



## Operation Model for Rapid Response to Unscheduled Aircraft Maintenance

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### Introduction

- Aircraft-On-Ground (AOG) events are random and unpredictable. Its impact associated with financial losses, service disruption and reputation tarnished
- Airlines and MROs design their service organisation to respond to AOG. Many has built in redundancies to absorb unpredictable events, but not necessarily cost efficient



Source: <https://m.dailyhunt.in/news/india/english/bignews/best-english-essay-bignew/india-grounds-boeing-737-max-aircraft-announces-dcaa-newsid-11100225>

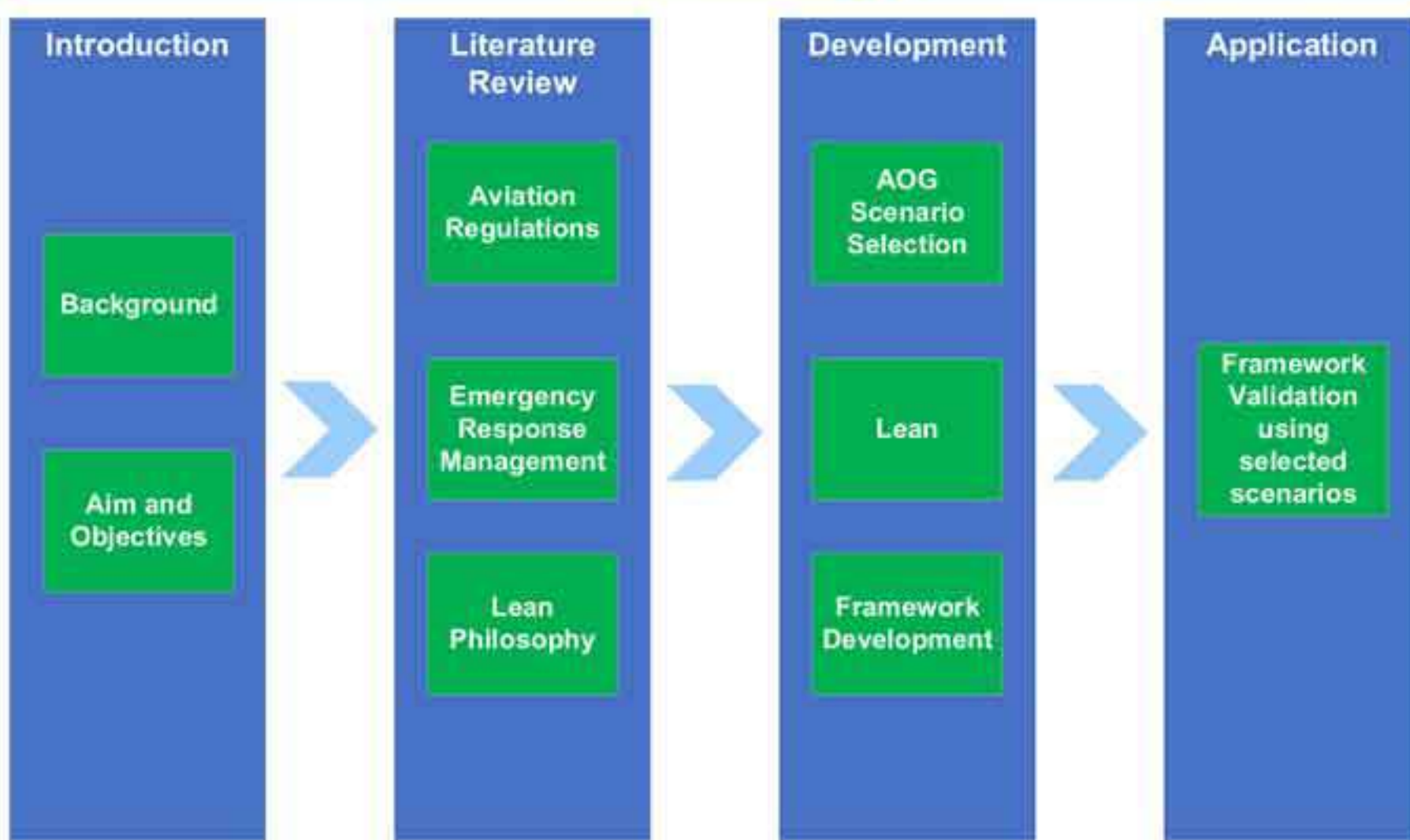
### Aim & Objective

- Aim** – To develop a framework that serves as a checklist for AOG service providers to review their existing AOG response services in terms of process and planning
- Objectives** – To identify best practices through review of existing AOG services being offered as well as emergency response processes and/or models from other domains
- To create fictitious Company ABC as representative research case study
  - To apply Lean concepts to improve existing AOG response in terms of process and planning



Source: [https://en.wikipedia.org/wiki/Aircraft\\_ground\\_handling](https://en.wikipedia.org/wiki/Aircraft_ground_handling)

### Methodology



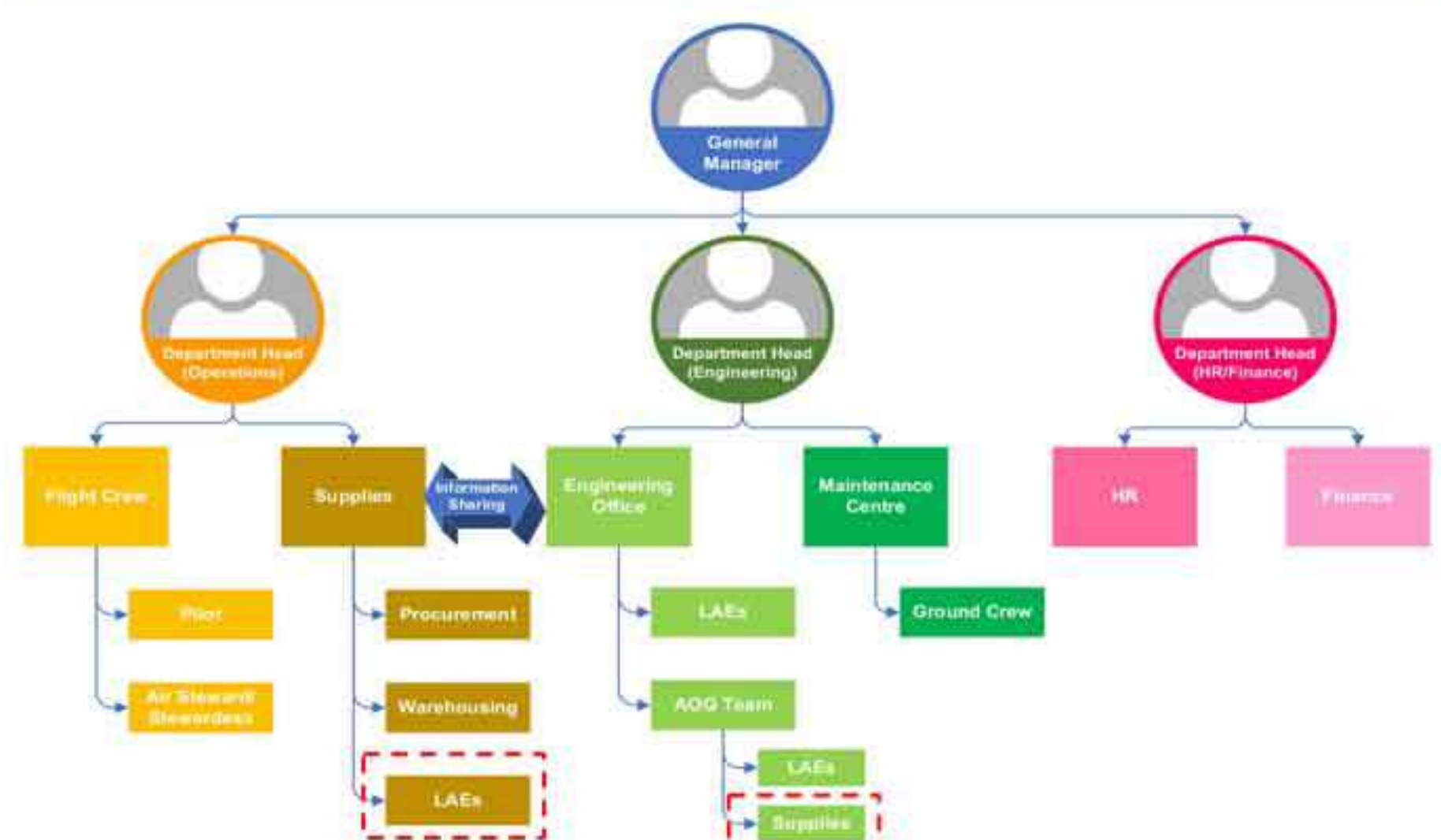
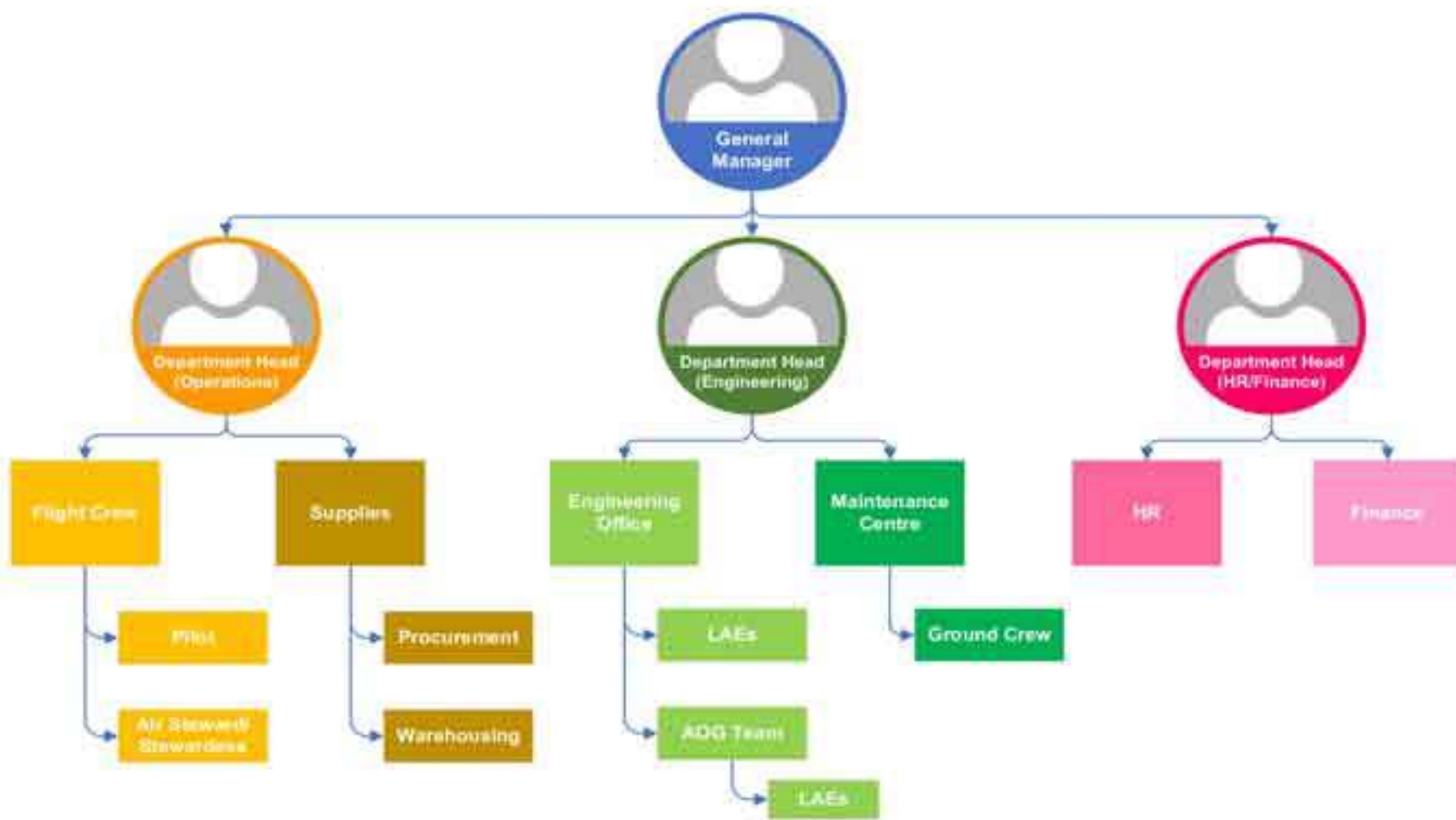
AS - IS

### Framework



- Predict
  - Preventive Maintenance
- Prepare
  - Ground coordination works
- Plan
  - Long-term strategic planning
- Partnership
  - Forming alliance

TO - BE



### Conclusion

- Framework provides a mean to evaluate existing AOG response processes
- Together with Lean concepts, framework facilitates the restructuring of work processes and business structure

### Recommendations

- Validate practicality of framework using actual company information
- Extend usage of framework to scheduled aircraft maintenance

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