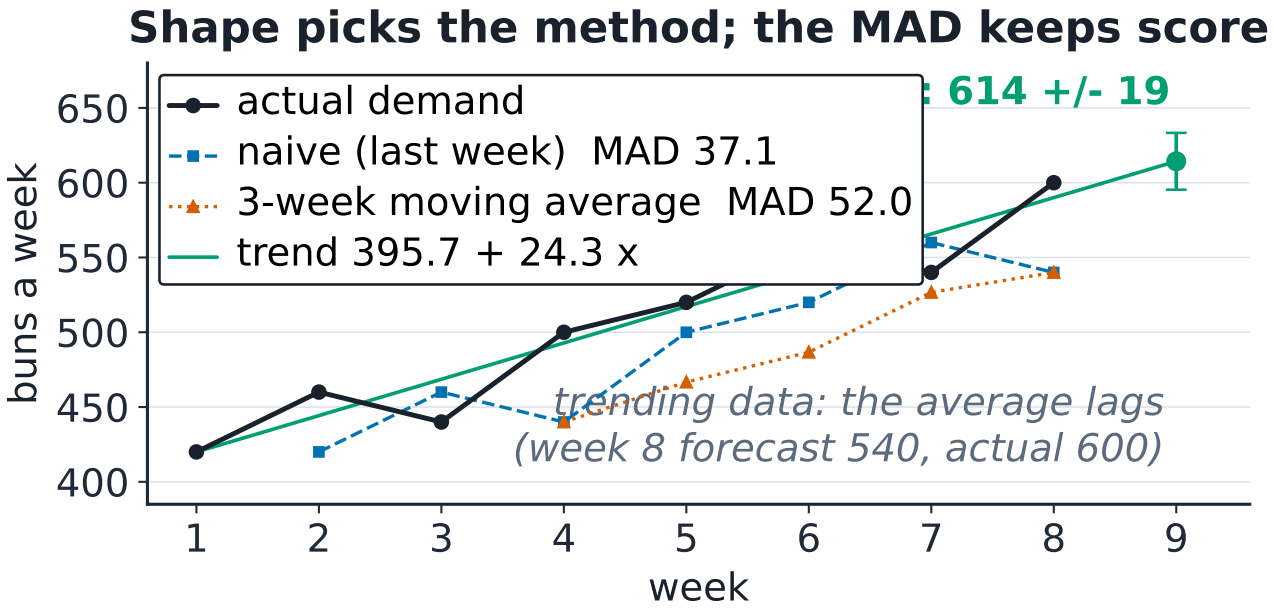
Exercise walk-through

10.6
Project management

University Business

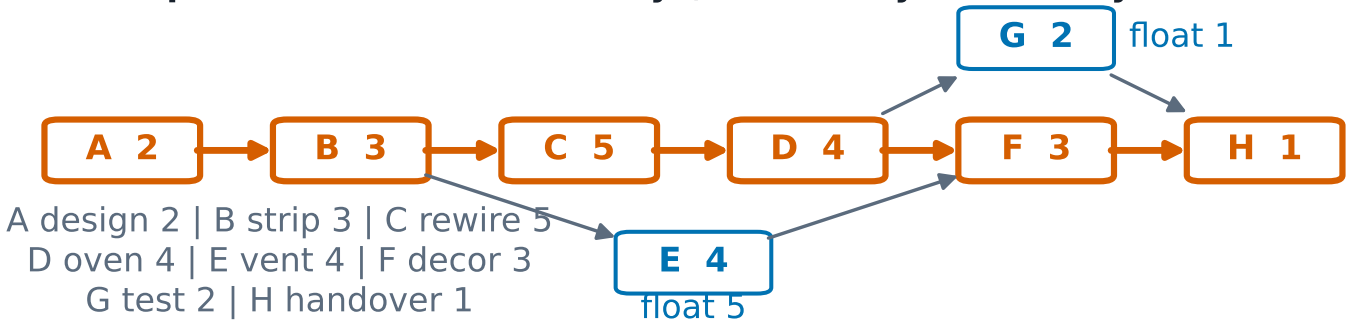
Forecasting: shape picks the method



The trend line beats the averages: week 9 forecast 614 +/- 19.

Project management: the critical path is the project

Critical path A-B-C-D-F-H = 18 days; crash C by 2 and D by 1 to reach 15

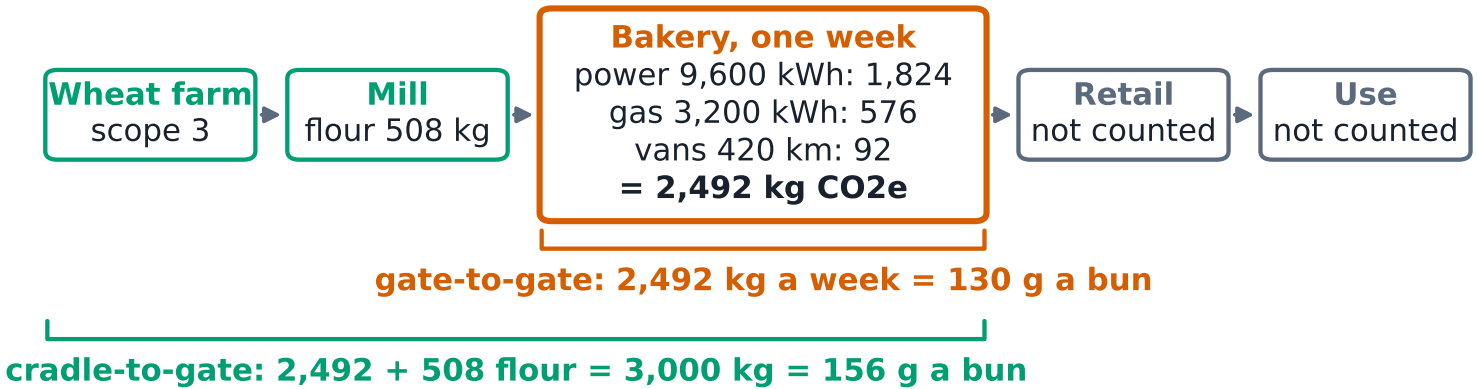




Critical path 18 days; at day 10, CPI 0.824 and EAC 72,800.

Sustainability in operations: the boundary is the claim

Same bun, two footprints: the boundary is the claim



renewable tariff at 0.06 kg/kWh cuts electricity 1,824 to 576: the site week halves to 1,244; the flour does not move

2,492 kg a week gate-to-gate; 3,000 kg with the flour counted.

Exercises 2.1·2.3

2.1 Forward pass: the project duration and the critical path. [4]

2.2 Total float of B and of D. [3]

2.3 C can be crashed 2 days at 300 a day, E 1 day at 500 a day; a day saved is worth 450. Which crashes pay, the new duration, and the net gain. [4]

Exercises 2.1·2.3

2.1 Forward pass: the project duration and the critical path. [4]

2.1

- A 0-3; B 3-7; C 3-9; D 7-9; E 9-14; F 14-17.
- Duration 17 days; critical path A-C-E-F $= 3 + 6 + 5 + 3$.

2.2 Total float of B and of D. [3]

2.2

- B: LF 9 (E must start at 9), EF 7 - float 2.
- D: LF 14, EF 9 - float 5.

2.3 C can be crashed 2 days at 300 a day, E 1 day at 500 a day; a day saved is worth 450. Which crashes pay, the new duration, and the net gain. [4]

2.3

- C by 2 at $300 < 450$: yes - 15 days; A-B-E-F is now also 15.
- E at $500 > 450$: no. Net $2 \times 450 - 600 = +300$.

Exercise 2.4

2.4 BAC 40,000. At the status date PV 22,000, AC 25,000, EV 20,000. CPI, SPI and EAC. [4]

Exercise 2.4

2.4 BAC 40,000. At the status date PV 22,000, AC 25,000, EV 20,000. CPI, SPI and EAC. [4]

2.4

- $CPI = 20{,}000/25{,}000 = 0.80$; $SPI = 20{,}000/22{,}000 = 0.91$.
- $EAC = 40{,}000/0.80 = 50{,}000$ - a 10,000 overrun flagged now.