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# Managing tourists' needs and expectations: An empirical analysis of the Egyptian airline sector

## Abstract

*An in-depth review of related literature has revealed that a majority of travel and tourism researchers tend to define quality as meeting tourists' needs and expectations. Since tourists (Passengers') expectations of service quality may vary at different stages in the service process, it has been strongly argued that in practice, most airlines measure passenger perceptions of their service offerings in order to evaluate and understand the airline's performance level without clear knowledge of tourists' expectations for service in each stage. Consequently, lack of understanding or misunderstanding such expectations could pose serious problems in resource allocation decisions. On the one hand, this study therefore attempts to develop a new service quality management instrument called TNE-Matrix, to be used as a futuristic and a predictive airline strategic planning tool, which integrate airline service bundle planning, service delivery process enhancement and service process control. The results from the survey of the Egyptian airline frontline managers and employees suggest that TNE-Matrix is highly valued as a predictive and a daily management tool, used to empower frontline employees to act on information received regarding the passengers' needs and expectations. On the other hand, it uses SERVQUAL model to measure perceived airline service quality from the passengers' viewpoint. The results of both steps indicated that enhancing the communication process between tourists and the airline frontline staff, and particularly flight attendants, has been highlighted as a key benefit of using the TNE-Matrix in the services delivery process and consequently in managing tourists' needs and expectations proactively.*

### Keywords:

*tourists' needs and expectations; airline service quality; SERVQUAL; TNE-Matrix; Egypt*

## Introduction

It has been suggested that delivering superior service quality is a prerequisite for success and survival in today's competitive business environment. In the airline industry understanding what passengers need and expect is essential to providing desired service quality (Gilbert & Wong, 2003) and consequently to understand the airline's perform-

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ance levels (Chen & Chang, 2005). This research paper focuses on the suggested relationship between passenger (tourist) expectations and airline service quality, and also demonstrates how airlines can utilize different customers' needs and expectations matrixes based on (Moran, 1998) daily management matrixes. The expectations construct has been presented as playing a key role in consumer evaluation of desired service quality (Parasuraman, Zeithaml, & Berry, 1985, 1988, 1991a; Grönroos, 1994; Tsaor, Chang, & Yeh, 2002; Gilbert & Wong, 2003; Chen & Chang, 2005). Moreover, according to Gilbert & Wong (2003) the meaning of needs and expectations in the service quality literature is similar to the ideal standard in the consumer satisfaction/dissatisfaction literature. In a widely cited study, Parasuraman et al. (1985) developed a gap framework that defined service quality as the degree and direction of discrepancy between customers' expectations and perceptions. Five gaps were identified when measuring overall service quality. Among these gaps, the first one arises when the customers' expectations for service and the management's perceptions of these expectations differ. Tsaor et al. (2000) have discussed that, since service industry is characterized by intangibility, perishability, inseparability and heterogeneity, it makes more difficult to measure service quality. In addition, based on a review of published research on service quality in airline sector, they concluded that most often statistical methods are employed. Furthermore, they argued that 5-point of Likert scales was the major way to evaluate service quality in the past.

Therefore, this research paper advocated the TNE-Matrix to be applied in the field of airline management, derived from the daily management matrixes, and systematic methods that address the customer requirements and have been applied to the field of management science, like the *Supplier-Customer Matrix* developed by Moran (1991), "QFD" technique *Quality Function Deployment Systematic Method*, also known as 'the house of quality', which started for the first time in Mitsubishi organization at the Kobe shipyards, Japan in 1972 (Williams & Buswell, 2003). Specifically, the purpose of this study is to explore needs and expectations of inbound tourists seen as airline passengers, and see how these needs and expectations are fulfilled during the flight. From that it is possible to (a) explore how tourist satisfaction can be measured in the airline sector and thereby contribute to improvement work in that sector, (b) to critically evaluate the role of using "TNE-Matrix", in delivering tourist service quality, and how it can be applied in airline companies in order to meet tourists' needs and expectations. In order to attain these aims, the paper starts with evaluating the literature on service quality and its measurement, then provides a wide-ranging framework for understanding the airline passenger needs & expectations as well as the passengers' perceptions followed by a review and assessment of the underpinning theories of service quality and service management literature in terms of tourists' needs and expectations. Then, a methodology was developed and tested on the Egyptian airline companies.

## Conceptualization of tourists' needs, expectations, and airline service quality

### NEEDS AND EXPECTATIONS APPROACH

Understanding, creating, communicating, and delivering passenger value and satisfaction are at the very heart of modern marketing strategies and practices. In service industries such as the airline industry, the distinctive features of services require that managers, particularly frontline managers, understand customer needs and expectations, and keep promises (Zeithaml & Bitner, 1996; Aksoy, Atilgan, & Akinci, 2003). However, most companies (airlines) do not recognize the importance of this approach. Passengers' expectations are among the factors influencing the service decisions of airlines. Empirical evidence has indicated that success in customer-focused service

development needs, expectations, and preferences (Gustaffson, Ekdahl & Edvardsson, 1999) and that marketing strategies implemented by airlines to expand internationally must take into account different expectations, perceptions of passengers and their needs (Sultan & Simpson, 2000).

#### **TOURISTS' NEEDS, EXPECTATIONS, AND SATISFACTION**

Literature related to travel; tourism; and airline management showed that there should be a casual link between quality of a tourism supplier's performance (airline), level of tourist satisfaction, and the organization's success. Higher quality of performance and levels of satisfaction are perceived to result in increased loyalty and future flights greater tolerance of price increases, and an enhanced reputation. (Baker & Crompton, 2000) stated that conceptualizations of the relationship among the constructs of service quality, expectations, and satisfaction have evolved independently in the tourism and marketing literature.

A detailed discussion of the definitions and the nature of these three constructs, and how they differ in the two literatures; has been provided by Crompton & Love (1995). Based on (Paarasuraman, Zeithaml, & Berry, 1991b) the lack of consensus on conceptualization of the three constructs has resulted in confusion to the point where the three constructs are frequently used interchangeably. Therefore, Manning (1986) did not differentiate between quality and satisfaction when he concludes, "The principal measure of quality in outdoor recreation has long been defined by visitor satisfaction". Recently, Baker & Crompton (2000) stated that performance quality is conceptualized as a measure of a provider's output, whereas level of satisfaction is concerned with measuring a tourist's outcome. All else equal, higher quality performance in facility provision, programming, and service are likely to result in a higher level of tourist (passenger) satisfaction.

#### **SERVICE QUALITY AND NEEDS**

Chen & Chang (2005) noted that the concept of quality originates from the manufacturing sector where quality control has been heavily researched. For instance, in the Japanese philosophy, "quality is zero defects-doing it right the first time" (Parasuraman et al., 1985). Past studies have defined quality as value (Feigenbaum, 1951); fitness for use (Juran, Gryna & Bingham, 1974; Juran, & Gryna, 1988), conformance to requirements (Crosby, 1979); meeting customers' expectations (Parasuraman et al., 1985) and the totality of the features and characteristics of a product/service that bear on its ability to satisfy stated or implied needs (ANSI/ASQC, 1987). Moreover, Chiu & Lin (2004) stated that the above definitions of quality fail to address the characteristics of services and the increased importance of the service sector. The current most pervasive definition of quality is the extent to which a product/service meets a customer's expectations (Reeves & Bednar, 1994). Chiu & Lin (2004) also highlighted that Juran & Gryna (1988) redefined the definition of quality from 'fitness for use' to 'meeting customers' needs' and 'freedom from deficiencies'. Therefore, it is highly argued that airline business must understand what passengers really need and then deliver its service accordingly.

#### **AIRLINE SERVICE QUALITY IN TERMS OF PASSENGERS' NEEDS AND EXPECTATIONS**

Airlines generally seeking service quality to achieve three goals: **(a)** to satisfy customers' needs and requirements, **(b)** to meet the company's corporate objectives, or in other words to satisfy shareholders by producing profits and **(c)** to out-perform the competi-

tors through product differentiation (Alamdari, 1999). Recently, Chen & Chang (2005) noted that a number of studies have addressed service quality issues in the airline industry in terms of passengers' needs and expectations. However, there are also some other approaches. For example, Elliott & Roach (1993) used on time-performance, baggage handling, food quality, seat comfort, check-in service, and in-flight service as the criteria for evaluating airline service quality. Tsaor et al. (2002) proposed a fuzzy multi-criteria model to evaluate service quality of domestic passenger airlines in Taiwan. Fifteen service attributes represented by five factors (on-board comfort, airline employees, reliability of service, convenience of service, and handling of abnormal conditions) were included in customer surveys. The evaluation outcomes helped airlines identify their internal and external competitive advantages relative to their competitors. Aksoy et al. (2003) explored the differences in consumer expectations of airline services between passengers on the Turkish domestic airline and those on four foreign airlines on the same routes. They also found that the underlying dimensions of service expectations varied between the two groups, although there was some overlap in the results. Gilbert & Wong (2003) developed a 26-item questionnaire incorporating reliability, assurance, facilities, employees, flight patterns, customization, and responsiveness dimensions to measure and compare the differences in passengers' expectations of the desired airline service quality. Significant differences were found among passengers from different nationality/regional origin groups and among passengers who travel for different purposes. The findings also showed that the passengers consistently ranked assurance as the most important service dimension. Chen & Chang (2005) utilized importance-performance analysis (IPA) to construct airline service attribute evaluation maps to identify areas for improvement in a Taiwanese airline. Results revealed that these gaps did exist where passengers were more concerned about the responsiveness and assurance dimensions from airline frontline.

Chiu & Lin (2004) argued that, although many theories about describing the contents of human needs have been developed, Maslow's hierarchical theory of needs is still regarded as one of the most comprehensive and widely used need theory, for being simple and more systematic than others (Cunningham & Wakefield, 1975). Moreover, as Chiu & Lin (2004) illustrated, if we neglect the different viewpoints about hierarchical problems between Adlerfer's ERG and Maslow's theory and focus on the categories of needs of the two theories, they provide similar contents in delineating human needs. However, since the contents of needs in Adlerfer's ERG theory are primarily derived from Maslow's theory, this study utilizes Maslow's seven categories of needs as illustrated in Table 1, to represent the dimensions of passenger's (tourist's) needs and developed airline service quality contents in accordance with these needs.

Table 1

**MASLOW'S SEVEN CATEGORIES AND THEIR RELATED AIRLINE SERVICE QUALITY**

| Categories of tourist' needs as a passenger | Contents of airline service quality              |
|---|--|
| Physiological needs                         | Comfort, convenience, responsiveness             |
| Safety needs                                | Assurance, reliability, consistency, secrecy     |
| Belongingness and love needs                | Relation, approval, empathy                      |
| Esteem needs                                | Self-esteem, superiority, politeness, acceptance |
| Self-actualization needs                    | Growth, show, care of social fairs               |
| Knowledge & understanding needs             | Innovation, learning                             |
| Aesthetic needs                             | Appreciation of nature, arts, and literature     |

Source: based on Chiu & Lin (2004)

## **AIRLINE SERVICES**

According to Chen & Chang (2005), airline service is a chain of services in which the entire service delivery is divided into a series of processes. Passengers' expectations of service quality may vary at different stages in the service process. Considering the nature of air transport, they divided the air travel services into two stages: airline ground services and in-flight services. Ground services stage include information gathering, reservations and ticket purchases, airport standby and check-in procedures, baggage handling services, waiting lounges and airport stores, stopover services, interactive signs for guiding passengers, air cargo services, and post-flight services. In-flight services stage include on board security services, on board comfort preparations, in-flight entertainment materials and programs, in-flight telecommunications such as internet /e-mail/fax/phone facilities, in-flight snack service, seat facilities, internal cleaning services, cabin crew and flight attendants responses, and taking off and landing procedures.

Tsaur et al. (2000) suggested that airline service also consists of the assistance associated with disruptions such as lost-baggage handling and service for delayed passengers. Consequently, service quality can be regarded as a composite of various attributes. It not only consists of tangible attributes, but also intangible/subjective attributes such as safety, comfort, which are difficult to measure accurately. Different individual passengers usually have wide range of perceptions toward quality service, depending on their preference structures and roles in process (service suppliers/receivers). Moreover, since airline services contain intangibility, perishability, inseparability and heterogeneity, it makes passengers more difficult to measure, perceive and expect airline service quality precisely. Therefore, TNE-matrix has been suggested to overcome this problem through allowing the airline management to find out the possible airline' perceptions of passengers' expectations proactively to satisfy their needs and expectations.

## **AIRLINE'S PERCEPTIONS OF PASSENGERS' EXPECTATIONS**

A number of studies have addressed Airline's perceptions issues in the airline industry. Hubbert, Sehorn & Brown (1995) found a significant gap between the consumers' expectations of service and frontline service personnel's perceptions of these expectations in service encounters. Therefore, the role of the frontline employees cannot be overemphasized in service organizations such as airline companies. Frederick & Mukesh (2000) developed a conceptual model known as the "Internal Service Quality Model", designed to evaluate the dimensions, and their relationships, that determine service quality among internal customers (airline front-line staff) and internal suppliers (airline support staff) within a large service organization - Singapore Airlines. The results suggest that the airline perceptions and expectations of internal customers and internal suppliers play a major role in recognizing the level of service quality perceived. As frontline employees may face hundreds of customers each day and each customer's expectations may differ, it is possible that they may also misjudge exactly what most customers expect (Luk & Layton, 2002). Similarly, Chen & Chang (2005) reported that even airline frontline managers that interacted with passengers regularly might misjudge the customers' expectations. Moreover, the gap between the passengers' expectations and airline frontline managers' perceptions of these expectations was much greater than that between the passengers' expectations and frontline employees' perceptions of the passengers' expectations. This highlights the importance of establishing upward communication that gives more emphasis on employees-to-managers' communication (Parasuraman et al., 1988). Therefore, this study developed TNE-Matrix to firstly, improve the cross-functional communication among the internal airline service suppliers and secondly, through it, to help an airline frontline teamwork to clearly and

proactively perceive/communicate with the passenger needs, expectations and desired airline service attributes.

## SERVQUAL versus TNE Matrix compared

### SERVQUAL

SERVQUAL, meaning SERVICE QUALity, is an often-used model for measuring quality dimensions. SERVQUAL has been promoted by the three American researchers - Zeithaml, Parasuraman and Berry, and is based on five general quality dimensions and the Gap Model. The five dimensions are reliability, responsiveness, assurance, empathy and tangibles. Another, similar model often called SERVPERF, an abbreviation of SERVICE PERFORMANCE, was presented by Cronin & Taylor (1992). In this model only the customer's experience is measured and not, as in SERVQUAL, the expectations as well (Kvist, 2005). The model has also attracted some criticism. Gilbert & Wong (2003) pointed out that Teas (1993a, b) found explanations of the "desires and wants" of consumers as vague and has questioned respondents' interpretation of expectations battery in the SERVQUAL instrument. Moreover, Teas believed that respondents might be using any one of the following six interpretations:

- **Service attribute importance:** Customers may respond by rating the expectation statements according to the importance of each.
- **Forecasted performance:** Customers may respond by using the scale to predict the performance they would expect.
- **Ideal performance:** The optimal performance, what performance "can be".
- **Deserved performance:** The performance level customers, in the light of their investment, feel performance "should be".
- **Equitable performance:** The level of performance customers feel they ought to receive given a perceived set of costs.
- **Minimum tolerable performance:** What performance "must be"?

Each of these interpretations is somewhat different, and Teas contends that a considerable percentage of the variance of SERVQUAL expectations measure can be explained by difference in respondents' interpretations. Boulding, Kalra, Staelin, & Zeithaml (1993) also identified three types of expectations among respondents' interpretations as follows: (1)-The will expectation, (2)-Should expectation, and (3)-Ideal expectation.

Furthermore, many researchers advocated that although SERVQUAL has been widely used to measure service quality across industries no two providers of service are exactly alike. Therefore, the authors of this study concluded that an adaptation of SERVQUAL is needed and it should serve only as a framework for this research, and this viewpoint is partly in line with Gilbert & Wong (2003). The instrument is viewed as a basic skeleton that requires modification to fit the specific Egyptian airline companies' situation and their passengers' cultural backgrounds.

### TNE-MATRIX

Chen & Chang (2005) reported that for airline industry practitioners, it is common to measure satisfaction levels for service attributes only (i.e. performance), but fail to address the importance of service attributes to the passengers' needs. Furthermore, passengers' attitudes toward airline service quality depend upon the process in which passengers compare between the actual perceived services and the desired, wanted and expected standards of airline services. Part of the confusion is attributable, as many studies have pointed out, to the fact that assessing tourist expectations is not a static exercise as tourists are becoming increasingly sensitive to service quality. However, not

all airline service dimensions are equally important to all tourists, as no two tourists are precisely alike, especially when demographics, purposes of traveling, and ethnic backgrounds are considered. Therefore, this study developed the TNE-Matrix as presented in Table 2, as a predictive instrument to: a) identify relative importance of the attributes associated with an airline service from the passengers' viewpoint to reflect the importance of airline services to tourists' needs and expectations, b) to address the airline perceptions of passengers expectations and c) to overcome the existing gap between tourists' service expectations and airline perceptions of tourists' expectations.

Table 2  
**AIRLINE TOURIST NEEDS AND EXPECTATIONS MATRIX (TNE-Matrix)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>Tourist needs and expectations</b><br>→   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Process Elements<br/>           (Including airline services, operations, inspections, and decisions)</b><br>↓ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Our perception   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Their perception   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Delta (- or +)</b>  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Optimization opportunity   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Continuous improvement   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: adapted from Moran, J. (1991, 1998)

The philosophy of designing the TNE Matrix was guided by Moran's (1991) theory of the continuous quality improvement of our daily work process management efforts. Deriving from this theory and its foundations, it has been suggested that to be effective at daily "airline" management process, and consequently, to identify the passengers' needs and expectations and the airlines' perceptions as "service providers", all airline members especially the frontline managers and employees, must understand: their work process; who their passengers are; what their passengers' needs and expectations are; who their suppliers (within the airline company) and how to communicate (meet) their needs and expectations to their suppliers.

Furthermore, this study suggests that TNE-Matrix is seen as a vehicle that clearly displays the above-mentioned five items and shows how they interact to produce an airline service that could meet inbound as well outgoing as passengers' needs. It is also claimed that TNE-Matrix used as a "Fact-driven management tool", acts as a multi-parts process that helps individual or airline work teams focus on tourist-airline relationships. During this process the frontline managers and employees must reflect, itemize and quantify how well they are meeting or exceeding their passenger needs and how well their suppliers are meeting theirs. A high level description of each part of the process is described in Table 3.

The evaluation procedure of investigating how TNE-Matrix works consisted of several logical steps as shown in Table 4.

Table 3

**DESCRIPTION OF THE MULTI-PARTS PROCESS OF TNE-MATRIX**

| Process number | Process description   |
|----------------|---|
| Process 1      | Identify the passengers, who traveling as tourists.   |
| Process 2      | Itemize the airline elements.   |
| Process 3      | Specify a time horizon for delivery. (Associated with the passengers needed time).  |
| Process 4      | Assemble needs and expectations expressions using the "passenger's viewpoint".  |
| Process 5      | Prioritize the needs and expectations expressions using the "passenger's perception values"   |
| Process 6      | Compare the <b>Airline Elements</b> (Airline's perceptions of tourists' needs and expectations) / <b>Tourists' Actual Needs</b> (Importance of airline services to tourists' needs and expectations). (Apply special effort to the optimization opportunities). |
| Process 7      | Keep the TNE-matrix on public display and up-to-date.   |

Source: Developed by the authors.

Table 4

**THE LOGICAL STEPS OF ESTABLISHING TNE-MATRIX**

| Step number and name   | Purpose   | Step description  |
|--|---|---|
| Step (1)<br>Process flow mapping   | The main purpose of this step, is to help frontline staff to understand what is done within a process, in other words, what the inputs are and what the flow of the process is?   | Process elements or sequences of tasks that lead to a particular end, where every airline's frontline employees must recognize that every thing is a process.   |
| Step (2)<br>Tourist needs and expectations   | The purpose is to allow the airline frontline staff to predict the expected needs of their passengers.  | Airline frontline employees develop a list of their passenger needs and expectations. (By listing the process elements on the left vertical side and the passenger needs across the top of the matrix).   |
| Step (3)<br>Comparing airline elements/ tourists' needs                                | The principal purpose is to find out the possible airline' perceptions of passengers' expectations.   | Airline frontline employees compare each process<br>Blank      Not applicable<br>1 Does not meet tourist needs<br>2 Acceptable-meets tourist needs<br>3 Exceeds tourist needs   |
| Step (4)<br>Perception value   | a) Allow the airline management to separate the airline' perception from the passenger' perception.<br><br>b) To allow the relations (if any) between the two perceptions to be established.<br><br>e.g. passenger satisfaction and the airline performance levels.                                     | Once all the comparisons are made, you sum up the columns and divide by the number of entries.  |
| Step (5)<br>Then, subtracts the " Our perception value" from " their perception value" | a) To discover the root causes of both the identified opportunities and weaknesses of the current measurement tool used to evaluate the passengers' perceptions.<br>b) To allow the airline frontline staff to determine who is responsible for each activity for the future successful implementation. | After that: Note whether there is a plus (+) or minus (-) difference under each column.<br><br>• <b>The Plus Value:</b> Indicates that items are satisfiers and there are optimization opportunities.<br><br>• <b>The Minus Value:</b> Indicates that items are dissatisfiers and there will be a continuous improvement plans should be communicated to the passenger. |



## Methods

### RESEARCH FRAMEWORK

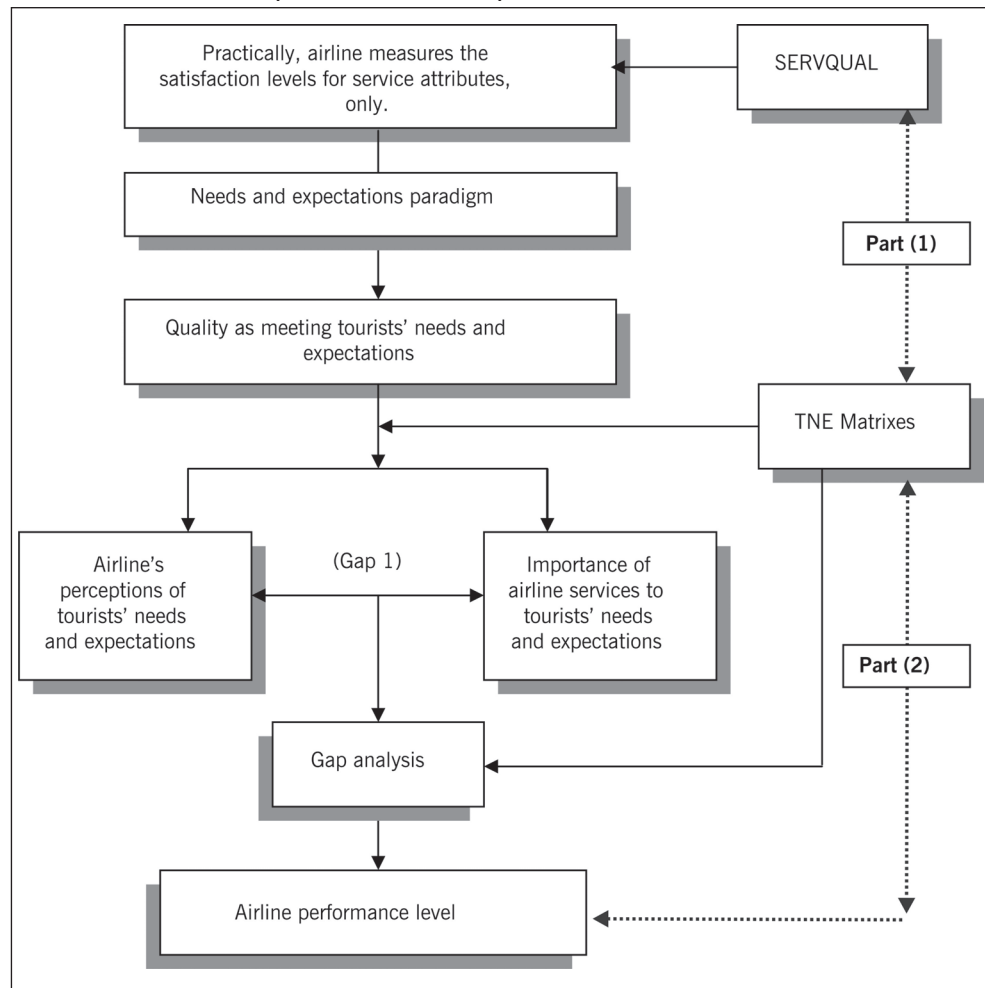
A research framework was developed to guide this research based upon the stated objectives and questions as illustrated in Figure 1 to be regarded as the conceptual model for this study, which tends to tie together the theoretical literature of measuring and delivering airline service quality with the developed management tool that called TNE matrix that used to manage the daily airline process of delivering service quality. Chen & Chang (2005) pointed out that previous airline research supports the notion that airline service quality results from a comparison of what passengers feel service firms should offer (i.e. from their expectations) with their perceptions of the firm's performance level in providing the services. This exactly what has been illustrated in the first part of the conceptual model, where, the study shed the light on the criticism directed to the SERVQUAL model, which used, practically in the airline sector, to measure only passenger perceptions of the service offerings to understand the airline's performance without clear knowledge of passenger expectations for service. While the perceived service quality is viewed as the degree and direction of the discrepancy between the passengers' perceptions and expectations. This leads to the developed TNE-matrix that overcomes this dilemma, through the second part of the conceptual model, which used to integrate the measurement process of the airline' perceptions of their tourists' needs and expectations a long with the importance of the airline services. This has been done by identifying the passengers, who traveling as tourists, assembling needs and expectations expressions using the "passenger's viewpoint, and prioritizing the needs and expectations expressions using the "passenger's perception values"". After constructing a real airline's perceptions, we compare the airline elements (airline's perceptions of tourists' needs and expectations) to the tourists' actual needs that reflects the importance of airline services to tourists' needs and expectations). Finally, TNE-matrix allow us, proactively, to discover the causes of both the identified opportunities, which indicate that airline items are satisfiers and weaknesses, which Indicate that airline items are dissatisfies and there will be a continuous improvement plans should be communicated to the passengers/tourists. And this in turn, leads to a better understanding of the achieved performance level of the airline.

The research method is a combination of (TNE-Matrix) formulated by (Moran, 1991, 1998), whereby a multi-attribute approach to service is formulated utilizing secondary data on airline service criteria to inform the questionnaire content, and by the use of SERVQUAL (Parasuraman et al., 1988, 1991), adjusted to the context of delivering airline services in terms of Needs an Expectations Paradigm.

In light of the preceding discussion, this study will specifically focus on the needs and expectations of inbound tourists using the Egyptian airline carriers. The following research questions are guiding primary research carried out to test the central tenant of this paper:

- RQ1. Which in-flight and airline ground services are expected as the most important needs from tourists' viewpoint? And how these needs are perceived from the airline' viewpoint?
- RQ2. Which in-flight and airline ground services are perceived as the needs of the least importance from tourists' viewpoint?
- RQ3. How do passengers and front-line managers and employees perceive the performance of delivering the airline services?
- RQ4. What are the general expectations of the tourists from their Egyptian airline carriers?

Figure 1  
**RESEARCH FRAMEWORK (CONCEPTUAL MODEL)**



Source: developed by the authors

### POPULATION AND SAMPLING PROCESS

For the purpose of this study two target populations were defined. First target population consists of inbound passengers traveling with the Egyptian airline companies – the state owned “Egypt Air” and other Egyptian private airline companies. The main purpose of surveying this sample is to get an understanding of the tourists’ needs and expectations of the Egyptian airline services and attributes. Out of five international airports in Egypt, four major airports - Cairo; Luxour; Hurgada and Sharm El-Sheikh international airports - have been selected as survey sites to make the sample more representative. These airports were selected because they act as the most convenient gateway for passengers/tourists heading to the popular tourist destinations of Egypt as well as they receive the largest volume of the inbound passengers/tourists as illustrated in Table 5. These four airports categorized as the main Egyptian international air travel hubs, which receive approximately 350 scheduled flights in total on each weekday (source: Egyptian Tourism Federation). Furthermore, Table 6’S breakdown of 2004 passenger traffic clearly shows that Egyptian airlines, other than Egypt Air, concentrate their operations on international charter flights to the selected airports especially, Luxor, Hurghada and Sharm-el- Sheikh airports, and on non scheduled domestic flights (charter and air taxi services) between Cairo and other main Egyptian airports.

Table 5

**PASSENGERS TRAFFIC THROUGHPUT AT EGYPT'S MAIN AIRPORTS\*** ('000)

| Airlines       | International     |              | Domestic         |              |
|----------------|-------------------|--------------|------------------|--------------|
|                | Passengers        | % Share      | Passengers       | %Share       |
| Foreign        | 13,112,504        | 73.7         | 673,218          | 12.3         |
| • Scheduled    | 5,941,940         | 33.4         | -                | -            |
| • Charter      | 7,170,564         | 40.3         | 673,218          | 12.3         |
| Egypt Air      | 3,399,823         | 19.1         | 3,341,387        | 60.8         |
| • Scheduled    | 3,091,966         | 17.4         | 2,811,780        | 51.2         |
| • Charter      | 307,857           | 1.7          | 529,607          | 9.6          |
| Other Egyptian | 1,277,981         | 7.2          | 1,478,007        | 26.9         |
| • Scheduled    | 13,352            | 0.1          | -                | -            |
| • Charter      | 1,264,629         | 7.1          | 1,478,007        | 26.9         |
| <b>Total</b>   | <b>17,790,308</b> | <b>100.0</b> | <b>5,492,612</b> | <b>100.0</b> |

\* Cairo, Nozha (Alexandria), Aswan, Luxor, Hurghada, Sharm-el-Sheikh  
Source: Egyptian Tourism Federation (ETF).

Table 6

**PASSENGER TRAFFIC THROUGHPUT AT SELECTED AIRPORTS, 2004** ('000)

| Type of traffic         | Cairo     | Nozha   | Luxor   | Hurgada   | Sharm-el-Sheikh |
|-------------------------|-----------|---------|---------|-----------|-----------------|
| Domestic non-scheduled  | 861,497   | 30,581  | 441,659 | 363,449   | 449,456         |
| Domestic scheduled      | 1,245,390 | 6,439   | 483,960 | 224,567   | 358,050         |
| International charters  | 643,848   | 23,060  | 836,304 | 3,633,223 | 3,521,165       |
| International scheduled | 8,014,932 | 337,652 | 206,052 | 282,450   | 204,913         |

Source: Egyptian Tourism Federation (ETF, 2004)

Survey was carried out during both, high (November, October 2005, and January 2006) and low (April, May, and June 2006) seasons, it was administrated in Saturdays and Sundays as the international weekend days and in Thursdays and Fridays as the local weekend days, in which the inbound flights reaches its maximum point and during the early morning hours of the day because most of the inbound flights arrive to the chosen airports around this time (according to the airports authorities). Obtaining an official permit for surveying passengers in arrival terminals and main entrances in each airport was needed. Due to limited time and manpower, a convenience sample method was chosen. Passengers were approached once they have completed the checking out procedure. All six main entrances (three at Cairo airport and three at the other three airports); to the departure terminal were stationed by two trained interviewers (a total of 12 interviewers). A total of 600 questionnaires were distributed among surveyed passengers, of which four hundred and seventy four (N=474) usable were returned, representing a 79% response rate.

The second target population for the study as illustrated in Table 7, was the employees of the Egyptian airline companies, registered with the Egyptian Ministry of Civil Aviation (EMCA).

Table 7

**THE POPULATION DESCRIPTION FOR THE SECOND SURVEYED GROUP**

| Items                      | Description   |
|----------------------------|---|
| The population             | Consists of all the Egyptian airline companies' members of the Egyptian Civil aviation Authority and their front-line staff.                      |
| The population description | Consists of those airline companies registered as tourist service suppliers at the comprehensive list of the Egyptian Ministry of civil aviation. |

In order to test the model of TNE Matrix, the sample included three senior executives in the head office of each surveyed airline (one as a strategist, one as a planning manager, and one as a quality manager) and 15 front-line employees working at the four major airports (reservation clerks, pilots and flight attendants, and airport check-in gate personnel) from each company as illustrated in Table 8. The study surveyed those managers and employees because they constitute a homogeneous group in terms of delivering airline service quality, as they are in position to be knowledgeable about passengers' expectations and, at the same time, are able to appraise internal elements processes and internal service delivery, which will eventually impinge on the passengers, who acts as the external customers. The final sample included (10) airline companies, (30) senior executives (managers), and (150) of the front-line employees employed in 10 different airline companies. An in purposive sampling method was used to choose the sample of this study because it is the most convenient sampling strategy to represent the predefined groups and subgroups that we are seeking. Furthermore, with a purposive sample, we are likely to get the opinions, perspectives and perceptions of our target population as well as verifying that the respondents do in fact meet the criteria for being involved in the sample. A narrative interview approach was conducted to collect data from the target front-line staff. This type of approach considered as the most insightful and progressive technique, which relies on a series of open-ended questions that ask for the stories of the interviewees' choosing, hence, the responses are not led by the interviewer, and themes are discovered rather than prescribed (Hollway & Jefferson, 1997). Front-line staff was approached once they have finished their whole encounters experience with passengers/tourists, which called "*Moments of Opportunity*" due to the potential value of the information gained from this source Williams & Buswell (2003). A pilot test of the front-line survey found the response rate tends to be very high; about 89 per cent, therefore, it was planned to approach at least 180 respondents to represent the population well. Once gain, obtaining an official permit from the 10 airline companies for surveying their front-line staff inside the airports was needed to approach them during the same time of surveying the inbound passengers/tourists.

Table 8

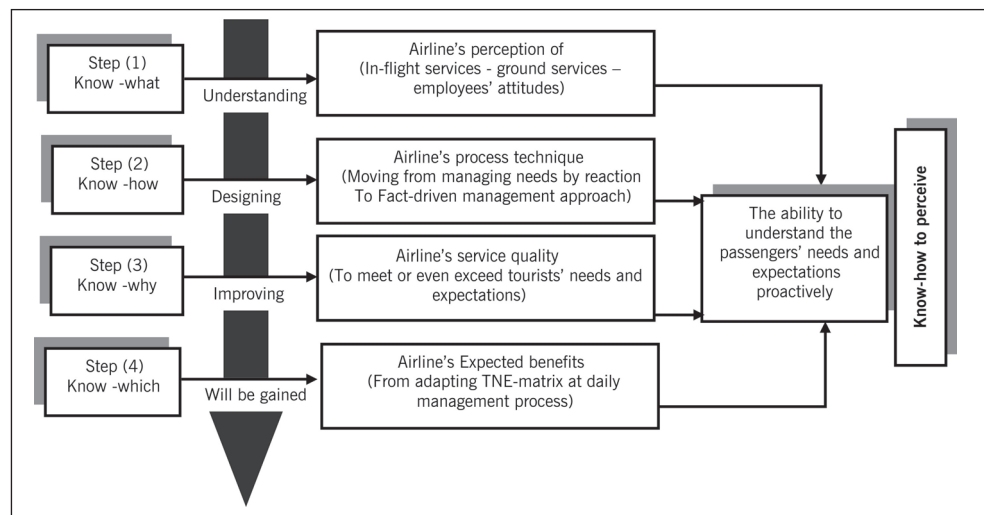
**SAMPLING PROCESS OF THE SECOND SURVEYED GROUP**

| 10 Airline companies<br>(Egypt Air + 9 Based upon the Egyptian private sector) |    |                                 |     |
|--|----|---------------------------------|-----|
| Senior executives (managers)   | N  | Front-line employees            | N   |
| Strategists  | 10 | Reservation clerks              | 50  |
| Planning managers  | 10 | Pilots and flight attendants    | 50  |
| Quality managers   | 10 | Airport check-in gate personnel | 50  |
| Sub-Total  | 30 | Sub-Total                       | 150 |
| Total Sample = 180 respondents   |    |                                 |     |

## QUESTIONNAIRES DESIGN

The questionnaire (Appendix) used for surveying passengers was a refinement of the original SERVQUAL instrument where questions were altered to fit the airline industry. In addition, instead of measuring both expectations and perceptions the questionnaire was designed to measure only the expectations of passengers. This serves as a generic guiding framework for individual airlines when formulating strategies to monitor and exceed passengers' expectations. Part 1 of the questionnaire dealt with specific airline service processes relating to the original SERVQUAL 5 dimensions scale developed by Parasuraman, Zeithaml & Berry (1988, 1994), which contains: Tangibles, Reliability, Responsiveness, Assurance, and Empathy that consisting of 26 statements in total. Respondents were asked to rate each statements on a scale from 0 (not very important) to 8 (very important), which tends to avoid the 'neutral' central tendency and can differentiate the various levels of respondents' expectations more clearly as found in the pilot test. Part 2 asked respondents to rank by importance five service attributes (tangibility, reliability, assurance, responsiveness, empathy) and space was provided space for additional comments about desired and expected airline services. Part 3 gathered demographic information such as country of origin of the respondent, the purpose of traveling, in addition, whether he/she is the decision maker in choosing the airline to help in painting a real profile of those passengers.

Figure 2  
THE AIRLINE FRONT-LINE STAFF SURVEY PROCESS



Concerning the survey of airline companies' employees, it was a combination of both quantitative and qualitative approach through the four well-defined steps described in Figure 2. *Firstly*, they were asked to report their main perceptions regarding the potential value of the information gained during the service encounter with their proactive expectations of the passengers needs. *Secondly*, they have been asked to complete the TNE-Matrix presented in Table 2, where they were required to complete the elements process at the left vertical side from their management point of view and to develop a proactive list of their passengers' needs and expectations to write them down across the top of the matrix; depending upon their professional experience. For the easiest access of this step, particularly, for the mid and lower rank front-line employees; full-detailed instructions regarding the completion of the TNE matrix were distributed among to the respondents as illustrated in Table 3. *Thirdly*, they were asked to compare the airline' perception of the tourists' expectations seeing as [our perception value] against the tourists' perceptions [seeing as their perception] on a separate paper, *Fourthly* and

finally, during a narrative interview which relies on a series of open-ended questions they were asked to appraise if they see the airline benefiting from the idea of TNE-Matrix, especially in the area of managing tourists needs and expectations.

## Findings and discussion

The findings based upon data collected from both passengers and front-line staff surveys demonstrated that significant differences exist among the passengers' expectations of ground and in-flight services delivered and the airline front-line staff perceptions of tourists' service expectations regarding the needs and expectations, and it was found that: concerning part one of the passenger's survey, it can be seen the findings provide a brief description of the 26 items organized by the 5 dimensions scale developed by Parasuranman, Zeithaml & Berry (1988, 1994), which contains: Tangibility, Reliability, Responsiveness, Assurance, and Empathy associated with the importance level of the statements tested that showed a better understanding of the analysis and reflects the degree of the importance regarding each statement as well as a final ranking for all airline elements, which have been listed by order of importance as illustrated in Table 9. While, Part 2 of the passenger's questionnaire asked respondents to prioritize directly the 5 dimensions 'in order of importance' for them, and the findings were given in Table 10.

Table 9

### DESCRIPTIVE ANALYSIS –ALL STATEMENTS ORGANIZED BY THE 5 DIMENSIONS

(N= 474 respondents for all statements (questions))

| Q. No.     | Traced dimension          | Core of the statement                                   | Respondents |           | The degree of importance | Listing all elements by order of importance |
|------------|---------------------------|---|-------------|-----------|--------------------------|---|
|            |                           |   | Frequency   | %         |                          |   |
| <b>Q1</b>  | <b>Reliability (1)</b>    | <b>On-time departure and arrival</b>                    | <b>445</b>  | <b>94</b> | <b>Very important</b>    | <b>1</b>                                    |
| Q2         | Reliability               | Consistent ground/ in-flight services                   | 212         | 45        | Relatively unimportant   | 17  |
| Q3         | Reliability               | Perform service right the first time                    | 232         | 49        | Relatively unimportant   | 15  |
| Q4         | Reliability               | Food and beverage                                       | 355         | 75        | Relatively important     | 7   |
| Q5         | Assurance                 | Behavior of employees gives confidence                  | 245         | 52        | Important                | 12  |
| <b>Q6</b>  | <b>Assurance (2)</b>      | <b>Safety</b>   | <b>441</b>  | <b>93</b> | <b>Very important</b>    | <b>2</b>                                    |
| Q7         | Assurance                 | Employees have knowledge to answer questions            | 412         | 87        | Relatively important     | 6   |
| <b>Q8</b>  | <b>Tangibility (4)</b>    | <b>Clean and comfortable interior/seat</b>              | <b>335</b>  | <b>71</b> | <b>Important</b>         | <b>9</b>                                    |
| Q9         | Tangibility               | In-flight entertainment facilities and programs         | 123         | 26        | Unimportant              | 20  |
| Q10        | Assurance                 | Availability of waiting lounges                         | 225         | 27        | Unimportant              | 19  |
| Q11        | Tangibility               | In-flight internet/email/ fax/phone facilities          | 20          | 4         | Least important          | 25  |
| <b>Q12</b> | <b>Responsiveness (2)</b> | <b>Courteous employees/ attendants</b>                  | <b>441</b>  | <b>93</b> | <b>Very important</b>    | <b>2</b>                                    |
| <b>Q13</b> | <b>Empathy (5)</b>        | <b>Neat and tidy employees</b>                          | <b>245</b>  | <b>52</b> | <b>Important</b>         | <b>12</b>                                   |
| Q14        | Assurance                 | Non-stop flights to various destinations                | 144         | 30        | Relatively unimportant   | 18  |
| Q15        | Assurance                 | Convenient flight schedules and enough frequencies      | 322         | 68        | Important                | 10  |
| Q16        | Assurance                 | Availability of global alliance partners' network       | 62          | 13        | Least important          | 22  |
| Q17        | Responsiveness            | Understanding of passengers' specific needs of tourists | 355         | 75        | Relatively important     | 7   |

Table 9 **CONTINUED**

|     |                |  |     |           |                        |           |
|-----|----------------|--|-----|-----------|------------------------|-----------|
| Q18 | Empathy        | Individual attention to passengers                   | 78  | <b>16</b> | Unimportant            | <b>21</b> |
| Q19 | Responsiveness | Availability of loyalty program                      | 59  | <b>12</b> | Least important        | <b>24</b> |
| Q20 | Responsiveness | Availability of frequent flyer program               | 322 | <b>68</b> | Important              | <b>10</b> |
| Q21 | Tangibility    | Availability of air/accommodation packages           | 217 | <b>46</b> | Relatively unimportant | <b>16</b> |
| Q22 | Assurance      | Availability of travel related partners, e.g. hotels | 14  | <b>3</b>  | Least important        | <b>26</b> |
| Q23 | Responsiveness | Prompt service by employees                          | 421 | <b>89</b> | Relatively important   | <b>5</b>  |
| Q24 | Responsiveness | Efficient check-in/baggage handling services         | 62  | <b>13</b> | Unimportant            | <b>22</b> |
| Q25 | Responsiveness | Employees are always willing to help                 | 245 | <b>52</b> | Important              | <b>12</b> |
| Q26 | Responsiveness | Employees handle requests/complaints promptly        | 441 | <b>93</b> | Very important         | <b>2</b>  |

Note: (1%: 14% = least important), (15%: 29% = unimportant), (30%: 49% = relatively unimportant), (50%: 74% = important), (75%: 89% = relatively important), (90%: 100% = very important)

Table 10

**DESCRIPTIVE ANALYSIS –RELATIVE IMPORTANCE OF THE 5 DIMENSIONS REGARDING PASSENGERS' EXPECTATIONS**

| Investigated dimensions | Number of respondents | Respondents Frequency & % |    |    |     |     | Ranking |
|-------------------------|-----------------------|---------------------------|----|----|-----|-----|---------|
|                         |                       | 1                         | 2  | 3  | 4   | 5   |         |
| Tangibility             | 474                   | 0                         | 0  | 27 | 112 | 335 | 4       |
|                         |                       | 0%                        | 0% | 5% | 24% | 71% |         |
| Reliability             | 474                   | 0                         | 3  | 10 | 16  | 445 | 1       |
|                         |                       | 0%                        | 1% | 2% | 3%  | 94% |         |
| Assurance               | 474                   | 0                         | 0  | 0  | 33  | 441 | 2       |
|                         |                       | 0%                        | 0% | 0% | 7%  | 93% |         |
| Responsiveness          | 474                   | 0                         | 0  | 14 | 19  | 441 | 2       |
|                         |                       | 0%                        | 0% | 3% | 4%  | 93% |         |
| Empathy                 | 474                   | 0                         | 15 | 25 | 189 | 245 | 5       |
|                         |                       | 0%                        | 3% | 5% | 40% | 52% |         |

Note: (1=the most important; 5=the least important)

Regarding the compared perceptions of passengers and the expectations of front line employees the following Table 11 introduces a brief and very intensive summary of these findings.

Table 11

**AIRLINE FRONTLINE PERCEPTIONS FINDINGS AND PASSENGERS' EXPECTATIONS FINDINGS COMPARED**

| Traced research questions   | Airline frontline perceptions findings  | Passengers' expectations findings  |
|---|---|--|
| RQ1. Which in-flight and airline ground services are expected as the most important needs from tourists' viewpoint? And how these needs are perceived from the airline's viewpoint? | 133 respondents (74%) of the surveyed front-line staff "both managers and employees" perceived security for passengers, will be considered as the most important tourists' In-flight needs. | While 441 out of 474, with a percentage of (93%) of the surveyed passengers expected that the Egyptian airlines will guarantee the following in-flight attributes that will achieve the following needs:<br>a. Make them feel safe on board.<br>b. Deal easily with courteous attendants<br>c. Experience prompt handling of requests/complaints |

Table 11 **CONTINUED**

|  |  |   |
|--|--|---|
| <p>RQ2.<br/>Which in-flight and airline ground services are perceived as the needs of the least importance from tourists' viewpoint?</p> | <p>158 respondents (88%) of the surveyed front-line staff perceived that check-in / baggage handling services, will be considered as the most important tourists' airline ground needs.</p>  | <p>While 62 out of 474, with a percentage of (13%) of the surveyed passengers expected that the Egyptian airline companies will have an efficient check-in and baggage handling services.</p> <p>It was found that both the availability of in-flight internet/email/fax/phone facilities and the availability of travel related partners had the perception of least importance for respondents.</p>   |
| <p>RQ3.<br/>How do passengers and front-line managers and employees perceive the performance of delivering the airline services?</p>     | <p>Based upon the information gained by the front-line staff during the service encounter with their proactive expectations of the passengers needs, it was found that:</p> <p>a. 22 frontline managers out of 30 (73%) evaluated the performance of their delivering services as of a very high standard one regarding the international standards of service quality.</p> <p>b. While 142 frontline employees out of 150 (95%) evaluated the performance of their delivering services regarding tourists' needs as of a low standard, and they assumed that using TNE-matrix would enhance the performance level of delivering service quality in general.</p> | <p>It was found that 232 passengers around (49%) showed that the Egyptian airline performs the service 'right the first time'.</p>  |
| <p>RQ4.<br/>What are the general expectations of the tourists from their Egyptian airline carriers?</p>                                  |  | <p>The results of the surveyed tourists revealed that the following attributes were highly expected from the Egyptian airline carriers:</p> <p>a. 445 respondents, approximately (94%), expected the reliable on-time departure and arrival.</p> <p>b. 412 respondents with a percentage of (87%) expected that the employees of the Egyptian airline carriers would have the sufficient knowledge to answer their questions as tourists.</p> |

## Conclusions

This research paper has presented TNE-matrix as a model of managing needs and expectations. The results from a study of in-bound passengers who traveling as tourists using the Egyptian airline carriers imply a need for the Egyptian airlines to develop passenger-focused services that require a detailed understanding of passengers' expectations. Meeting these expectations would raise the level of passenger satisfaction and value perception, and consequently the delivering process of the airline service quality performance level viability. Moreover, it was indicated that TNE-Matrix is highly valued as a predictive and a daily management tool, used to empower frontline man-



ers and employees to act on information received regarding the passengers' needs and expectations. An important finding was that TNE-matrix could be used as a futuristic planning tool to move the airline frontline staff out of managing tourists' needs-by-reaction style into management by tracing passengers' expectations. Furthermore, as indicated from the findings of the traced third research question, it was found that the gap between the passengers' expectations and frontline managers' perceptions of these expectations was much greater than that between the passengers' expectations and frontline employees' perceptions of the passengers' expectations regarding the performance level of delivering airline service quality. This highlights the importance of establishing up-ward communication that gives more emphasis on employees to managers communication (Parasuraman et al., 1988; Chen & Chang, 2005). Generally, this study presented a general framework for contributing the knowledge of airline passengers' needs and expectations and identifying areas for service process improvement. It may help airlines improve their service offerings in ways that are important to the tourists. However, it must be acknowledged that understanding the relationship between airline service quality and tourists' needs and expectations is very important. Although, it is perhaps more useful managerially to identify specific drivers of airline service quality that most relate to the tourists' needs when they are surveyed as passengers as appropriate intervention strategies to be formulated. Concerning the research and academic relevance and practical implications of this study it has been found that from one hand, the study's findings are of particular interest to better delivering the airline service quality, which has the ability to shape the future of airline performance level. While, from the other hand, the study's findings provide greater insight into why using TNE-matrix is so futuristic and a predictive airline strategic planning tool. As, these findings tended to secure the Egyptian airline sector a healthy competitive position in the future by formulating visions, policies, strategies, and courses of actions that can create passenger (tourist) value through satisfying or even exceeding their passengers' needs and expectations proactively, taking into account the challenges faced with many airline companies settled in the Middle East, such as "The Emirates" and "Qatar Airways", which compete by claiming that their flights are cheaper, faster and offer better facilities; such a claim can beat the Egyptian airline sector in case of misunderstanding of their passengers' needs and expectations, as it is widely accepted today that a customer/passenger with positive perceptions about service quality is likely to report high levels of satisfaction. Furthermore, these findings from the experimental adoption of TNE-matrix appears to be a vital early step in the management process of tourists' needs and expectations, guided by the surveyed front line employees' suggestions, which provide the Egyptian airline sector a real platform for going on to consider the future in terms of delivering airline service quality, as they are the only one who can appraise the internal procedures and internal service delivery process, which will eventually impinge on the external customers (tourists).

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## Appendix

### Passenger questionnaire used for the study<sup>(1)</sup>

Dear passenger,

We are conducting a survey regarding your expectations of the Egyptian Airlines' services: *Please* indicate the level of importance of each statement for you. Your comment is highly important to the analysis, and will be treated with anonymity and confidentiality. Thank you very much for your cooperation.

#### Part 1

Please **circle** the number that indicates *the level of importance* of each statement for you

| Q.No. | Airline process eElements<br>How important is it for you that:  | Unimportant |   |   |   |   | Very important |   |   | No opinion |
|-------|---|-------------|---|---|---|---|----------------|---|---|------------|
| 1     | The Egyptian flight departs and arrives at time it promises   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 2     | The Egyptian airline provides good ground/in-flight services consistently.                                    | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 3     | The Egyptian airline performs the service 'right the first time'.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 4     | The Egyptian airline provides quality food and beverages.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 5     | The behavior of the Egyptian airline employees gives you confidence.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 6     | The Egyptian airline makes you safe?  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 7     | Employees of the Egyptian airline have the knowledge to answer your questions as a tourist.                   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 8     | The Egyptian aircraft has clean and comfortable interiors and seats.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 9     | The Egyptian airline has up-to-date in-flight entertainment facilities and programs.                          | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 10    | The Egyptian airline has comfortable waiting lounges.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 11    | The Egyptian airline provides in-flight internet/email/fax/phone services.                                    | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 12    | Employees of the Egyptian airline are consistently courteous with you.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 13    | Employees of the Egyptian airline appear neat and tidy.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 14    | The Egyptian airline has non-stop service to various destinations.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 15    | The Egyptian airline has convenient flight schedules and enough frequencies                                   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 16    | The Egyptian airline has global alliance partners in order to provide a wider network and smoother transfers. | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 17    | The employees of the Egyptian airlines understand the specific needs of tourists?                             | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 18    | Employees of the Egyptian airline give you individual attention.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 19    | The Egyptian airline has a sound loyalty programme to recognize you as a tourist.                             | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 20    | The Egyptian airline has a sound mileage programme.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 21    | The Egyptian airline offers you with air/transfer/accommodation packages.                                     | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 22    | The Egyptian airline has other travel related partners, e.g. car rentals, hotels and travel insurance.        | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 23    | Employees of the Egyptian airline give you prompt service.  | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 24    | The Egyptian airline has efficient check-in and baggage handling services                                     | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 25    | Employees of the Egyptian airline are always willing to help you.   | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |
| 26    | Employees of the Egyptian airline are never too busy to respond to your request or complaint.                 | 1           | 2 | 3 | 4 | 5 | 6              | 7 | 8 | 0          |

<sup>(1)</sup> Based upon Gilbert and Wong, 2002.

## Part 2

Please **prioritize** the following 5 attributes **in order of importance** to you (1=the most important; 5=the least important)

- **Tangibility** (check-in / baggage handling service, in-flight facilities, waiting lounge)
- **Reliability** (on-time departure/arrival, consistent service, feeling safe and self-confidence)
- **Assurance** (safety records, employees' capability, Flight Patterns, flight schedules and frequencies)
- **Responsiveness** (efficient service, prompt handling of requests/complaints, courteous attendants)
- **Empathy** (Neat and tidy employees, individual attention, anticipation of your travel needs)

Are there any specific reasons why you prioritized the attributes in such order?

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## Part 3

Please **tick** the appropriate box below

27. You are:

- Male
- Female

28. Your purpose of travel (or next possible trip if not traveling today):

- Diving
- Visiting friends/relatives
- Holiday/Christmas
- A (3S) tourist Sun/Sea/Sandy beaches)
- Other (please write \_\_\_\_\_)

29. What is your age?

- Under 21
- 21-30
- 31- 40
- 41- 50
- 51- 60
- Over 60

30. Which of these ethnic groups/nationalities do you belong to?

- |   |  |
|---|--|
| <input type="checkbox"/> Middle Eastern | <input type="checkbox"/> Scandinavians               |
| <input type="checkbox"/> Indian         | <input type="checkbox"/> North American              |
| <input type="checkbox"/> Libyan         | <input type="checkbox"/> Arab Gulf                   |
| <input type="checkbox"/> Australian     | <input type="checkbox"/> Japanese                    |
| <input type="checkbox"/> Korean         | <input type="checkbox"/> West European               |
| <input type="checkbox"/> Turkish        | <input type="checkbox"/> Others (Please write) _____ |
| <input type="checkbox"/> South African  |  |

Although we are unable to reply to you personally, we do consider any suggestions and comments you wish to make on improvements to the Egyptian airlines and services offered in terms of tourists' needs and expectations.

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