

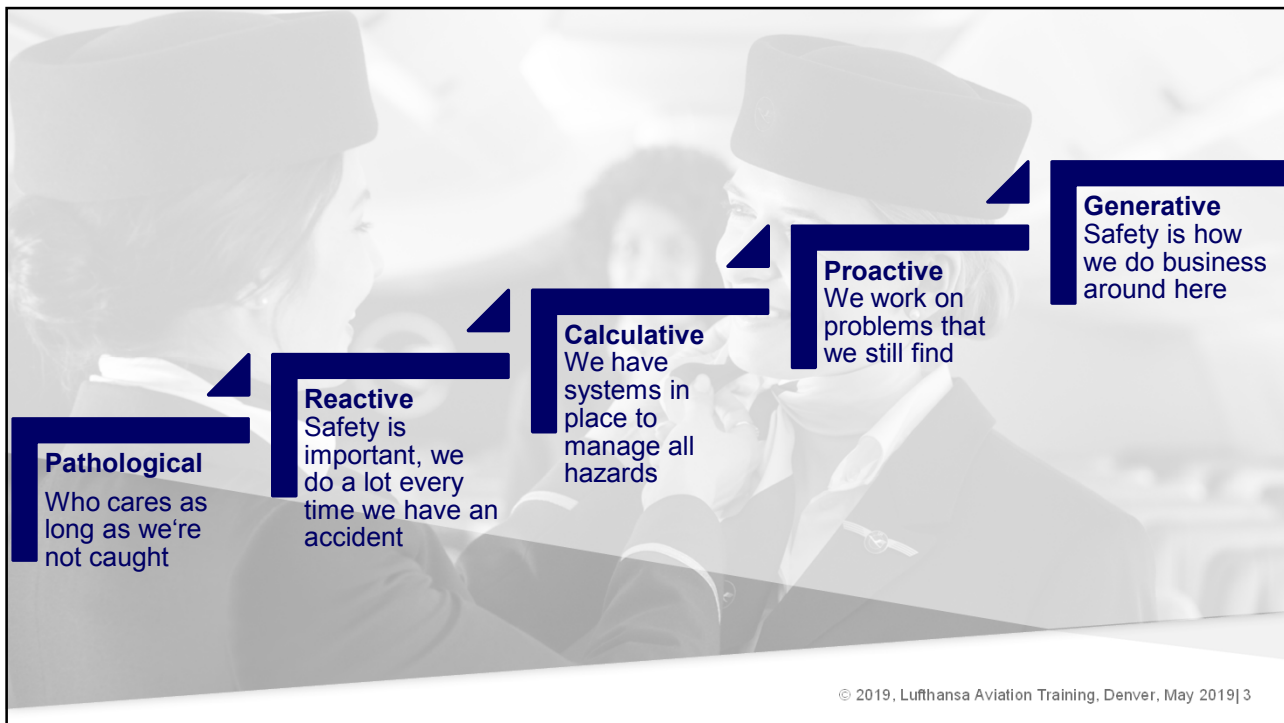


Skills for the future: do crews have them and does our training incorporate them?

Culture



© 2019, Lufthansa Aviation Training, Denver, May 2019 | 2





A strong safety culture has a great impact on accident reduction.

Less risky behavior, less mistakes, less accidents and higher productivity.

The management demonstrates their commitment to safety.

Safety will play an integral role in daily operations.

Employees will take ownership of their safety – there will be spirit & identification.

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 5

	Safety-I	Safety-II
Definition of safety	That as few things as possible go wrong.	That as many things as possible go right.
Safety management principle	Reactive, respond when something happens or is categorised as an unacceptable risk.	Proactive, continuously trying to anticipate developments and events.
View of the human factor in safety management	Humans are predominantly seen as a liability or hazard.	Humans are seen as a resource necessary for system flexibility and resilience.

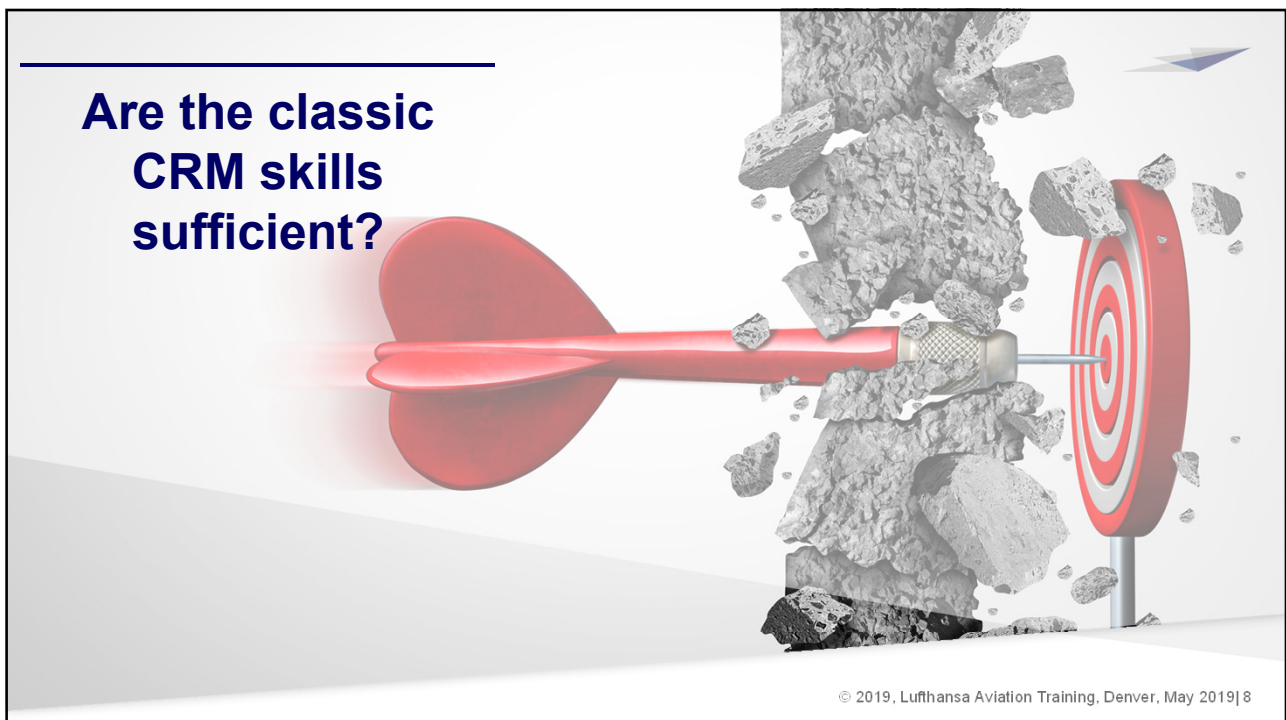
© 2019, Lufthansa Aviation Training, Denver, May 2019 | 6



Safety Issues NBAA

- Automation Mismanagement
- Loss of Control Inflight
- Runway Excursions
- Controlled Flight into Terrain
- Ground Operation and Handling Incidents
- Single-Pilot Operations

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 7



Are the classic CRM skills sufficient?

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 8

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

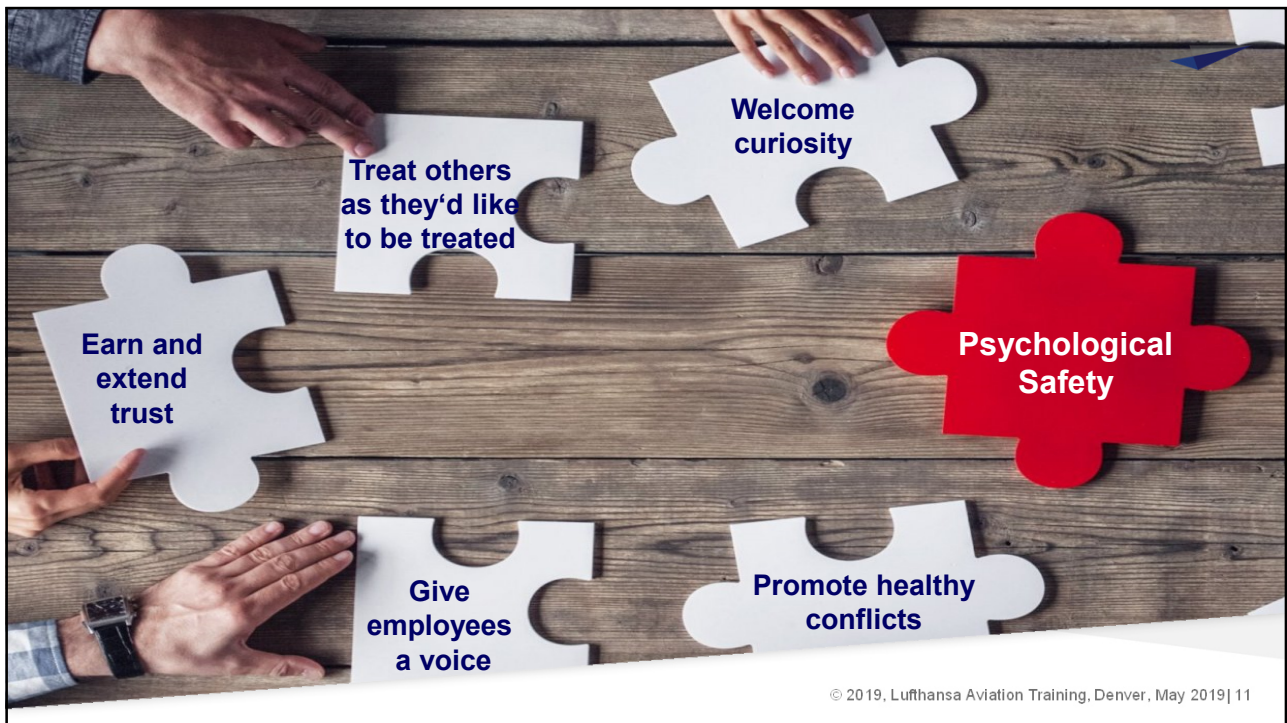
in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

Source: World Economic Forum

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 9





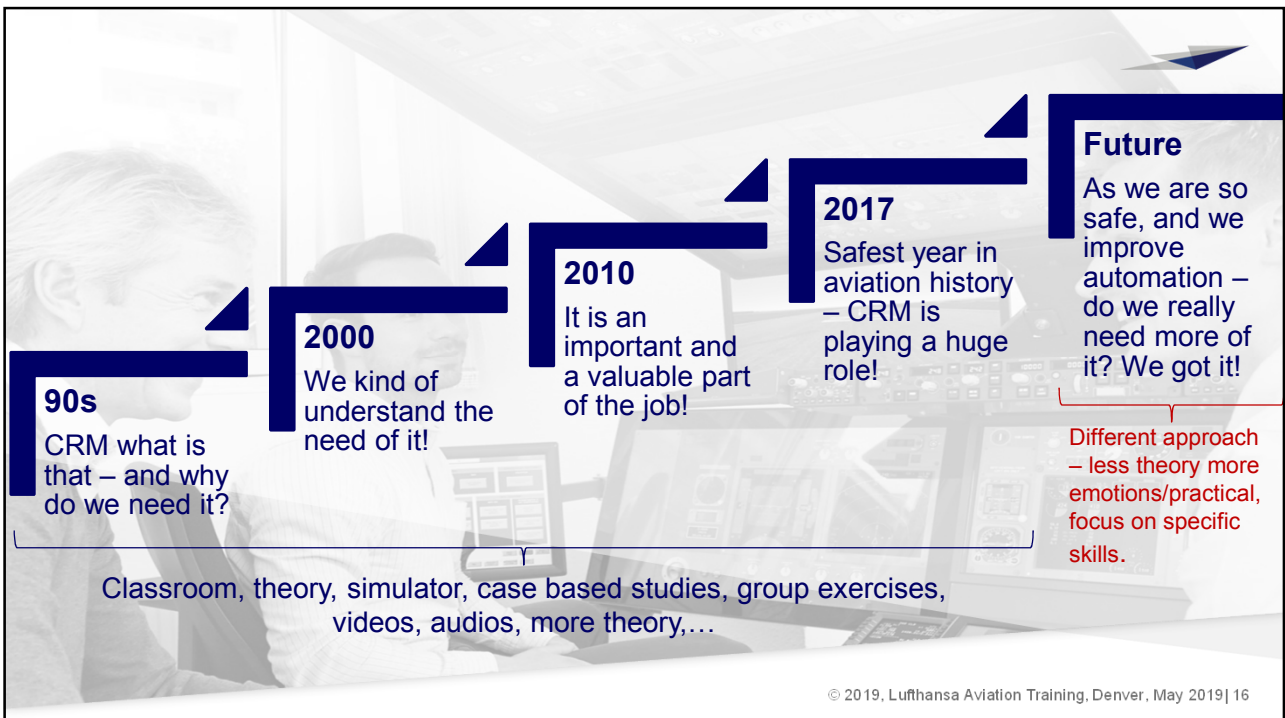




Training

Is the way how we train our flight crews efficient, adapted, creative and according to the needs of our trainees?

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 15



90s
CRM what is that – and why do we need it?

2000
We kind of understand the need of it!

2010
It is an important and a valuable part of the job!

2017
Safest year in aviation history – CRM is playing a huge role!

Future
As we are so safe, and we improve automation – do we really need more of it? We got it!

Different approach – less theory more emotions/practical, focus on specific skills.

Classroom, theory, simulator, case based studies, group exercises, videos, audios, more theory,...

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 16

**Training has to be
more than a**

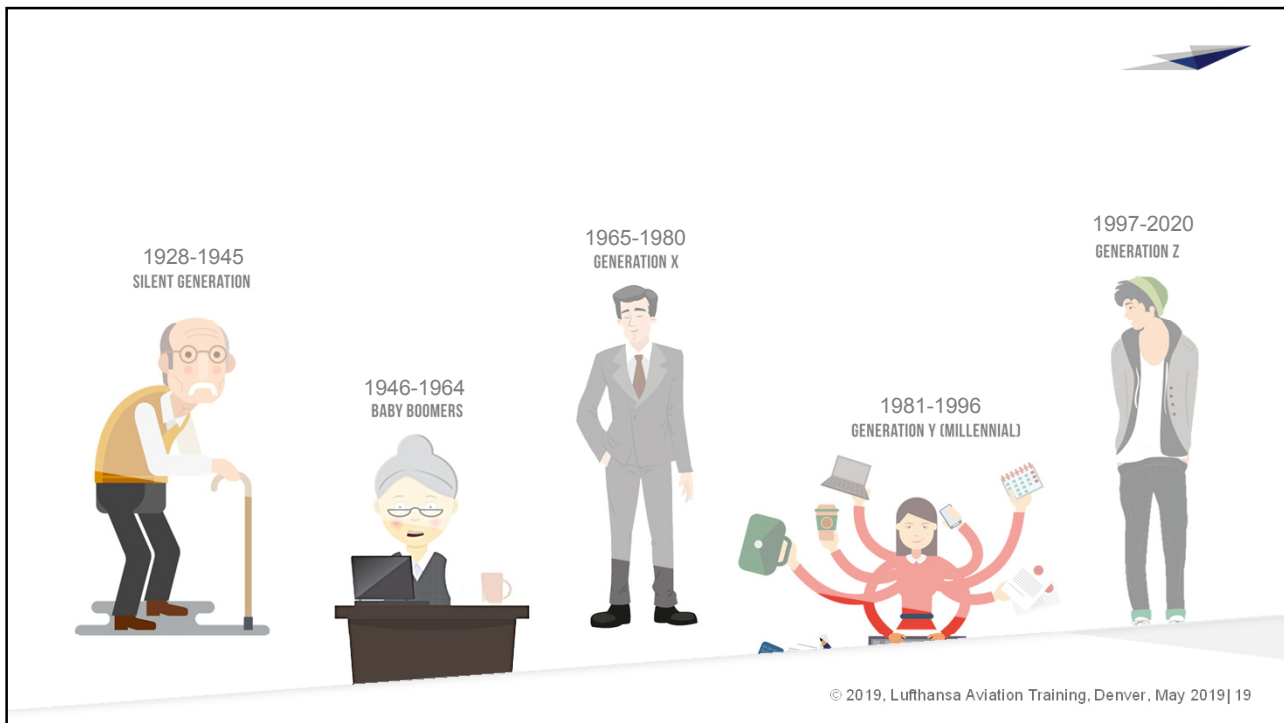












© 2019, Lufthansa Aviation Training, Denver, May 2019 | 17

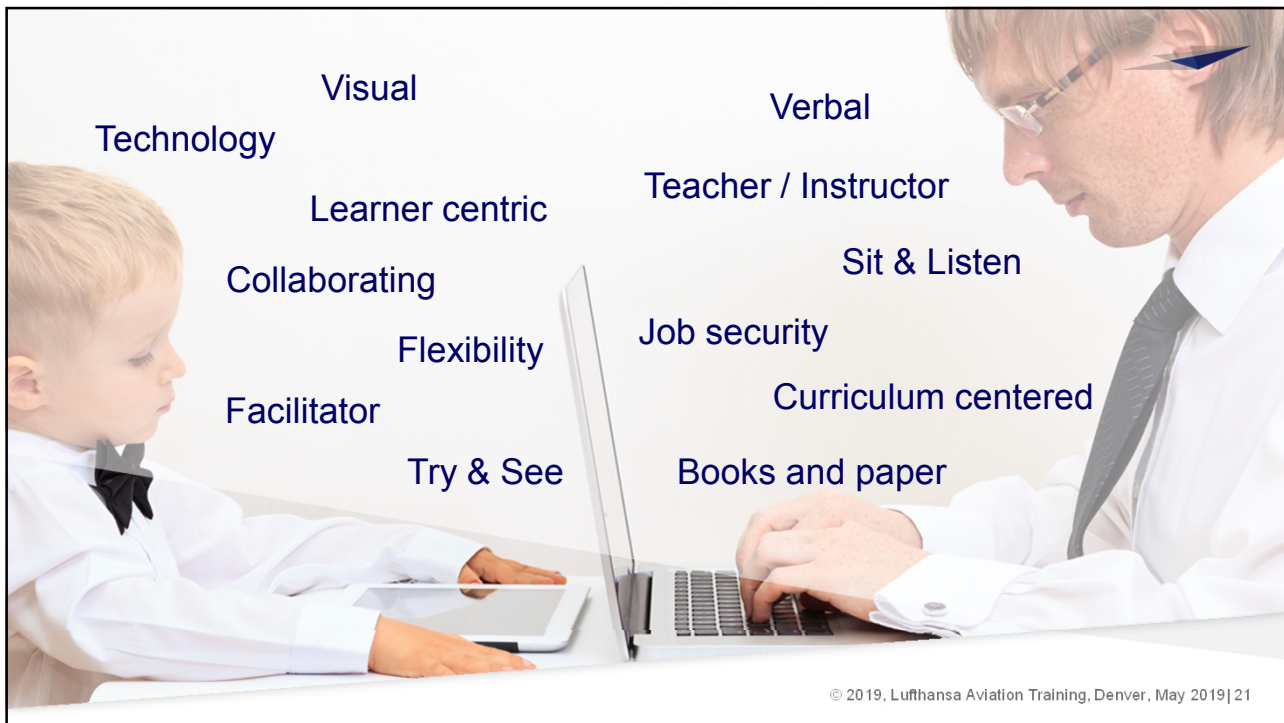
Our trainees



© 2019, Lufthansa Aviation Training, Denver, May 2019 | 18



Characteristics	Maturists (pre-1945)	Baby Boomers (1945-1960)	Generation X (1961-1980)	Generation Y (1981-1995)	Generation Z (Born after 1995)
Aspiration	Home ownership	Job security	Work-life balance	Freedom and flexibility	Security and stability
Attitude toward technology	Largely disengaged	Early information technology (IT) adaptors	Digital immigrants	Digital natives	Technoholics
Attitude toward career	Jobs are for life	Organisational—careers are defined by employers	Early 'portfolio' careers — loyal to profession, not necessarily to employer	Digital entrepreneurs — work "with" organizations not "for"	Career multitaskers
Signature product	Automobile 	Television 	Personal computer 	Smart phone 	Nano-computing, 3-D print, driveless cars 
Communication media	Formal letter 	Telephone 	E-mail and SMS 	SMS or Social media 	Hand-held communication devices 



What today's learners want to know...

*Tell me what I need
to learn*

*Tell me what
learning I need to
complete*

*Tell me what
learning I've
completed*

*Show me what else
I may want to learn*

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 23

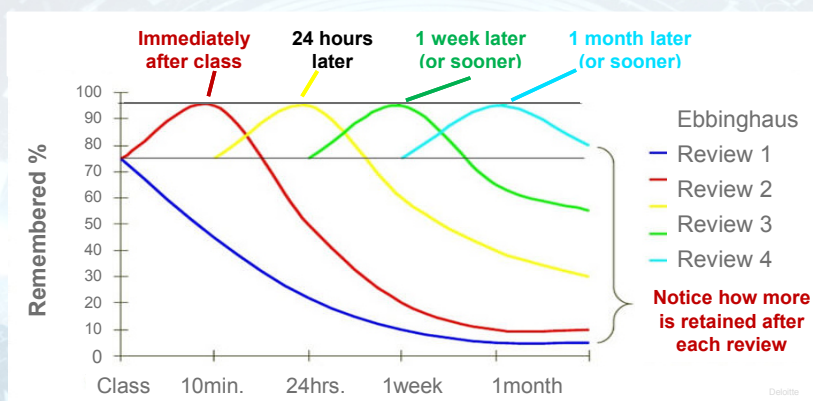
Practical
Trainer
Environment
Emotions
Brand
Content / Skills
Audience
Technology
Collaboration

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 24

RECURRENT OF THE RECURRENT OF THE RECURRENT

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 25

Repetition, Spacing, Questioning



© 2019, Lufthansa Aviation Training, Denver, May 2019 | 26





Step 1: **Push** Training – we prepare our trainees and give them tools, attitudes, beliefs and skills.

Step 2: **Pull** Training - try things, make mistakes, collect experiences and share with your community, but also use the community. Continuous training with the help of new technology.

REVIEW, REINFORCE und REMEMBER

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 27



“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

Alvin Toffler

© 2019, Lufthansa Aviation Training, Denver, May 2019 | 28



© 2019, Lufthansa Aviation Training, Denver, May 2019 | 29