

A business plan for Battery-as-a-Service

Enabling an electric vehicle OEM to build a GTM strategy for Battery-as-a-Service



Quick overview

Our client specializes in electric and battery-powered vehicles in underground mining. They needed our help to develop a GTM (Go to Market) strategy that could include their innovations in the BaaS (Battery-as-a-Service) space aimed at existing and new customers. Our client needed critical projections for the development roadmap they were creating and potential costs for their BaaS products.

Client success details

With our help, our client was able to understand the emerging value chain for BaaS and create a strategic framework that included the costs of their BaaS innovation. FutureBridge answered several strategic questions including:






BaaS is a growing opportunity in the electric vehicle segment. However, it needs a deep understanding of the cost and value chain to exploit this opportunity

- What are the various BaaS platforms for different industries?
- How is the value chain emerging for the BaaS?
- What are the drivers and challenges for these services?
- Who are the key players offering BaaS across which industries?
- How will the cost of BaaS evolve in the next five years?

Key Factors	Applications
<p>Power Generation</p> <ul style="list-style-type: none">• Cyclical solar energy with peaks at mid-day and in summer• Unstable wind energy with lull for up to 3 days and irregular strength• Increasing grid instability due to EV charging• High investment need into dedicated storage for stationary applications <p>Mobility</p> <ul style="list-style-type: none">• Long Charging times of 30 minutes to 12 hours for 100%• Limited Driving range particularly at high speeds or load• Higher sales price by 50% to 200% than entry price fuel-powered cars• High investment need into dedicated energy storage capacity for mobile application and charging infrastructure <p>Other Industries</p> <ul style="list-style-type: none">• Various industries are using battery as a power backup, various battery powered tools and equipment lifters in several industries like Mining, Telecom, General Industry, Oil & Gas, Railways, etc.	<p>Stationary Application - as local energy storage, UPS, backup, off-grid electricity source; easily replaceable 48V-packs for individual and adaptable installations</p> <p>Mobility Application - as scalable traction battery with variable capacity; swappable packs for affordable electric vehicles with large operating range and multiple charging options</p> <p>Other Industries - to provide highly efficient interchangeable battery capacity across applications</p>

FutureBridge conducted extensive primary and secondary research across selected industries to develop a concise view of the current and emerging BaaS sector. Primary research included interviews with suppliers and industry experts to assess the viability of key service offerings and future cost evolution for BaaS our client was developing.

<p>Boomer M2 Battery</p> 	<ul style="list-style-type: none">• The battery can be easily lifted from the top and thanks to its low position it will not affect the visibility from the cabin• The robust and reliable BUT 36 booms gives Boomer M2 Battery excellent multi capabilities• It is able to perform long travelling distances between each face	<ul style="list-style-type: none">• Model: 88.5 kWh, LiFePO4, 630 VDC• Electric system: 24 V, Batteries 2x125 Ah• Cleaner work environment: Onboard charging helps in charge during drilling
<p>ST7 Battery</p> 	<ul style="list-style-type: none">• The Scooptram ST7 battery is a robust LHD built for demanding underground applications• Maintenance and hassle-free service• Quick battery change enables a 24/7 operation with just two batteries. The quick charger ensures a that a fully charged battery is always available in time for the next swap	<ul style="list-style-type: none">• Model: Artisan, 165 kWh, LiFePO4, 630 VDC• +4h operational time on a full charge in most applications• The large capacity battery and powerful motors provide the power to outperform the diesel machines in most applications
<p>ST14 Battery</p> 	<ul style="list-style-type: none">• The Scooptram ST14 Battery is designed to optimize every stage of the loading operation• The compact and highly productive, zero-emission Scooptram ST14 Battery gives you the ability to work in the toughest conditions while reducing your ventilation needs and cost	<ul style="list-style-type: none">• System voltage: Start and Accessories 24V, with 24/12 V converter• Intelligent control system featuring traction control, speed limiter, over speed protection and automatic ride control

FutureBridge further analyzed current industry activities, proposals and the plans of key players, plus various related technical, commercial and regulatory factors to understand the future of BaaS. The cost breakdown and partnership options for providing BaaS were also evaluated. The work FutureBridge carried out enabled our client to define their business plan and operational roadmaps to deliver BaaS to their customers.

About FutureBridge

FutureBridge tracks and advises on the future of industries from a 1-to-25 year perspective.

We keep you ahead on the technology curve, propel your growth, identify new opportunities, markets and business models, answer your unknowns, and facilitate best-fit solutions and partnerships using our platforms, programs, and access to global ecosystems and players.