

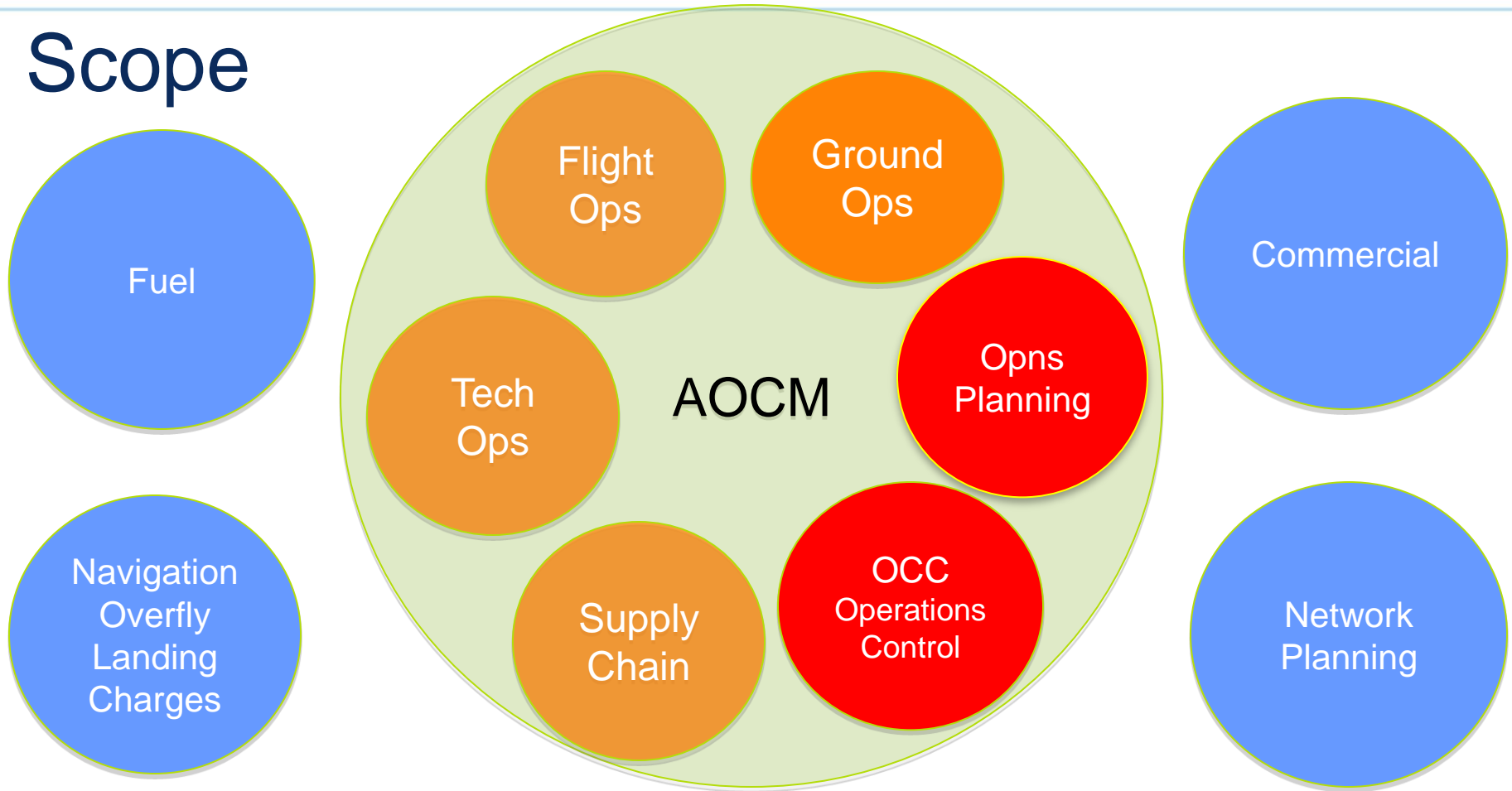


Airline Cost Management through Operations Planning and Control

Airline Cost Conference
Geneva – August 30, 2013

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Scope



The focus of today's presentation

➤ **Operations Planning**

- To produce a plan or schedule that is operationally achievable, as well as recoverable and amendable at lowest possible cost

➤ **Operations Control**

- A process to control and manage deviations from plan in a timely, service oriented, cost efficient manner

➤ **Relationship to Operations Cost Management**



The Industry Challenge



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Airline Operations

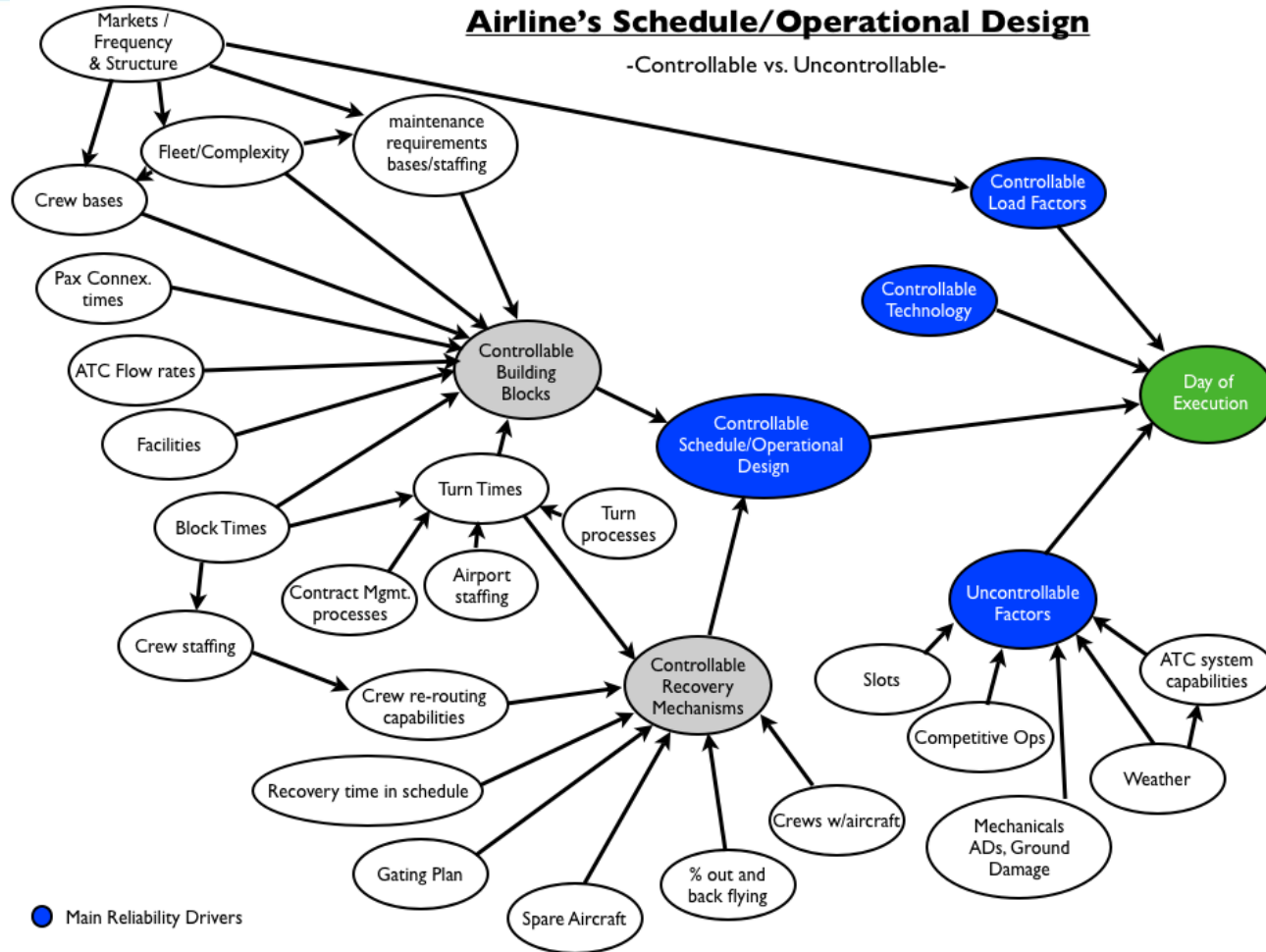
- Few industries have to profitably manage so many moving parts
- Expanding airline route and alliance marketing structures are extremely susceptible to impact from a myriad of world events
 - Weather
 - Political
 - Economic
 - Competitive
- The complexity and frequency of required planning changes and daily operational decisions are ever increasing
- Every day is an irregular operation --- from the planning phase to the day of execution.

All of which drive Cost



Airline's Schedule/Operational Design

-Controllable vs. Uncontrollable-





Operations Planning and Cost Management



Where to Begin

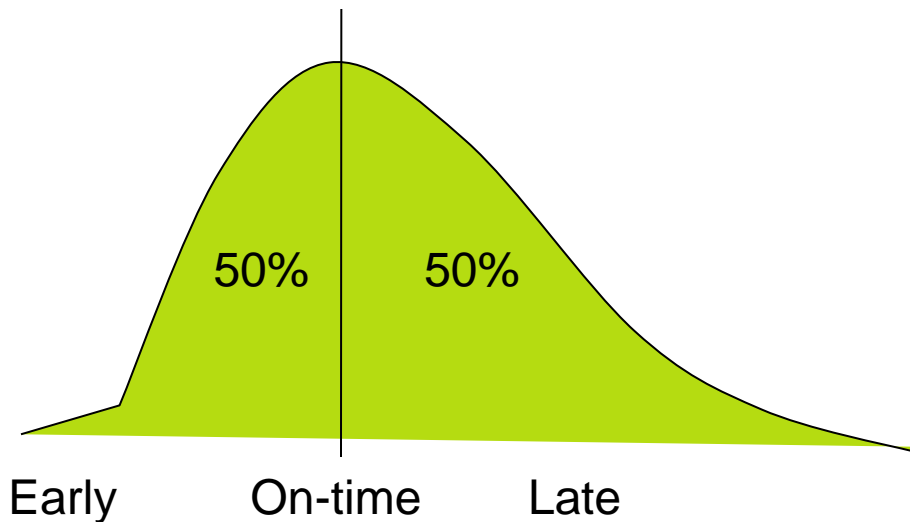
➤ Does the Schedule or Plan work ???

Operations Planning - Cost Drivers

- Schedule Design
 - Marketing Objectives / Schedule Design Complexity
- Asset Management
 - Aircraft Assignment and Utilization
 - Crew Staffing, Training, and Utilization
- Planning Components
 - Blocktime Standard
 - Required Ground Time and Resources
 - Aircraft Maintenance Requirements
 - Schedule Reliability Objectives
 - Schedule Recovery Options

Blocktime Standard

Scheduling



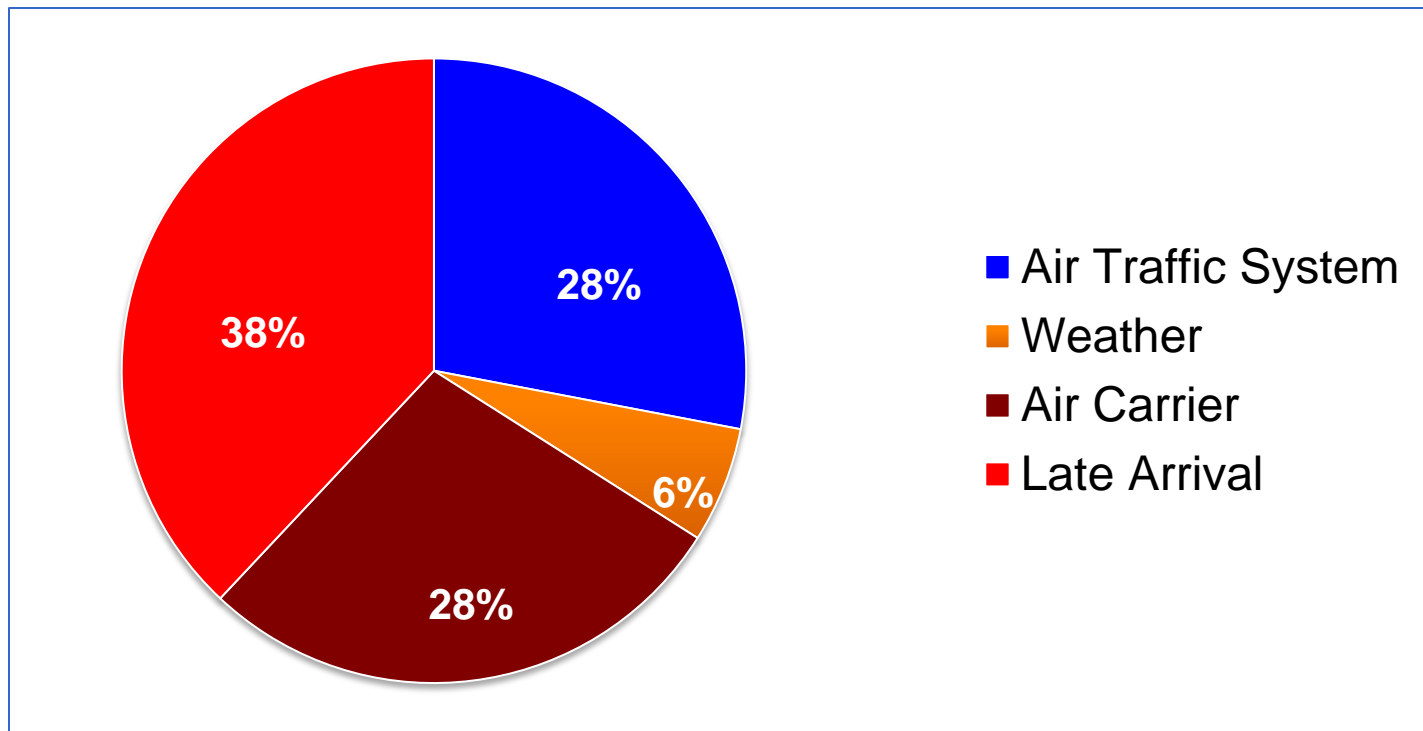
Variability

- ↗ Type of Aircraft
- ↗ Time of Day
- ↗ Airport Environment
 - ↗ Arrival/Departure Capacity
 - ↗ Airport Ground Congestion
 - ↗ ATC System Capability
- ↗ Seasonal Wind Variability
- ↗ Crew Operating Policy

Accurate Blocktimes

- The “Essential” Building “Block” for the airline planning process
- Used in estimating:
 - How many Pilots & Flight Attendants do we need?
 - How much Maintenance will we require?
 - How the aircraft and crew patterns flow?
 - How the airports operate?
 - Passenger/baggage/crew connection times
 - Number of aircraft to operate the schedule reliably?
 - The Cost to Operate the Schedule

Airline IRROP Cause Distribution



Delay / Reliability Analysis Program

- Root Cause Analysis and Allocation of impact on
 - Performance
 - Cost
- Option Analysis
 - resources
 - time
 - schedule adjustment
- Coordinated Cost / Benefit Review
- Implementation of indicated changes
- Track Results

What Costs to Measure ?

➤ Common airline cost measures include

Operational Cost Measures

- ↗ Safety - damage, injury, lost productivity rates
- ↗ Aircraft utilization per day
- ↗ Crew resource utilization per schedule period
- ↗ Maintenance
 - ↗ Reliability
 - ↗ Dispatch Rate
- ↗ Productivity / man hours per service event
 - ↗ per departure
 - ↗ per passenger served/cargo weight handled
- ↗ Revenue - % retained, lost

Operations Function - Cost Measures

- Flight Operations
 - block hours per pilot, pilots per aircraft
 - % actual hours flown vs. available hours
- Technical Operations
 - maintenance turn-time productivity
 - Check yield
 - LLP utilization
- Ground Operations
 - cost per station - per departure - per aircraft type
 - scheduled and minimum aircraft turn times (% achieved)

How to Plan ?

➤ Recommendation:

➤ Integrated Operations Planning

Integrated Ops Planning Objectives

- Provide enterprise view, organizational structure, and processes to enable collaboration between Commercial objectives and Operational requirements in planning and scheduling
- Optimize financial results from a balanced design perspective taking into account revenue, cost, and operational performance
- Enable an airline to efficiently manage and respond to changes in global and competitive environment

**Integrated Operations Planning is critical for success
in today's airline industry environment**

General Rule

- The earlier in the planning process an airline can "build in" the operational requirements and infrastructure to support its commercial and planning objectives,
- the more reliably and cost effectively the airline will perform



Operations Control OCC



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Airline Operations Management

- All airlines have some form of daily operations management process
- But, many do not fully realize the service improvement capability and cost management potential of a pro-active, fully integrated, collaborative, Operations “Control” process

Operations Control (OCC) - Mission

- Corporate business unit(s) or operational department(s) tasked with managing and coordinating execution of the daily airline schedule as planned
- Primary goal to anticipate and minimize the performance, service, and cost impact of irregular operations (IRROP)

“What should the OCC contribute to an airline ? ”

- To support positive business results, an effective OCC must
 - **Manage the Operation** of the airline schedule as planned
 - **Minimize the Impact** of schedule disruptions on the airline
 - provide **Quality Service** to the maximum number of passengers
 - maximize **Revenue Retention**
 - direct most **Cost Effective** plan to return to planned schedule
- Every decision, action, or inaction will significantly impact the resulting Company performance, including
 - Operational
 - Service
 - and, Financial (Cost/Revenue)

Where to begin ?

➤ Organization/Process

- Representation for every department or function which can impact, or will be impacted by, an OCC decision concerning the operation of the flight

➤ Information/Communication

- Comprehensive, real-time, dynamic (including revenue and cost) to enable and enact balanced decisions

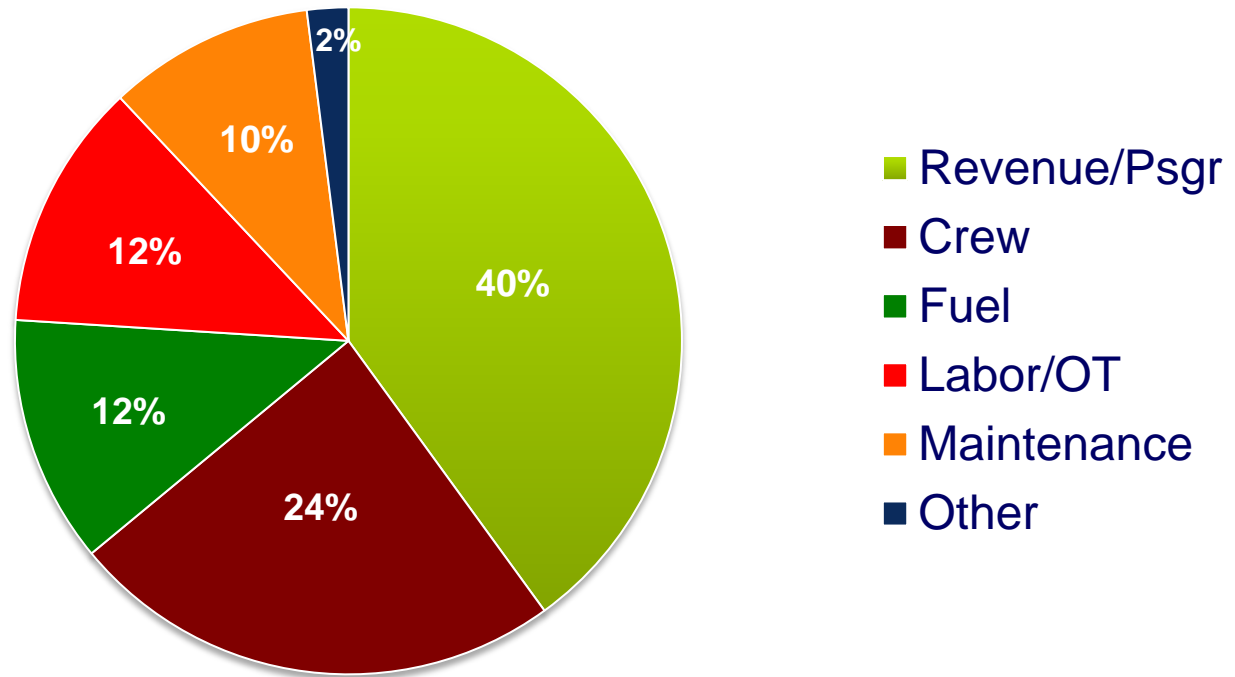
➤ Authority

- Ideally a separate reporting department (similar to Safety) but, must have decision autonomy

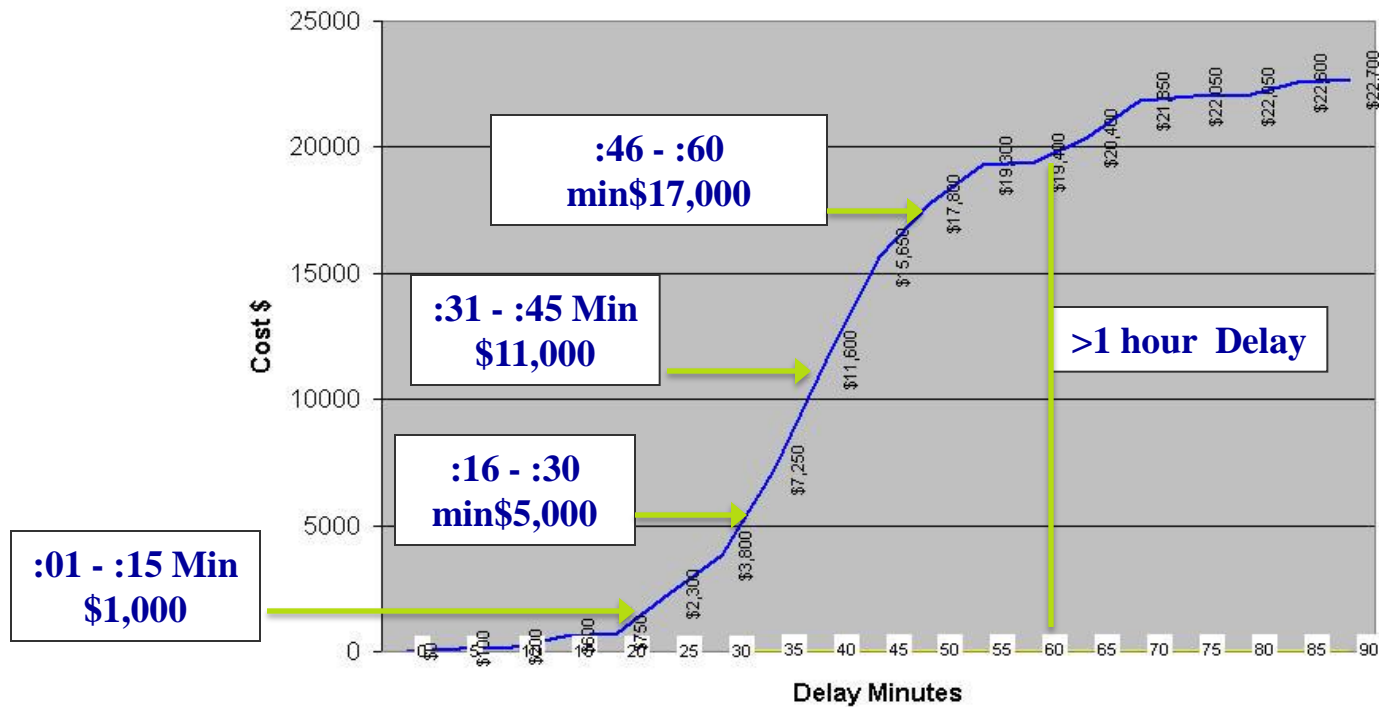
OCC IRROP Cost Management

- To tactically manage daily operations and make correct business decisions, the OCC needs good, timely, accessible information
- Resource Availability – Aircraft, Crew, Support
- IRROP Cost
 - Operational – crew, maintenance, services, resource utilization
 - Passenger – lost revenue, interrupted trip expenses
 - Service impact – customer, regulatory, Good Will
- Revenue and Reservations
 - total \$ onboard, booking class, potential for loss, market considerations
 - re-accommodation options / projected length of delay to destination
 - special circumstances (ex: high school band, cruise connection)

IRROPS Cost Distribution



Delay Cost vs. Length of Delay



OCC Recommendation

- Develop an Operations Control Process (OCC) to support cost management objectives and
 - Serve as the **center** of airline's operational decisions
 - Facilitate **collaborative** decisions among all affected disciplines
 - Support **Planning** for disruptions – Enable **pro-active** action
 - **Mitigate** IROPS impact - Recover **quickly** – **Limit** next day impact
 - Optimize for **Company** business objectives
- Incorporate as part of an overall integrated airline planning, performance improvement, and cost management process



Operations Cost Management

Are you achieving the results you expect?



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IATA Support Activities

- Provide a wide range of customized services to reduce costs and improve efficiency



Self - Assessment

- Key Questions to determine how to assess your airline's cost management capability and performance



Operations Cost – Planning & Control

- Is there a fully Integrated Schedule Planning process ?
- Is there a process to track and validate planning components ?
- Is there an effective process to manage and control / react to daily and near-term deviations from plan ?
- Is there an effective process to determine associated delay cause and cost impact ?
- Is there a focused corporate Operational Reliability or Punctuality program and culture ?

Summary

- Effective Operations Planning and Control must continuously seek the optimal cost-effective balance between
 - operational reliability
 - service quality
 - cost management
 - revenue maximization



Thank You



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