CASE STUDY

Vehicle Replacement

Multi-Engine AI Consultation for a Complex Purchase

From the Practical Wisdom AI Archive

CHALLENGE

The Challenge

Alan, a UK driver living between two homes (one of them off-grid), needed to replace his Dacia Jogger. The vehicle had served him well, but the requirements had outgrown what it could carry.

The constraints pulled in different directions:

- Regular 500-mile motorway runs, where fuel economy and long-distance comfort matter most
- An off-grid home, ruling out plug-in hybrids and full electric vehicles entirely
- Heavy cargo needs: a dog, diving gear, computer equipment, often loaded all at once
- Genuine satisfaction with Dacia's value proposition; brand loyalty was a real factor
- Budget consciousness; preference for value over prestige

The combination produced a particular tension. Plug-in hybrids would carry their batteries as dead weight without mains charging. Full hybrids might not deliver substantial efficiency gains at sustained motorway speeds. And no current Dacia model offered a meaningful step up in cargo capacity from the Jogger he was replacing.

METHODOLOGY

The Theophrastus Methodology

Faced with this multi-dimensional decision, Alan turned to Theophrastus, the multi-engine AI consultation service developed by The Phronesis Project.

Rather than asking a single AI service, Theophrastus dispatches the same brief to three engines independently. None of the engines sees what the others have produced. This protects against single-point bias and surfaces both consensus and disagreement.

The three engines:

- Perplexity for current market data and real-time web search
- Claude (fresh session) for analytical assessment and broader market view
- ChatGPT for efficiency calculations and comparative analysis

Each engine received the identical core brief: vehicle replacement, large cargo estate or SUV, UK market, petrol or hybrid only, no plug-in, no full electric.

CONSENSUS

Where the Engines Agreed

The convergence was striking.

All three engines independently named the Skoda Superb Estate (1.5 TSI eTEC mild-hybrid petrol) as the standout recommendation. The reasoning aligned across engines:

- 690-litre boot, the largest in its class
- Optional height-adjustable flat load floor, important for repeated heavy loading
- 400-plus mile motorway range per tank
- Mild-hybrid system fitted as standard, not a paid extra
- Genuine long-run motorway refinement, including acoustic glass
- What Car? Estate of the Year 2026

- Approximately £5,600 cheaper than the VW Passat Estate, which is essentially the same car on the same platform

All three engines agreed that self-charging full hybrids (Toyota, Hyundai, Kia, the new Dacia Bigster) require no mains connection and are entirely suitable for an off-grid home. The plug-in hybrid was independently ruled out by all three on the same grounds.

DIVERGENCE

Where the Engines Differed

The divergence was instructive, not contradictory.

Perplexity provided the most precise current data on the Dacia range, drawing from official UK specifications. It confirmed the Bigster as the only meaningful Dacia upgrade path and noted that no larger Dacia is planned for the near term.

Claude's fresh session produced the most comprehensive broader market analysis. It identified the flat load floor on the Superb as a specific practical requirement worth paying for, a point the other engines had not explicitly flagged. It also disclosed that it had encountered and ignored prompt injection attempts embedded in two car review websites: a small but interesting note on responsible AI behaviour during research.

ChatGPT provided the most precise efficiency calculations. Using What Car? real-world figures and current UK fuel prices, it calculated a saving of approximately £12 to £13 per 500-mile trip for a full hybrid over petrol. It also calculated the payback timeframe on the hybrid premium: approximately 100,000 miles to recover a £3,500 price gap.

RECOMMENDATION

The Recommendation

Skoda Superb Estate, 1.5 TSI eTEC 150, SE L specification.

The reasoning consolidates across all three engines:

- Cargo: 690 litres, exceeding all mainstream competitors, with optional flat load floor for heavy equipment
- Motorway capability: 400 to 450 miles per tank in real-world use, acoustic glass, optional massage seats (functional, not luxury, on a 500-mile run)
- Hybrid effectiveness: the mild-hybrid system delivers benefits regardless of charging infrastructure, and is fitted as standard
- Value: a £5,600 saving versus the VW Passat Estate for essentially identical capability, with better controls

Two alternatives carried weight:

Skoda Kodiaq (5-seat specification)

If SUV body style is preferred. 910 litres of boot space exceeds any estate in the comparison. Same mild-hybrid powertrain. Reviewers flagged some early reliability concerns; buying a one-to-two-year-old example rather than new is worth considering.

Dacia Bigster Hybrid 155

If staying with Dacia matters. 612 litres seats up, 1,912 litres flat. Full hybrid, no mains charging needed. The only meaningful Dacia upgrade path. It loses the Jogger's seven-seat flexibility but offers more cargo capacity in a five-seat SUV body.

Vehicles Ruled Out, With Reasoning

The exclusions were as instructive as the inclusions.

Peugeot 508 SW: Load floor not flat with rear seats folded. This single feature failed the brief.

Peugeot 5008 mild hybrid: Noisy, strained powertrain at sustained UK motorway speeds. Compromises long-run comfort despite its size.

Kia Sorento hybrid: Multiple reviewers flagged the hybrid drivetrain as strained at sustained motorway speeds. A specific weakness for a 500-mile-run user.

Hyundai Santa Fe hybrid: Outstanding interior, but a starting price of £48,640 made it hard to justify when the Superb or Kodiaq deliver comparable practicality for around £10,000 less.

VW Passat Estate: The same car as the Superb, costing £5,000 to £6,000 more, with worse touch-sensitive controls. Direct comparison made the Skoda's value advantage clear.

The Hybrid Question

For a 500-mile motorway-dominated use case, the hybrid analysis carried a counter-intuitive finding.

Full hybrids deliver their largest efficiency gains in town and mixed driving, where regenerative braking and electric-only running do the most work. At sustained motorway speeds, the gain is real but modest: approximately 15 percent over an equivalent petrol. ChatGPT's calculation: a saving of £12 to £13 per 500-mile trip at current fuel prices. The payback timeframe on a £3,500 hybrid premium runs to roughly 100,000 miles, factoring in first-year VED savings.

For a high-mileage motorway user, the maths support full hybrid only at very high annual mileages. For a moderate motorway user, the premium does not pay back quickly enough to justify itself.

Mild hybrid sits in a different position. It smooths the engine's operation and recovers some braking energy but cannot drive the car on electric power alone. As an upgrade option, the cost would not be worth paying. Fitted as standard (as on the Superb), it is a useful addition that comes free.

The plug-in hybrid trap: a plug-in vehicle that is never plugged in carries its battery as dead weight and delivers no efficiency benefit. For an off-grid home, this is the worst of both worlds.

The Dacia Question

Brand loyalty was a genuine factor, not noise. Alan's satisfaction with Dacia's value proposition was earned, and the engines treated it seriously.

The honest answer: the Bigster is the only step up Dacia currently offers. It is larger than the Jogger, provides more cargo capacity, and is available as a full hybrid. What it loses is the Jogger's seven-seat flexibility; it is a five-seat SUV.

No larger Dacia estate or MPV is confirmed for the near term. The 2026 Dacia product update focuses on powertrain improvements to the existing range, not a new larger vehicle.

For a buyer needing significantly more space than the Bigster offers, the step outside the Dacia range to the Superb or Kodiaq is the correct move.

OUTCOMES

Outcomes and Lessons

Decision Implementation

Alan selected the Skoda Superb Estate 1.5 TSI eTEC in SE L specification.

The decision satisfied each of his constraints:

- 690 litres of cargo space with flat load floor handles all equipment requirements
- 400-plus mile range removes range anxiety on 500-mile runs
- Acoustic glass and optional massage seats deliver genuine long-run comfort
- Mild-hybrid efficiency benefits without any charging infrastructure
- Substantial cost saving versus the equivalent VW

What the Methodology Surfaced

This case study illustrates the value of multi-engine dispatch beyond bias mitigation alone.

Constraint matrix optimisation: Five-plus dimensions of optimisation produced no single excellent vehicle. Trade-off analysis was the work; the multi-engine view produced a sharper trade-off than any single engine would.

Use-case-specific technology assessment: Generic advice ("hybrid is good") could have steered Alan toward a full hybrid that would not pay back at his use pattern. The engines collectively produced a more honest answer: mild hybrid is fine, full hybrid is overkill at this mileage profile.

Market efficiency discovery: The £5,600 gap between the Superb and the Passat for essentially identical platforms is a genuine market inefficiency. A single AI engine might have surfaced it; the multi-engine approach made it unavoidable.

Bias mitigation in practice: The Claude session's discovery of prompt injection attempts on mainstream car review websites was a useful reminder that AI behaviour varies under adversarial conditions. Multiple perspectives helped surface what a single perspective might have missed.

APPENDIX

Technical Notes

Vehicle Comparison

Model	Boot (up)	Boot (flat)	Powertrain	New from
Skoda Superb Estate 1.5 eTEC	690L	1,950L	Mild hybrid petrol	£38,135
Skoda Kodiaq 1.5 eTEC (5-seat)	910L	2,065L	Mild hybrid petrol	£39,045
Dacia Bigster Hybrid 155	612L	1,912L	Full hybrid	TBC
Toyota Corolla TS 2.0 hybrid	596L	1,591L	Full hybrid	£32,195
VW Passat Estate 1.5 eTSI	690L	1,920L	Mild hybrid petrol	£43,740
Skoda Octavia Estate 1.5 TSI	640L	1,700L	Mild hybrid petrol	£29,485
Kia Sorento hybrid	Large	Very large	Full hybrid	£43,635
Hyundai Santa Fe hybrid	Large	Very large	Full hybrid	£48,640

Confidence Summary

Finding	Confidence
Skoda Superb Estate is the strongest fit for this brief	High
Dacia Bigster is the only meaningful upgrade in the Dacia range	High
Full hybrid offers real but modest motorway savings versus petrol	High
Self-charging full hybrid requires no mains power, ideal for off-grid	High
Mild hybrid not worth a significant premium for motorway-dominated use	High
Kia Sorento hybrid struggles at sustained motorway speeds	High
Skoda Kodiaq offers more boot volume than any estate (910L)	High
Full hybrid payback at motorway use requires high annual mileage	Medium

Methodology Note

Three-engine role-specialised dispatch: Perplexity, Claude (fresh session), ChatGPT. April 2026. Synthesis layer authored by Claude. Engine inputs independent. Verifiable via the portable prompt held in the underlying synthesis report.