



NEXT GENERATION OF AVIATION PROFESSIONALS  
**GLOBAL SUMMIT**  
ICAO HQ MONTRÉAL, 27-28 NOV 2017



# Aviation from Young Professional's Point of View

*By: Kleopas Danang Bintoroyakti, ICAO Young Aviation Professional 2017*



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## Kleopas Danang Bintoroyakti *Young Aviation Professional 2017*

### Education:

**Gonzaga College Catholic High School, Jakarta, Indonesia**  
(2003-2006)



**Bachelor of Arts in Mass Communications and Politics**  
**Atma Jaya Yogyakarta University, Indonesia** (2006 – 2009)



**Masters of Science in Air Transport Management and Operations**  
**Coventry University, United Kingdom** (2015 – 2016)



### Work Experience:

**Weber Shandwick Indonesia, Senior Consultant**  
(2010 – 2013)



**AirAsia Indonesia** (2013 – 2015) *Communications Executive*



**PT Angkasa Pura Solusi** (2016 – 2017) *Business Development Manager*



**ICAO, Young Aviation Professional Officer** (2017 – Present)



### Key Aviation Projects:

*Corporate Communications, Crisis Communications (First-hand Experience),  
Government Relations, Safety Communications*





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# Brief Information about where I come from...



**More than 260 million population**

**127 million air passengers as of 2016**

**+ - 19 scheduled airlines  
 45 non-scheduled airlines**

**More than 270 airports (28 International)**

**3 time zones, more than 17,000 islands**



**More than 65,000 people in Indonesia work for Aviation sector Technical and Non-Technical (managerial)**

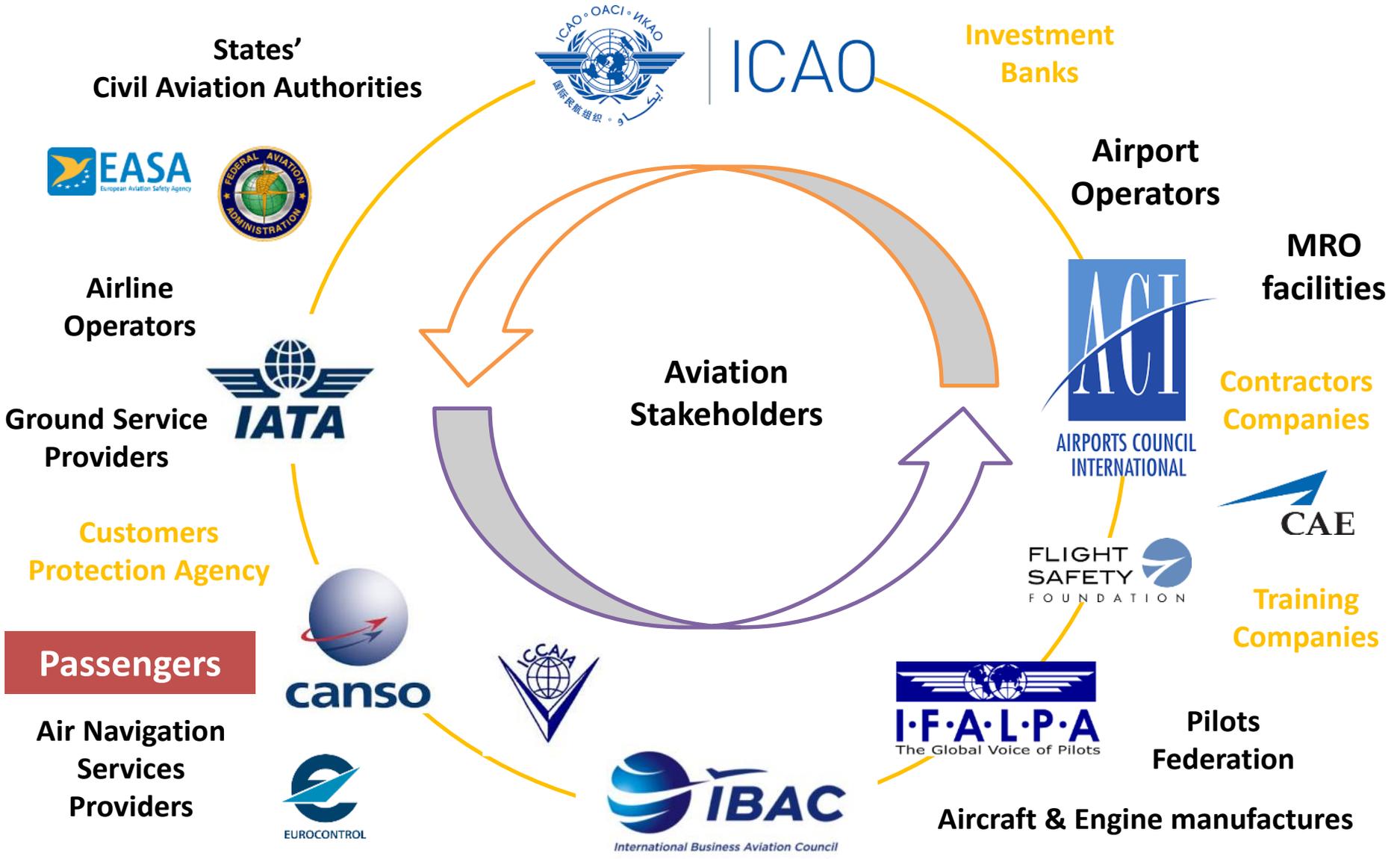
**+ - 10,000 Pilots\*, + - 1,488 ATC officers\*, + - 3,948 FOOs\*\*, + - 12,648 flight attendants\*\*, + - 7,217 Aircraft Technician\*\***

*\*data as of 2016  
 \*\*data as of 2014*



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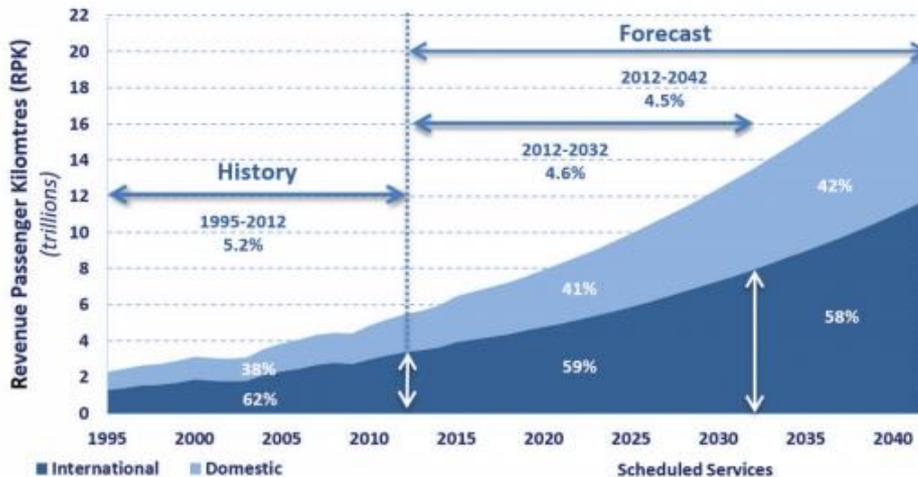
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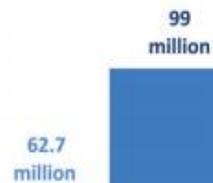


## Projection & Benefit

Total passenger traffic: history and forecast

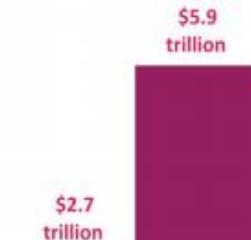


EMPLOYMENT (JOBS)



2014 2034

ECONOMIC BENEFIT (GDP)



2014 2034

By 2034, both air passenger traffic and air freight traffic are expected to more than double, compared to 2016. Passenger traffic is expected to reach over 14 trillion RPKs with a growth of 4.5 per cent per annum.

The future growth of air transport will likely depend on sustainable world economic and trade growth, as well as declining airline costs and ticket prices. Other factors, including regulatory regimes (such as liberalization of air transport), technological improvements and fuel costs will also impact future growth.

**In 2034, aviation will provide 99 million jobs and generate USD 5.9 trillion in GDP, a 122% increase from 2014.**

Source: ICAO, Aviation Benefits Report 2017

### Airport development projects: States in all regions gear up to anticipate future demand

By Kiewit Danang Bintoroayakti, Young Aviation Professional



Chhatrapati Shivaji International Airport located in Mumbai, India

Over the past twenty years, emerging economies such as Asia-Pacific, Latin America, the Middle East and Africa have experienced significant traffic growth and improved connectivity. In addition, the birth of low-cost carriers and aggressive airline expansion projects have also contributed to growing passenger and air cargo volumes worldwide.

With this rapid growth, the world's airports must plan today to meet tomorrow's air service demand, whether through new infrastructure or optimization of existing assets. ACI forecasts indicate that passenger traffic will increase by an average of 5.2% a year to over 14 billion by 2039, and while most of the growth is expected to come from emerging economies, growth is still expected to be strong in mature markets.

When required to meet forecasted demand, States and airport operators put infrastructure development on their priority list, but budget or funding remains a challenge for all but the most commercially successful airports. Indeed, airports are asset-intensive businesses that require significant capital investment that may take many years to recover.

In an effort to generate funding for new infrastructure or enhancements to existing infrastructure, some airports have started seeking interest from private investors. In addition to

ensuring airports can meet demand for air service, investment is important for enhancing the passenger's experience. For example, 10 years ago, passenger and baggage check-in were only available manually at service desks. Airlines have since invested in online check-in systems, which in turn contribute to increased operational efficiencies. This innovation is just one example of how the passenger experience has been improved. Others include exclusive lounges, duty free shops, parks and conference facilities. Airports have become public spaces with multiple functionalities. In turn, promoting and marketing a culture of continuous service improvement has become a matter of gaining a competitive advantage and optimizing non-aeronautical revenue generation—another excellent source of funds for reinvestment.

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# Driver of Change for the Airline Industry

Society	Technology	Environment	Economy	Politics
<ul style="list-style-type: none"> <li>• Terrorism</li> <li>• Urbanization and the growth of megacities</li> <li>• Passenger identity and fraud</li> <li>• Global aging</li> <li>• Middle class growth in China and the Asia-Pacific region</li> <li>• New modes of consumption</li> <li>• Tensions between data privacy and surveillance</li> <li>• Global population growth driven by Asia and Africa</li> <li>• Shifting ethnic, political and religious identity</li> <li>• Disability, fitness and health</li> </ul>	<ul style="list-style-type: none"> <li>• Cybersecurity</li> <li>• Expanding human potential</li> <li>• Robotics and automation</li> <li>• 3D Printing and new manufacturing techniques</li> <li>• Virtual and augmented reality</li> <li>• Internet(s) of Things</li> <li>• Alternative fuels and energy sources</li> <li>• New aircraft designs</li> <li>• Alternative modes of rapid transit</li> <li>• Geospatial technology</li> </ul>	<ul style="list-style-type: none"> <li>• International regulation of emissions and noise pollution</li> <li>• Resource nationalism</li> <li>• Personal carbon quotas</li> <li>• Water and food security</li> <li>• Environmental activism</li> <li>• Extreme weather events</li> <li>• Rising sea levels and reclaimed habitats</li> <li>• Human-controlled weather</li> <li>• Circular economy</li> <li>• Infectious disease and pandemics</li> </ul>	<ul style="list-style-type: none"> <li>• Global income inequality</li> <li>• Strength and volatility of global economy</li> <li>• Price of oil</li> <li>• Level of integration along air industry supply chain</li> <li>• Shift to knowledge-based economy</li> <li>• Privatization of infrastructure</li> <li>• Concentration of wealth into a "Barbell economy"</li> <li>• Unionization of labor and regional independence</li> <li>• Open data and radical transparency</li> <li>• Changing nature of work and competition for talent</li> </ul>	<ul style="list-style-type: none"> <li>• Bribery and corruption</li> <li>• Geopolitical (in)stability</li> <li>• Government ownership of airspace and critical infrastructure</li> <li>• Strength of governance</li> <li>• Anti-competitive decisions</li> <li>• Defense priorities dominate civilian needs</li> <li>• Shifting borders, boundaries, and sovereignty</li> <li>• Increasing influence of alternative regional and global institutions</li> <li>• Trade protection and open borders</li> <li>• Rise of populist movements</li> </ul>



Figure 2: 50 Drivers of Change for the Airline Industry



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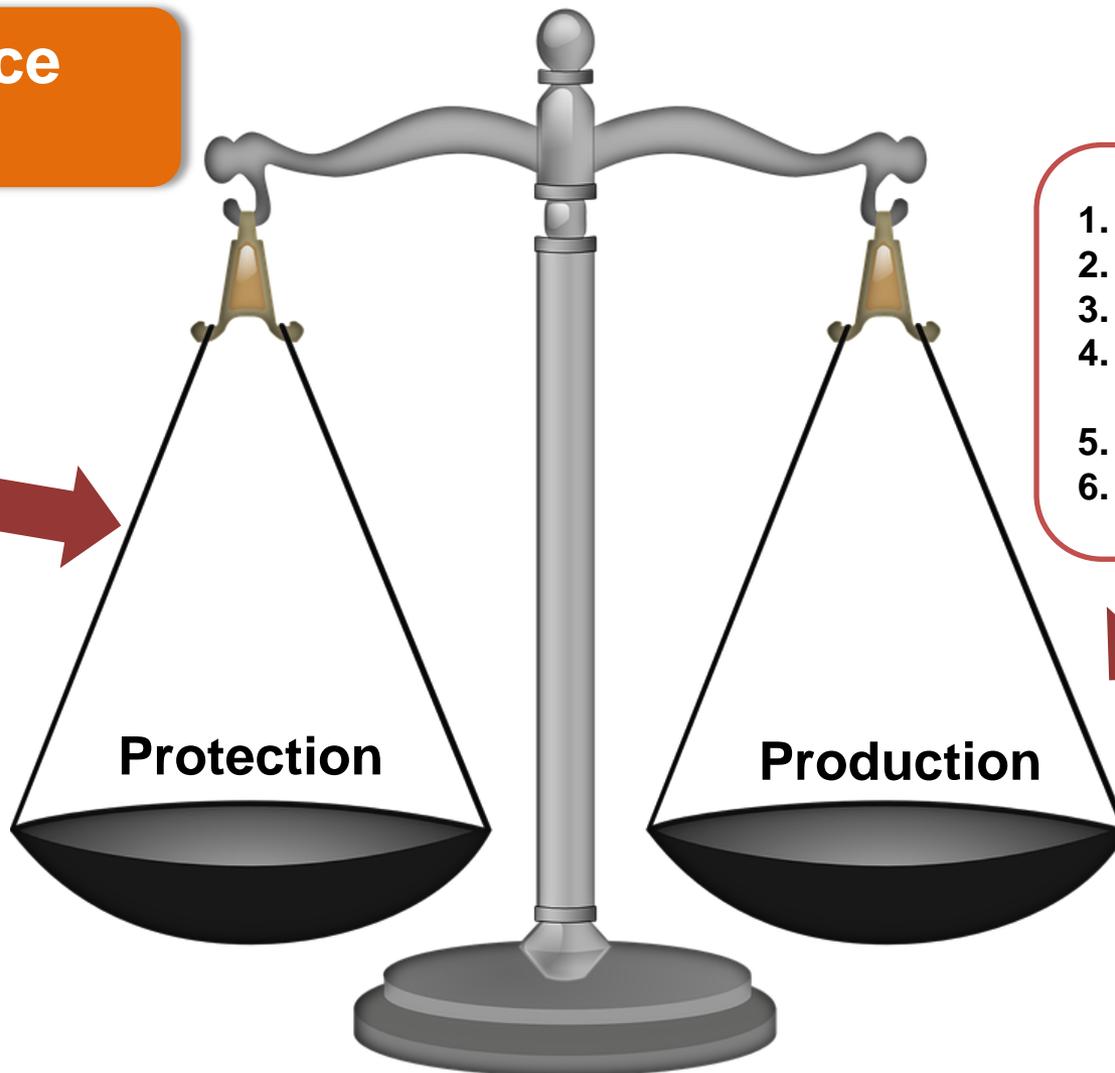
**COMPLEX, HIGHLY REGULATED  
AND DYNAMIC**



## The Balance Scale

Infuses safety & security to parts of all the system:

1. People
2. Tools
3. Procedures
4. Materials
5. Equipment



1. Revenue
2. Traffic growth
3. OTP
4. Passenger services
5. Marketing
6. Profitability





# Working in Aviation

## ADVANTAGES

1. Travel Benefits
2. Good Compensation
3. Health Benefits, pensions
4. Multicultural Environment
5. Personality Improvement
6. Trainings
7. International Exposure
8. Skillset transfer

## CHALLENGES

1. High Investment
2. Highly regulated
3. Culture, Language Barrier
4. Gender Equality
5. 24/7 Business
6. Prone to Crisis
7. Stress, pressure, fatigue
8. Visa restrictions



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## Next Generation Professional Available Careers in Aviation



**Question: How to attract and how to retain them to work with the industry?**





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# The Future? – MILLENNIALS

*Narcissist*

*Travel*

*Cost Sensitive*

*New Experience*

*Ambitious and Instant*

*Competitive*

*Global Citizen*



*Intuitive, Spontaneous*

*Mashable.com/Getty Image*

*Entrepreneurial*

*Freedom!*

*Confident*

*Tech Savvy*

*Conscious*

*Social Media*

*Civic Oriented*

*Open minded*



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## Conclusion – Proposed Strategy

**INTRODUCE AVAILABLE CAREER PATH IN AVIATION**

**EDUCATE ABOUT AVIATION INDUSTRY & INVOLVE THEM SINCE YOUNG AGE**

**PROMOTE AVIATION CAREERS WITHOUT GENDER-BIASED**

**RESPECT OTHER SKILLSET**

**OPTIMIZE DIGITAL TECHNOLOGY, CUTTING EDGE RECRUITMENT**

**SUPPORTING POLICY TO MAKE AVIATION EDUCATION MORE AFFORDABLE**

**SCHOLARSHIPS**

**PROMOTE**

**SET CLEAR PROCEDURE, GOALS AND GUIDANCE**

**POLICY TO BRIDGE THE GAP BETWEEN SENIORS AND AB-INITIO**

**EQUAL OPPORTUNITIES FOR BOTH TRAINING & CAREER PROGRESSION**

**FLEXIBILITY FOR AVIATION PROFESSIONAL TO WORK ANYWHERE IN THE WORLD**

**DEVELOP AN OPEN, FUN, EMPLOYEE CENTERED AND FAIR CORPORATE CULTURE**

**LISTEN TO THEIR ASPIRATION AND GIVE THEM SELF-ASSUREDNESS**

**RETAIN**



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# Involve the Aviation Enthusiast Community



**Members:**  
 Website: 22,109  
 Twitter Followers: 22,180  
 Instagram Followers: 11, 000+  
 Facebook: 5,926  
 YouTube: 613

Forum discussion  
 Offline Gathering  
 Plane Spotting  
 Die Cast Collector  
 Flight Simulator  
 Promoting Safety  
 Aviation Education



Indoflyer



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