

Scheduling

Chapter 16



How Scheduling fits the Operations Management Philosophy

USING OPERATIONS TO COMPETE

Operations As a Competitive
Weapon
Operations Strategy
Project Management

MANAGING PROCESSES

Process Strategy
Process Analysis
Process Performance and Quality
Constraint Management
Process Layout
Lean Systems

MANAGING VALUE CHAINS

Supply Chain Strategy
Location
Inventory Management
Forecasting
Sales and Operations Planning
Resource Planning
Scheduling

Air New Zealand

- Flight and crew scheduling is a complex process.
- Scheduling begins with a five-year market plan.
- This general plan is further refined to a three-year plan, and put into an annual budget in which flight segments have specific departure and arrival times.
- Crew availability must be matched to the flight schedule. Two types of crews—pilots and attendants—each comes with its own set of constraints.
- Sophisticated optimization models are used to design generic minimum-cost schedules.

