ZERO G

Crew Management
A data driven approach

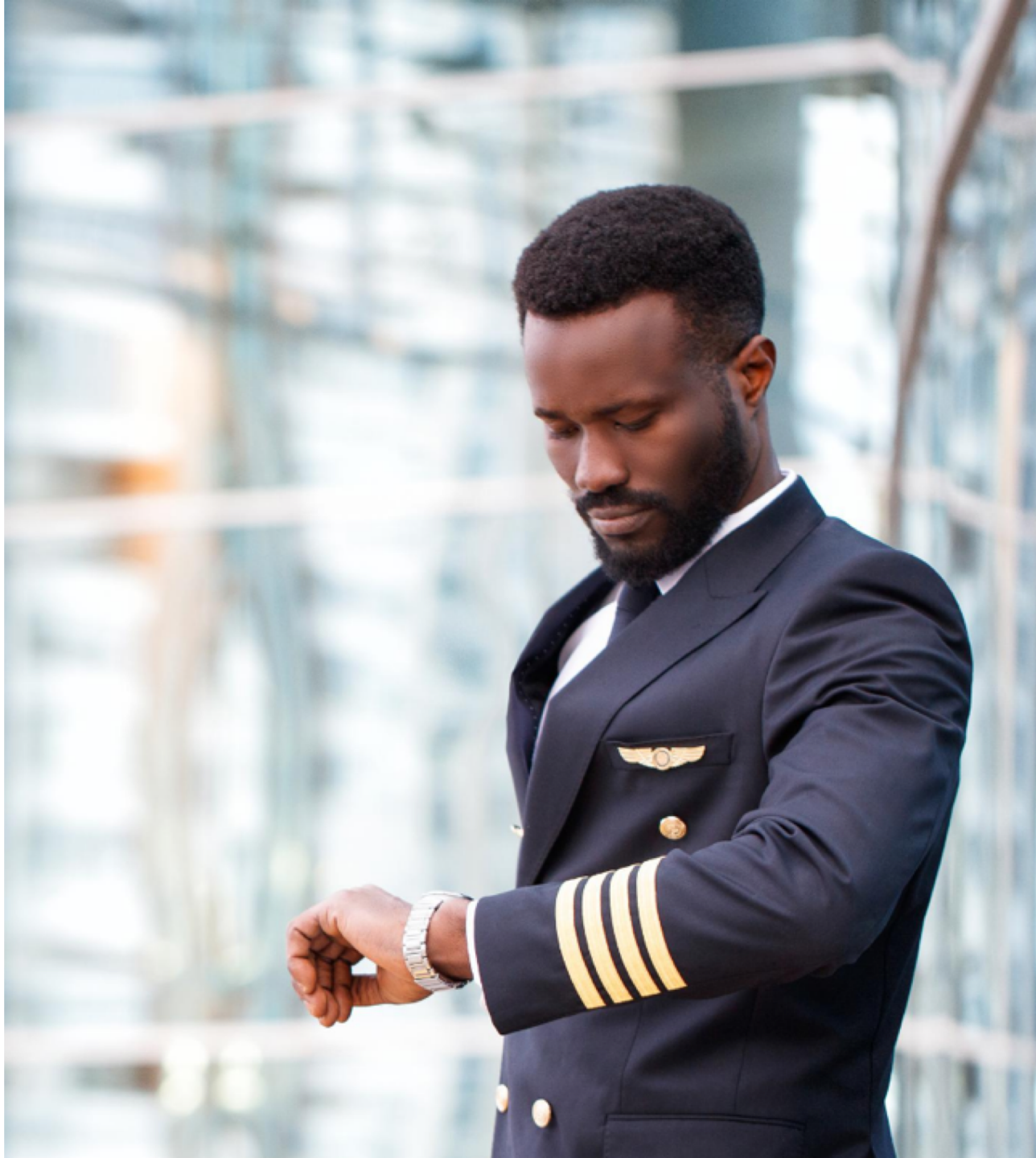
Marketing

OUR VISION

Use analytics to enable crew and managers to live healthier, happier & more balanced lives

We know the positive impact of analytics, it creates transparency and insight, an opportunity for collaboration and automation of repetitive error-prone tasks.

Through data engineering, machine learning and visualization, we translate previously isolated data sources into actionable insights for crew managers to tangibly improve crew management.



THE SITUATION

Crew management is a sensitive, highly complex & labor intensive process

Airlines have real incentives to manage crew processes properly, not only because of overall costs – 30.3% share according to Reuters - but also to avoid the dangers of fatigue and improve crew satisfaction.

Data can be a key asset in breaking down complexity – regulations, dependencies, rest, training, cost, and much more - but often isn't used well. Read why ↓

THE CHALLENGE

Airlines aren't fully leveraging their data, due to these three business reasons:

1. FOCUSED WORKSTREAM
Crew managers troubleshoot issues all day in isolation, without necessary holistic clarity on their actions' outcomes

2. INACCESSIBILITY OF CRUCIAL DATA
Business users lack access to necessary data for evaluations, making data-driven decision making impossible / time consuming

3. CRITICAL SKILL-SET
A critical skills-set (combining crew management and analytical expertise) is a scarce resource in the industry as a whole

THE SOLUTION

Make your data and derived insights securely available to the team

Our SaaS crew analytics application is **tool-agnostic** – it works with Jeppesen, NetLine/Crew, AIMS, and Sabre – and makes data and derived insights **securely available to end-users via web-UI and role-based access control.**

A cloud-native data processing architecture - for highest security standards, computer power and cost-effectiveness – that enables **self-service analytics and training machine learning applications on your data** and tailored to your goals.

Gold
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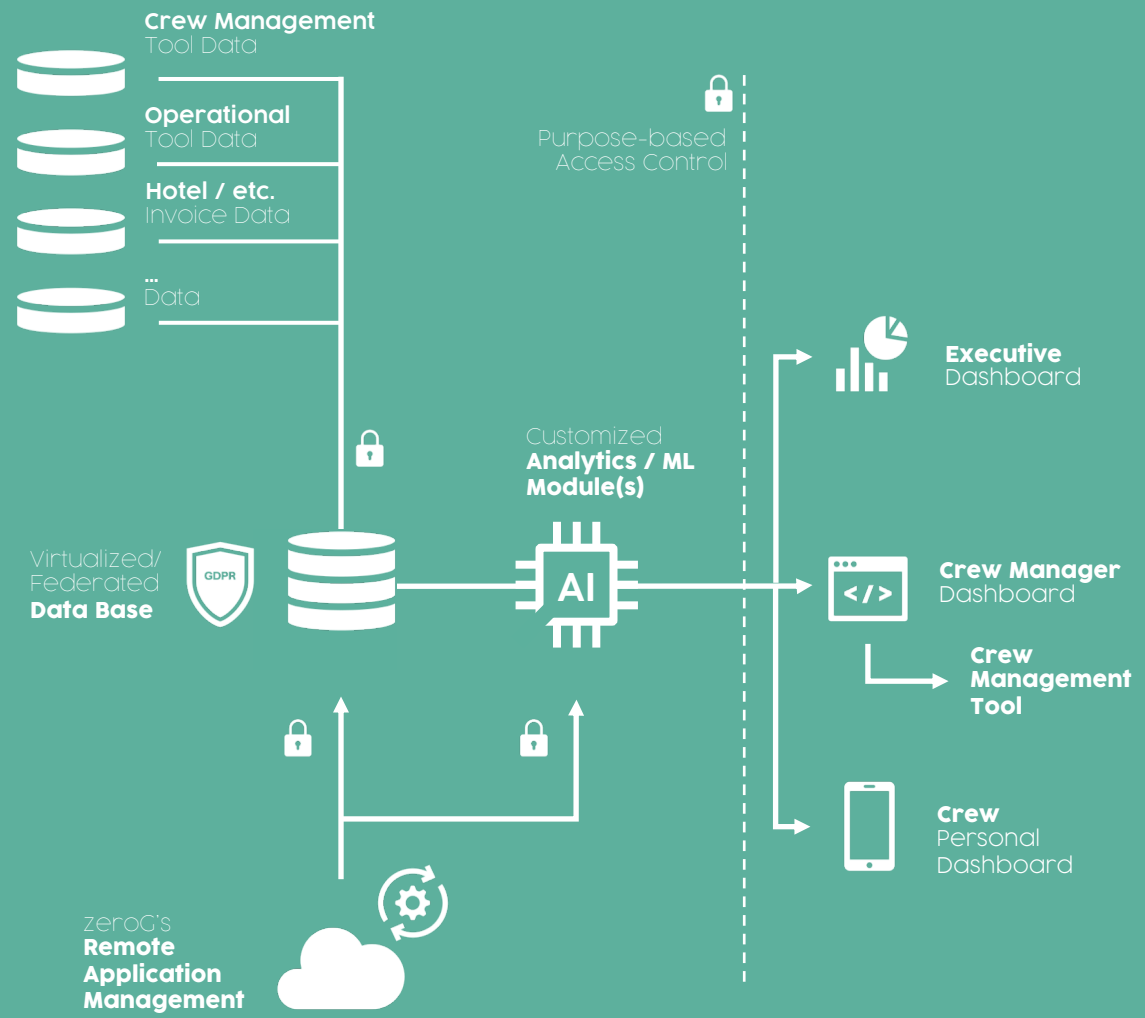
SOLUTION SKETCH:



THE OUTLOOK
Choose which features make sense when for reaching your airline's goals

HORIZON 1 – Basic
Transparency, Insight, & Effective Collaboration

Data Visualization & Diagnostic Analytics

1. Crew COVID19 Tracking Monitor
Enable crew managers to trace possible contacts of a positively tested crew member and adjust roster accordingly

2. Unplanned Crew Absence Monitor
Use data to breakdown and know what drives unplanned crew absences, to take effective measures for (stand-by) planning

3. Crew Roster Robustness Monitor
Use data to analyze how robust a crew roster was in comparison to roster changes and the day of operations

4. Crew Operational & Training Cost Monitor
Use financial data (e.g. hotel invoices, taxi, etc.) and cost assumptions (e.g. delay minutes) to evaluate crew costs

5. Crew Satisfaction and Fatigue Monitor
Use data to analyze and foresee what drives crew (dis)satisfaction and fatigue to ensure alert/content crew

6. Personal Crew Analytics Cockpit
Use data to provide crew members transparency on their work-life balance: e.g. accepted bids vs. accepted bids of colleagues

HORIZON 2 – Average Complexity
Foresight & Enhanced Insight

Predictive Analytics & Machine Learning

1. Crew Absence & Stand-By Demand Prediction
Use data and derived insights to predict dynamic stand-by demand for each crew roster

2. Pairing Optimization
Incorporate multiple variables and data in predicting various roster options

3. Preferential Bidding Optimization
Use predictive analytics to ensure preferential bidding options,to align with crew requirements and airlines' business needs

4. Training and Re-Certification Prediction
Predict and plan crew member training and recency, plus predict most convenient time slots ,with cost and roster as a base

5. Predict Operational Cost of Roster
Use historical data to predict the overall operational cost of your crew roster

HORIZON 3 – Extreme Complexity
Hidden Pattern Discovery & Complex Problem Solving

Deep Learning & Automation

1. Holistic Pairing
Create a deep learning model to discover hidden patterns in your airline's data to provide best possible pairing options

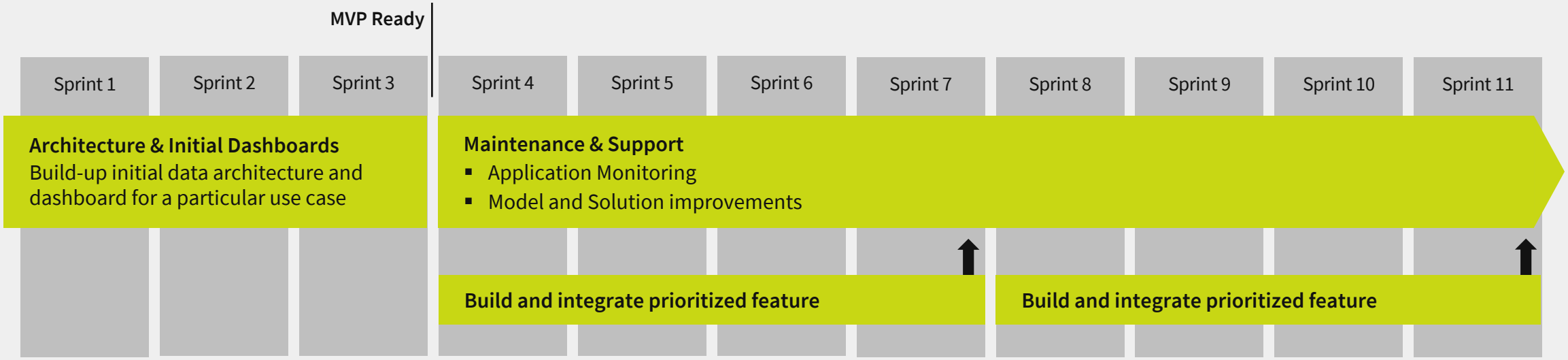
2. Holistic Preferential Bidding
Create a deep learning model to discover hidden patterns in your airline's data, to provide best preferential-bidding blocks

3. Operational Cost Pattern Discovery
Create a deep learning model to discover hidden patterns in your airline's data on hidden cost drivers of your roster

4. Instant Repairing Optimization
Rapidly respond to airline recovery by analyzing and recommending roster repairs (on demand)

THE DELIVERY ROADMAP

Iteratively realize your airline's Crew Analytics Tool Suite
and continuously leverage insights from your data



Work Mode: Agile development in two-week sprints

Commercial Frame: Two-week development sprint fixed rate + separate maintenance agreement

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Thank you!

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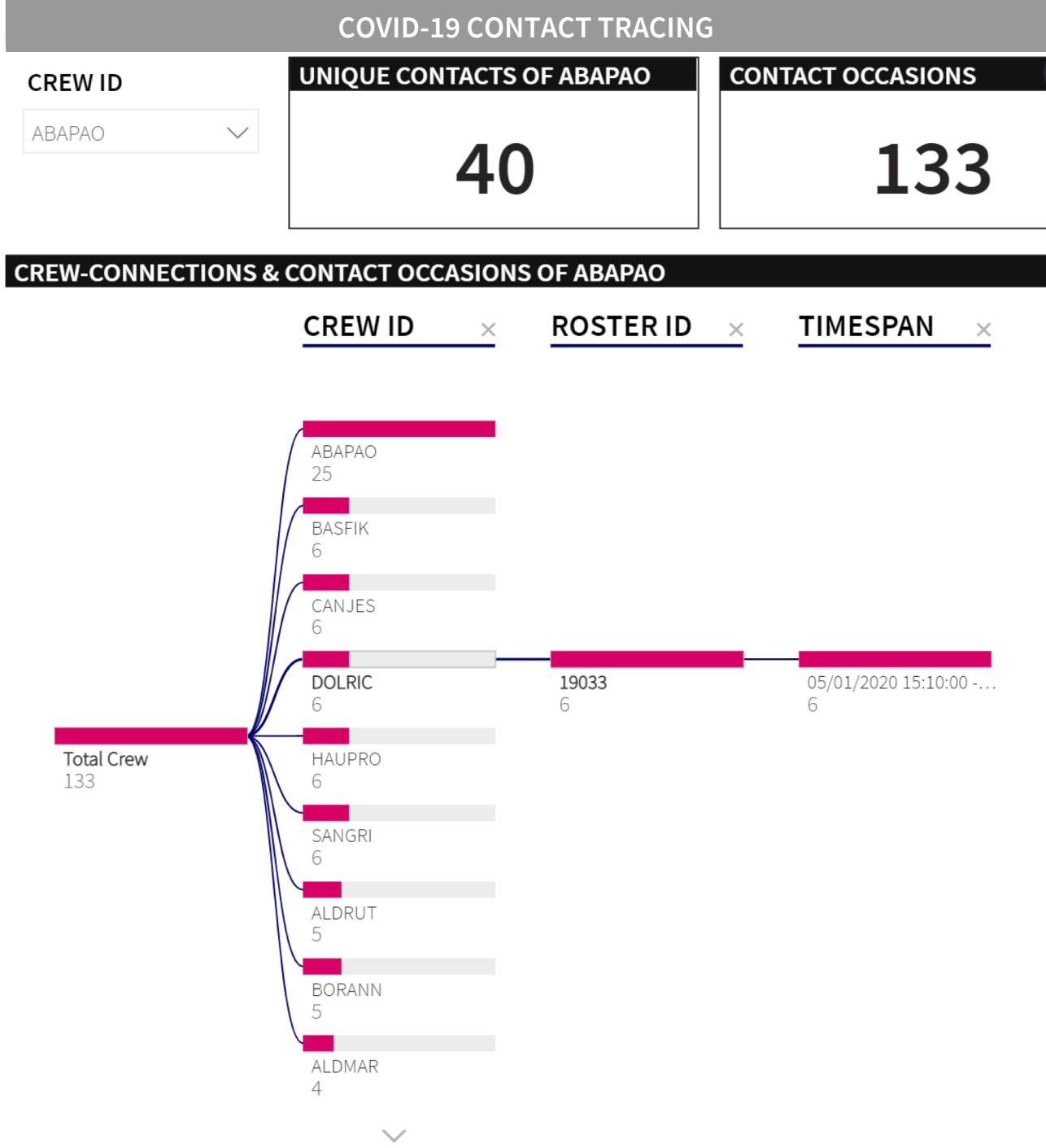
APPENDIX A
Crew COVID19 Tracker

Ensure the health of your crew and passengers through tracking a crew's contacts after a positive test result

Airlines can track contacts of positively tested crew members, enabling roster managers to exchange crew for upcoming flights quickly.

Discover our demo:
https://crewanalytics.zerog.aero/



APPENDIX B
Unplanned Crew Absence Monitor

Enhance transparency, break-down complexity and improve crew roster by understanding drivers behind unplanned crew absence

Crew roster managers can adapt their stand-by needs based on actual data, to lower overall operational cost of their airline and track the impact of their decisions on performance.

Discover our demo:
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