



The Client
Raiders Basketball

The Industry
Sports Club

The Solution
Excel Optimisation



Overview

The Raiders Basketball Club is one of the largest clubs in the district, consisting of 90 teams, and over 100 possible court times and locations.

Business Challenge

Each team nominates its 5 preferred training locations and times in order of preference and the club's primary goal was to allocate these in the most optimal way to maximise satisfaction amongst its teams by granting as many preferences as possible. This had previously been done manually, which was a very time-consuming process for the volunteers involved.

How Access Analytic Helped

Using Excel's tools, we developed an automated system for collecting the data, setting up the optimisation problem with appropriate constraints, and then solving this to reach the optimal solution.

Business Benefits

The solution provided several key benefits for the basketball league, enhancing overall efficiency, fairness, and satisfaction among all stakeholders:

- **Maximised Team Satisfaction:** By accommodating as many team preferences as possible, the solution ensured that teams were happier with their schedules, leading to higher satisfaction and morale.
- **Fair Allocation:** The solution ensured that each game slot was utilised properly, maintaining fairness and equity in scheduling.
- **Operational Efficiency:** Automating the scheduling process using Excel Solver significantly reduced the time and effort required compared to manual scheduling, improving operational efficiency.
- **Conflict Minimisation:** By optimally assigning game slots based on team preferences, the solution minimised conflicts and scheduling issues.
- **Resource Utilisation:** The even distribution of games across the available venues, days, and times ensured that all resources were utilised effectively without overburdening any single venue or time slot.

