

Roadmaps that drive technology/product selection, sourcing, and implementation

Client Our client, a leading medium and heavy international truck company, is a division of a global automotive corporation. The corporation is ranked among the Global Fortune 100.

Challenge Determine the best Auxiliary Power Unit technology solutions to be applied to next generation heavy duty trucks with two main objectives: 1) product differentiation to meet key customer requirements, and 2) enhance our client's innovation image. New APU technology was required to meet game-changing targets for output, environmental compliance, integration with the vehicle, and user friendliness.

Actions **Opportunity Definition...** Establish criteria to beat the competition.

- Customer requirements
- Meeting and anticipating future regulations
- Functional and structural performance

The Right Technologies... Identify & assess technology platforms.

- Fuel cell options
- Rechargeable battery options
- Small diesel options
- Other technology family options

The Right Products... Determine and assess APU systems.

- Stand-alone vs. Integrated into vehicle
- "Hotel-load" vs. full-time operation

Roadmapping... Establish time to market for technologies & APU systems: short, medium & long term. Select the winning technology and system.

The Right Business Model

- Product Strategy... What APU differentiation strategy?
- Sourcing Plan... Who are the best suppliers? What relationship should be established?
- Implementation Plan... How to make selected technologies and systems available for planned future vehicles?

Results BIC identified and assessed the best APU technology for our client's vehicle launch time frame. BIC also identified the best sources and assisted with early negotiations for test and development arrangements.

Client Comment *"After working with BIC, I have found that the BIC innovation process bridges the gap between having information and getting results."* Research Scientist, Battelle