire was distributed at the domestic departure hall amongst visitors flying domestically, and *lastly*, the questionnaire was distributed amongst visitors (meeters and greeters) to the airport at the international arrival area.

Arriving passengers were not incorporated in the study due to time and security constraints. Fieldworkers moved around these three areas of the airport at different times throughout the research period in order to minimise bias. The fieldworkers approached potential respondents and explained the objective of the survey to them.

A total of 560 questionnaires were distributed over a five-day period. During the data capturing it was found that 70 questionnaires were uncompleted and was therefore omitted from the analysis, consequently 490 questionnaires were used in the final data analysis.

#### 3.3 Statistical analysis

Once the questionnaires have been collected, the data was captured onto a Microsoft© Excel© spread sheet where after it was statistically analysed using the software programme IBM SPSS Statistics Version 21 (SPSS Inc. 2013).

The data analysis was performed in three stages:

- firstly, a general demographic profile of the respondents was determined;
- secondly, two factor analyses were performed with a view to determine the key success
  factors underlying the visitors' airport experience based on the questions pertaining to
  the airport's attributes and the visitors' motivations;
- thirdly, an analysis demonstrating the relationship between selected demographic characteristics and the identified key success factors was undertaken.

Descriptive statistics focussed initially on the demographic profile of respondents, where frequencies were used to analyse the data. Two principle axis factor analyses, using an Oblimin rotation with Kaiser normalisation, were performed on the 35 airport attribute items and the 20 visitor motivation statements to explain the variance-covariance structure of a set of variables through a few linear combinations of these variables.

The Kaiser-Meyer-Olkin measure of sampling adequacy was used to determine whether the covariance matrix was suitable for both factor analyses. Kaiser's criteria for the extraction of all factors with Eigenvalues larger than one were used because they were considered to explain a significant amount of variation in the data (Field 2009:647).

All items with a factor loading of above 0.3 were considered as correlating with a factor, whereas all items with factor loadings of lower than 0.3 were eliminated, due to their insignificant correlations with other factors (Pallant 2010:193). Any item that cross-loaded on two factors, with factor loadings both greater than 0.3, was categorised into the factor where interpretability was deemed best.

A reliability coefficient (Cronbach's Alpha) was computed for each factor to estimate their internal consistency. According to Field (2009:675), a Cronbach Alpha value of 0.7 and above is considered to be reliable. The average inter-item correlations were also calculated as another measure of reliability. According to Clarke and Watson (1995), all inter-item correlations between 0.15 and 0.55 are considered as indications of reliability.

Lastly, Spearman's Rank Order Correlation (Rho) was used to test whether visitors' demographic characteristics played a role in visitors' airport experience by calculating the interrelationship between selected demographic profile characteristics and the key success factors. A Spearman's Rank correlation of 0 indicates no relationship, whereas a correlation of 1.0 indicates a perfect positive correlation and a value of -1.0 indicates a perfect negative correlation (Pallant 2010:134).

#### 4. RESULTS

The results obtained are shown as follows: firstly, an overview of the demographic profile of the airport visitors is presented and this is followed by a discussion of the results from the factor analyses. Finally, the results obtained from the Spearmans (r<sub>s</sub>) correlation coefficient tests that were used to indicate the interrelationship between demographic profile characteristics and the key success factors are provided.

# 4.1 Demographic profile of visitors

The majority of respondents surveyed were at the airport to travel (78%); it was furthermore found that 55% of the respondents were males and most of them are between 26 and 44 years of age (54%). Respondents indicated that they travel mostly alone (56%); their highest level of education was a diploma/degree (49%); and they are predominantly in a professional occupation (31%).

The preferred class of travel is economy (89%) and respondents mostly use the airline check-in desk at the airport as a preferred mode for check-in (51%). A large percentage (49%) of the respondents revealed that it was their first or second visit to the specific airport. They also indicated that they prefer to arrive more than 2 hours before their scheduled departure (37%). This indicates that respondents did spend adequate time at the airport to formulate an experience. The demographic profile results obtained are indicated in Table 2.

**TABLE 2:** Demographic profile of visitors

Category	Profile
Gender	Male (55 %); female (45%)
Reason for being at the airport	Travelling (78%); meeter and greeter (22%)
Age	26-34 years (30%); 35-44 years (24%); 45-54 years (8.5%)
Nationality	South African (46%); American (8.9%); Namibian (8.9%)
Highest level of education	Matric/high school (23%); diploma/degree (49%); postgraduate (28%)

Category	Profile
Occupation	Professional (31%); manager (14%); self-employed (13%)
Travel party size	1 person (56%); 2 persons (24%); 3 persons (8%); 4 and more persons (12%)
Type of class flying	First Class (3%); business class (8%); economy class (89%)
Number of return trips made to/through this airport in the last 12 months	1-2 times (49%); 3-5 times (24%); 6-10 times (15%); 11+ times (12%)
Number of hours prior to the scheduled departure/arrival of yourself/friend/family did you arrive at the airport	Less than 30 min (9%); 30 – 45 min (8%); 45 - 60 min (10%); 1h - 1h15 (11%); 1h15 - 1h30 (7%); 1h30 - 2h (18%); More than 2 hours (37%)
Method of check-in used	Check-in desk (51%); self-service kiosk (12%); internet check-in (6%)

Source: Data obtained from statistical analysis

# 4.2 Factor analyses results: identifying the key success factors

To identify the key success factors influencing visitors' experience at the airport, a factor analysis was performed on (a) the airport attributes and (b) visitors' motivations. These results are presented in the next section.

# 4.2.1 Identifying the key success factors from airport attributes

To examine the key success factors influencing visitors' experiences at the airport, a principal axis factor analysis with Oblimin rotation was undertaken. As indicated in Table 3, the factor analysis yielded 5 factors, namely:

Factor 1 = Physical comfort; Factor 2 = Amenities; Factor 3 = Visitor facilities; Factor 4 = Passenger services and Factor 5 = Accessibility.

TABLE 3: Factor analysis results identifying key success factors from airport attributes

Key Success Factors	Factor loading	Mean value (standard deviation)	Reliability coefficient (Cronbach Alpha)	Inter-item correlation
FACTOR 1: Physical comfort		3.95 (0.91)	0.93	0.59
Availability of seats within the airport	0.790			
Thermal comfort (No too hot and not too cold)	0.727			
The physical layout of the airport to make the use of facilities easy and accessible	0.712			
General security	0.691			

Key Success Factors	Factor loading	Mean value (standard deviation)	Reliability coefficient (Cronbach Alpha)	Inter-item correlation
The comfort of seats within the airport	0.663			
Convenient location of trolleys	0.615			
General hygiene	0.610			
The distance between facilities/components/departure halls	0.592			
Availability of elevators/ escalators/ moving walkways	0.465			
FACTOR 2: Amenities		3.49 (1.02)	0.90	0.54
Conference and convention centres	0.681			
Prayer and religious facilities	0.654			
Quiet areas in the airport to nap, read, do business	0.598			
Day rooms for stop-over passengers	0.594			
Recreation areas/play areas for children	0.583			
Travel agents and means of obtaining information on South African attractions	0.553			
A cheerful airport atmosphere	0.529			
Visual sensation (art displays)	0.525			
FACTOR 3: Visitor facilities		3.70 (0.99)	0.90	0.59
Nationally known restaurants available	0.940			
Nationally known retail outlets available to visitors/passengers	0.848			
A variety of retail concessions within the airport (such as shops and restaurants)	0.759			
The quality of food and beverages at the airport	0.622			
Neatly dressed airport employees	0.589			
Financial and insurance services available at the airport (such as foreign exchange outlets, travel insurance)	0.434			
FACTOR 4: Passenger services		4.02 (0.94)	0.92	0.62
Efficient process from check-in to boarding	0.839			
Fast check-in processing time	0.762			
Available areas and staff available to assist with check-in	0.748			

Key Success Factors	Factor loading	Mean value (standard deviation)	Reliability coefficient (Cronbach Alpha)	Inter-item correlation
Plenty of open spaces to prevent overcrowding	0.584			
Encounter with customs	0.537			
Telecommunication and available WiFi	0.507			
FACTOR 5: Accessibility		4.07 (1.06)	0.84	0.52
The general signage to the airport	0.866			
The parking facilities	0.707			
The transport methods available to get to the airport	0.661			
Signage within the airport (such as flight times & information)	0.506			
Quality of service receivable from car rental outlets	0.471			
STATISTICS:		•		
Total variance explained	67.5 %			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.94			

Source: Data obtained from statistical analysis

The five factors presented in Table 3 accounted for 67.5% of the total variance which indicates that the number of factors extracted is representative of the original data set (Pallant 2010:199). The Kaiser-Meyer-Olkin measure of sampling adequacy of 0.94 also indicates that patterns of correlation are relatively compact and yield distinct and reliable factors (Field 2009:647). Bartlett's test of sphericity also reached statistical significance (p < 0.001), supporting the factorability of the correlation matrix (Field 2009:660; Pallant 2010:197).

The factor scores were calculated as the average of all items contributing to a specific factor so that they could be interpreted on the original five-point Likert Scale of measurement that ranged from 1 (not important at all) to 5 (extremely important).

All the factors had relatively high reliability coefficients, ranging from 0.84 (the lowest) to 0.93 (the highest). The average inter-item correlation coefficients with values between 0.54 and 0.62 also imply internal consistency for all factors. Moreover, all items loaded on a factor

with a loading greater than 0.3 and the relatively high factor loadings indicate a reasonably high correlation between the factors and their component items (Pallant 2010:193).

Accessibility (Factor 5) and Passenger service (Factor 4) were indicated as the most important by the respondents, and accounted for the highest mean values of 4.07 and 4.02 respectively. This was followed by Physical comfort (3.95) and Visitor facilities (3.70). Amenities obtained the lowest mean value (3.49) and was regarded as the least important factor contributing towards the visitors' airport experience.

#### 4.2.2 Identifying the key success factors from visitor motivations

Furthermore, two key success factors were identified when performing the principle axis factor analysis using an Oblimin rotation with the Kaiser Normalisation on visitor motivation constructs. The two key success factors were identified from the factor analysis and were labelled according to similar characteristics (Factor 1 = Psychological experience and Factor 2 = Travel experience). The results of this factor analysis are indicated in Table 4.

The factors presented in Table 4 accounted for 77.97% of the total variance which indicates that the number of factors extracted is representative of original data set (Pallant 2010:199).

The Kaiser-Meyer-Olkin measures of sampling adequacy of 0.97 indicate that the patterns of the correlation are relatively compact and yield distinct and reliable factors (Field 2009:647).

Barlett's test of Sphericity also reached statistical significance (p < 0.001), supporting the factorability of the correlation matrix (Field 2009:660; Pallant 2010:197).

TABLE 4: Factor analysis results identifying key success factors from visitor motivations

Key success factors	Factor loading	Mean value (standard deviation)	Reliability coefficient (Cronbach Alpha)	Inter-item correlation
FACTOR 1: Psychological experience		2.61 (1.193)	0.98	0.79
To have my curiosity aroused	0.986			
To search for answers to questions I might have	0.980			
To have my interest captured	0.950			
To feel involved in what is going on around me	0.914			
To buy souvenirs that I believe my friends and family will enjoy	0.867			
To feel in control of what is going on around me	0.892			

Key success factors	Factor loading	Mean value (standard deviation)	Reliability coefficient (Cronbach Alpha)	Inter-item correlation
To reflect on past memories	0.883			
To strengthen my relationship with my family/friends/companion	0.818			
To learn new things	0.815			
To meet people with similar values and interests	0.801			
To experience local cuisine	0.799			
To indulge in activities offered by the airport	0.764			
To be entertained	0.748			
To get away from everyday pressures/stress	0.528			
FACTOR 2: Travel experience		2.70 (1.116)	0.92	0.65
To experience the special atmosphere of a 'travel' destination	0.797			
The Gautrain gave me easy access to visit this airport	0.771			
To expose my children to the airport and teach them about airplanes	0.680			
To enjoy a change of pace from work	0.593			
The airport experience is something new to me	0.524			
STATISTICS:				
Total variance explained	77.97%			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.97			

Source: Data obtained from statistical analysis

The factor scores were calculated as the average of all items contributing to a specific factor so that they could be interpreted on the original five-point Likert Scale of measurement that ranged from 1 (not important at all) to 5 (extremely important). *Travel experience* (Factor 2) scored the highest mean value of 2.70 followed by *Psychological experience* (Factor 1) with a mean value of 2.61.

This indicates that *Travel experience* factor was the biggest contributor to visitor experiences at the airport. All factors had relatively high reliability coefficients, ranging from 0.92 (the lowest) to 0.98 (the highest). The average inter-item correlation coefficient, with values between 0.65 and 0.79, implies internal consistency for all factors.

All items loaded on a factor with a loading greater than 0.3 and the relatively high factor loadings indicate a reasonably high correlation between the factors and their component items (Palant, 2010:193).

# 4.3 Correlation tests between visitors' demographic profile and the KSF's

The Spearman's Rho non-parametric test was used to measure the significance of association between selected demographic profile characteristics and the seven KSF's. Table 5 indicates Spearman's correlation test results.

From the seven key success factors, three KSFs showed no correlations (p > 0.001) compared against the demographic profile characteristics. These factors are: Psychological experience, Travel experience and Amenities. Conversely, the remaining factors namely: Physical comfort, Visitor facilities, Passenger services and Accessibility showed significant correlations. The results revealed that gender (where 1 = male and 2 = female) had significant correlations with Physical comfort (-0.175) and Accessibility (-0.134), as indicated in Table 5.

Female respondents rated Physical comfort and Accessibility higher than their male counterparts. Visitor facilities showed a significant correlation with Number of return trips (0.135), which suggests that the visitor facilities are more important for regular travellers since they return to the airport.

Lastly, Passenger services showed a significant correlation with Education, with a value of 0.127. This indicates that the higher the level of education of an airport visitor, the higher their expectations would be of the quality of passenger services at the airport.

TABLE 5: Spearman's Rho  $(r_s)$  correlation between the key success factors and the visitor profile

Spearman Rho test (r <sub>s</sub> )	Psych exp	Travel exp	Physical comfort	Amen- ities	Visitor facilities	Pax services	Access- ability
Number of	0.047	0.049	0.070	0.034	0.135**	0.029	-0.038
return trips							
No of hours	-0.007	-0.044	0.053	0.056	-0.043	0.042	0.068
Age	-0.010	-0.004	0.062	0.044	0.062	0.084	0.001
Gender	0.029	-0.006	-0.175**	-0.096 <sup>*</sup>	-0.023	-0.102 <sup>*</sup>	-0.134**
Nationality	-0.010	0.042	0.040	-0.082	0.120 <sup>*</sup>	0.020	-0.045
Education	-0.041	-0.050	0.056	0.092*	-0.025	0.127**	0.114*
Occupation	0.005	-0.004	0.025	0.080	0.015	0.090*	0.073

Travel party	0.050	-0.002	-0.069	0.033	0.002	-0.037	-0.055
size							

#### Note:

Source: Data obtained from statistical analysis

## 5. FINDINGS AND IMPLICATIONS

The purpose of this research was threefold, as indicated earlier: *firstly,* to identify the KSF's influencing visitors' experiences (based on airport attributes and visitors' motivation to be at the airport); *secondly,* to compile a demographic profile; and *thirdly,* to determine whether the KSF's correlate with the demographic profile characteristics of airport visitors. Based on the results, this research yielded the following three findings and may suggest a number of implications:

(i) The first finding answers the first objective mentioned above, where five key success factors were identified based on visitors' experiences regarding airport attributes. These are, in order of importance: *Accessibility; Passenger services, Physical comfort; Visitor facilities and Amenities.* These KSF confirm previous research, but can also be categorised as new and airport specific. The KSFs *Accessibility, Physical comfort and Visitor facilities* support previous research findings by Engelbrecht (2011); Erasmus (2011); Kruger (2006); Manners (2011); Marais (2009) and Van der Westhuizen (2003), while *Passenger services* and *Amenities* are identified as airport specific.

Visitors' experiences are first and foremost influenced by how easy they find it to move around (Accessibility). This can be described as visitors' primary experience needs at an international airport.

This finding is particularly important since airport environments are elaborate buildings and way-finding, especially for foreign and first-time visitors, is important in an unfamiliar environment. Airport management should therefore ensure that the signage to and within the airport are well maintained with a view to ensure that visitors find it simple and easy to move around within the airport.

Passenger services was identified as the second most important KSF. As illustrated in Figure 1, airports have primary and secondary functions that are offered to visitors, and according to visitors' perceptions, the primary functions (check-in, waiting areas, security

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

and customs) of an international airport are more important in influencing visitors' experiences. Consequently, the secondary services offered by the airport (accept for accessibility) are not a major indicator that influences visitors' experiences, because visitors are more influenced by the quality and efficiency of service received from the core services.

Physical comfort was identified as the third most important factor. Indeed, visitors indicated that they arrive at least two or more hours prior to scheduled departure, and they therefore spend quite a few long hours at the airport. Being comfortable is thus important to visitors. Since this factor scored a higher mean value than *Visitor facilities*, it shows that visitors' experiences are more influenced by comfort (such as comfortable chairs in waiting areas) than by access to shopping and entertainment at the airport.

Visitor facilities and Amenities were identified as the least important in influencing visitor's experiences; moreover, these factors are categorised as part of the secondary services that airports offer.

Visitors' airport experiences are primarily based on basic needs such as finding one's way, moving from landside to airside without too much hassle, and being comfortable. Only once these basic needs have been satisfied, visitors will be attracted by the visitor facilities and amenities offered. This research supports management literature that emphasise the importance of first addressing the primary (basic) services that an organisation offers in order to ensure that visitors, in this case, have a pleasant airport experience at.

It is therefore evident that although airports have been transformed into ultra-modern shopping and entertainment centres, visitors are actually seeking a true airport experience based on efficiency and effectiveness of basic airport services. Consequently this should be the focus of airport management.

(ii) The second finding revealed two additional different and very specific motives for visiting an international airport, namely *Travel experience* and *Psychological experience*.

Based on the literature review presented above, the latter differs significantly from traditional visitor motivation research that has revealed prominent motivations such as escape, novelty, relaxation, adventure, education and enhancement of relationships. Since 78% of the respondents at the airport were travellers compared to 22% of visitors (meeters and greeters) one can draw a parallel with the factor *Travel experience* and what visitors perceive as important.

The former confirms the summary of KSF's in Table 1 that demonstrated that organisations should turn their focus towards their core and basic services, which in this case entail the provision of services that assist with the transportation of visitors.

The KSF *Psychological experience* scored a very low mean value of 2.61 which means that visitors are not intrigued by a visit to the airport and do not undertake such a visit for reasons other than for travelling or meeting and greeting a friend or family member.

This finding is rather important to airport management, because attracting visitors to the airport for reasons other than the ones mentioned above could result in additional revenue for the airport. Therefore, one can propose that management should explore a supplementary marketing strategy to attract visitors to for reasons of leisure and education.

(iii) The third finding flows from the former two, and entails that all seven key success factors can be categorised into tangible experiences (*Physical comfort; Amenities; Visitor facilities and Accessibility*) and intangible experiences (*Passenger services; Psychological experience* and *Travel experience*). Based on the mean values of these factors, visitors' airport experiences are mainly influenced by the tangible experience factors. It is therefore proposed that airport management should focus on the tangible aspects of the airport experience for visitors in order to increase satisfaction amongst airport visitors. Furthermore, this KSF's are unique for an airport environment and it can be concluded that KSFs would likely differ from industry to industry.

#### 6. CONCLUSION

The primary aim of this research was to determine the key success factors (KSF) that influence visitors' experience at an international airport in South Africa. Furthermore, this study also sought to identify the demographic profile of visitors and to establish whether there is a relationship between the demographic profile and the key success factors.

Based on the results of this study, it is clear that airports have specific KSFs that should be identified by management in order to offer memorable airport experiences to visitors. The seven KSFs that an airport should incorporate into their strategic management plan are (in order of importance) the improvement of *Accessibility; Passenger services, Physical comfort; Visitor facilities; Amenities; Psychological experience and Travel experience.* The above confirms that currently visitors are more likely to seek experiences rather than products.

The KSFs can assist airport management to influence and orchestrate visitors' experiences by means of proper facilitation of the set of interactions between their service offerings and

visitors. It is evident that every tourism operation has its own set of unique product-specific attributes and that the KSFs for an arts festival, music festival, hotel or conference centre will not necessarily be applicable to an airport.

Investigating the KSFs that influence visitors' airport experiences could result in airport management being more customer-focussed; visitors having higher levels of satisfaction; effective service quality management; increased airport revenue; and, lastly, it can provide guidelines for strategic management and future developments.

This research furthermore established a general demographic profile of visitors and the research has shown that although visitors at come from a variety of background and cultures, they have similar airport experiences.

Following the results of this study, it is evident that airport management should be knowledgeable with regard to which airport factors influence visitors' experiences.

It is recommended that this study should be repeated on an annual basis in order to ensure that when visitors' experiences are shifting, airport management can address the issue. Future studies should also aim to include all the international airports in South Africa, with a view to create a reliable measuring instrument for future research purposes.

This research made the following valuable contributions:

- (i) this was the first time that KSFs for a complex environment such as an international airport in South Africa has been researched;
- (ii) this research provides valuable insights into the management of airports, and
- (iii) it emerged clearly that airport management should be knowledgeable concerning what visitors regard as important for a memorable airport experience and then endeavour to provide it.

#### **REFERENCES**

**APPEL CP.** 2010. Critical success factors in managing hotels in South Africa. Potchefstroom: North-West University, Potchefstroom Campus. (Mini-dissertation - Hons BA.)

**AVCIKURT C, ALTAY H & ILBAN MO.** 2011. Critical success factors for small hotel businesses in Turkey: an exploratory study. *Cornell Hospitality Quarterly* 52(2):153-164.

**BROTHERTON B.** 2004. Critical success factors in UK corporate hotels. Service Industries Journal 24(3):19-42.

**BULLEN CV & ROCKART JF.** 1986. A primer on critical success factors. (*In* Bullen CV & Rockart JF *eds*. The rise of managerial computing: the best of the center for information system research. Homewood, IL.: Dow Jones-Irwin. pp. 383-423.)

**CARALLI RA.** 2004. The critical success factor method: establishing a foundation for enterprise security management. Pittsburgh, PA: Carnegie Mellon University (Software Engineering Institute).

**CLARK LA & WATSON D.** 1995. Constructing validity: basic issues in objective scale development. *Psychological Assessment* 7(3):309-319.

**COGHLAN A & PEARCE P.** 2010. Tracking affective components of satisfaction. *Tourism and Hospitality Research* 10:42-58.

**CROMPTON JL.** 1979. Motives for pleasure vacation. *Annals of Tourism Research* 1(4):408-424.

**CUTLER SQ & CARMICHAEL BA.** 2010. The dimension of the tourist experience. (*In* Morgan M, Lugosi P & Ritchie JRB *eds*. The tourism and leisure experience: consumer and managerial perspectives, v. 44. Bristol, UK: Channel View. pp. 3-26.)

**DE WITT L.** 2006. Key success factors for managing special events: the case of wedding tourism. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**DEVESA M LAGUNA M & PALACIOS A.** 2010. The role of motivation in visitor satisfaction: empirical evidence in rural tourism. *Tourism Management* 31(4):547-552.

**ENGELBRECHT WH.** 2011. Critical success factors for managing the visitor experience at the Kruger National Park. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**ERASMUS LJ.** 2011. Key success factors in managing the visitors' experience at the Klein Karoo National Arts Festival. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**FARAHANI AF & TÖRMÄ E.** 2010. Assessment of customers' service quality expectations: testing the 'hierarchical structure for airport service quality expectations' in a Swedish context. Umeå, CH: Umeå University, Umeå School of Business.

**FERNANDES E & PACHECO RR.** 2010. A quality approach to airport management. *Quality & Quantity* 44(3):551-564.

FIELD A. 2009. Discovering statistics using SPSS. 3rd ed. London, UK: Sage.

**FINNEY S & CORBETT M.** 2007. ERP implementation: a compilation and analysis of critical success factors. *Business Process Management* 13(3):319-347.

**FLUGHAFEN ZÜRICH AG.** 2010. Airport attractions and Swiss tours. [Internet: http://www.zurich-airport.com/desktopdefault.aspx/tabid-29/; downloaded on 2013-10-09.]

**FODNESS D & MURRAY B.** 2007. Passengers' expectations of airport service quality. *Journal of Services Marketing* 21(7):492-506.

**FREATHY P & O'CONNELL F.** 2000. Market segmentation in the European airport sector. *Marketing Intelligence & Planning* 18(3):102-111.

**FUERST F, GROSS S & KLOSE U.** 2011. The sky is the limit? The determinants and constraints of European airports commercial revenues. *Journal of Air Transport Management* 17(5):278-283.

**GAO L, SCOTT N, DING P & COOPER C.** 2012. Tourist experience development: design, attributes, perceived experiences and customer value. (*In* Tsiotsou RH & Goldsmith RE *eds.* Strategic marketing in tourism services. Bingley, UK: Emerald Group. pp. 215-230.)

**HOLBROOK MB.** 2000. The millennial consumer in the texts of our times: experience and entertainment. *Journal of Macro Marketing* 20:178-192.

**IIAC see INCHEON INTERNATIONAL AIRPORT CORPORATION** 

**INCHEON INTERNATIONAL AIRPORT CORPORATION.** 2013. Leisure and entertainment. [Internet: http://www.airport.kr/airport/facility/efalicityInfo.iia?carld=9&shopGubun=01; downloaded on 2013-10-09.]

**JARACH D.** 2001. The evolution of airport management practices: towards a multi-point, multi-service, marketing-driven firm. *Journal of Air Transport Management* 7(2):119-125.

**KIM J.** 2009. Development of a scale to measure memorable tourism experiences. Bloomington, IN: Indiana University. (Thesis - PhD.)

**KINLEY TR, FORNEY JA & KIM Y.** 2012. Travel motivation as a determinant of shopping venue. *International Journal of Culture, Tourism and Hospitality Research* 6(3):266-278.

**KRUGER M & SAAYMAN M.** 2010. Travel motivation of tourists to Kruger and Tsitsikamma National Parks: a comparative study. *South African Journal of Wildlife Research* 40(1):93-102.

**KRUGER ME.** 2006. Key success factors in managing a conference centre in South Africa. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**LEASK A.** 2010. Progress in visitor attraction research: towards more effective management. *Tourism Management* 31(2):155-166.

**LEE MS, SAN YH & HSU YR.** 2011. A study of the key success factors of the ecotourism industry in Taiwan. *African Journal of Business Management* 5(2):627-640.

**MAGRI AA & ALVES CJP.** 2005. Passenger terminals at Brazilian airports: an evaluation of quality. *Journal of the Brazilian Air Transport Research Society* 1:9-17.

**MANNERS B.** 2011. The critical success factors for managing the visitor experience at a major musical event. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**MARAIS M.** 2009. Key success factors in managing the Wacky Wine Festival. Potchefstroom: North-West University. Potchefstroom Campus. (Dissertation - MCom.)

**MOTLANTHE K.** 2013. 69<sup>th</sup> International Air Transport Association's annual general meeting, and the Air Transport Summit. Cape Town. 3 June 2013.

**OH H, FIORE A & JEOUNG M.** 2007. Measuring experience economy concepts: tourism applications. *Journal of Travel Research* 46:119-132.

**PALLANT J.** 2010. SPSS survival manual: a step-by-step guide to data analysis using SPSS Version 15. 4<sup>th</sup> ed. New York, NY: McGraw-Hill.

**PATERNOSTER J.** 2008. Excellent airport customer service meets successful branding strategy. *Airport Management* 2(3):218-226.

**PEARCE P, FILEP S & ROSS G.** 2011. Tourists, tourism and the good life. New York, NY: Taylor & Francis.

**PENEDA MJA, REIS VD & MACARIO MR.** 2011. Critical factors for development of airport cities. *Journal of the Transportation Research Board* 2214:1-9.

**PINE BJ & GILMORE JH.** 1998. Welcome to the experience economy. *Harvard Business Review* 76(4):95-106, Jul/Aug.

**POPOVIC V, KRAAL BJ & KIRK PJ.** 2010. Towards airport passenger experience models. (*In* Proceedings of the 7<sup>th</sup> International Conference on Design & Emotion, 4-7 October 2010, Spertus Institute, Chicago, IL. pp. 2827-2837.)

**PULLMAN ME & GROSS MA.** 2004. Ability of experience design elements to elict emotions and loyalty behaviors. *Decision Sciences* 35(3):551-578.

**SEYANONT A.** 2012. Passengers' perspective toward airport service quality at Suvarnabhumi International Airport. *Journal of Society for Transport and Traffic Studies* 3(3):32-41.

**SKYTRAX.** 2013. World's top 100 airports. [Internet: http://www.worldairportawards.com/Awards\_2013/ top100. htm; downloaded on 2013-11-13.]

**SLABBERT E & SAAYMAN M.** 2003. Guesthouse management in South Africa. 2<sup>nd</sup> ed. Potchefstroom: Institute for Tourism and Leisure Studies.

**SNEPENGER D, KING J, MARSHALL E & UYSAL M.** 2006. Modeling Iso-Ahola's motivation theory in the tourism context. *Journal of Travel Research* 45(2):140-149.

**SOLOMON M.** 2004. Consumer behaviour: buying, having and being. New York, NY: Pearson Education.

**TORRES E, DOMINGUES JS, VALDE L & AZA R.** 2006. Passenger waiting time in an airport and expenditure carried out in the commercial area. *Journal of Air Transport Management* 11(6):363-367.

**VAN DER WESTHUIZEN T.** 2003. Key success factors for developing and managing a guesthouse. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**WALI AA, DESHMUKH SG & GUPTA AD.** 2003. Critical success factors of TQM: a select study of Indian organisations. *Production Planning and Control* 14(1):3-14.

**WILLIAMS K.** 2011. Key success factors in managing the visitor experience at the Cape Town International Jazz Festival. Potchefstroom: North-West University, Potchefstroom Campus. (Dissertation - MCom.)

**YEH C & KUO Y.** 2003. Evaluating passenger services of Asia-Pacific international airports. *Logistics and Transportation Review* 39(1):35-48.

**ZEHRER A.** 2009. Service experience and service design: concepts and application in tourism SMEs. *Managing Service Quality* 19(3):332-349.

**ZOMERDIJK LG & VOSS CA.** 2010. Service design for experience-centric services. *Journal of Service Research* 13(1):67-82.