

Empirical Analysis of Passenger Self-Service Implementation in Cairo International Airport

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Abstract

The purpose of this paper is to provide an empirical analysis an airport passenger operation and to improve its efficiency. An implementing was conducted to evaluate the quantitative and qualitative efficiency of the self-service check-in booth in Cairo International Airport. As community becomes more customary with new technologies, airlines and airports are using new steps to deliver faster and smother services to airline passengers. This study includes web check-in, mobile phone check-in, check-in kiosks, and personalized check-in methods. Data were collected at Cairo International Airport on several non- sequential days. The results showed that to create satisfaction with the check-in process, e-check-in appears to play an important role as it reduces waiting times. However the new procedures are not trusted completely, so operated check-in steps are still needed. Self-check-in steps appear more important for passengers. Furthermore, web check-in appears to be a more common method, especially for travelers aged 35- 44 years.

Keywords: Self Service, Cairo International Airport, Passenger self-service, Fast Travel Program.

Introduction

New self-service check-in methods have been introduced by airports and airlines in recent years, starting with check-in kiosks, which are now ubiquitous. Newer technologies allow check-in on the web or even using a mobile phone. The advantages of these new check-in methods include reducing crowding in airport halls and faster check-in procedures for passengers.

The research underlying this paper focused on finding differences in travelers' acceptance of and satisfaction with different check-in procedures. Different check-in methods were evaluated concerning their attractiveness and passengers' satisfaction or dissatisfaction with them. The research aims to understand whether new check-in procedures are trusted quickly and if travelers prefer them. To this end, results were analyzed by age group and Flight class. The underlying analysis was based on these questions:

1. Are travelers in general reluctant to use new check-in methods that employ new technologies?
2. Do differences exist in travelers' uptake of these methods, depending on age?
3. Do differences exist in the uptake of these methods, depending on Flight class?

As a limitation of this underlying research it has to be mentioned that passengers will gradually get used to new check-in methods and different check-in possibilities will be common in the future. Assuming this evolution occurs, future results from a similar survey might produce greater differences compared to these findings.

As the service industry resumes expanding, airlines have a desire to computerize procedures in order to reduce operational costs, increase rate of transactions and remove the variability in the human service encounter. Airport self-service technology is used to reduced cost and increase revenue (Curran, 2003) while also improving customer service (Beatson, 2007).

Self-service technology provides both passengers and airlines with many benefits; however there are often restrictions that force a load upon both parties causing each user to

consider how self-service technology in airports affects the way they choose to access information and use technology. Understanding how airlines have implemented self-service technology to benefit all users will help create an enhanced perceptiveness of how passengers, staff and the airline industry as a whole has been affected by the use of self-service technology (Drennen, 2011).

Middle East Area region it began as a dedicated self-service and the first Common use self-service kiosks have been installed at Cairo International Airport TB3. The Common use self-service will be designed for the use of different types of passengers with or without baggage where passengers with baggage could use the new use facility of the Common Use Baggage System. The Common use self-service platform software will be responsible for managing the entire Kiosks System, The final configuration of the Common use self-service kiosk will very much depend on airport operational and security requirements (Abdelaziz et al., 2010).

Literature review

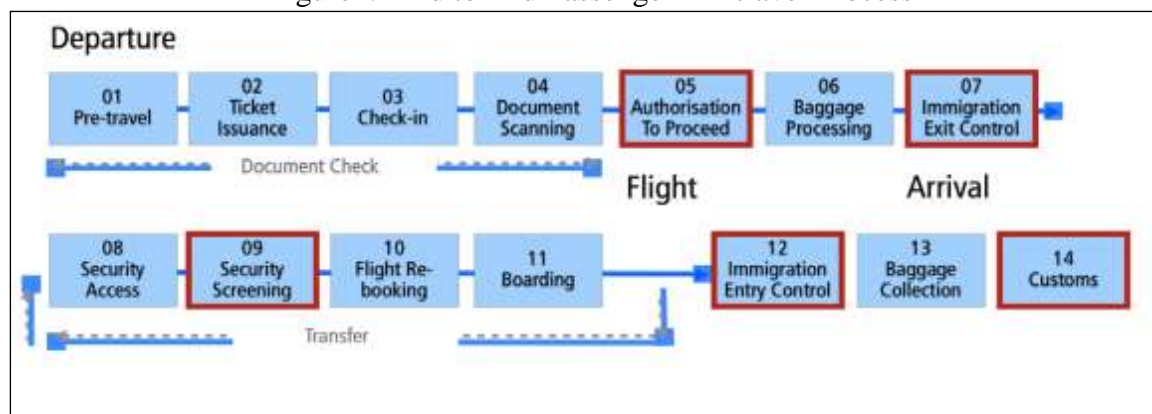
Self-service

Self-service options were introduced in the 1990's for passengers firstly in the area of check-in. What was initially a service for business or frequent travellers soon migrated to the wider passenger's base. The early drivers included direct cost reduction for airlines and a need to provide a higher level of passenger service by reducing queuing times at check-in (Best, 2013), Passengers now expect to exercise control over more of the journey as they see real added value from self-service options, namely speed, convenience and control.

Self-service processing is an acquired skill, and passengers will likely become more adept with self-service technology as they gain more experience with them. Airports and its processes can cause passengers to be very anxious (Lovelock, 2013), so those with anxiety and a lack of confidence will most likely turn down self-service options in favour of human alternatives; in turn this means that passengers do not gain experience or confidence with self-service, and they are stuck in a cycle of only using processing methods which airports are gradually phasing out. One method airports could undertake in an attempt to get passengers out of this cycle is going back to Chang and Yang's (2008) recommendation of offering self-service passengers exclusive incentives, such as seat selection privileges or meal vouchers.

Self-service opportunities today pervade all areas of a passenger's air-travel journey. These opportunities begin prior to arriving at the airport and continue through the airport departure process, in-flight services, airport transfer points, and finally through the airport arrival process. Figure 1 presents the many journey steps at which self-service opportunities may be presented.

Figure1: End to End Passenger Air-travel Process



Source: (GSM Association and IATA, 2011).

Definition of self service

Self-service technologies have extended beyond the check-in process to regularly contain lost/delayed baggage recovery, various forms of document checks, automated flight rebooking/upgrade notifications, and self-boarding.

Self-service is the process by which consumers engage in all or a portion of the provision of a service (Castro et al., 2010).

Self-service technologies are a way for consumers to locate desired information or complete various processes electronically without the assistance of staff (Louisa, 2012).

Advantages of self-service

As the airline industry resume to grow and the demand for Self Service Technology changes, airlines have taken hold of Self Service Technology and have been able to provide passengers with the technology they have longed to use. Airlines are now putting the power in the passenger's hands and allowing them to perform multiple tasks that once could only be completed by a service staff (Weiss, 2006).

Self Service Technology provides passengers with various benefits that would not be possible had the passengers used a service staff. Benefits include: increased control over the service delivery as the passengers is in control of the process, convenience as Self Service Technology is available at almost every hour and at multiple locations, reduction in passengers wait times as lines tend to be shorter and flexibility in use as many tasks can be completed in a central location for multiple airlines (Meuter, 2000).

Disadvantages of self-service

While many advantages exist passengers face many disadvantages as well. Self Service Technology has allowed airlines to lose a great deal of interpersonal contact that passengers once had with service staff (Beatson, 2007). The reduction in interpersonal contact can have a long term impact on passengers' perceptions of individual airlines depending on their experience with Self Service Technology devices. Disadvantages contain; possible loss of personal information, lack of comfort with the technology, fear of the unknown (Curran, 2003).

Self-service check-in at Cairo international airport

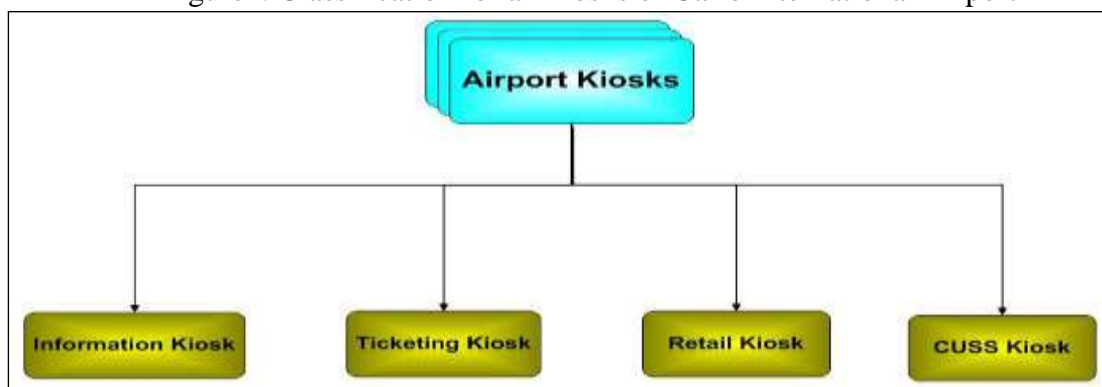
Cairo International Airport is one of Egypt's major airports and the primary hub for national carrier Egypt Air. The airport is located 15km north-east of the city (Cairo International Airport, 2017). The airport is administered by the Egyptian Holding Company for Airports and Air Navigation, which controls four companies: Cairo Airport Company, Egyptian Airports Company, National Air Navigation Services and Aviation Information Technology, and the Cairo Airport Authority (CAA), which is the regulatory body. The airport has the potential to be a major hub with its positioning between Africa, the Middle East and Europe.

There are various modern facilities being introduced at the airports now which make the travelling experience more pleasant and less stressful. What is one of the most developing tools now is self-check-in and self-baggage-drop which is available by filling in the information at the airport kiosk. It is also available to check in online or with a smartphone (Anna, 2013).

Airport Self-service technologies takes on many types which include but are not limited to; information kiosks (standalone terminal that provides information, goods and services), ticketing kiosk (purchase airline tickets, check luggage and monitor flight status), CUSS kiosk (ease congestion and help reduce long lines, shared terminals with multiple airlines), retail kiosk (passengers can purchase goods and services before or after a flight)

(Abdelaziz et al., 2010), internet bookings and through the use of smart phones or mobile devices. Self-service technologies has become a relied upon service in satisfying the both passenger and the airline needs.

Figure2: Classification for all kiosks of Cairo International Airport



Source: (Abdelaziz et al., 2010).

Passenger self-service at Cairo international airport

As Passenger service is an essential factor in the current market place, retailers are adopting self-service technologies (SSTs) to improve the quality of service. Interfaces enable companies to delight their customers instantly by allowing them to solve their problems using technology (Bitner et al., 2002). Self-service technologies indicate any technological application, but the most typical SST is interactive kiosks which refer to computer workstations for public access (Rowley and Slack, 2003).

Check-in processes are important for several reasons. Airlines and airports want to know as much about passengers' travels intent as possible, in order to provide a smooth check-in operation and ensure a high quality check-in service for passengers. Self-check-in steps reduce the number of staff needed for check-in purposes at the airport. From a passenger's perspective, check-in processes are important because they are related to negative perceptions of waiting in queues and having to undergo complicated procedures at airports (Wittmer, 2011).

In addition to the traditional check-in at desks at airports, several new check-in processes have been developed in recent years. Among these are self-service check-in steps such as self-check-in kiosks, web check-in and mobile phone check-in options.

The passengers on Egypt Air (and their partners in Star Alliance) currently use web check-in or check-in kiosk options. Self-service check-in opportunities are becoming more popular, and include:

- Airport check-in kiosk: passengers use computer terminals to check in at the airport; the boarding pass is printed on the spot and the luggage is left at a nearby luggage drop-off desk.
- Web check-in: passengers check in at the airline website and print their boarding pass themselves; luggage is left at a luggage drop-off desk at the airport.
- Mobile phone check-in: passengers check in by mobile phone and receive their boarding pass electronically; luggage is left at a luggage drop-off desk at the airport.

Fast travel program

While self-service technologies are earning priority in the aviation business, airline and airport authorities aim to offer more self-service products and services to cover different passenger needs and demands. Illustrations of self-service technologies in the aviation market include information provision, check-in kiosks, self-bag drop units, electronic

security gates, automatic boarding gates, and self-service lost-and-found kiosks (Staub and Teber, 2015). According to passenger service processes and standards defined by the IATA, available self-service applications per process. The same has been extracted from the IATA's Fast Travel Programme (Best, 2013). Accordingly, six travel phases have been taken into account for self-service technologies usages:

Check-in: display self-service check-in at the location, using at least one of the following four channels: Automated, Kiosk (Dedicated or Common Use), Web or Mobile Check-in.

Bags ready-to-go: Self-tagging [display passengers the possibility to generate and apply the baggage tags themselves] and Fast Baggage Drop Off [display a dedicated position for the purpose of baggage acceptance]

Document Check: display the possibility for passengers to self-scan their travel documents (passport, ID cards, Driving licences...) and verify automatically that the travel document data are compliant with the destination or transit requirements.

Flight rebooking: In case of disruption (cancellation or delay), display the possibility for passengers to be pro-actively re-booked and to obtain new booking options or boarding token via a self-service channel (kiosk/web/mobile).

Self-boarding: display the possibility for passengers to self-scan their boarding token at the gate to gain entry to the aircraft.

Bag recovery: display the possibility for passengers to register a claim for a mishandled bag via a self-service channel (kiosk / web / mobile).

Fast travel benefits

At mass market capability, there is a value proposition for each of the main stakeholders involved, specifically (Best, 2013):

1. Passengers will value the elements of speed, convenience and control through a greater range of self-service options. Passengers will be able to utilize the full range of self-service options globally.
2. Airlines can enhance their value proposition to their passengers and so realize enhanced customer service, reduce their cost base and improve the bottom line.
3. Airports will be in a position to develop appropriate facilities to provide an improved value proposition to meet the needs of all passengers, airline customers and their handling agents. In addition, the improved flow of passengers using self-service will enable a change in the design and layout of airports in the future translating to more efficient capital investment for airport construction.

Table 1: Fast Travel Airline/Airport Status

| Color status | Airline | airport |
|--------------|--|--|
| Platinum | Implemented all six Fast Travel projects covering at least 80% of their passengers | At least 80% of the airport's passengers are offered Fast Travel |
| Gold | Implemented all six Fast Travel projects in at least one single airport | At least one airline has implemented all Fast Travel projects at the airport |
| Green | Fast Travel offered in one location | At least one airline is offering Fast Travel at the airport |

Source: (Kuuchi, 2015)

The table shows the Fast Travel Airline/Airport Status Platinum; Gold; Green. Egypt Air has become the first airlines in Africa to be granted the green light for the application of the "Fast Travel" program

Methodology

In this section the researcher gives details about the method of research used and analysis of the information gathered for the current study.

Research goal

Through this survey, we aim to identify Egyptian passenger characteristics and passenger approaches to self-service and Fast Travel Program technologies. To do so, survey of Egypt Air passengers was administered

Sample and data collection

The data were collected in the check-in hall at Cairo international airport on non-consecutive days during one month. Mainly First, Business and Economy class passengers were included in the study. Respondents were asked to answer certain demographic questions. Information the Self-Service applications and the Fast Travel program

The primary aim of the survey was to evaluate Egyptian passenger approaches to self-service and fast travel program, the current study took place during the first quarter of 2017 and the data were collected using questionnaires that were personally distributed. Participants were passengers of Egypt Air; the survey of this study was administered to 150 Egyptian passengers.

Measures

The questionnaire was designed based on a range of related studies (youngcourt et al., 2007). Its final form included 28 questions. The first part of the questionnaire consisted of demographic information; while the second part included the following 2 variables represent Self Service and Fast Travel Program.

Self-service applications: ten items were used to assess participants' perception on "Flight tariff and fee searches- Flight booking or purchasing air ticket- On-line check-in- Flight schedule and fee searches with mobile devices- Check-in by using mobile devices- Flight information with mobile devices- Boarding with mobile applications - Check in by using self-service kiosks- Automatic security gate usages - Self bag drop units/counters". Participants used a ten – point scale ranging from "Yes, used already" to " No, never used before" to respond to the items.

Fast travel program: ten items were used to assess participants' perception on "Operated Check-in- Check-in kiosk- Web Check-in- Mobile Phone Check-in- Passenger Self-tagging - Fast Baggage Drop off- Document Check - Flight rebooking- Self-boarding- Bag recovery". Participants used a ten – point scale ranging from "Yes, used already" to " No, never used before" to respond to the items.

Results and discussion

The main source of stress for passengers is 'long wait times and queues' with 'unexpected changes/lack of information' and 'lack of control', Passengers consider security, transfer, and check-in to be the most stressful steps of the journey. Passengers are generally positive about using technology to aid their travel experience, particularly if it reduces stress or addresses pain points in the journey.

The popularity of self-service among passengers continues to increase. Almost two thirds of passengers used self- service check-in, an increase over last year. The self-service options passengers would most welcome are unassisted bag drop, automated boarding gates and transfer kiosks.

Sample characteristics

A total of 150 out of 200 passengers completed the questionnaire in the 30-days survey period representing a response rate of 75%. The results of this study have been organized according to the variables.

Table 2: Descriptive Features of respondents

| Descriptive Features | | Frequency | Percentage (%) |
|--|-----------------|-----------|----------------|
| Age groups | | | |
| | 18-24 | ---- | ---- |
| | 25-34 | 57 | 38 |
| | 35- 44 | 74 | 49.3 |
| | 45-54 | 19 | 12.7 |
| | 55 and above | ---- | ---- |
| Gender | | | |
| | Female | 36 | 24 |
| | Male | 114 | 76 |
| Income (per month: in Egyptian pound) | | | |
| | Less than 1.000 | --- | --- |
| | 1.000 - 2.999 | 9 | 6 |
| | 3.000 - 5.999 | 66 | 44 |
| | 6.000 - 8.999 | 19 | 12.7 |
| | 9.000 and above | 19 | 12.7 |
| | Missing | 37 | 24.7 |
| Travel Frequency over 10 flight per annum | | | |
| | Yes | 47 | 31.3 |
| | No | 94 | 62.7 |
| | Missing | 9 | 6 |
| Flight class | | | |
| | Economy Class | 94 | 62.7 |
| | Business Class | 19 | 12.7 |
| | First Class | 28 | 18.7 |
| | Missing | 9 | 6 |
| Phone Type Carried | | | |
| | Plain phone | 17 | 11.3 |
| | Smart phone | 133 | 88.7 |

Table (2) shows the results per age groups, Gender, Income (per month: in Egyptian pound), Travel Frequency over 10 flight per annum, Flight class, and Phone Type Carried. The primary age group was (35-44) years representing 49.3% of the represents; the other four main age groups were (25-34) 38%, (45-54) 12.7%. Table shows passengers of (35-44) represented the highest percentage of supports of self service. Among the 150 passengers 76% were male and 24% female. While under half 44% of passengers were average income from 3.000 - 5.999. While under half 31.3% of passengers Traveled Frequency over 10 flight per annum. Among these trips, 62.7% flew economy class and 18.7% flew first class, 12.7 % of passenger flew businesses class. From the table the data shows that 88.7 % of passengers owned Smart phone.

Table3: Frequencies and percentages of respondents of use the Self-Service applications

| Variables | Yes, used already | | No, never used before | |
|--|-------------------|----------------|-----------------------|----------------|
| | Frequency | Percentage (%) | Frequency | Percentage (%) |
| Online applications | | | | |
| Flight tariff and fee searches | 111 | 74 | 39 | 26 |
| Flight booking or purchasing air ticket | 129 | 86 | 21 | 14 |
| On-line check-in | 141 | 94 | 9 | 6 |
| Mobil Applications | | | | |
| Flight schedule and fee searches with mobile devices | 103 | 68.7 | 47 | 31.3 |
| Check-in by using mobile devices | 84 | 56 | 66 | 44 |
| Flight information with mobile devices | 112 | 74.4 | 38 | 25.3 |
| Boarding with mobile applications | 84 | 56 | 66 | 44 |
| Airport Applications | | | | |
| Check in by using self-service kiosks | 120 | 80 | 30 | 20 |
| Automatic security gate usages | 105 | 70 | 45 | 30 |
| Self-bag drop units/counters | 94 | 62.7 | 56 | 37.3 |

In Table, survey outputs related to response categories were amended as “yes, used already” and “no, never used before”. This amendment provided alignment among categories for logistic regression analysis that will be applied further analysis.

Table (3) shows the results online applications, Mobil Applications, and Airport Applications. The results show a distributed relationship between the different online applications methods. Almost above half the passengers 74% using Flight tariff and fee searches, while 86% of passengers using Flight booking or purchasing air ticket, 94% of passengers using On-line check-in. The results show Mobil Applications using Flight schedule and fee searches with mobile devices 68.7%, Check-in by using mobile devices used by 56% respondents, Flight information with mobile devices used by 74.4% respondents, Boarding with mobile applications used by 56% respondents. The results in table (3) show that Airport Applications using check in by using self-service kiosks 80%, Automatic security gate usages used by 70% respondents, Self-bag drop units/counters used by 62.7% respondents.

Table 4: Frequencies and percentages of respondents of use the Fast Travel program

| Variables | Yes, used already | | No, never used before | |
|---|-------------------|----------------|-----------------------|----------------|
| | Frequency | Percentage (%) | Frequency | Percentage (%) |
| Check-in | | | | |
| Operated Check-in | 131 | 87.3 | 19 | 12.7 |
| Check-in kiosk | 122 | 81.3 | 28 | 18.7 |
| Web Check-in | 103 | 68.7 | 47 | 31.3 |
| Mobile Phone Check-in | 84 | 56 | 66 | 44 |
| Bags ready-to-go | | | | |
| Passenger Self-tagging | 115 | 76.7 | 35 | 23.3 |
| Fast Baggage Drop Off | 79 | 52.7 | 71 | 47.3 |
| Document Check | | | | |
| Offering the possibility for passengers to self-scan their travel documents (passport, ID cards, Driving licences...) | 141 | 94 | 9 | 6 |
| Flight rebooking | | | | |
| Offering the possibility for passengers to be pro-actively re-booked and to obtain new booking options or boarding token via a self-service channel (kiosk/web/mobile). | 141 | 94 | 9 | 6 |
| Self-boarding | | | | |
| Offering the possibility for passengers to self-scan their boarding token at the gate to gain entry to the aircraft. | 113 | 75.3 | 37 | 24.7 |
| Bag recovery | | | | |
| self-reporting of missing baggage via a self-service channel (kiosk / web / mobile) | 36 | 24 | 114 | 76 |

Table (4) shows the results of Fast Travel program. Interestingly, the results show a distributed relationship between had checked in using operated check-in desk 87.3%, while 81.3% had used check-in kiosks during the survey. Web check-in was used by 68.7% respondents; mobile phone check-in was used by 56% respondents. The results show Bags ready-to-go using Passenger Self-tagging 76.7%, Fast Baggage Drop Off used by 52.7% respondents. The results show Document Check using Passenger 94% respondents, While above half 94% offering the possibility for passengers to be pro-actively re-booked and to obtain new booking options or boarding token via a self-service channel (kiosk/web/mobile). The table shows self -boarding using passenger 75.3 respondents. Finally the results in table (4) show that self-reporting of missing baggage 24% respondents.

Chi-Square Test

This part shows the relations between some important variables in the field study by cross tabulations, it also shows the significance differences between some of these variables with use chi-square test, and find in these part correlations between the variables of the study.

Find chi-square value by this equation:

$$X^2 = (O-E) / (E).$$

O: Observed Number

E: Expected Number

Count Degree of freedom (D.F) by this equation:

Degree of Freedom (D.F) = (columns -1) (rows-1)

Table 5: Value of Chi-Square Tests for relation between Phone Type Carried and Flight schedule and fee searches with mobile devices

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 42.017 | 1 |

The previous table reveals that the value of the chi square (42.017) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Phone Type Carried and Flight schedule and fee searches with mobile devices, In addition, the significance level given under "(2-sided)" sig.000Asymp, This value which means that there is a significant statistical relation between the two variables.

Table 6: Value of Chi-Square Tests for relation between Phone Type Carried and Check-in by using mobile devices

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 24.402 | 1 |

The previous table reveals that the value of the chi square (24.402) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Phone Type Carried and Check-in by using mobile devices, In addition, the significance level given under "(2-sided)" sig.000Asymp, This value which means that there is a significant statistical relation between the two variables.

Table 7: Value of Chi-Square Tests for relation between Phone Type Carried and Flight information with mobile devices

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .005 | 6.505 | 1 |

The previous table reveals that the value of the chi square (6.505) and the abstraction probability (.005), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Phone Type Carried and Flight information with mobile devices, In addition, the significance level given under "(2-sided)" sig.005Asymp, This value which means that there is a significant statistical relation between the two variables.

Table 8: Value of Chi-Square Tests for relation between Phone Type Carried and Boarding with mobile applications (no paper required)

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 24.402 | 1 |

The previous table reveals that the value of the chi square (24.402) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Phone Type Carried and Boarding with mobile applications (no paper required), In addition, the significance level given under "(2-sided)" sig.000Asymp, This value which means that there is a significant statistical relation between the two variables.

Table 9: Value of Chi-Square Tests for relation between Check-in kiosk and Automatic security gate usages (none required security staff check points)

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 15.465 | 1 |

The previous table reveals that the value of the chi square (15.465) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Check-in kiosk and Automatic security gate usages (none required security staff check points), In addition, the significance level given under "(2-sided)" sig.000Asymp. This value which means that there is a significant statistical relation between the two variables.

Table 10: Value of Chi-Square Tests for relation between Check-in kiosk and Self bag drop units/counters

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 57.787 | 1 |

The previous table reveals that the value of the chi square (57.787) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Check-in kiosk and Self bag drop units/counters, In addition, the significance level given under "(2-sided)" sig.000Asymp. This value which means that there is a significant statistical relation between the two variables.

Table11: Value of Chi-Square Tests for relation between Web Check-in and Flight booking or purchasing air ticket

| Sig.(Value) | X ² | Df |
|-------------|----------------|----|
| .000 | 53.513 | 1 |

The previous table reveals that the value of the chi square (53.513) and the abstraction probability (.000), a value less than 0.05 which means that there is statistical significance i.e. there is a relation between the sample of the study Web Check-in and Flight booking or purchasing air ticket, In addition, the significance level given under "(2-sided)" sig.000Asymp, this value which means that there is a significant statistical relation between the two variables.

Summary and conclusion

The research focused on the feedback from Egypt Air passengers utilizing self-service. The survey results reviewed that the passengers are responding positively to self-service

and generally understand the process. However, the acceptance of this relatively new technology within Egypt Air's own workforce depends to a large extent on the type of station at which the staff works.

This research indicates self-service procedures remain important and will be needed in the future. They have a high possibility to make satisfaction. Different age groups perceive Fast Travel, and assign diverse usability scores to them.

For Cairo international airport new e-check-in procedures will be common in the future. Airlines will likely promote passengers' use of e-check-in procedures to limit costs by reducing the number of check-in counters. However, in the future they will also need more luggage deposit facilities and options. Cairo international Airport could investigate new service possibilities to speed up the luggage drop process, perhaps by providing more self-service luggage drop options.

Looking at the implications for Cairo international airport managerial practice, it can be concluded that the following has to be taken into account:

1. Traditional, operated check-in counters remain important for passengers.
2. E-check-in procedures have gained importance and trust.
 - web check-in with a printed boarding pass is more trusted than mobile check-in
 - The more experienced the traveler (higher travel frequency), the smaller the resistance toward web or mobile check-in.
3. With the growing use of e-check-in procedures, luggage drop facilities have to be improved.
4. Satisfaction is related to waiting time.
5. Fast Travel Program can help reduce waiting time if adequate

Recommendations

While the provided recommendations aim to help change the way airlines and passengers view and use airline self-service, it is important for those individuals to act and do what's best for the airline industry as whole. Working together to move forward with the use of self-service can help improve the travel experience while potentially having a positive effect on the future exists of self-service. Using the provided recommendations can help improve the airline passenger experience when it comes to the use of self-service and help make great improvements in the way the travel industry uses self-service.

The review of literature and future trends in mind the following recommendations can be suggested:

1. Egypt Air should study and review the impact self-service has on Cairo international airport and passengers prior to selecting specific technologies to put in use.
2. Training staff to know the "ins and outs" of how to use the Fast Travel Program which then results in improved passengers use.
3. Communicating effectively between Cairo international airport staff and passengers can help improve the self-service experience and implementation.
4. Communicating effectively can also aid in passengers training costs.
5. Survey passengers to know how they feel (fear or happiness) when faced with the choice of using self-service.
6. Study the passengers experience and learn what works best for the passengers and what encourages passengers to choose Fast Travel Program over the service staff interaction.
7. Use more cost efficient self-service devices to meet budget guidelines and help reduce passenger's cost.

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