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# A Human Factors Program in a Multicultural Airline



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معاً إلى كل مكان  
Going places together



# Contents

- A multi cultural Airline
- Understanding Human Factors
- Identifying your target audience
- Understanding culture – in all forms
- Supporting Evidence Based Training
- Delivering the product



# Pilots & Cabin Crew in QR

129 Nationalities – Over 3400 Pilots and 10500 Cabin Crew



Over 150 Destinations



# What is Human Factors?

What is really happening

What I think is really happening



Senses



Reality

SITUATIONAL AWARENESS

Perception of Reality

INFORMATION PROCESSING

UNDERSTANDING

STARTLE EFFECT

ASSERTIVENESS

We make decisions based on our PERCEPTION of reality

WORKLOAD

UNKNOWN

LEADERSHIP

JUDGEMENT

KNOWLEDGE

PROCEDURES

TEAMWORK

DECISION MAKING

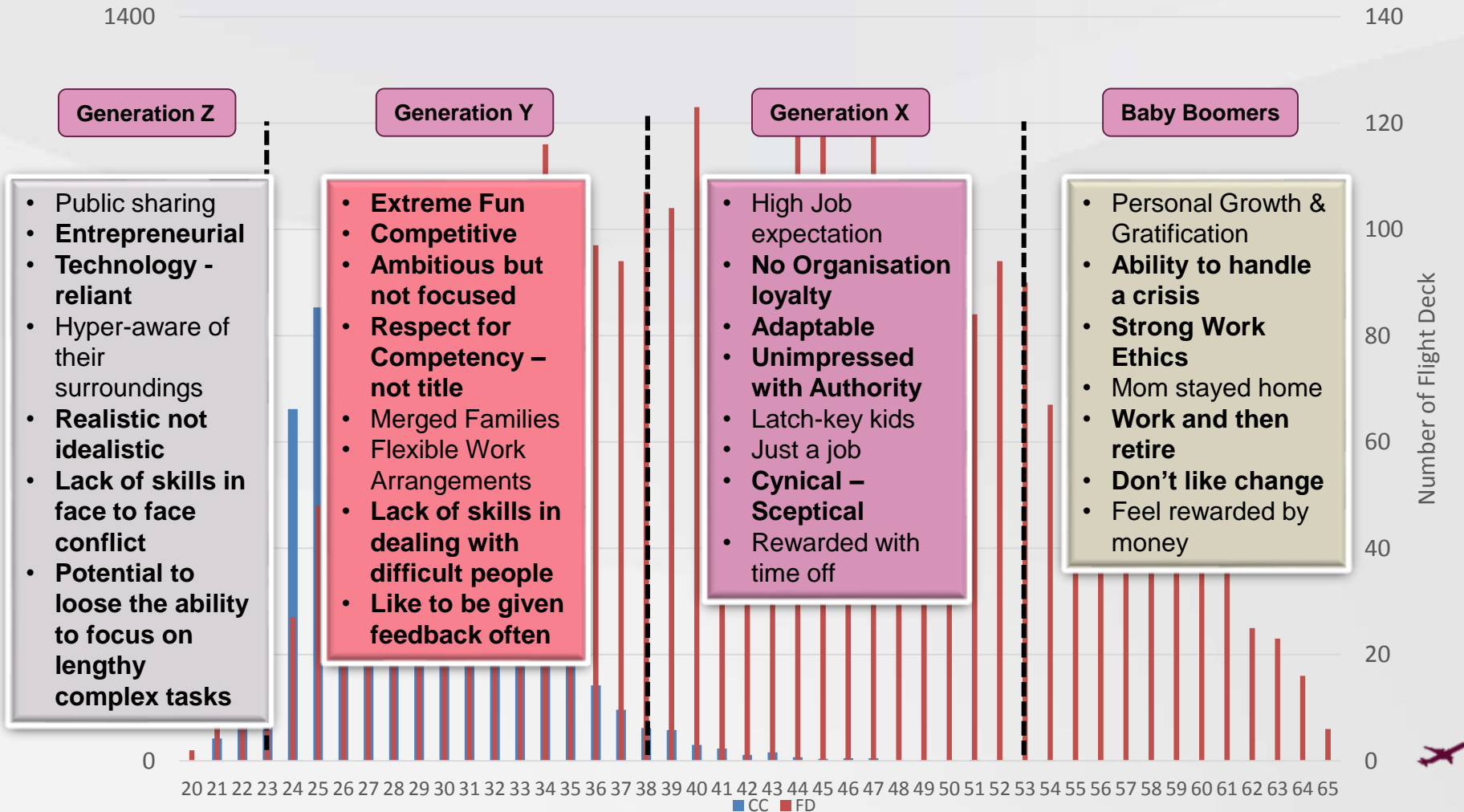
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# Understanding your Target Audience

- Generational Culture
- National Culture
- Professional Culture
- Organisational Culture
- Safety Culture



# Generational Differences



Data: Flight Planning – Nationalities – December 2016  
 West Midland Family Centre, 2017  
 Anne K. Robey-Graham, 2008

# How do they like to Learn?

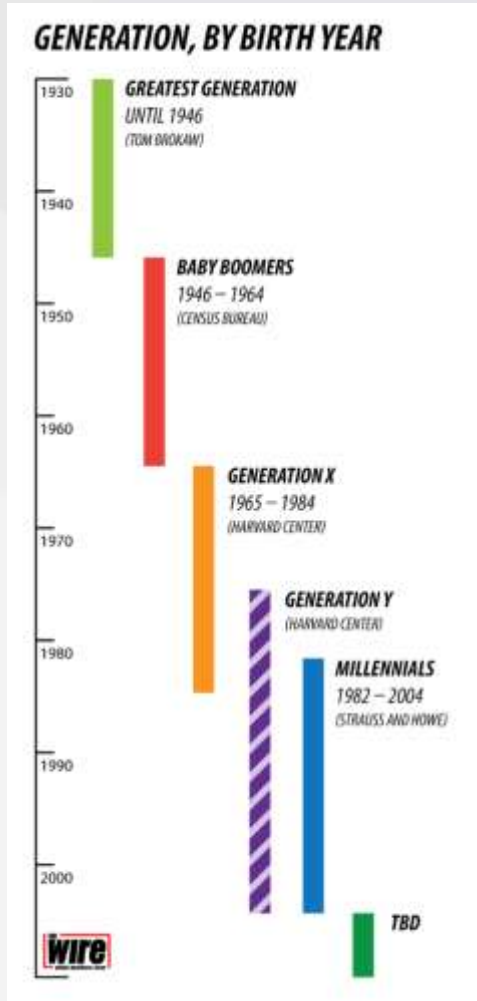
Age  
in  
2017

53-72

33-52

23-37

7-22



	Influencers	Training Focus	Learning Format	Learning Environment	Ideal Leaders
53-72	Evidential Experts	Technical Data Evidence	Relaxed Structured	Classroom Style Quiet Atmosphere	Commanding Thinkers
33-52	Pragmatic Practitioners	Practical Case Studies Applications	Spontaneous Interactive	Round-Table Style Relaxed Ambience	Co-ordinating Doers
23-37	Experiential Peers	Emotional Stories Participative	Multi Sensory Visual	Café Style Music & Multi Modal	Empowering Collaborators
7-22	User Generated Forums	Multi Modal eLearning Interactive	Student- Centric Multi Stimulus	Lounge room style Multi Stimulus	Inspiring Co-Creators

# Barriers to Cockpit/Cabin Communication

Dimension	Cockpit	Cabin
<b>Gender</b>	Mostly male	Mostly female
<b>Age (average)</b>	28 - 60	23-32
<b>Workspace</b>	Confined	Spacious
<b>Physical Activity</b>	Stationery	Active
<b>Noise Level</b>	Relatively quiet	Relatively noisy
<b>Airport Workload</b>	High	Low
<b>Cruise Workload</b>	Low	High
<b>Primary Goal</b>	Safety	Safety
<b>Primary Role</b>	Technical Expertise	Service Delivery
<b>Cognitive Orientation</b>	Technical	Social
<b>Career</b>	Life Long	1-7 years



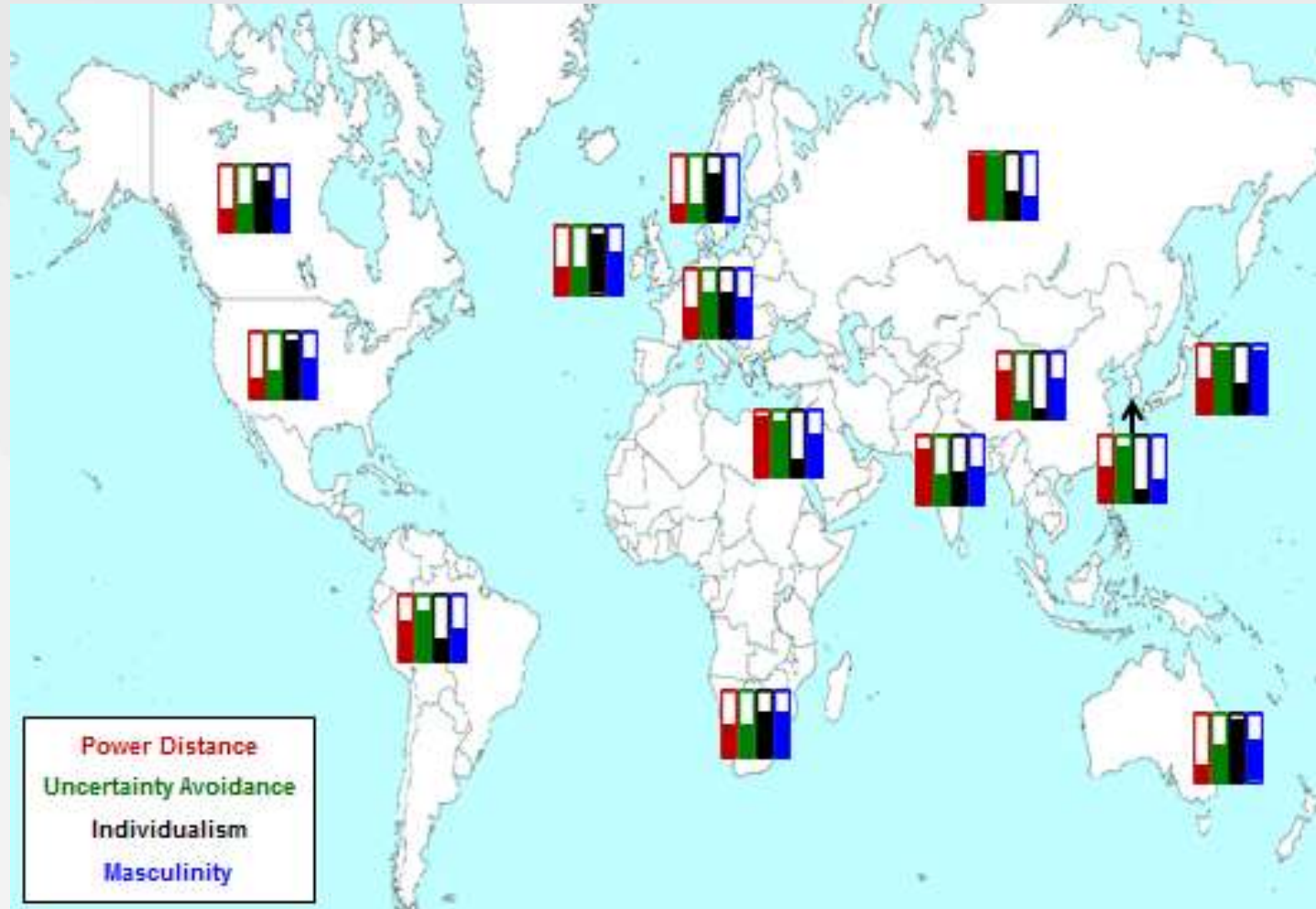
# Hofstede's Cultural Traits



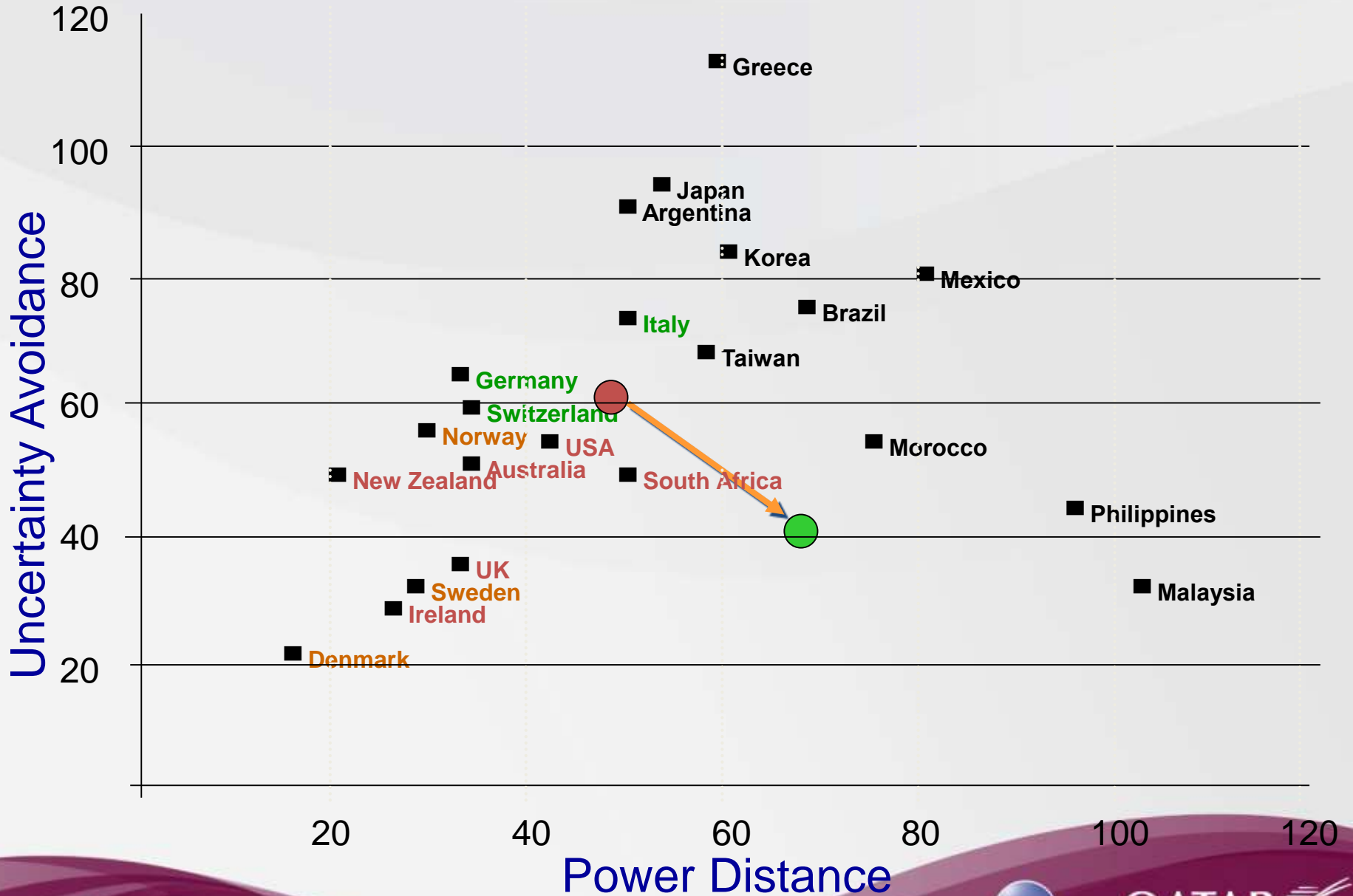
- Power Distance
- Uncertainty Avoidance
- Individualism vs Collectivism
- Masculinity vs Femininity



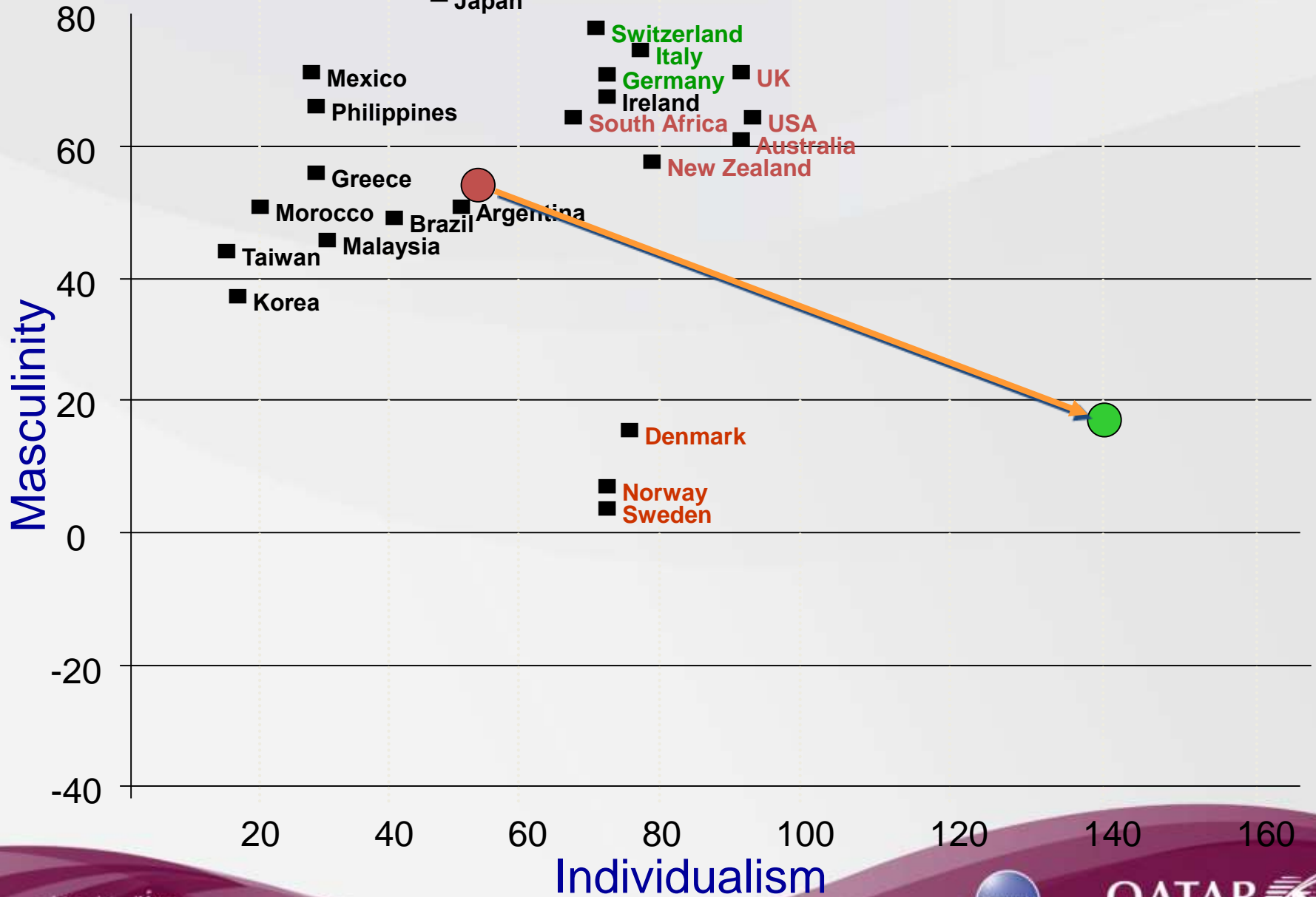
# National Culture



# National vs. Pilot Culture

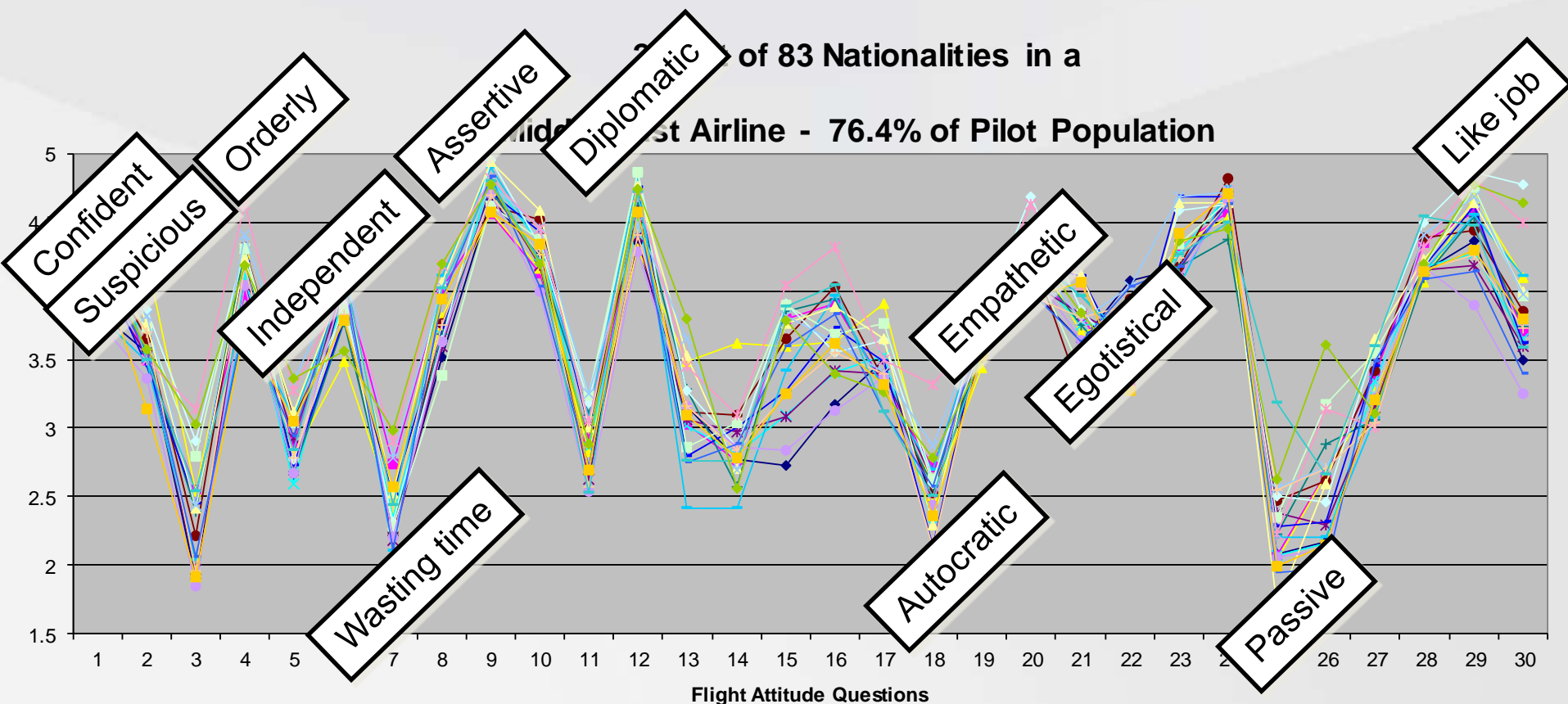


# National vs. Pilot Culture





# Airline Professional Culture



Australia	Belgium	Brazil	Britain	Canada	France	Germany
Holland	Ireland	India	Italy	Jamaica	Malaysia	Mexico
New Zealand	South Africa	Sweden	Switzerland	UAE	USA	

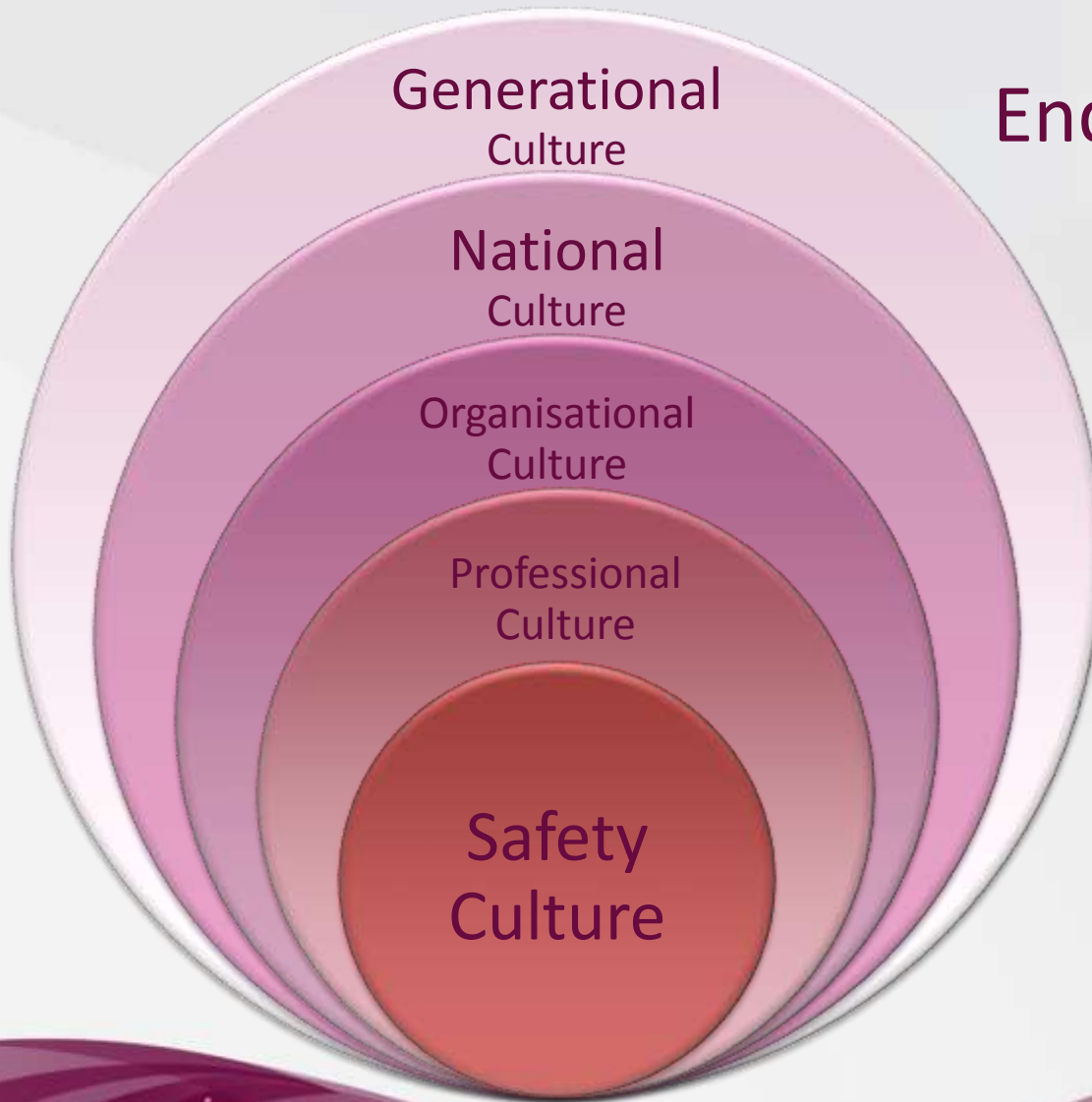
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Source: Flight Management Attitude Questionnaire for Airline 2010 (N= 2095)

# Prioritising Culture



End Goal = Safety

Prevention of  
damage, injury or  
death

To protect  
yourself and  
others

# Working Together



- Strict adherence to SOPs and standard phraseology is the glue that holds a multicultural team together
- Creates predictability and coordination
- Allows for a shared mental model
- Sometimes you will need to adapt



In the end, safe and efficient operations are delivered by pilots and cabin crew who are guided primarily by their professional culture and have moved beyond “multi-culture” as an influential factor on the aircraft.

# EBT Assessment Competencies

- Knowledge
- Procedures
- Handling
- Automation
- Workload
- Situational Awareness
- Decision Making
- Communication
- Leadership & Teamwork

## Reliability

Easily identifiable, can have clear links and short-term change may be possible

## Resilience

Not easily identifiable, linked in complex ways and often require long-term change



# AMC/GM TO ANNEX III (PART – ORO)

- “Should ensure following aspects addressed”:
  - Automation and philosophy on use of automation
  - Monitoring and Intervention
  - Resilience Development
  - Performance Adaptation
  - Surprise and Startle Effect
  - Cultural Differences
  - Operators Safety culture and company culture
  - Case Studies

# CRM Program

Based on EASA ORO- FD and ORO - CC

## Flight Deck

- Initial
- Conversion
- Recurrent
- Combined
- Pre Command
- Command
- TTT Flight Instructor
- TTT CRM I

## Cabin Crew

- Initial
- Conversion
- Recurrent
- Combined
- CS
- CSD
- HPL
- TTT CRM I

# Summary

- Imperative to understand your target audience – adapt accordingly
- Culture flows through all modules
- Resilience in all courses
- Strong facilitation and class participation
- Evidence Based Training only

# Conclusion

- You cannot change behaviour with a Power Point slide

Participate – Experience -  
Discover