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2020 BEST PRACTICES AWARD

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gogoro

2020 GLOBAL SWAPPABLE BATTERY ELECTRIC SMARTSCOOTER COMPANY OF THE YEAR AWARD

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Industry Challenges

Rapid urbanization and population density are stressing urban transport systems, creating pollution, congestion, and mobile inefficiency. With the growing number of megacities in the world—by some projections, the amount will reach 39 by 2030[1]—the problem is only going to get worse. To address the issue, city leaders are seeking progressive action regarding both transportation and energy, as they guide the transition from gridlock and fossil fuel-powered vehicles to sustainable development and smart city concepts.

While the primary public response was to switch to electric vehicles (EVs), in reality, many people find EVs both unaffordable and difficult to manage. Cost of living and rising tuition rates for students shrinks transportation budgets, and parking or power charging issues inconvenience riders. Many people are even rejecting vehicle ownership altogether, using public transportation to get from Point A to Point B; however, public transport lacks the privacy and freedom associated with private vehicle ownership.

As a result, riders are turning to alternative modes of transportation. Compact and affordable vehicles like bikes and scooters are beginning to intersect with sharing communities in developing smart city ecosystems. Innovation, regarding vehicles and business models, abound as market participants recognize the opportunity. These new entrants face several challenges related to building high-performing, connected, smart vehicles, and networks to go along with them. Functionality and design simplicity are vital differentiators, while companies also must foster growth within their networks and demonstrate viability in a rapidly changing market ecosystem. Through strategic market placement and continuous innovation, prevailing companies will gain quick market share and establish their market leadership.

Gogoro's Visionary Innovation & Performance and Customer Impact

Founded in 2011, Taipei, Taiwan-based Gogoro originated in response to an apparent impasse in the transition from fossil fuels to sustainable energy. Intending to leverage innovation to solve the problem on a massive scale, the company's founder's targeted consumer-level applications. The method, Gogoro decided, was to establish an EV battery swapping infrastructure. After receiving funding from billionaire Dr. Samuel Yin of Ruentex in Taiwan, the company built a battery, cloud service, and mechanism for swapping batteries in public spaces. During that development, Gogoro also created a vehicle to prove the concept. The investments then progressed. In 2015, Panasonic and the Taiwan government's National Development Fund contributed to the investments, and the company launched the Gogoro S1 Smartscooter® and the Gogoro Network at the Consumer Electronics Show in Las Vegas, winning multiple awards. In 2017, a group of investors that included Japanese conglomerate Sumitomo, French Energy Giant Engie, Al Gore's Generation Investment Management, and Singapore's Temasek Holdings Pte put an

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[1] https://business.inquirer.net/259928/megacities-domination-growing

additional $300 million towards the company. The recipient of Frost & Sullivan's 2016 Technology Innovation award, the company has revamped its product offerings, adding three additional vehicles, and extended its presence to Berlin, Paris, and Madrid with about 5,000 scooters. Gogoro anticipates continued success at the intersection of mobility, transportation, and sustainability.

Improving Mobility Through The Gogoro Network

Gogoro has spent several years building the Gogoro Network™—a cloud service that utilizes machine learning (ML) and artificial intelligence to connect GoStations™—ATM-sized stations designed to exchange used batteries for charged ones. In a typical usage scenario, a customer rides up to a GoStation®, places used batteries in the two open slots—a standard station has eight slots—and, six seconds later, receives pre-charged batteries in exchange. In those six seconds, the GoStation® authenticates the owner, performs a diagnostic of the vehicle to ensure safety, and then pushes out the two charged batteries.

Gogoro does not sell the batteries to its customers, because they are expensive—costing on average 30-35% of an EVs overall expenditure—and they become unusable, either running out of charging cycles or not reaching sufficient charge for motor applications. By maintaining ownership of the batteries, Gogoro reduces costs for its customers and has an opportunity to provide frequent upgrades. Rather than customers having to throw out batteries when they no longer hold a charge, the company inserts new battery innovation into the same battery cases, which increase range and power and improve overall performance. Gogoro has also released a new generation of batteries in the same case size that further improve performance.

Although these batteries are outperforming Gogoro's initial expectations—each battery charge powers a scooter for 60-100 kilometers (km)—they are typically no longer useful for EV applications when they go below 70% functionality. To manage the afterlife of these batteries, Gogoro's team implements second-and third-life business plans for them. The company uses the batteries for data backup and data storage during a second-life plan.

In July 2019, Gogoro made an announcement to launch GoShare®, a new urban vehicle sharing platform that allows riders to rent its scooters.[2] The launch took place in Taoyuan, Taiwan in August 2019 with 1,000 scooters and as of October 2019 has expanded to Taipei. GoShare® riders can also use the Gogoro Network to exchange batteries. In other words, riders and passengers that access GoShare® services can also swap batteries at GoStations® to extend their rides. By introducing GoShare®, Gogoro becomes the first company to design an end-to-end experience with an app, vehicle, and backend infrastructure. The company expects to build the service out in several cities outside of Taiwan by the end of 2020.

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[2] Gogoro. "Gogoro Launches GoShare®, An End-to-End Mobility Sharing Platform And Solution For Smart Cities." PR Newswire: Press Release Distribution, Targeting, Monitoring and Marketing. July 05, 2019. Accessed July 25, 2019. https://www.prnewswire.com/news-releases/gogoro-launches-goshare-an-end-to-end-mobility-sharing-platform-and-solution-for-smart-cities-300880265.html.

Fostering the Gogoro Community

Although customers can order Gogoro scooters online—then either pick it up or have the company deliver it—most buyers visit one of Gogoro's 25 stores, where employees walk them through the Gogoro Network, demonstrate how to swap batteries, allow them to test ride vehicles, discuss customizations (regarding color or accessory preference), and complete paperwork (for government subsidies or reimbursements). Depending on availability, customers can either ride away on their new scooters directly after the sales process, or they can pick them up in a couple of days. Gogoro also offers 24-hour online and offline customer support for troubleshooting and maintenance issues.

Post-purchase, many customers get involved in the Gogoro community. As a testament to Gogoro's success with GoStations®, GoShare®, its list of vehicles, and the overall Gogoro Network, the company's ridership developed their own community, forming multiple rider groups, forums, and networks. Many of these riders, as a result of their Gogoro experiences, became focused on sustainability. They built Gogoro-related communities and became ambassadors for climate change and clean energy transportation. They meet regularly for events. Recognizing an opportunity to foster growth, Gogoro developed a program, with a small team of employees dedicated to the Gogoro community. The program and the community promote future growth for the company, creating a sense of inclusiveness among riders.

Rise to Prominence

Gogoro began its market presence when it launched its first pilot in 2015. The company decided to start the project in Taiwan, which had multiple benefits regarding the supply chain, manufacturing, technology, workforce, and user adoption. In addition to being a densely populated area, Taiwan has the highest per capita scooter ownership in the world, with 23 million people and 14 million operating scooters, and Gogoro recognized massive opportunity there, viewing Taiwan as an excellent locale to test its products and work out any unanticipated complications.

Since the initial launch in Taiwan, Gogoro has seen significant success, growing from an initial installment of 70 GoStations® to nearly 1,500 stations by the end of 2019, which Gogoro's more than 225,000 customers pay monthly fees to access. Gogoro strategically places these stations about every 500 meters in places such as malls, convenience stores, parking structures, and coffee shops. The company has established consumer battery swapping on a mass scale—performing about 160,000 battery swaps each day (58 million to date)—and demonstrated that its business model is not only viable but also practical, offering tremendous benefits to gasoline and fossil fuel distribution. Gogoro also allows third-party partners to use its infrastructure. For instance, COUP—an eScooter sharing service in Europe—operates the Gogoro smart scooter and Gogoro infrastructure in Berlin, Germany, Paris, France, and Madrid, Spain. There is also an ongoing pilot for a similar business model with Sumitomo Corporation on Ishigaki jima Island in Japan.

With the initial launch in Taiwan in 2015, Gogoro built an experience center in Taipei, Taiwan, along with some other stores to increase foot traffic and promote the company. Since then, Gogoro has closed the experience center, because the company felt it had served its purpose: the company began to see a significant amount of business from referrals, with an enormous number of people finding out about Gogoro from other customers. By introducing inexpensive vehicles and customizable battery swapping programs that are specific to different audiences, the company has reached an even broader set of users.

Fulfilling a Vision

Gogoro is well-positioned for future growth. The batteries the company designed and built are lasting much longer than the company initially anticipated, and the Gogoro Network has become what the company calls an ecosystem enabler. In other words, Gogoro did not start with the intention of making vehicles or scooters, but a platform that offers riders, passengers, vehicle manufacturers and cities a choice to enjoy mobility on a massive scale while benefiting the community, alleviating congestion, and moving from one location to the next efficiently. The impact of Gogoro's network became especially apparent in 2019; the mayor of Tauyuan City, Wen-Tsan Cheng, praised the company for helping it transition to a smart and sustainable city.

Recently, Gogoro launched its "Powered by Gogoro Network" program, extending its batteries, battery infrastructure, and motors to other vehicle companies. Gogoro announced the first third-party participant—Yamaha—in September 2018. Yamaha built a scooter that will use Gogoro batteries and utilize the Gogoro Network, beginning in 2019. The company also announced three other companies—PGO, Aeon Motor and Tai Ling Industry as "Powered by Gogoro Network" partners. All four companies are creating vehicles targeted at different audiences and segments that integrate with the Gogoro network, three of which will ship by the end of 2019.

Additionally, the company has launched a third version of the Gogoro Smartscooter, called the Gogoro 3. While Gogoro 1 was the first scooter the company developed—and thereby, the most innovative—Gogoro 2 was the scooter that took Gogoro to the mass market—selling more than 123,000 vehicles—and Gogoro 3 updated the design with a minimalist approach. Gogoro also launched a fourth Smartscooter—Gogoro VIVA™—in September 2019.

As the implementation occurs, Gogoro, along with its vision for increasing sustainability through mobility, will have come full circle. The company will have steadily and incrementally achieved its long-term goal of enabling the transition from fossil fuels to sustainable energy at mass-market energy and transportation scale.

Conclusion

As urban density continues to generate demand for alternative modes of transportation, new opportunities will emerge for industry participants seeking to aid in the transition from fossil fuel usage to sustainable solutions. Gogoro offers not just a product and service, but an entire community to riders and passengers wishing to travel within cities while minimizing their environmental impacts and optimizing their mobility. In a short period, the company has seen significant success, expanding its product offerings to include multiple scooter series models, improving its network with greater efficiency, forming beneficial partnerships, and strategically expanding its presence throughout Asia and Europe. With its demonstrated success and commitment to sustainable mobility, Gogoro earns Frost & Sullivan's 2020 Global Company of the Year Award in the Swappable Battery Electric SmartScooter Market.

Significance of Company of the Year

To receive the Company of the Year Award (i.e., to be recognized as a leader not only in your industry, but among non-industry peers) requires a company to demonstrate excellence in growth, innovation, and leadership. This excellence typically translates into superior performance in three key areas—demand generation, brand development, and competitive positioning—that serve as the foundation of a company's future success and prepare it to deliver on the 2 factors that define the Company of the Year Award: Visionary Innovation and Performance, and Customer Impact).

Understanding Company of the Year

Driving demand, brand strength, and competitive differentiation all play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Visionary Innovation and Performance to enhance Customer Impact.

Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated each factor according to the criteria identified below.

Visionary Innovation & Performance

Criterion 1: Addressing Unmet Needs
Requirement: Implementing a robust process to continuously unearth customers' unmet or under-served needs, and creating the products or solutions to address them effectively

Criterion 2: Visionary Scenarios through Mega Trends
Requirement: Incorporating long-range, macro-level scenarios into the innovation strategy, thereby enabling "first-to-market" growth opportunity solutions

Criterion 3: Implementation of Best Practices
Requirement: Best-in-class strategy implementation characterized by processes, tools, or activities that generate a consistent and repeatable level of success.

Criterion 4: Blue Ocean Strategy
Requirement: Strategic focus on creating a leadership position in a potentially "uncontested" market space, manifested by stiff barriers to entry for competitors

Criterion 5: Financial Performance
Requirement: Strong overall business performance in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Impact

Criterion 1: Price/Performance Value
Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience
Requirement: Customers feel they are buying the most optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience
Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience
Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity
Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

	STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	Monitor, target, and screen	Identify Award recipient candidates from around the globe	• Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies	Pipeline of candidates who potentially meet all best-practice criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	• Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best-practice positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized Award candidates
6	Conduct global industry review	Build consensus on Award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible Award candidates, representing success stories worldwide
7	Perform quality check	Develop official Award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best-practice Award recipient	• Review analysis with panel • Build consensus • Select winner	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform Award recipient of Award recognition	• Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	Take strategic action	Upon licensing, company able to share Award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess Award's role in future strategic planning	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS
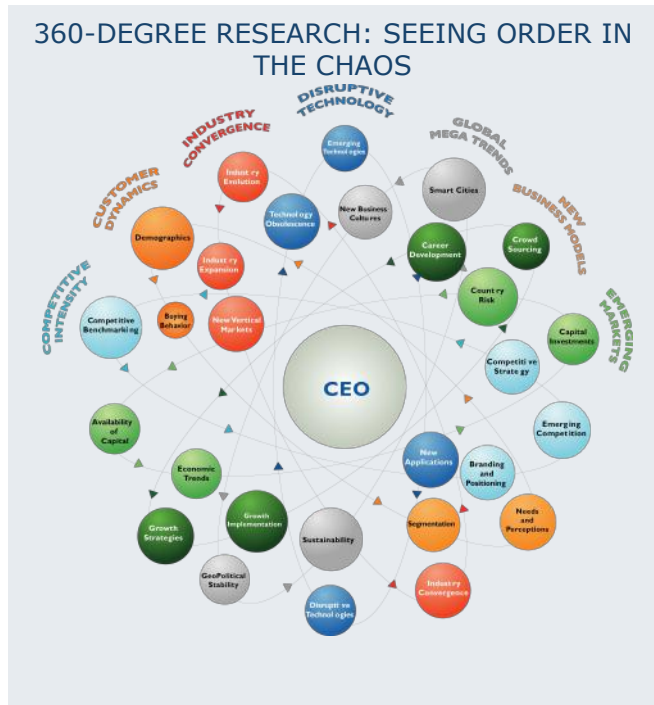
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