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WORLD BUSINESS PARTNERS

Ground accidents due to slippery runways and associated costs for airports

ACI World Benefits

New World Business Partners

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Message from Angela Gittens, Director General, ACI World

Celebrating customer service excellence in a time of change

Dear Colleagues,

I’m excited and looking forward to the 27th ACI Africa/World Annual General Assembly, Conference and Exhibition taking place from 16–18 October 2017 in Port Louis Mauritius, under the theme “Bold leadership in a time of change.” This theme recognizes that, whatever the set of changes that beset our business and our lives, airports play a crucial role in the economic and social health of communities, countries, regions and the world at large, and they must craft a strategy for their sustainable development to continue providing those benefits.

Among such changes is the evolution of passenger expectations. From digital services to tailored experiences, today’s customers are more knowledgeable and have higher expectations of airports than ever before. It is those airports that are best able to meet customer expectations that will have an advantage over their competitors. Like just about every other business, airports must continually improve their service levels in order to thrive in an ever dynamic environment.

The good news is that airports large and small are making the commitment to provide an excellent customer experience. And ACI is committed to helping its Member Airports achieve their goal through a host of Airport Service Quality (ASQ) products and services. ASQ is the only worldwide programme to survey passengers at the airport on their day of travel. Every year, the programme delivers some 600,000 individual surveys in 42
languages in 85 countries and in 2017 to date, 45 airports have joined the programme, growing the total number of ASQ participants to 343, accounting for 59.9% of global passenger traffic. ASQ is present in 74% of the world’s top 100 busiest airports—up 4% since 2016.

As evidence of the success in satisfying the traveling public that airport teams are achieving, this year the programme celebrates the largest group of ASQ Award winners ever. We will highlight those achievements at the ASQ Awards Ceremony during the Gala Dinner of the 27th ACI Africa/World Annual General Assembly, Conference and Exhibition. And we will also celebrate the nine airports that have been inducted in 2016 and 2017 into the ACI Director General’s Roll of Excellence, awarded to those that have ranked in the top five airports by size or region for five of the last six years in the ASQ Survey.

The common denominator among all of these stellar airports is their focus on cultivating a robust culture of customer service—delivered not only from front-line staff, but from the entire airport community. To help in this regard and to meet popular demand, we developed the ASQ Employee Survey for Customer Experience, an internal diagnostic and benchmarking tool that can be used for all staff working at an airport.

This new survey and the new ASQ Arrivals Survey, will be highlighted at the annual conference. ASQ’s main objective is to provide airports with research tools and management information to better understand passenger views with respect to the airport’s services. While the long-running ASQ Departures Survey focuses on the passenger journey before take-off, the new ASQ Arrivals Survey covers the touchpoints the passenger encounters after landing, providing airports with a more comprehensive understanding of the experience their enterprise is delivering. Once again, the survey is one-of-a-kind, conducted just after the experience occurs. It is also our first to be delivered in tablet mode so it will be easier for the airport to process.

I invite you all to take advantage of the pre-conference workshop on Monday 16 October and the conference session on customer service on Tuesday 17 October which will feature first-hand accounts from the top-performing airports who will be candid about what worked, and what didn’t work, in their journey to customer service excellence.

We can’t stop change but we can avail ourselves of the tools and strategies to manage through and even stay ahead. The 27th ACI Africa/World Annual General Assembly, Conference and Exhibition is a great opportunity to do just that.

See you there.

Angela Gittens

Director General

[Signature]
Sir Seewoosagur Ramgoolam International Airport: A leading African airport and host location for the 27th ACI Africa/World Annual General Assembly, Conference and Exhibition
The Sir Seewoosagur Ramgoolam International Airport (SSRIA) is a leading airport in the African and Indian Ocean region. For the past three consecutive years, starting in 2014, the airport has been awarded Best Airport in Africa, in the category of less than 5 million passengers. The year 2016 was particularly rich in accolades for Mauritius Airport with its induction to the ACI Director General’s Roll of Excellence, for its sustained good performance in the ASQ programme and also for receiving the Best Airport-Safety Award from ACI Africa.

Internationally connected

Presently, some 18 airlines, members of the 3 major airline alliances, connect Mauritius to more than 30 destinations around the world through Mauritius Airport. The country has thus good connectivity with the major capital cities in Europe, Asia and Africa. In 2016, the airport has processed more than 3.5 million passengers and has recorded a traffic growth of nearly 11% as compared to the previous year.

Being the only airport serving as gateway for air access to the island of Mauritius, SSRIA plays a strategic role in the socio-economic development of the country. Conscious of the challenges ahead, Airports of Mauritius (AML) a public company which is the owner and licensed operator of Mauritius Airport, has through the years continued to invest in the modernization of the airport infrastructure to enhance services, passenger comfort, safety and security.

The airport has recently put into operation a new 49 hectares Freeport and Cargo Zone to boost the country’s freight and transhipment business. Located midway in the Indian Ocean between Asia and Africa, Mauritius aspires to serve as a bridge for commercial exchanges between these two continents. Among the forthcoming projects, the construction of a 70m high Air Traffic Control Tower with start of works by end of 2017, will lead the way to further infrastructure development at the airport.

APEX Security Programme

Mauritius Airport is a symbol of both regional integration as well as sustained international cooperation. As a dedicated member of ACI Africa, the airport joined its Board in 2016 to enhance its contribution to the deliberations and formidable work being done by the organization in favour of the community of African Airports. In parallel, Mauritius Airport has been keeping up with sector initiatives taken at an international level. It thus joined the ACI APEX Safety programme in 2014 and has since then been participating actively by sending its expert personnel for reviews at peer airports. In recognition
Feature airport

Large window panes in the ceiling
of its outstanding contribution to the APEX Safety programme, ACI World presented a special award to Mauritius Airport during its 26th World Annual General Assembly in Montreal, Canada in 2016.

In March 2016, AML took another bold step by being the first airport in the world to implement the APEX Security Programme. Since then the programme is being implemented in numerous airports internationally by ACI, with security experts of AML participating in security reviews at peer airports.

Mauritius Airport also enjoys privileged relationships with counterparts in other regions around the world. In November 2016, AML signed a “Sister Airport Agreement” with Beijing Capital International Airport, opening the doors to new opportunities of cooperation in terms of training and access to new technologies.

**Aviation training and environment**

AML has always considered investment in its human resources to be equally important to that in infrastructure. In this regard, it has enhanced its training capabilities by refocusing its training resources and setting up an Aviation Training Centre within the airport precinct. The Training Centre successfully met the requirements of the ICAO TRAINAIR Plus Programme.
and became an Associate Member of the network in April 2017. Presently, the centre is hosting a series of courses both for the continuous learning and development of airport staff, as well as for new entrants aspiring to become the next generation of airport personnel.

In its quest towards better managing the ecological impact of its operations, Mauritius Airport is embarking on the *ACI Carbon Accreditation Programme*. An independent specialized consulting firm has already been appointed towards implementing the first phase of the programme, namely the carbon mapping process. The airport already has a well-structured and detailed environment protection framework but wishes to improve further by benchmarking with the best international practices in the field.

**A promising future**

Year 2017 promises to be a marking year for Mauritius Airport, as it prepares to host the 27th ACIAfrica/World Annual General Assembly, Conference and Exhibition from the 16–18 October. This event is much awaited locally and has aroused the interest of all airport and aviation stakeholders. This year’s conference theme which is focused on “Bold leadership amidst changing times” is a perfect opportunity for airports to reflect on the means and ways to improve their resilience and
charter the way ahead. There are already very high expectations regarding the outcomes of the conference and high level symposiums scheduled during the 3-day event.

The ASQ Award Ceremony of the best performing airports of year 2016 will also be held during a special Gala Dinner on 17 October 2017. Mauritius Airport will have the special honour of receiving its Best Airport in Africa award at home. AML is working hard with all its partners to make of this assembly and conference a memorable event for all the 600 plus foreign delegates expected to attend.
ACI participation in ICAO Aerodrome Design and Operations Panel meeting

By R C Raman, Manager, Airport Safety and Operations, ACI World
The Aerodrome Design and Operations Panel (ADOP) working group met at the International Civil Aviation Organization (ICAO) headquarters in Montreal from 4–7 July 2017. Airports Council International (ACI) World staff participated along with Ian Witter, Heathrow Airport; Ian Redhead, Kansas City International Airport; Dick Meerman, Amsterdam Schiphol Airport; and, Thomas Mayer, European Regional Aerodromes Community. Several other airports also took part as members of national representations.

David Gamper of ACI World presented an update on the first meeting of the Wildlife Hazard Management Expert Group, which reports to the ADOP. The main task of the expert group is to update the Airport Services Manual - Part 3, which needs to be consistent with a new chapter of the PANS-Aerodromes, include new technologies and develop guidelines to follow a risk-based approach in wildlife hazard management. ADOP acknowledged the work done so far and requested input from other regions, in addition to Europe and NA in the expert group.

ACI along with the International Federation of Airline Pilots Associations (IFALPA) also presented a discussion paper on a new convention for taxiway naming, which was discussed in detail by the panel members.

The panel discussed at length a proposal to make changes in Obstacle Limitation Surfaces (OLS). The proposed surfaces are predominantly based on aircraft speed categories and are expected to bring major changes in existing procedures on controlling obstacles around the airport followed by Civil Aviation Authorities and airports. Further studies and a full review will be carried out by the OLS Task Force based on the inputs provided by ADOP members before the changes are brought before the Air Navigation Commission (ANC), most likely in 2018, for implementation by the end of 2020.

During the four-day meeting, the panel discussed a wide array of topics such as:

- proposal to change the type faces of airport signage;
- the amalgamation of CAT III A, B & C Instrument Landing System (ILS) into one single CAT III;
- a concept of operations for aircraft with folding wingtips (notably the Boeing 777X which is under development);
- width of clearways;
- Runway End Safety Areas (RESA) tailored as per safety requirements;
- contents of PANS Aerodromes Part II, ICAO guidelines for ground handling;
- proposed changes in pavement (ACN/PCN) classifications;
Safety

- runway distance remaining signage;
- the recent work carried out by the Visual Aids Working group;
- proposal on identification of inconsistencies or contradictions in Chapter 5 of Annex 14 Vol I;
- runway contamination reporting;
- Amendments in Annex 14; and,
- Vol II on Heliport design and operations, etc.

The secretaries of other ICAO panels presented updates on their work and the interface required with ADOP. Presentations were given on Flight Operations Panel (FLTOPSP), Safety Management Panel (SMP), Multidisciplinary Cargo Safety Group (MCSG) and Remotely Piloted Aircraft Systems Panel (RPAS). In addition, three forthcoming ICAO symposiums were presented:

- [Global Runway Safety Symposium (GRSS)](#) to be held on 20–22 November 2017;
- [Global Air Navigation Industry Symposium (GANIS)](#) to be held on 11–13 December 2017; and,
- [Safety & Air Navigation Implementation Symposium (SANIS)](#) to be held on 13–15 December 2017.

ACI and its member airport representatives provided comments and inputs during the meeting on proposed amendments to ICAO regulations, protecting the interests of airports. For more information on upcoming ACI/ICAO events, please visit our [event listings](#).

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Capacity Building and how ACI contributes to global initiatives

By Nicholas Ratledge, Manager, Security, ACI World
With the current global security climate, and the seemingly regular occurrence of terrorist threats and incidents, the industry is again stepping up to increase measures to safeguard its passengers, staff and facilities. Maintaining the safety and security of the aviation system and the traveling public is a shared priority for all industry stakeholders, from airlines and airport partners to federal agencies, law enforcement and all staff working in the airport environment. Indeed, there has been a great deal of focus on aviation security, from the United Nations Security Council, at the International Civil Aviation Organization (ICAO) and in individual States.

In 2016, the United Nations Security Council adopted Security Resolution 2309, highlighting that all member states should work collaboratively to address security threats to civil aviation, in particular calling on States to ensure that international security standards are reviewed and adapted to effectively address the threat posed by terrorist targeting of civil aviation. The resolution also highlighted the need for States to assist ICAO to continue to enhance audit, capacity development and training programmes in order to support their implementation.

This was further elaborated at the 39th ICAO Assembly with the commitment of a plan to develop the Global Aviation Security Plan, or GASEP. The GASEP provides the foundation for States, industry, stakeholders and ICAO to work together with the shared and common goal of enhancing aviation security worldwide, and fulfilling the commitments set out in UN Security Council Resolution 2309. ACI firmly believes that industry has a key role to play in providing assistance and capacity building activities and is fully committed to helping airports improve their security measures through the APEX in Security programme.

**ACI’s APEX in Security programme**

In 2015, ACI, in collaboration with aviation stakeholders and airports worldwide, developed a new Airport Excellence (APEX) in Security programme, based on the highly successful APEX in Safety Programme. The APEX programme is an entirely voluntary programme for our member airports who wish to benefit from the experience of others to improve their security measures, capacity and efficiency. As with safety, APEX in Security provides a peer review tailored to the individual needs of airports and proposes effective solutions which will lead to improving the security standing of the airports who participate in the programme. It provides the host airport with valuable assistance for any improvements to their security programme, as well as providing an excellent learning opportunity to security partner airports.
It doesn’t matter the size of airport being peer reviewed or if the host airport wishes to expand its security capabilities; the APEX programme is valuable in providing different perspectives and experiences.

A review includes an assessment of current practices, a gap analysis against internationally recognized best practices, identification of recommended solutions and the design of an action plan to help the airport optimize its security performance. We emphasize that this is not an audit. There is no cost to the host airport other than covering expenses for the team. During and after the review, host airports have access to a community of security experts with a wide range of skills and in-depth knowledge in topics from oversight to access control and from physical security measures to security screening. Post-review, host airports have access to the latest training programmes, workshops, guidance materials and consultancy to address recommendations provided by the APEX team.

APEX also provides an insight into trends in the security standing of airports and helps identify global training and assistance needs with a common goal of improving aviation security worldwide.

The first pilot programme review was completed in 2016 at Sir Seewoosagur Ramgoolam International Airport in Mauritius, followed by Ngurah Rai International Airport in Denpasar, Indonesia and
Sultan Aji Muhammad Sulaiman Airport in Balikpapan, Indonesia. Lusaka, Zambia and two further reviews in Indonesia—Surabaya and Makassar—followed in 2017. The pilot reviews were extremely successful in not only identifying areas of improvement for the airports to address, but in highlighting the collaborative effort between ACI and other parties, including other States who observed or support the review process.

APEX in Security has been well received globally, has the support of ICAO along with many regulators, and has an agreement with ICAO for collaboration on reviews where appropriate. It was commended by the members of the ICAO AVSEC Panel, and at the AFI SECFAL Steering Committee. ACI is now working with several bodies and regulators towards cooperation and funding opportunities which will increase the accessibility of the programme even further to those who need it. ACI is pleased to announce that the APEX in Security programme will be officially launched at the upcoming World Annual General Assembly in Mauritius in October 2017.

ACI encourages our member airports in all regions to take part in this excellent programme when requiring assistance or just a fresh look at security operations. If you wish to have an APEX in Security review conducted, or would like to take part in a review as a security partner, please contact either your ACI regional office or Danny Boutin, Senior Manager, APEX Programmes, ACI World at dboutin@aci.aero.
The International Civil Aviation Organization (ICAO) will be holding its inaugural Global Aviation Security Symposium from 12 – 14 September at the ICAO Headquarters in Montréal, Canada.

The three-day Symposium will bring together AVSEC professionals from around the globe to advance the cultivation of a new mind-set towards aviation security, embracing it as a culture that goes beyond a set of standards. It will strategically enhance international cooperation and collaboration to address the threat posed by terrorists targeting civil aviation by reinforcing, strengthening and promoting the international framework of aviation security standards. Participants will benefit from an interactive exhibition showcasing the latest State and industry AVSEC technology and process innovations, along with dynamic learning workshops.

This will also be an incredible opportunity for networking and collaboration between States, ICAO, industry leaders, and representatives from different international and regional aviation organizations.

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Measuring airport financial performance

By Patrick Lucas, Senior Manager, 
Economics and Statistics, ACI World

The global airport industry is subject to economic landscapes which vary from one region or jurisdiction to another. Consequently, measurement of airport financial performance and the subsequent interpretation of economic indicators must take into account institutional objectives in both local and national contexts. Some airports are geared toward maximizing returns for investors or shareholders, whereas others are mandated purely to recover the costs they incur in providing airport services and infrastructure. For instance, many airports in the US are owned by local governments and are financed by local government or municipal bonds. The objective of airports and local governments in these contexts is primarily to generate local economic benefits, as opposed to generating financial returns on investments.

Benchmarking financial performance is also a complex task for the airport industry because of the diversity of capital structures that airports employ. In turn, this affects their bottom lines. Since various forms of equity and debt financing are used by different stakeholders at different airports, an airport’s ownership model has a direct impact on its capital structure and influences the composition of its invested capital. For example, government-owned airports use different methods to raise capital than do airports that are publicly listed and traded on stock exchanges. In other cases, public-private partnerships (PPPs) are formed to facilitate financing by private stakeholders of specific facets of an airport’s business. Government-owned airports, which constitute the majority of airports worldwide, are financed by the public purse, government debt, fees levied on users of infrastructure and commercial activities, or a combination thereof.

Any discussion of airport revenue and profitability would be incomplete without considering the role played by economic regulation. An airport’s capacity to generate revenue is a function of throughput and its market characteristics, but this capacity also varies depending on the jurisdiction in which an airport operates. Not only do airport managers face multifaceted challenges in the areas of safety, security and the environment, but often they must also comply with economic regulations which govern the pricing of airport services.

Profitability measures

Profitability measures sometimes vary both in terms of how they are calculated and how they are interpreted. Accounting standards and methodologies aimed at calculating profitability indicators vary not only among jurisdictions but also across companies and industries. Care should always be taken in explaining the nuances
of different profitability indicators.

Various measures can be used to examine airport profitability. The earnings before interest, taxes, depreciation and amortization (EBITDA) margin is a measure of a company’s operating performance before factoring in cost allocations for fixed assets, payments to creditors and the tax environment in which it operates. Alternatively, purely from an accounting perspective, net profit is defined as the difference between total revenues (aeronautical, non-aeronautical and non-operating revenues) and total costs, which include total operating expenses, capital costs and taxes. An airport’s net profit margin is an important indicator of how efficiently the airport is managed after taking into consideration all expenses, capital costs and taxes. Because this ratio is the end result of an airport’s operations for any given period, it effectively summarizes in a single measure management’s ability to run the business. A higher margin or revenue in excess of costs indicates higher profitability and is more desirable from an investment standpoint. A net profit margin of 17.2% was calculated for the industry as a whole in 2015. However, because the airport business is capital-intensive, net profit margins are only partial indicators in that they do not take into account some aspects of an airport’s balance sheet (e.g., invested capital).

**Return on invested capital and the weighted average cost of capital**

Return on invested capital (ROIC) is a measure that combines almost every element of an airport’s income statement and balance sheet. It is a robust measure of profitability, because within a single measure not only does it consider the effective management of total revenues and total costs in a financial year, but it also takes invested capital into account. From an investor’s point of view, ROIC measures the payment that both debt and equity holders would receive by providing their capital. In the case of equity holders, ROIC is the return for bearing the equity risk. When examined through the lens of this measure, actual returns are considerably lower across the industry compared to net profit margins. A global ROIC of 6.4% was calculated for the industry as a whole in 2015. However, differences in ROIC exist between airports in advanced economies and airports located in emerging markets. The latter group has higher returns on the whole.

By itself, ROIC does not tell the full story of financial performance and economic efficiency. Only when it is compared to the weighted average cost of capital (WACC) does ROIC offer meaningful results. WACC essentially serves as a measure of the opportunity cost
of an alternative investment with a similar risk profile. Thus, WACC can be viewed as the expected return on investing in airports, from the perspectives of both equity holders and debt holders. ROIC is the actual return. If ROIC exceeds WACC, an airport has created value in the form of real, positive economic profits. In contrast, ROIC that falls short of WACC indicates net economic losses. Previous studies have pointed to overall airport-industry WACC being in the realm of 6% to 8%. Assuming that this range remained steady in 2015, airports are just breaking even in generating returns and in some cases may be suffering real economic losses compared to WACC. It is important to note that WACC varies according to jurisdiction, market conditions and investment risk, depending on where airport operators place their capital investments.

This article draws on information from ACI’s Airport Economics Report. For more information on ACI’s suite of financial data, indicators and analysis, please refer to ACI’s Key Performance Indicators (KPIs). The KPIs cover a vast number of airport metrics, which include, among others, measures of the return on invested capital, return on assets and return on capital employed by different aggregate groupings for benchmarking purposes.
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The demographic shift occurring in many countries coupled with the exponential rise in mobile telephony penetration rates, proliferation of digital technologies and competition in online commerce has important implications on airports’ commercial activities and their bottom line. As air travel continues to extend its reach to the world’s populations through affordable choices, the demographic composition of the world is changing. Whereas many advanced economies continue to experience an ageing population, major emerging markets have also observed an expansion in their working age populations which has contributed to a burgeoning middle class. Moreover, the first generation of digital natives, millennials, have expectations that are in line with their distinctive lifestyles, which are helping shape new business models across aviation. In an effort to better understand the traveling passenger at the world’s airports, what can we learn from their tastes and preferences across these changing markets? Are there differences
across generations and age structures of traveling passengers? Can we segment and profile passengers accordingly based on their needs, tastes and preferences? What are some of the drivers of air transport demand across major city markets? What is the composition of airport revenues in this changing landscape? With wide and simultaneous access to information and communication technologies (ICT), can Millennials be considered the first true global generation?

Using information and data under the rubric of evidence-based decision making is of central importance for ACI World in supporting the business intelligence needs of the global airport industry. ACI World has become the major ‘go to’ place for airport related matters, especially on the economic aspects of airports, whether in the form of data products, publications, policies and guidance, advisory or conferences. It is uniquely positioned to collect, analyze and interpret airport related data to assist members and other stakeholders in an advisory capacity. This article highlights some of the upcoming events on the topic as well as a list of some key products and services on the abovementioned subject.

i. Upcoming ACI Events

The upcoming ACI World Annual General Assembly Conference and Exhibition on 16-18 October in Port-Louis, Mauritius will offer various fora that will focus on the customer experience. The first workshop, entitled Customer experience forum: Tools, data, action!, will review ACI data tools to aid airports with the task of analyzing customer experience data for a plan of action. The second session, The Road to Success: Learning from the world’s best airports in customer experience, will provide a platform to learn the secrets of success from the leaders of the world’s best airports in customer experience, as awarded by the ACI Airport Service Quality (ASQ) programme. Finally, passenger profiles across various age structures will be explored in great detail at the upcoming Trinity Forum, the premier Global Airport Commercial Revenues Conference on October 25-27th October in Bangkok, Thailand. This will provide an ample opportunity for delegates to learn from both the common patterns as well as the differences in customer expectations across generations of passengers. For more information on on the event, please visit the website for the Trinity schedule.

ii. Passenger personas and profiles across the generations

Based on ASQ data, ACI introduced the concept of Passenger personas to help better describe airport customers. Personas are fictional characters or typologies created to represent the different market segments that might use a product or service, such as an internet website, brand or product in varying ways.

ACI Passenger Personas are divided into six key personas based on ASQ passenger data gathered from over 550,000 travelers and more than 300 airports worldwide. The six passenger personas represent key profile groups that allow airports to strategically create different customer experiences to meet the needs of different passenger types.

The latest research conducted by the ASQ Programme relates to tastes and preferences
of passengers across generations and age structures. The ability to segment passenger preferences not only based on personas but also generational profiles provides even more insights into understanding and shaping the customer experience.

Much more than a one-dimensional profile of the people you need to influence, actionable personas and generational profiles reveal insights about your customers’ decisions— their specific attitudes, needs, expectations and concerns. This in turn can help airports steer customer experience initiatives in the right direction.

iii. Measuring air transport demand: past, present and future

With comprehensive data coverage for over 2,400 airports in 160 countries worldwide, ACI’s flagship publication, the World Airport Traffic Report (WATR), remains the authoritative source for global analysis of air transport demand as well as in-depth analyses of historical trends, drivers and risks affecting air transport demand in Africa, Asia-Pacific, Europe, Latin America-Caribbean, the Middle East and North America. It is also the principal industry reference for the latest airport traffic data, rankings and trends on air transport demand.

Likewise, forecasts are a crucial ingredient in airport planning for the determination of future capacity requirements. Because infrastructure projects are costly and involve many resources, a data-driven understanding of future demand such as the expected number of aircraft movements, passenger traffic throughput and air cargo volumes gives airport planners and investors the necessary information for effective decision making.

The ACI World Airport Traffic Forecasts (WATF) presents aggregate airport traffic projections at the global, regional and country levels based on internationally comparable airport traffic data. Both absolute figures and compounded annual growth rates are presented over three time horizons which include short-, medium- and long-term over the 2016-2040 period. In addition to global forecasts, regional forecasts are presented for Asia-Pacific, Africa, Europe, Latin America-Caribbean, Middle East and North America. Airport traffic forecasts are also presented for major markets which consist of individualized national projections for over 90 countries.

iv. Airport Key Performance Indicators and ACI Airport Economics Report

Airports are complex businesses that operate in unique and evolving physical, financial and regulatory environments. ACI’s Airport Key Performance Indicators provide invaluable insight into areas ranging from financial and commercial activities to fixed-asset productivity and airport operations. The use of internationally comparable indicators provides quantifiable barometers of industry activity, and these indicators are presented as industry averages based on various groupings: airport size, economic grouping, geographical region, regulatory model and ownership. This complete package of indicators—which includes over 40 detailed statistical tables—is designed to provide quantifiable barometers of industry activity for airport managers, analysts, investors and other aviation stakeholders. The derived
indicators are based on an annual survey that generated responses from 827 airports for the 2015 financial year. Together, these airports handled 5.1 billion passengers or about 73% of worldwide passenger traffic in 2015.

The ACI Airport Economics Report presents global analyses relative to airport activity for the financial year 2015. An in-depth analysis of air transport demand across the globe and in key emerging markets is presented. As in previous years, the bedrock of the report consists of summaries of and commentary on industry revenues (aeronautical and non-aeronautical) by source, costs (operating and capital), and their evolution over time. Following the request of our members, in the latest publication we have added statistical annexes of all key performance indicators.

v. Airport Business Analytics

Effective measurement of business performance aimed at developing strategic actions is a cornerstone in the sustainability of contemporary business enterprise. The modern airport operator, which has been propelled into a dynamic and competitive landscape, has moved away from being a mere infrastructure provider to a diversified and complex business that operates strategically within the air transport value chain. Consequently, an understanding of economic performance based on statistical and analytical tools as well as robust performance indicators provides valuable business intelligence to decision makers and other stakeholders.

ACI’s new course in Airport Business Analytics has been developed to fill this ever-growing need across the industry. The seminar will introduce participants to some of the essential tools and techniques that are used to support data-driven decision making in organizations with applications to the airport industry. Seminar themes include predictive analytics based on basic regression techniques, airport financial analysis through a battery of key performance indicators as well as the rudiments of air transport demand forecasting. By the end of the seminar, participants will have a firm grounding in several baseline methods and applications that are required to analyse the airport industry and contemporary business problems. Course modules are taught from a practitioner’s perspective using data-driven case studies and computer based applications such as Microsoft Excel.

For a comprehensive discussion on the latest demographic and technological trends shaping the airport industry please refer to the article “The airport business in an era of demographic change and technological disruption.”
Global indicators for over 800 airports, representing 73% of the world’s passenger traffic
TAKE YOUR PASSENGER SERVICE TO NEW HEIGHTS

PASSENGER PERSONAS

Every passenger is different, and airports that know who their passengers are can better cater to their wants and needs. Through extensive study and data analysis of ASQ Survey data, ACI has created an ASQ add-on based around six passenger typologies that will help you to:

- know what current and prospective customers are thinking and doing;
- highlight the passenger types that are most inclined to spend at your airport;
- help you understand the specific attitudes, needs, expectations and concerns of your passengers;
- address gaps in service and,
- benchmark your results with other participating airports.

ARRIVALS SURVEY

Participating ASQ airports can now take part in the add-on ASQ Arrivals Survey that offers vital learnings related to arriving passengers’ satisfaction levels. The ASQ Arrivals Survey takes place on the day of travel as passengers are in the airport, ensuring that impressions are fresh and opinions are accurate. The ASQ Arrivals Survey will:

- help you understand arriving passengers’ moods and impressions of the airport, from walking distances and washroom cleanliness to wayfinding, immigration, baggage claim and much more;
- help differentiate the key drivers of satisfaction among arrivals passengers, which can be distinct from the needs of departures passengers; and,
- give you the actionable intelligence to enhance your service offering to arriving passengers, and gauge the effectiveness of these enhancements.

Do not wait to take the next step in improving the customer experience journey at your airport.

Contact ACI’s ASQ team for more information by emailing aciasq@aci.aero.
As ACI’s Airport Service Quality (ASQ) programme is now over halfway through its 11th successful year, and as we celebrate this milestone we are focusing on how airports are increasingly putting the passenger first in all that they do. Indeed, passenger service is a shared priority among all aviation stakeholders—in particular all members of the airport community.

As you’ll learn in this interview series, airports are digging deeper than ever through activities aimed at cultivating a culture of customer service excellence across all staffing levels. Aligning all stakeholders in the pursuit of airport customer service excellence can be a powerful tool toward improving the passenger experience, ensuring employee satisfaction and raising non-aeronautical revenues.

In this edition, I speak with Christina Smith, Customer Services Executive at Liverpool John Lennon Airport.

Key facts about Liverpool John Lennon Airport

- **Airport code:** Liverpool John Lennon Airport (LPL)
- **What year the airport opened:** 1930, with its official opening in 1933 as the first provincial airport
- **Annual number of passengers in 2016:** 4.8 million, representing an 11% increase from 2015
- **Number of employees at LPL:** 250 direct employees with 3,500 colleagues from other companies working with LPL

**Did you know?**

- LPL has the Yellow Submarine outside the new Terminal, a bronze statue of John Lennon and Beatles-themed features around the terminal
- Concorde was a regular visitor for many years, celebrating the Grand National Festivals with avid race goers
- The old Terminal is now an art deco airport-themed hotel
1) How and why did LPL join ASQ? How does LPL directly benefit from ASQ?

LPL joined ASQ in 2014 following a change of ownership to improve the customer experience. Q3 2017 is the 8th consecutive quarter of participation and the feedback provided by passengers permits us to gauge the effectiveness of our strategic priorities against customer feedback.

We monitor performance against our own performance and that of our benchmark group of airports.

2) How does LPL align the common vision of improving passenger experience with all stakeholders, partners and service providers in your organization?

LPL shares quarterly results in a number of ways. Wayfinding screens display ASQ results at locations throughout the terminal. Email footers display the latest quarterly rankings. Data from the quarterly results is the basis for reviews with service partners and providers. As “One Team,” our service partners and providers represent LPL and as such it is important that the ASQ results are shared and understood by all players on the team. Customer feedback tells us where we are meeting or exceeding
expectations, or falling below expectations.

We use the feedback to prioritize key areas for improvements. For example, we ranked consistently lower than our aspirations in terms of availability and cleanliness of toilets. ASQ feedback from users helped us to prioritize a programme of refurbishment which has been rolled out across around 80% of our toilet facilities to date. Improved scores are reflecting the investment that has been made in this area.

3) Are there any particular programmes, courses or activities LPL runs with employees that are specifically aimed at improving customer and passenger satisfaction?

Customer Service Training and Brand Standards presentations are delivered to service partners and providers, and colleagues alongside LPL employees. We have a short One Team video where a cross section of airport colleagues are featured to deliver our One Team Customer Experience message.

These training sessions run throughout the year with additional Disability Awareness sessions for all airport colleagues. Activities such a supporting our airport charity, Alder Hey Children’s Hospital, are open to employees across the site and we celebrate exceptional service with Extra Mile Awards throughout the year.

4) Does LPL practice measuring customer satisfaction of only departing passengers or both departing and arrival passengers?

The terminal facilities at LPL are compact. A passenger arriving on a flight on the main apron may enter the Immigration Hall and exit the terminal with their luggage having walked no more than 100 metres in some cases. For this reason, surveying arriving customers is not possible as customers are keen to continue their journey on public or private transport directly.

However, we find that customers are willing to complete surveys before boarding their flights when departing from the airport. In these cases, passengers who have used the airport for a previous journey are able to provide us with their arrival experience from their most recent flight.

5) What is some of the more unusual passenger feedback LPL has ever received?

Passenger feedback is as wide ranging as the passengers who travel through LPL. One gem that we remember fondly is: “I have never flown XXXX air since they cancelled my flights, needlessly during the ash cloud period!”

6) What are some of the topics you would like to see discussed at future ASQ Forums?

At future ASQ Forums we would like to hear about potential digital processing options
and developments.

**Christina Smith’s Biography**

Christina Smith is a Customer Services Executive at Liverpool John Lennon Airport. Christina has been working with team Liverpool Airport since 2002, the year that the current terminal opened. Christina’s background in the industry is varied, having come full circle from working part-time in retail at the original Liverpool terminal while studying at university. This was followed by two years living and working in France before returning to the industry working for airlines, handling agents and airports in operational and customer-facing roles at several UK airports.

LPL has been participating continuously in the ASQ programme since Q4 2014.

Christina’s main role is to manage the quarterly fieldwork process and to work with the LPL team to share results.

For more information on the ACI ASQ programme, visit [www.aci.aero/asq](http://www.aci.aero/asq) or reach
Customer experience is everywhere in business these days. In 2016 ACI World demonstrated that customer experience is the best way to increase non-aeronautical revenues through the research paper, “Does passenger satisfaction increase airport non-aeronautical revenues?”

According to Harvard Business Review, “customer experience can be defined as the sum of all interactions a customer has with a company or an entity providing a paid service. This can include everything from a customer’s initial awareness or discovery of a company,
product or service, through the purchase and use of that company’s products or services.” These interactions can be delivered in person, through the internet or other channels. Together, these all add up to the critical moments—what we call touchpoints or moments of truth—that create an organization’s overall customer experience. According to Forrester Research, there is convergence between customer experience and human experience, and customer experience is mainly driven by emotions.

ACI is proud to hold the very first ACI-ASQ Customer Experience pre-conference forum during the forthcoming 27th ACI Africa/World Annual General Assembly, Conference & Exhibition on Monday 16 October 2017 at 2pm. This three-hour customer experience forum will be split into three components dedicated to examining the following:

- how and why airports should understand their customers;
- how airports can engage with their communities and stakeholders to deliver excellent customer service; and,
- how to enhance customer experience through the use technology.

During the event, we will see how the service-profit chain establishes relationships between profitability and customer loyalty and employee satisfaction, loyalty and productivity. The links in the chain are as follows: profit and growth are stimulated primarily by customer satisfaction; satisfaction is largely influenced by the value of services provided to customers; value is created by satisfied, loyal, well trained and productive employees. Employee satisfaction, in turn, results primarily from high-quality support services and policies that enable employees to deliver results to customers (Harvard Business Review).

Customer experience in an airport is a very complex business, with a lot a people involved from different airport teams and other stakeholders such as airlines, retailers, governments and more. A driving force that makes the ASQ programme so powerful is its ability to get all stakeholders on the same page. As an old African proverb states: “If you want to go fast, go alone. If you want to go far, go together.”

Customer experience vs. employee experience: Why does it matter?

Customer experience is an encounter between two people. Every employee contributes to the final customer experience. Of course, people directly involved with the customer not only contribute but also provide benefits to the customer even though there are no direct interactions. In the second portion of the ASQ Customer Experience Forum, we will see how airports can engage with their communities and stakeholders to deliver excellent customer service and to contribute to the global experience.

Customer experience is human to human, and this is why a concept call “symmetry of attention” is crucial. Symmetry of attention can best be described as follows: If you keep your employees happy, the employees will keep your customers happy. You can also treat and consider your employees like your customer. We can even talk about the employee experience and not just only the customer experience.
The graph below shows the link between the customer experience and the employee experience.

The graph illustrates the relationship between the level of employee engagement in an airport and the level of customer satisfaction. It also illustrates the concept of symmetry of attention. A disengaged employee may behave rudely towards a customer as the result of a certain level of dissatisfaction, thereby acting as a detractor. Fortunately, this mirror effect works also other way around. A dedicated employee can delight a customer, thereby acting as an ambassador.

However, do not forget, customer experience is all about emotions. Good customer service with a smile is often the best and easiest way to create positive emotion!

Airport community, be customer experience ready! We invite you to contact us by emailing contacta-ciasq@aci.aero to see how ACI can help you to manage your customer experience programme.

Source: Adapted from Cap Client (La mobilisation au service du client. Livre blanc de l’indice MC2. André Coupet - Cap Client)
BE CUSTOMER READY WITH ACI’S EMPLOYEE SURVEY FOR CUSTOMER EXPERIENCE (ECE)

- A tool specifically designed to help airports be “customer ready”
- A survey that can be used year after year
- A measure of employee performance and engagement to strive higher
- An ideal complementary tool for existing ASQ airport members

KEY BENEFITS OF USING ACI’S ECE

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<td>Improved airport experience through better relationships with airport employees</td>
<td>Feeling of valued contribution and belonging to the airport community</td>
<td>Growth of revenues, improved productivity and employee retention</td>
<td>Unified pursuit of a seamless passenger experience</td>
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aciasq@aci.aero  +1 514 373 1200  aci.aero/Airport-Service-Quality/ASQ-Home
New airports join the ASQ family

By Andreas Schirmer, Senior Advisor, ASQ, ACI World

Increasingly, airports around the globe are taking the opportunity to obtain in-depth knowledge about their passengers’ satisfaction.

As the latest members joining the community of airports participating in the ASQ Departures Survey, ACI welcomes three airports operated by the Port Authority of New York and New Jersey: John F. Kennedy International Airport (JFK), Newark International Airport (EWR) and La Guardia Airport (LGA).

2017 has been the most successful year in ASQ’s history in terms of new participants: 46 airports joined the programme in 2017, growing the total number of ASQ
participants to 343. In this context, the ASQ team is also pleased to announce Estonian as the 42nd language option for the ASQ questionnaire.

While the long-running ASQ Departures Survey focuses on the passenger journey before take-off, the recently launched ASQ Arrivals Survey covers the touchpoints relating to the passenger experience after landing; the first group of airports in this new extension of the programme are ADL (Adelaide, Australia), BWI (Baltimore, United States), LCA (Larnaca, Cyprus), YUL (Montreal, Canada) and YYZ (Toronto, Canada).

ASQ benefits for participating airports

- **Data deep dive:** Standard reports and an interactive online analysis tool that provides participants all the information they need to analyze their data and compare them to results of airports in their region and globally.

- **Target setting and monitoring:** Based on ASQ results, service targets can be set; goals and incentives can be established to motivate managers and their teams both internally and externally through Service Level Agreements with partner organizations.

- **Optimizing initiatives:** Understanding what is most relevant to passengers helps identify where to invest and focus financial and human resources.

- **Sharing best practices:** Annual Conferences (ASQ Forums) are organized to discuss current topics and share learnings on how to help raise service standards at all ASQ airports.

- **Regulator support:** ASQ insights are often used in discussions between airport management companies and regulators to provide a reliable measure of the service quality.
• **Marketing:** ASQ helps airports inform their stakeholders (airlines, communities, airport authorities, etc.) of achievements in passenger service; in addition, ACI recognizes top performers with the prestigious annual ASQ Awards and global press campaigns that highlight the winners’ accomplishments to a worldwide audience.

If you are interested in learning more about the ASQ passenger surveys, which open the door to numerous opportunities to measure, compare and enhance customer satisfaction, please contact ASQ at aciasq@aci.aero or call a member of the team today at +1 514 373 1200.

Advance your airport’s interests through our ACI Global Training courses: Managing Service Quality at Airports course and Developing a Customer Service Culture at Airports: Measuring and Benchmarking the Results.
## ASQ Departure Survey: New participants 2017

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CONGRATULATIONS
YOUR PASSENGERS HAVE SPOKEN


The annual ASQ Awards recognize and reward the best airports in the world according to ACI’s ASQ passenger satisfaction survey. They represent the highest possible accolade for airport operators and celebrate the commitment of airports worldwide to continuously improving the passenger experience.

Be sure to join us for the prestigious ASQ Awards ceremony on Tuesday, 17 October, to be held at the 27th ACI Africa/World Annual General Assembly, Conference and Exhibition, taking place from 16–18 October 2017, in Port Louis, Mauritius.

For more information regarding the ASQ Awards, visit:  www.aci.aero/asq-awards

For more information regarding the 27th ACI Africa/World Annual General Assembly, Conference and Exhibition, visit www.aci-waga2017.com
Why digital transformation is important to airports

By Michael Zaddach, Senior Vice President, IT, Munich Airport
Regardless of size, airports operate in complex, changing and challenging environments. While the demand for air travel is growing, the infrastructure and ability of an airport to cope with demand may be limited. Economic pressure from airlines, service demands from customers and competition from other airports may impose constraints. Regulation, deregulation, emerging technologies and social media bring their own problems and opportunities, and of course, security is more critical than ever.

In the difficult quest for profitability, airport operators are confronted with a double challenge: ensuring that aircraft leave on time and that the flow of passengers within terminals is smooth. The goal for most of these savvy consumers is optimizing the time spent at the airport, which in turn provides a real potential return for airports—a potential that could be optimized by taking advantage of digitalization.

Recognizing the importance of airport digital transformation, Airports Council International (ACI) established a Task Force under the ACI World Airport Information Technology Standing Committee (WAITSC) to produce a White Paper titled *Airport Digital Transformation*. We are pleased to announce that the White Paper V1.0 is coming this fall.

The White Paper has been produced for all airport managers and chief experience officers interested in the digital transformation. Although the airport digital transformation is an important topic with great interest, an industry wide definition does not exist; some consider it to be purely within the realm of information technology and others within that of business. The Task Force looked into this issue at length and concluded that the digital transformation is not only about technology but also about business transformation in a digital world. It is both the implementation of new technologies as well as the integration of existing technologies, processes and services to deliver a better experience to all stakeholders.

The White Paper provides the reader with an overview of the airport digital transformation and outlines digital technology tools that offer a better view and control of the passenger journey—minimizing disruptions and providing solutions based on data analytics, for passengers, airports and stakeholders.

Despite the growth in air travel over the last decade, revenues from aeronautics, such as landing fees, have tended to stagnate. To become truly profitable, airport operators have no choice but to concentrate on non-aeronautical revenue sources. The improvement of the passenger
experience through digital solutions is therefore full of opportunities for returns.

In addition to the White Paper, a survey has been developed in order to determine the maturity of airports in adopting airport digital transformation technology tools. And lastly, the White Paper also provides a smart approach for airports in their journey to becoming digital.

In conclusion, airport digital transformation is inevitable and ACI is actively involved in providing information and services to make the journey more efficient.

For more information on the release of Airport Digital Transformation visit our website.

Members of the Task Force include:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Albert Van Veen</td>
<td>Former CIO</td>
<td>Amsterdam Airport Schiphol Group</td>
</tr>
<tr>
<td>Arie Van Der Veek</td>
<td>Enterprise Architect</td>
<td>Amsterdam Airport Schiphol Group</td>
</tr>
<tr>
<td>Catherine Mayer</td>
<td>VP</td>
<td>SITA</td>
</tr>
<tr>
<td>Jörg Ebbinghausen</td>
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<td>Munich Airport</td>
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<td>Singapore Changi Airport Group</td>
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</tbody>
</table>
Airport excellence in safety programme
complimentary service for members
Assess your safety levels to improve your standing in accordance with industry standards.

Assessment and benchmarking services
Assess, monitor, protect and improve your customer experience, cybersecurity, safety and compliance to ensure the sustainability of your airport.

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Enhance your professional skills in airport management and operations.

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GENEVA, SWITZERLAND | 3-4 OCTOBER 2017

THE LEADING GLOBAL FORUM FOR THE WORLD’S AVIATION COMMUNITY TO DISCUSS THE SUSTAINABLE DEVELOPMENT OF AVIATION.

ORGANISED BY:

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All sectors of the global aviation industry have been working together to reduce air transport’s environmental impact, following a shared strategy for CO2 emissions reduction. The Summit is where, in 2008, the aviation industry launched the world’s first emissions reduction goals from a single global sector. Since those goals were announced, the industry has been making impressive progress in addressing its carbon emissions, as well as driving all aspects of sustainable development.

WHO WILL ATTEND

Airlines, airports, air navigation service providers, manufacturers, fuel suppliers, ground service and transportation providers, industry suppliers of products and services, travel and tourism companies, civil aviation authorities, chambers of commerce, government representatives, aviation regulators, industry trade associations, environmental groups and civil society.

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» Network with over 300 of aviation’s leaders, experts, stakeholders, regulators, NGOs and the media.

» Question the experts on topics of critical importance to aviation today, through interactive panel debates and technical workshops.

REGISTRATION NOW OPEN AT
WWW.ATAG.ORG
Mark your calendar for Airports Council International's upcoming Airport Service Quality Forums

**ASQ FORUMS 2017**

Driven by Customer Experience: Share, Think, Improve

26–28 April - Haikou, China | 13–15 September - Prague, Czech Republic | 2–4 October - Detroit, USA

Theme for 2017: **Cultivating a customer experience airport community**

The ASQ Forums offer the airport community the opportunity to share best practices in airport customer experience and learn more about the world's leading passenger satisfaction benchmarking programme.

There are no attendance fees for airport employees.

For more information, please visit [www.aci.aero/asq](http://www.aci.aero/asq).

**We look forward to welcoming you to China, the Czech Republic and the United States!**
World Elephant Day
WORLD ELEPHANT DAY

August 12 2012 marks the year World Elephant day was launched, bringing international attention to an important cause—protecting elephants in the wild. A beloved animal around the globe, elephants are one of many species part of the illegal wildlife trade.

WHAT ACI WORLD PROMOTES

The illegal wildlife trade is the fourth most lucrative global crime valued up to US$20 billion a year. ACI World works side-by-side partners to fight against wildlife trafficking through policy making and education.

Current global efforts to raise awareness include the first UN General Assembly Resolution on the subject, the Reducing opportunities for Unlawful Transport of Endangered Species (ROUTES) partnership, and the United for Wildlife Task Force Declaration, signed at the Buckingham Palace in 2016 by 40 parties, including ACI. ACI is committed to developing a framework to fight wildlife trafficking and adopting and encouraging the adoption of a zero tolerance policy regarding illegal wildlife trade.

WHAT CAN YOU DO?

- Do not buy ivory or other wildlife products. Be an elephant aware consumer
- Visit elephants in countries where they live in the wild – tourism benefits the economy, provides needed jobs, deters poachers and abuse, and gives you the opportunity to experience the beauty, intelligence, and emotional capacity of these magnificent giants
- Take action on social media

#BeElephantEthical #UnitedforElephants
190 accredited airports

- 22 in North America
- 116 in Europe
- 37 in Asia-Pacific
- 6 in Latin America & Caribbean
- 9 in Africa

Welcoming 2.5 billion passengers per year.

In 58 countries across the world.

Or 38.5% of global air passenger traffic.

Visit our interactive results website: www.airportCO2.org
AMPAP: The Global ACI-ICAO Airport Management Professional Accreditation Programme (AMPAP) is an executive development programme for airport executives worldwide. The primary focus is to develop airport managers through a six-course curriculum that covers all functional areas of the airport business in key areas. AMPAP encourages participants to share best managerial practices in an interactive, cross cultural environment while establishing a global network of contacts.

Upcoming Gateway Courses:
Cincinnati, Hong Kong, Delhi, and more TBC
What type of training delivery is best for your organization?

By John Webster, Senior Manager, Global Training

ACI Global Training offers a diverse offering of training solutions to member airports and other aviation related entities to assist in building their staff’s competencies and capabilities through quality driven, relevant, up-to-date programmes and industry best practices.

Over the last four years, we have seen significant growth in the demand for both online and classroom courses as a means of educating and training employees but also a growth in the demand for “onsite or in-house” classroom training at the facilities of the host organization.

In the case of our online products which feature such offerings as the Airport Operations Diploma Programme (AODP), we have seen a significant rise in student hours as more and more airports are using this web based platform as a viable tool to meet the diverse training requirements across their organization.

These organizations have realized the benefits of online training, given the quality of the curricula offered, course affordability, flexibility and the easy level of access for students to enroll in these programmes.
However, in continuing to assess the needs of airports – as it relates to classroom training - we are seeing an increasing trend of organizations to host courses on their own premises as opposed to sending their senior staff to attend courses at external venues.

Given this assessment, it raised the question, which is better for the organization, onsite or offsite training?

We have decided to debate the pros and cons of each approach and the rationale for what should be the deciding factor in how to train your staff.

<table>
<thead>
<tr>
<th>Advantages of “onsite/in-house” training</th>
<th>Advantages of “offsite” training</th>
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<tr>
<td><strong>Location</strong> – The biggest advantage of on-site training is the location. With the training done on the company’s premises, employees save valuable time, which otherwise would have been lost on commuting. On-site training also allows the organization to make last minute adjustments and additional changes to operational considerations.</td>
<td><strong>Staff morale</strong> - Offsite training sessions or meetings tend to be more memorable as they break away from the norm. Creating environments for your employees with enhanced experiences will help with employee retention and satisfaction, and it will also be perceived as reinvesting in your employees and their career. Being offsite, the employee is exposed to new perspectives and can witness “first-hand” different work practices that can be adopted at their own airport.</td>
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<tr>
<td><strong>Privacy</strong> - Delicate organizational data used for customized courses can be shared by members and utilized as solid illustrations amid intuitive and organized confidential workshop sessions in complete confidence.</td>
<td><strong>Focus</strong> – Being at a different location away from the actual workplace can eliminate distractions and help to ensure that your employees are fully engaged with the new information. Employees can be more focused and therefore learn better when they are away from the office. They should not be distracted to answer ringing phones, or be tempted to check their emails during classes.</td>
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<tr>
<td><strong>Tailored course content</strong> - Organizations have the ability to have their courses customized to the requirements of the client to focus on areas that can strengthen the performance of the individual and the company as a whole.</td>
<td><strong>Networking</strong> – Offsite courses are great for networking and team building. They can also improve the learning experience by allowing individuals to share advice and best practices in an open space.</td>
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<td><strong>Employees have access to training that works around their schedule</strong> - With on-site training, courses can be scheduled based on the organization’s specific needs. Learning and development professionals can plan training to suit their own employees according to their schedules so as not to clash with peak operational dates/hours where the employee is most needed.</td>
<td><strong>Engaged</strong> – When training is away from the office, a change of scenery can have a positive effect. Student engagement is likely to be higher too, which will help everyone get the most out of the training sessions. The individuals met in a work setting may be more willing to “open-up” in new offsite training environment as participants get to know each other on a personal level especially through group work and team exercises.</td>
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In regards to the disadvantages of both approaches, the following areas have been noted:

<table>
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<tr>
<th>Disadvantages of “onsite/in-house” training</th>
<th>Disadvantages of “offsite” training</th>
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<tbody>
<tr>
<td><strong>Price</strong> – Overall cost of having the course hosted at the organization’s facilities. However, the cost per delegate is typically less when compared to sending the same number on to out-of-country training courses.</td>
<td><strong>Price</strong> – Offsite training at an external venue can cost more than running a training session in local offices where more people can be trained. The investment to send a limited number of staff to “offsite” training is greatly dependent on factors such as the training subject area, level of expertise required, accessibility of the required training, potential impact on the organization not to have the required training for those select individuals - to highlight a few points.</td>
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<td><strong>Extra administration burden</strong> – Organizations need to make sure they have suitable training space for learning, proper equipment, trainer parking and support logistics in order to successfully host the course in-house.</td>
<td><strong>Time off work</strong> – Employees will need to take much more time away from work to attend the training session at a different location.</td>
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<td><strong>Pressure on delegates</strong> – If individuals are offsite for training they are likely unable to be contacted, however if they are onsite they can be pulled out of a classroom if necessary.</td>
<td><strong>Travel</strong> – Employees will need to travel to the training venue, which can be costlier per participant (e.g. Hotel, airfare, per diem) in comparison to “in-house training”. However, the selection process for choosing training for employees will be based on the specialized nature of the training and thus only allowing a limited number of people to attend.</td>
</tr>
<tr>
<td><strong>Distracted with getting involved in day-to-day operations of current job</strong> – Employees may decide to attend the course to take a break from their current job or worst case scenario they don’t turn up at all because the course is running on an inconvenient time or day.</td>
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<tr>
<td><strong>No networking opportunities</strong> – Attending a course with delegates from other companies allow networking and learning opportunities which are excluded when courses are hosted in-house.</td>
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</table>
Upon review, whether you select onsite or offsite training, neither approach is better nor worse than the other but is very much dependent on your structure, business needs, operational considerations, strategic objectives and several other environmental factors specific to your organization. When developing a training strategy, taking a step back to review what is truly important to your business prior to choosing what type of training works for your staff and by extension, your organization is key.

Staff are one of the most vital elements to a company’s success. An organization cannot achieve its objectives and would not operate at the optimum level that is required without the support of its staff. Therefore, although there are costs associated with training, it is important to ensure that staff have all the competencies needed to be able to carry out their work effectively and efficiently.

Staff turnover and retirement of “long serving” airport employees are other major issues that can affect a businesses’ success. As such, it is paramount to show employees that they are an asset not an expenditure, by investing in them and their future.

Training can also stimulate staff to do better and create a more fulfilling work environment. Having access to training and professional development is becoming more of a contributing factor that job seekers look for when selecting a future employer. Offering quality based training as part of the human resource performance policy can therefore help attract some of the best talent within the industry.

Given this observation, your organization should be asking this fundamental question, “how healthy is my talent pipeline?”

For more information on the full range of programmes that we offer, please contact us at training@aci.aero.
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Earn Your Diploma in 3-steps

1. **Airport Financial Management** - new course
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Airport Operations Diploma Programme

Did You Know?
The Airport Operations Diploma Programme provides airport professionals with a broad understanding of airside operations, terminal and landside operations and business operations in order to empower them with the knowledge to successfully address the operational and business needs of 21st century airports.

Programme Structure
The Programme consists of three self-paced online courses:

- **Airside Operations**
- **Terminal and Landside Operations**
- **Airport Business Operations**

Candidates must successfully complete all three online courses within a three-year time frame.

To register for the Airport Operations Diploma Programme visit [www.olc.aero](http://www.olc.aero) or contact enrolments@olc.aero

For more information on ACI Global Training visit [www.aci.aero/training](http://www.aci.aero/training) or contact training@aci.aero
ACI Global Training
photo gallery

Airport Safety Management Systems Implementation, 3–7 July 2017 in Kigali, Rwanda
GSN1 – Safety Management Systems, 3–7 July 2017 in Montego Bay, Jamaica

Formation Aérodomes et Aides Visuelles au Sol, 3–8 July 2017 in Douala, Cameroun
Global Training

Managing Service Quality, 10–12 July 2017 in Panama City, Panama

GSN 2 - Airside Safety Operations, 10–14 July 2017 in Montego Bay, Jamaica
Training calendar

Asia-Pacific

Airport Safety Management Systems (SMS) Implementation*
24–28 September 2017  Abu Dhabi, UAE

GSN 2 - Airside Safety and Operations
1–5 October 2017  Abu Dhabi, UAE

GSN 5 - Advanced Safety Management Systems
8–12 October 2017  Abu Dhabi, UAE

Airport Environmental Management*
8–12 October 2017  Abu Dhabi, UAE

Developing a Customer Service Culture at Airports*
15–19 October 2017  Abu Dhabi, UAE

Europe

GSN 2 - Airside Safety and Operations
18–22 September  Istanbul, Turkey

Airport Master Planning
25–29 September  Istanbul, Turkey

Human Factors for Airport Managers
23–25 October  Bucharest, Romania

ACI/ICAO Aerodrome Certification*
23–27 October  Istanbul, Turkey

Latin America-Caribbean

GSN 1 - Safety Management Systems
25–29 September  Panama City, Panama

Behavioural Analysis: Passenger Screening and Insider Threat Management
9–13 October  Montego Bay, Jamaica

North America

Safety Risk Assessment
9–11 October  Honolulu, USA

Aeronautical Studies and Risk Analysis
12–18 October  Honolulu, USA

Security and Facilitation
23–27 October  San Francisco, USA

*Can be taken as an elective for the Airport Management Professional Accreditation Programme (AMPAP)

**Course availability and dates subject to change. Visit our Global Training calendar for the most up-to-date information

For additional information please contact us at training@aci.aero
Find out why the world’s best airports are part of the Airport Service Quality programme

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For more information on how to join the ASQ network, contact the ASQ team:

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*Airport code sizes are based upon Director General’s Roll of Excellence inductees and ASQ Award winners since 2006
**The ASQ Awards are provided based upon the top three mean scores on overall satisfaction from the ASQ Survey
Key events and courses

Highlighted events and training
September–November 2017

- **2017 AIRPORTS CANADA CONFERENCE & EXHIBITION**
  24–26 October 2017
  Toronto, ON

- **2017 ACI-LAC ANNUAL ASSEMBLY, CONFERENCE & EXHIBITION**
  7–9 November 2017
  San José, Costa Rica

- **2017 ACI-NA ANNUAL CONFERENCE & EXHIBITION**
  17–20 September 2017
  Fort Worth, TX

- **BEHAVIOURAL ANALYSIS: PASSENGER SCREENING AND INSIDER THREAT MANAGEMENT**
  9–13 October 2017
  Montego Bay, Jamaica

- **AERONAUTICAL STUDIES AND RISK ANALYSIS**
  12–18 October 2017
  Honolulu, USA

- **ASQ Forum Detroit**
  2–4 October 2017
  Detroit, MI

*This course can be taken as an elective for the Airport Management Professional Accreditation Programme.
How healthy is your talent pipeline?

Invest in your employees' skills today, cultivate a culture of excellence and reap the rewards tomorrow.

Leadership and management

Professional certification

In-house training

Subject-matter competency

Instructor-led

E-learning
SAVE THE DATE

ANNUAL ASSEMBLY
CONFERENCE & EXHIBITION
San José, Costa Rica - November 7-9, 2017
ACI Events calendar

September 2017–December 2017

**ICAO Global Aviation Security Symposium (AVSEC2017) in collaboration with ACI**
12–14 September 2017  Montreal, Canada

**ASQ Forum Prague**
13–15 September 2017  Prague, Czech Republic

**2017 ACI-NA Annual Conference & Exhibition**
17–20 September 2017  Fort Worth, TX

**ASQ Forum Detroit**
2–4 October 2017  Detroit, MI, United States

**Global Sustainable Aviation Summit 2017 (ATAG)**
3–4 October 2017  Geneva, Switzerland

**27th ACI Africa/World Annual General Assembly, Conference & Exhibition**
16–18 October 2017  Port Louis, Mauritius

**2017 Airports Canada Conference & Exhibition**
24–26 October 2017  Toronto, ON

**The Trinity Forum 2017**
1–3 November 2017  Bangkok, Thailand

**ACI-NA Marketing & Communications Conference**
6–8 November 2017  St. Louis, MO

**2017 ACI-LAC Annual Assembly, Conference & Exhibition**
7–9 November 2017  San José, Costa Rica

**11th ACI Airport Exchange**
5–7 December 2017  Muscat, Oman

For a full listing of ACI events, please visit [www.aci.aero/events](http://www.aci.aero/events).
SAVETHEDATE

13th ACI Asia-Pacific Regional Assembly, Conference & Exhibition

April 23-25, 2018
Narita, Japan

For further inquiries
www.aci-asiapac.aero | events@aci-asiapacific.aero
Ground accidents due to slippery runways and associated costs for airports

By Dieter Pade, VP International Sales, Cyclone Technology LLC

When low-cost runway maintenance technologies are used, runways can be damaged in such a way that regularly scheduled resurfacing becomes a more expensive and onerous task. Add to this scenario wear from larger, heavier aircraft, the effects of climate change and damage from ground accidents, and it becomes clear that choosing a quality runway maintenance option is vital if an airport is to protect the significant initial investment it made in the runway’s construction and avoid higher costs down the road.

Of course, safety is also an issue. With regard to ground accidents, data from Boeing, the International Air Transport Association and the International Federation of Air Line Pilot’s Associations indicate that 51% of incidents are due to insufficient rubber removal from the traffic area; in times of high humidity the rubber that has accumulated on the runway becomes slippery, reducing the ability for aircraft to break.

In fact, the issue of rubber accumulation on the runway has come to the attention of both the Federal Aviation Administration (FAA) and the International Civil Aviation Organization (ICAO), with both providing recommendations for maintaining runway texture to allow for adequate aircraft braking on landings or in case of an aborted takeoff.

Outsourcing runway maintenance activities is one solution, but having in-house equipment at the ready offers a variety of advantages for airports:

- All work is done by airport staff, making it easier to assure quality and assign responsibility.
The work of any contractor offering prices lower than the above should be carefully reviewed for quality. Further, given the above costs, airports may consider investigating the potential return on investment should they purchase their own runway resurfacing equipment. The result could be a safer passenger experience, less frequent maintenance and reduced costs.

• **The equipment is always on hand when it is required.**

• **Airports know their operating environments better than anyone, and can adjust the process to ensure the runway performs as required given temperature, precipitation, wear and tear from the climate, etc.**

According to [dpw.lacounty.org](http://dpw.lacounty.org), the cost to maintain a runway to FAA and ICAO standards is as follows:

• **Preservation using modern technology costs between $2.00 and $12.50 per square meter.**

• **Resurfacing costs between $17.50 and $25.00 per square meter.**

• **Major rehabilitation work costs between $30.00 and $50.00 per square meter.**
### ACI World Benefits

#### ANALYTICAL REPORTS AND AIRPORT TRAFFIC DATA

<table>
<thead>
<tr>
<th>ITEM</th>
<th>WORLD BUSINESS PARTNERS</th>
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<tbody>
<tr>
<td>ACI Airport Economics Comprehensive Report (PDF)</td>
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<tr>
<td>ACI Airport Key Performance Indicators (KPI) Excel - With Summary Report</td>
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<td>ACI Annual World Airport Traffic Report (Annual WATR) - Excel</td>
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<td>ACI Annual World Airport Traffic Report (Annual WATR) - PDF</td>
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<td>FreightFlash (Press Release)</td>
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#### ASSISTANCE

- Access to key decision makers at airports ✓
- Priority access to staff expertise ✓
- Support and lobbying efforts with governments and/or regulators ✓

#### AIRPORT SERVICE QUALITY (ASQ)

- ACI Passenger Personas: A new approach to passenger profiling $
- Does passenger satisfaction increase airport non-aeronautical revenue? A comprehensive assessment research report $
# ACI World Benefits

## CONFERENCES
- Access to speaker presentations and delegate lists in PDF - No Contact Details (registered delegates only)
- Admission to special social and networking events at ACI conferences and exhibitions (e.g., breakfast meetings with Airport CEOs/Directors during WAGA (registered delegates only)
- Membership & discounted rates for registration and exhibition booths
- Preference given on speakers and booth selection (subject to the event)
- Sponsorship opportunities for ACI World events

## COMMUNICATIONS
### OR/AR
- Airport World Magazine (Monthly) (Hard Copy)
- Airport World Magazine Advertising Opportunities
- Events: Upcoming conferences, workshops and forums (Email)
- Global Training Newsletter (Monthly) (Email)
- Global Training: Upcoming Courses (Email)
- Holiday Card (soft copy)
- Press Releases (Email) (Summaries also found in World Report)
- Social Media (Facebook/LinkedIn/Twitter/Youtube)
- World Report Newsletter (Monthly) (Soft Copy)

## CORE DOCUMENTATION
- ACI Policy and Recommended Practices Handbook
- 20th ACI Anniversary Book
- ACI Annual Report
- ACI Airport Members Directory and World Business Partners Directory - PDF/Hard Copy
- ACI World Business Partners Directory

## GROUPS (BOARDS/COMMITTEES)
- ACI World Business Partners Advisory Board
- ACI World Governing Board
- ACI World Standing Committees
  - 10 Airport Regional Reps. are appointed by ACI Regional Offices (two per region)
  - Airport Chair & Airport Vice Chair are appointed by the ACI World Executive Committee
  - 10 Airport Members at Large are appointed by ACI World in coordination with ACI Regional Offices
  - 5 WBPs are appointed by ACI Regional Offices (one WBP per region)

### OR & AR
- Media/Marketing Contacts & Aviation Journalists

### Nominated by Regional Office
- (nominated by regional office)
## ACI World Benefits

### Membership Structure

WBP membership is open to companies doing business with, for and at airports, or in an airport-related industry. Every ACI WBP will designate a primary Region, determined by where the majority of their yearly airport-related revenue is earned. While being a global programme, each Region oversees the management of its own programme, which is reflected in both the unique benefits it offers and its fee structures. For an additional fee, WBPs can become an Affiliate member of another Region, which entitles them to greater benefits in that Region.

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### Handbooks

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<tr>
<th>Item</th>
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<td>ACI C USS Survey (2006)</td>
<td>*/OR</td>
</tr>
<tr>
<td>ACI Survey on Apron Incidents and Accidents 2006 and 2007</td>
<td>$</td>
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<tr>
<td>Apron Marking and Signs Handbook (2009)</td>
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<tr>
<td>Common Use IT Handbook (2007)</td>
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### Training

<table>
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<tr>
<th>Item</th>
<th>World Business Partners</th>
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<tbody>
<tr>
<td>ACI Global Training: AELP/AMPAP/GSN/Airport Dynamics</td>
<td>$</td>
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<tr>
<td>ACI Global Training: Inhouse Training</td>
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### Website

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<th>Item</th>
<th>World Business Partners</th>
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<tr>
<td>Airport Job Search Advertising</td>
<td>$</td>
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<tr>
<td>Banner Advertising</td>
<td>$</td>
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