EMERGING TECHNOLOGY IN AIRLINE INDUSTRY

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Abstract : The present paper is an initiative to understand the concepts of Indian Airline industry and its growth over the period. The objective of this paper is to undertake an empirical study on service qualities provided in different air ports in India and come up with some concrete solutions to provide better service quality to passengers and visitors in the different destination. In this regard secondary data is considered.

IndexTerms- Airlines,Passengers,technology.

I. INTRODUCTION

Indian aviation sector is growing at an accelerating rate and the country is getting the benefits of its improved connectivity. Since its inception the sector has seen many changes. The vast geographical coverage of the country and its industrial growth makes the airline sector more meaningful. The rising working grows up and economic improvement of Indian middle class is also expected to boost the growth of the sector further.

1.1 Connectivity

Connectivity is a growing trend in airline technology, according to CNN largely because passengers, employees, business net works, suppliers, and procurement professionals all use digital devices and tools to stay connected. Connectivity also fosters growth in the airline industry by improving the travel experience, which in turn boosts customer loyalty.Hyper-connectivity, which refers to increased use of many devices, is changing the rules and etiquette of airlines' service strategy by offering travelers multitasking features and more.

1.2 Passenger empowerment

Increased computing options improve the customer experience by allowing passengers to stay up to date on business developments, communicate with friends and family, or simply choose their own entertainment during flights.According to Future Travel Experience, passenger empowerment is a driving force behind the trends in airline technology. Passengers want convenient, user-friendly service solutions. They want to stay connected and up to date. Giving passengers updated computing solutions provides greater flexibility, better accommodates their interests, and encourages them to return for future flights.

1.3 Biometrics, sensors, and tracking technology

Another growing trend in airline service is use of biometrics for check-in and baggage solutions. Biometric technology improves security.Sensors and tracking technology is also gaining interest as airlines explore smart technology. In the future, airlines will use eye tracking and sensor technology in flight monitors. While tracking technology remains a work in progress today, it is poised improve the passenger experience going forward.To minimize unplanned downtime, airlines are turning to advanced analytics. Airline maintenance workers use updated technology to order parts and products, while sensors and biometric tools streamline general management. Real-time analytics improve airline maintenance by managing unexpected problems more efficiently and even anticipating issues before they occur. The result: fewer delays, better maintenance strategies, and more efficient repair solutions.

1.4 Virtual reality

Virtual reality already plays an important role in many aspects of the airline industry. The technology provides a glimpse into the cockpit of new planes, and pilots routinely use virtual reality for training purposes.

1.5 Improving security

Because greater use of smart devices increases the risk of data breaches, airlines are increasing their focus on cyber security. Forward-thinking airlines are turning to advanced digital security solutions to ensure proper governance of all data and fully protect sensitive customer information.

1.6 Cloud solutions

Like most industries, airlines are increasingly adopting cloud solutions to maintain and share vast amounts of data. As airlines grow, this technology is integral to meet customers' needs.Every airline faces challenges in today's business environment, and the most successful ones constantly strive to improve the customer experience. By using updated technology, airlines can encourage passengers to return for future flights by offering a top customer experience, while keeping data safe within a complex digital environment.

II OBJECTIVES OF THE STUDY

This study is to find the growth, concept of airline industry and to study on technology that has been used in the aviation industry.

2.1 Methodology

The present study based on secondary sources and for this purpose various libraries visited for collection of data. Indian aviation sector has a long history and moved from private sectors to government sector then again in the hand of both government and private sectors. With every passing year, the sector witnessed significant improvement in the movement of traffic in both the passenger and cargo segment. According to India Brand Equity Survey Report, 2017 India stands at 9th position in terms of market size.

III GROWTH OF AIRLINE INDUSTRY

Indian airline sector has a long history and moved from private sectors to government sector then again in the hand of both government and private sectors. With every passing year, the sector witnessed significant improvement in the movement of traffic in both the passenger and cargo segment. During the financial year 2017, the country witnessed 21.5% improvement in domestic passenger traffic. The sector is expected to become 3rd largest aviation market in the world by 2020.The growth projectory of the sector is shown in t

3.1 Cloud computing and Airline Industry

Cloud computing is the hottest trend in corporate computing right now and air transport companies should not be slow to grasp the opportunity. Airlines are constantly struggling with huge quantities of data in complex environments, and global staff require 24/7 access to data in order to keep ground and air operations running seamlessly. In an industry that reaches the globe and never sleeps, international commercial airlines need all the responsiveness and resiliency that they can get. What technology would be a better fit than cloud computing, the cloud gives the aviation industry an opportunity to reinvent the way airline, redefine the way it works with its customers, and rewrite its relationship with all its stakeholders

3.2 The Future Of Airports – It's Smart Technology And Cloud Efficiency

Airports are massive and complex organisations. Paris Aero port – one of the busiest airports in the world – describes itself as a 'factory of the future' – "Management on a daily basis of industrial processes such as the handling of thousands of pieces of luggage that come through our airports each day," the Paris Aeroport website quotes

It's true that airports need to refine their processes with the exacting precision of advanced manufacturing to facilitate the smooth flow of people, baggage, and the aircrafts themselves. To achieve that, airports are heavily investing and other smart technologies, looking to leverage the ability for technology to enhance efficiency, productivity, and security. From sensors deployed throughout the airport to monitor and manage temperature and lighting to better direct baggage to the correct aircraft, smart check-in kiosks and unmanned bag drops, cameras with facial recognition and predictive AI to heighten security, and unified communications to enable instant communication across the entire airport, technology is being used in ever-more complex and integral ways across the entire airport.

IV CHALLENGES IN AIRLINE INDUSTRY:

A smooth and hassle-free journey where passengers do not have to break stride from the curb to the gate, unless they choose to, is the goal: that would deliver tremendous value to passengers." explained Transport Association's (IATA) chief executive Tony Tyler at its 2013 World Passenger Symposium. To make seamless travel a reality, airline and airports will have to collect, manage and share in real-time key information about the passenger journey and about their own key assets, such as planes, security checkpoint and staff. Airlines and airports face several challenges to make the fullest use of the latest intelligence inherent in their operational and passenger systems.

4.1 System incompatibility and data integration

The variety of the systems currently used by airports, ground handlers and airlines brings complexity to the exchange of data. System compatibility is an unavoidable step for the implementation of business intelligence initiatives.

4.2 Insufficient data standards

Due to the high number of systems in use by the different stakeholders, data is likely to come from multiple sources making it more complex to get meaningful information. Standards and good practices should be put in place to ensure the data interoperability.

4.3 Coping with or analysing data

Within airports and airlines, an important amount of data is already retrieved and collected. Nevertheless the challenge lies in the meaningfulness of the information. To be exposed to the passengers or the staff, the data should be processed, analyzed and communicated in a user-friendly manner.

4.4 Willingness to share data

Although stakeholders recognize the need for collaboration, reluctance to share data freely is a fact; whether this is a across departments of the same company of with third-parties. The ambitions to improve services and operations are dependent on the ability of stakeholders to overcome this stumbling block. Finally, While airlines and airports have broadly similar ambitions to create greater visibility around the passenger journey, there are key differences in their priorities for utilizing business intelligence.Indeed, airlines give the highest priority to sales and marketing, whereas airports put the focus on operational awareness.

CONCLUSION

With the increase in standard of living and introduction of Economy class the passenger's preference also changed dramatically. In Earlier days airlines being used by high class people only. Now a days the trends changed and now the mass people also able to travel in airlines. This is being reflected with the number of increase of passenger's volume.

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