

MAYDAY

MAYDAY

Human Factors Training for Maintenance



AEROTEAM
Training Solutions



**COPENHAGEN
GAME LAB**



Agenda: A Short Introduction

MAYDAY Background

MAYDAY Benefits

MAYDAY Screen Prints

Benefits Summed Up

MAYDAY: A Concept Is Born

As a training manager, I have always strived to give my students something extra. Raising the bar, so to speak. For me, aviation training has never been about knowledge checks or a tick in the box. For me, bringing something of value into the training sessions is stimulating and motivating.

I have practiced and facilitated Crew Resource Management and Human Factors Training for more than 15 years. Making sure that everything I teach complies with regulations from EASA, FAA, and ICAO. Aviation is a heavily regulated field, and pilots, cabin crew, and maintenance staff must keep up through regular training courses. But I have always felt it was quite challenging to maintain and develop an acceptable knowledge level within the current training options. So how could I rethink the field of aviation training?

Three years ago, a sick bat put a temporary end to my teaching. Covid came, and we all had to stay home – with nothing else to do but try to keep our personal lives and businesses afloat. Personally, I worried that it could potentially take years for things to return to normal. If ever. But instead of wallowing in self-pity, I rolled up my sleeves and started to see my own experience in a new light. This process gave rise to the conception of **MAYDAY**.

Training – the **MAYDAY** way – means that participants interact and make decisions to solve the challenges at hand. The scenario-based learning structure essentially means that they can learn from their mistakes without facing the consequences. An approach called Active Learning. I ask questions, give tasks, and open for discussions. In turn, my students get a good group dynamic, enhanced skills, and valuable feedback.

Prior to my career in aviation training, I practiced as a cabin crew member for 10 years, before I operated as a pilot for almost 10 years. Jobs which provided me with a good understanding of the dynamics that play out onboard an airplane. Good and bad. From this experience, I also learned the importance of good teamwork. A non-technical skill which is trained through **MAYDAY** alongside communication, decision-making, situational awareness, and leadership.

For me, the pandemic became the stepping-stone for rethinking aviation training. We must involve participants in the learning process rather than just engage in knowledge checks.

That is what makes **MAYDAY** a unique training solution.

- Søren Seindal Agner, CEO

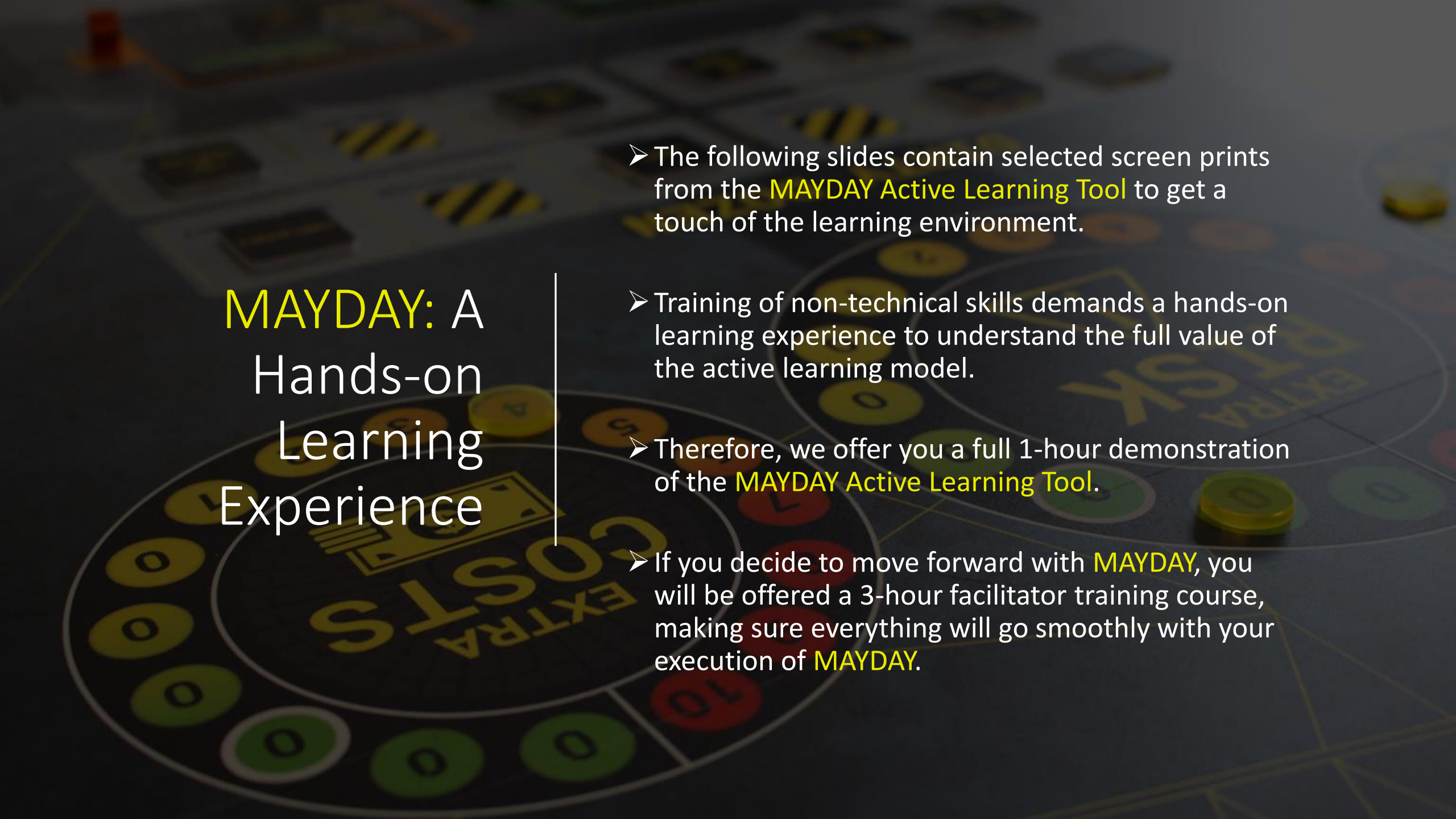
What's in It for You?

*Using **MAYDAY** in your training gives you several **benefits***

1. **Plug and Play-solution** – The scenario-based training concept is easy to implement since the training is a very structured process, in which participants must answer questions and make decisions.
2. **Saving resources** – The trainer needs little to no preparation before classes as the learning process is driven by realistic dilemmas and interactions primarily between the participants.
3. **Effective learning** – The concept uses Active Learning, where the participants engage in their own learning by thinking, discussing, investigating, and making decisions as a unit.
4. **Assessment of skills** – The concept makes it possible to assess non-technical skills in the learning environment and provide effective feedback to participants on their performance by observing their behaviour.
5. **Management report** – Your organisation will receive a summed-up management report, which demonstrates the evidence-based training gaps and priorities of the participants in terms of Risk-Cost-Time. It is essentially a thorough evaluation of the safety culture in your organisation which can be used to take corrective action.
6. **Safe learning environment** – Mistakes can be made without physical consequences. This approach enhances the learning outcome for the participants.
7. **Facilitation training** – The trainer develops skills in facilitation (learning by doing still applies).
8. **Motivated participants** – The concept is also a game in which the participants complete the training – and have fun at the same time.

How Does the MAYDAY Game Work?

- The first job is to select your own staff to solve the task at hand.
- Each selected staff has different strengths and weaknesses.
- In the game, you will be challenged with 4 different scenarios of tasks where you need to make a decision.
- There are no right or wrong decisions, but all decisions have a consequence.
- The consequence for each decision reflects one or more of the factors “Risk-Cost-Time”.
- During the game, there will be several possibilities for reflections in the group. This enables the participants to gain and anchor learning about human factor issues and safety management.



MAYDAY: A Hands-on Learning Experience

- The following slides contain selected screen prints from the **MAYDAY Active Learning Tool** to get a touch of the learning environment.
- Training of non-technical skills demands a hands-on learning experience to understand the full value of the active learning model.
- Therefore, we offer you a full 1-hour demonstration of the **MAYDAY Active Learning Tool**.
- If you decide to move forward with **MAYDAY**, you will be offered a 3-hour facilitator training course, making sure everything will go smoothly with your execution of **MAYDAY**.

Select staff

i

Confirm

CHARLO
CERTIFY
Age: 38

Certifying Staff

Apprentice

1 Apprentice

Choose 4 Certifying Staff

Your Choices Have Consequences

Each staff has different strengths and weaknesses

Selected staff



ADAM, 35

Experienced

CERTIFYING STAFF

Complacency



JIM, 56

Experienced

CERTIFYING STAFF

Lack of Communication



PETER, 42

Assertive

CERTIFYING STAFF

Stress



LIZ

CERTIFYING STAFF

Age: 29

Liz has been on the team for a year but previously worked for three other companies. She enjoys solving a tricky problem but also prefers to not work overtime so she can engage in political grass-root work.



MONA

APPRENTICE

Age: 24

Mona has always been fascinated by aircraft. After school, she signed up at the aeronautical college to get initial training, but struggled to get a contract with a company. She is social and outgoing.



Next

Positive skills:

Help staff member to perform tasks better

The Dirty Dozen:

Have a negative impact on the performance. The relevant factors are listed below each staff member

Time for Reflection

There are several stages where there is time for reflections

Staff selection // 1st DEBRIEF

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Confirm

Personal issues may not necessarily be related to work but could still have an impact on the working environment.

Have you experienced any situations where personal issues, your own or others, affected your ability to work effectively together as a team? How did you deal with these issues?

I worked in ...

In the game you meet some people with different personalities and attitude.

In your own work, have you experienced situations where certain personalities and attitudes had an effect on the working environment? What did you do about it?

Type your answer here

What can you do, as an individual and/or as a team, to mitigate the negative effects on the working environment of personal issues and different personalities and attitudes?

Type your answer here

The in-game reflections of Human Factors and safety issues draw focus and attention to your own situation

Every Choice Has a Consequence

You can clearly evaluate the consequences of your decisions

Good choices

Not so good

...And face the consequences

Day 1

Extra Time

Extra Risk

Extra Cost

Turn card

ADAM, 35
Experienced
CERTIFYING STAFF

Complacency

Stress

JIM, 56
Experienced
CERTIFYING STAFF

Lack of Communication

PETER, 42
Assertive
CERTIFYING STAFF

Stress

Distraction

LIZ, 29
Troubleshooter
CERTIFYING STAFF

Lack of Resources

Lack of Communication

MONA, 24
Teampayer
APPRENTICE

Lack of Assertiveness

THE PASSENGER SEAT

Adam is EXPERIENCED:
-1 Extra risk

Option A
Passengers may distract you and create pressure, so you may feel compelled to select a "quick fix".

Adam has COMPLACENCY:
+2 Extra risk

Adam received a new Dirty Dozen:
Stress

THE ARM REST

Peter is ASSERTIVE:
-1 Extra time

Option A
A proactive action but maybe your time and skills were needed elsewhere.

This task took extra time:
+1 Extra time

Peter received a new Dirty Dozen:
Distraction

THE TOWING

Liz is TROUBLESHOOTER:
-1 Extra risk

Option A
If the staff do not see the note, the aircraft sits outside all night.

This task increased the cost:
+2 Extra cost

Liz received a new Dirty Dozen:
Lack of Communication

THE BOLT

You are installing a bolt in the hot section of an engine. The manual calls for the bolt to be lubricated with a special heat resistant compound. The only batch in the hangar is quarantined as it expired three weeks ago.

Option A
You retrieve it from quarantine and use it anyway as it looks satisfactory.

Option B
This is the only engine you know of where this special compound is used. All other comparable installations use a more common compound. You use that one.

Built-in Safety Surveys

A strong management tool for safety improvements

Final // Reflection

Select two of the topics on the list, which you believe is the most challenging for your company.

Explain why you think they are challenging and then describe a concrete initiative for improvement in those areas.

Manuals are difficult to read and not structured well enough.

Operation are pushing for deadlines all the time

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Confirm

HANDOVER PROCEDURES ☐

TOOL CONTROL ☐

ENVIRONMENTAL EFFECTS ☐

HUMAN PERFORMANCE AND LIMITATIONS ☐

OPERATIONAL PRESSURE ☒

SAFETY CULTURE ☐

USE OF DOCUMENTATION ☒

This tool provides management with valuable input of the general working conditions and safety level in the company. Data from the games are collected and assembled into a report

The participants provide input of safety challenges – and may list their suggestions for improvement

Summing Up the Benefits

MAYDAY offers multiple benefits both in terms of learning and cost

LEARNING

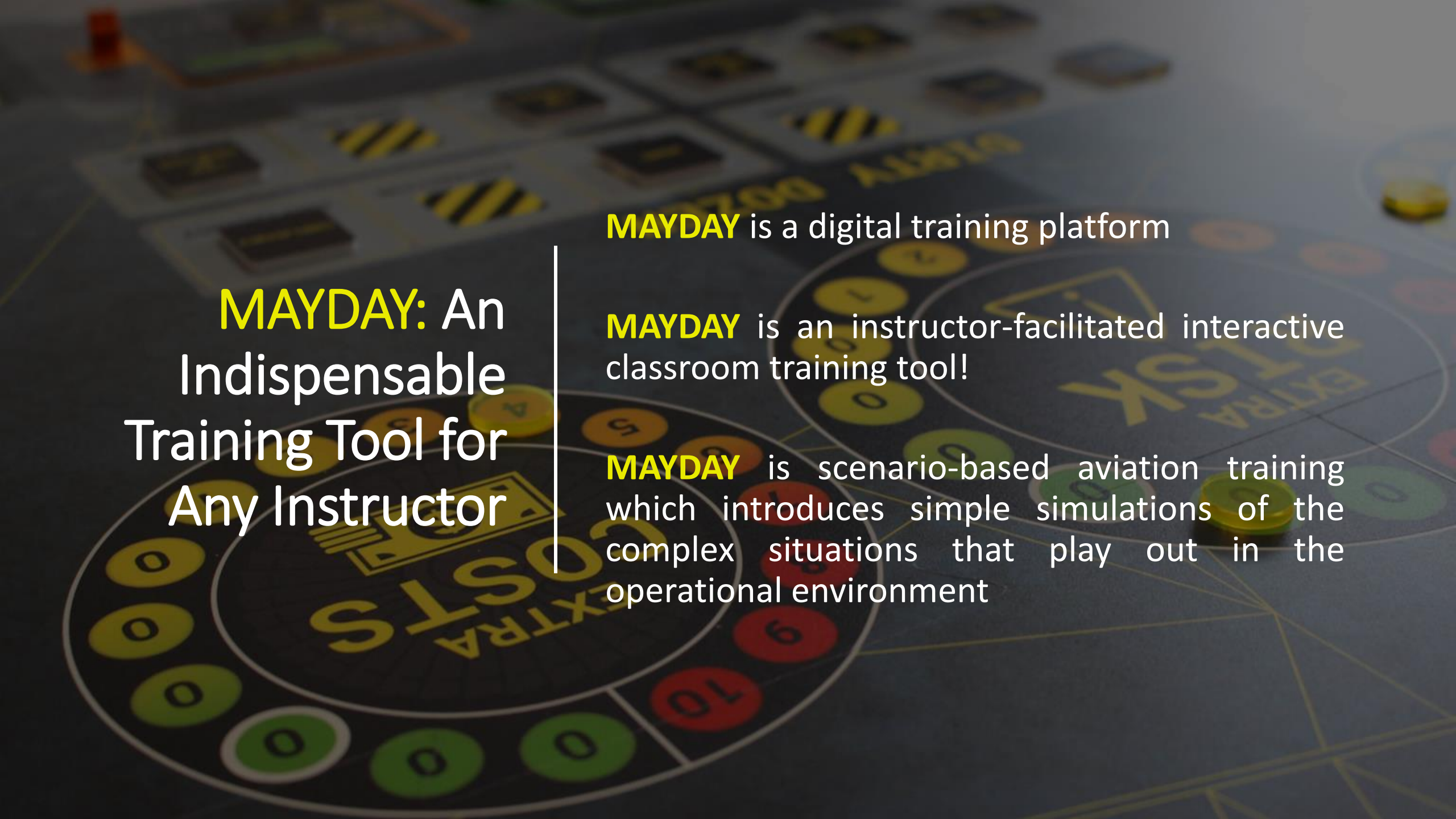
- Enhances non-technical skills
- Very high learning effect
- Scenario-based training that simulates real life
- Introduction to safety tools
- Insights into company human factors and safety issues
- Motivating & fun
- The key to Active Learning

HUMAN FACTORS TRAINING for MAINTENANCE



ECONOMY

- Low cost per user (time & money)
- Minimal instructor preparation
- Input to management for solution of problems & challenges
- Compliant with EASA & FAA
- Built-in company Safety Survey (feedback to management)
- Data reports for SMS and CBTA
- Continuous improvement of the entire organisation



MAYDAY: An Indispensable Training Tool for Any Instructor

MAYDAY is a digital training platform

MAYDAY is an instructor-facilitated interactive classroom training tool!

MAYDAY is scenario-based aviation training which introduces simple simulations of the complex situations that play out in the operational environment

If you have any questions, big and small,
please do not hesitate to reach out to us:

Have **fun!** But
remember,
SAFETY is not a
game

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Visit our LinkedIn:
[@AEROTEAM Training Solutions](#)



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