

GM Fleet's Charge into EV

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I. EXECUTIVE SUMMARY & MARKET LANDSCAPE

GM is betting big on electric vehicles (EVs) as the global electric vehicle market is expected to grow to nearly five times its 2019 pre-pandemic size by 2027 (Wagner). Through 2022, auto makers expect to launch upwards of 500 new electric vehicle models worldwide (Gersdorf). To lead this growth as the holder of almost one-fifth of the U.S. auto market and to fulfill its promise of rolling out 1 million EVs worldwide by mid-decade, GM must secure a sufficient share of EV sales and take advantage of an overall boom in demand (Root). The Bolt EV's delivery of its best first-quarter sales to date in 2021 further highlights the promising potential for EV acceptance ("GM's First...").

This, alongside a tight supply of semiconductor microchips and rising costs of other inventories, created a seller's market, which GM has navigated by streamlining its manufacture of vehicles to pickup trucks and other popular SUV models and halting production at factories when necessary. GM also fine-tuned its distribution to dealers while offering fewer discounts to buttress margins for its fourth-quarter of 2020 (Boston, Naughton). Anticipated government contribution of \$174 billion toward the EV cause and the endorsements of carbon taxes by the American Petroleum Institute would accelerate the impact of GM's total \$27 billion commitment to EV development through 2025. These provide stepping stones for GM to reach its goal of phasing out gas- and diesel-powered vehicles by 2035 and achieving carbon neutrality by 2040 (Schlesinger). Importantly, GM's vertical integration and efforts and joint venture with LG indicate its strong pursuit of in-house battery production. A general standardization approach could allow the company to focus on expanding its breadth of electric vehicle offerings in a cost effective way, leading the charge to fill the market with the sufficient EV variety that it lacks (Foldy). The new, electric full-size Chevy Silverado represents GM's initiative to meet this need of commercial fleets while advancing its strategy of retail adoption (Chin).

With these goals in mind combined with the forecasted market landscape of the EV industry, the recommendations above provide a high-level, long-term strategy for GM's success within the EV market, and particularly within fleets while also catering to GM's core competencies. The recommendations start with a baseline software package to be included within all GM EV fleets. Stemming from this à-la-carte premium software packages that can operate on top of the baseline package. These include extended support services from GM for both FMC managers and fleet drivers as well as OnStar integrated Smart Charging capabilities for the electric fleets. Ultimately, the standardization of software packages coupled with a standardized battery will foster long-term cost savings for GM by leveraging economies of scale in both key areas. Understanding the existence of a continuous line of support and brandpower of GM Fleet, the goal is for customers to be more inclined to convert to GM EV fleet vehicles.

II. BRAND AUDIT

Identity

GM aspires to lead innovation within the EV industry. Even before this new pursuit, GM differentiated itself by offering lower prices and granting accessibility to a wider consumer audience. Early CEO Alfred P. Sloan got the company on board with the idea of “a car for every purse and purpose,” with each brand under the GM umbrella serving as a next, upgraded purchase for the consumer (The Henry Ford, 2021). Getting the customer’s foot in the door at a potential loss was the jumping off point for this ladder strategy. However, it pushed GM into several market segments with many competitors, proving unsustainable. Further, consumer loyalty to high-touch dealers rather than to GM as the manufacturer threatened the success of a purchase ladder.

GM shifted gears in response to changing industry dynamics by narrowing its all-encompassing approach (Lopez). Today, its portfolio includes the Chevrolet, Buick, GMC, and Cadillac brands. GM also invests in OnStar, BrightDrop, and Ultium technologies, among others, in its rapid transition from a frontrunner in the ICE industry to a leader in EV (“View the Entire...”). The company strives to only enter profitable markets and standardize where standardization is most effective (Lopez). For example, the Ultium battery platform brought forward with the 2020 Hummer EV allows for scalability and flexibility in car creation through a general “skateboard” platform (Orlove).

GM’s former overabundance of vehicle options no longer shapes its identity. Now, its innovative cost leadership is rooted in standardized technology that is adaptable to evolving consumer needs. GM’s initiatives are built to yield economies of scale and lower manufacturing costs. The launch of the company’s modernized logo within the past year reflects the company’s efforts to free itself from the confines of traditional thinking. The logo’s vibrant color scheme and lowercase font signify cleaner skies in a zero-emissions future with its Ultium platform and other sustainable campaigns.

Positioning Analysis & Image

GM’s refocus in recent years to a culture of productive collaboration, trust, and expanded diversity of thought provides it a strong internal platform to redefine the brand outside the company. As part of its appeal, GM presents shoppers with a reasonable selection of distinct brands to fit their lifestyles. Its GMC branch even won the Kelley Blue Book Brand Image Award for four consecutive years as of 2017, due to consumers’ historical perception of GMCs as technologically capable vehicles with professional grade features. This is also reflected in the Sierra pickup’s receipt of the highest possible five-star Overall Vehicle Score for safety since the National Highway Traffic Safety Administration’s refinement of qualification standards (“GMC Wins...”). With a strong foundation catering to customer satisfaction, GM has a platform to grow the EV market on its own.

To communicate this perception of dependability and quality, GM recently overhauled its original website format and included more information about its EV offerings. GM also highlighted its dedication to the environment, even achieving the title as one of the 2020 World’s

Most Ethical Companies by the Ethisphere Institute (“General Motors Named...”). To further reinforce its image as an inventive leader within the EV space, GM utilized its “Everybody In” influencer campaign and its “Zero Crashes, Zero Emissions, Zero Congestion” media wide commitment (Jamie).

Consumer perception of GM across the entire supply chain is also impacted by Tesla and other emerging companies in the green space who are experimenting with direct-to-consumer models (Foldy). For Tesla, vehicle performance pushes consumers to the purchase point. Therefore, Tesla is increasing its commercial sales at a decent pace without any local representation. However, dealerships are integral to the success of GM’s distribution channels and represent the predecessor of the end fleet consumer. GM’s acquired respect from dealers and Fleet Management Companies (FMCs) might be threatened by the potential for change around how dealerships stock inventory to resemble more of a European shopping experience - where consumers are not physically presented with a spectrum of options. Dealership cost savings from reduced inventory and limited EV stock provide incentive to divert from GM’s traditional sales model (Naughton). Some establishments are skeptical of long-term demand and believe that auto manufacturers like GM are misguided when pushing them to showcase EVs in general showrooms. Instead, they feel that the EV customer differs greatly from the ICE customer; as such, appealing to both would be counterproductive. This conflict has created a newfound uncertainty for dealerships and FMCs around whether GM can walk the walk in the EV sector or whether it has overstayed its welcome as an ICE player.

Delivery

Product

GM fleet has a portfolio of over 60 high-performance, commercial vehicles across the Chevrolet, GMC, Buick, and Cadillac brands (“Find a Fleet Vehicle...”). These vehicles include cars, trucks, SUVs, and vans. Currently the Chevrolet Bolt EV is the only GM fleet vehicle offered under “alternative fuel vehicles” (“2020 Chevy Bolt EV...”). The Bolt EV has an EPA-estimated 259 miles of driving range per full charge and offers 66 cubic feet of cargo volume. The Bolt also boasts three points of charge: a 120-volt charge cord allows charging at any 3-prong outlet, the 240-volt charge unit offers 25 mph of charge time, and the available DC Fast Charging allows for 100 mi per 30-minute charge.

Second to the physical vehicle, GM fleet vehicles come with a variety of telematic options. Integrated software in both ICE and EV fleet vehicles act as the FMCs’s eyes and ears, providing FMCs and fleet customers the options to monitor vehicle safety, driver behaviors, and resource efficiency. Telematics are owned and operated as a subset of GM’s Onstar Vehicle Insights. Some key features include geofencing, vehicle performance (checked-out vehicles, diagnostic issues, distance, and more), and in-vehicle coaching (real-time, spoken reminders for driver safety) (“OnStar Vehicle Insights”).

Price

Pricing varies more commercially than with retail, since fleet customers need to include license and dealer fees. The current price range for all GM vehicles is \$21,400 (Chevrolet Trax) to \$76,195 (Cadillac Escalade). On the EV side, the Chevy Bolt EV starts at a price of \$36,620 and is considered to be a mid-level vehicle (“Find a Fleet Vehicle...”).

Telematics add extra charge, however GM works closely with FMCs to communicate and coordinate changes in price. OnStar Vehicle Insights is currently priced at \$15.99 plus tax per vehicle per month (“OnStar Vehicle Insights”). In-Vehicle Coaching is considered a separate service, priced at \$6.99 plus tax per vehicle per month.

Place

GM fleet vehicles, including the Chevy Bolt EV, are purchased directly from GM Fleet by FMCs or fleet customers. GM utilizes a national network of over 4,100 dealerships to sell fleet vehicles (“Locate a Dealer...”). Charging availability is a primary concern among FMCs wishing to convert. GM and its partner charging companies are leveraging these telematics to build a charging infrastructure for fleet customers at the places they are already congregating (Jenson, 2021).

Promotion

GM relies on its strong partnerships with FMCs and fleet customers to communicate fleet vehicle promotions. These relationships and weekly check-in meetings are the avenues GM fleet consultants can take to advocate for EV fleet conversion.

Touchpoint Analysis & Experience

GM Fleet relies on a history of relationships with those involved within its value chain. This complex ecosystem is made up of GM representatives (consultants for vehicles, telematics, and fleet needs), FMCs, fleet customers, and aftermarket companies. Each of the mentioned stakeholders plays a pivotal role in driving the customer experience as well as in driving the mass adoption of EVs. However, each stakeholders’ individual value-adds separate GM from valuable moments of customer decision making such as pre-purchase and post-purchase.

Pre-Purchase

The pre-purchase journey focuses on facilitating the decision to convert to a GM EV. Without widely accessible charging infrastructure or electric commercial trucks, fleets already have barriers to convert. In the short term, this is partly outside of GM’s control. Yet, GM Fleet could still be driving the conversions around EV fleet conversion.

Unfortunately, GM pre-purchase “EV evangelization” is limited by marketing communications that are neither push nor pull. Unlike for retail EV efforts, there is no advertising or marketing campaign pushing EV acceptance by fleets. EV communications are largely educational: portals on the GM Fleet website share statistics and benefits of adoption.

Missing from that website education is the mention of government assistance. External incentives for EV conversion include local and state programs that offer grants to convert. For example, in the state of Michigan, grants are offered by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) for eligible freight vehicles and equipment that facilitate the adoption of zero-emissions or alternative fuels (“Michigan Laws and Incentives”). Several individual grants are also available.

Testimonies from FMC managers indicate that most of their fleet customers decide

independently to convert prior to approaching the FMC for support (Shadoin, 2021). Due to GM's position as a manufacturer higher up in the supply and value chains, FMCs are the stakeholder in close proximity to the end-customer and thus have the responsibility of actively encouraging EV acquisition. Unfortunately, encouraging the consideration of EVs presents a conflict of interest: EVs reduce the maintenance costs from which FMCs earn most of their revenue.

Purchase

GM has its fleet account executives and business development managers around the country to work with commercial clients directly. Purchase decisions and price negotiations are done between GM Fleet and FMCs (potentially directly to fleet customers), whereas actual purchase support like financing is done between fleet customers and FMCs (Shadoin, 2021).

When it comes to telematics, fleet customers rely on FMCs for analytics, support, and maintenance. Thus, in a way GM is removed from the end-customer. Despite this, its tight relationships with FMCs provide GM with a bridge across the value chain to understand end-customers' wants and needs.

Post-Purchase

Post-purchase activities include customization or “upfitting” the vehicle as well as continued telematics use for fleet business insight. As telematics are managed by FMCs, the focus has been on customization. Fleet customers either go directly to their partnered FMC or to a third-party business to tailor their fleet vehicles, whether ICE or EV, for their specific needs. Companies like Merchants Fleet leverage the fact that OEMs and few FMCs are not able to provide the extensive customization services desired by fleet customers (Nayar, 2021).

Strategies like personalization, contextual interaction, and innovation tend to cement customers in a loyalty loop from first purchase. Customization services most closely address the customer preferences. However, GM does not currently play an active role in this aspect of value creation. Therefore, the company should leverage the general vulnerability of this distribution structure by taking a stronger hold of this loyalty-building process.

III. BRAND BENEFITS & BRAND EQUITY

Brand Benefits

The GM brand has been historically associated as a “leader” brand, that balances cost-leadership and pushing product innovation amongst American OEMs. Within the marketing communications across the value chain (GM→ FMC→ Fleet Customers), it is clear that GM Fleet as a sub-unit is associated with strong relationships garnered by a system for providing one-on-one vehicle insights and business support. This reputation as a relationship manager is a key brand benefit, reducing the risk of brand switching while moderating search costs faced by fleet customers and FMCs.

As mentioned earlier, another way to consider the fleet value chain is that GM is removed from the end customer. While this distance may have some limitations in terms of post-purchase customization, it could be evolved into a brand benefit and point of differentiation. There is an opportunity for GM to gather deeper insights about consumer needs via the intimacy of smaller FMC correspondence; and in doing so, it inadvertently reaches across its entire supply chain. GM can leverage the value chain distance as a brand benefit, absorbing the FMC’s learned efficiencies and unique position as the fleet customer’s advocate.

Brand Equity

While GM EVs are still in their adolescence, with only the Chevy Bolt available for both fleet and retail customers, the horizon for GM EV fleet vehicles shows great potential. GM as a whole is transforming how it is perceived internally and externally as a leader in transportation. EVs are at the forefront of this transformation to a more sustainable portfolio. Additionally, through social media listening, high level snapshots are captured of how conversations are centering around EVs (Exhibits B and C). EVs are the focus of the tech world, disrupting the automotive industry. This is a positive for GM: it’s brand equity is becoming more closely associated with EV value than with ICE or legacy vehicles. Now, all GM must do is make that association worthwhile by commandeering the pace of EV expansion.

GM Fleets that benefit from the long-term cost savings provided for by EVs will advocate for EV brands, further boosting brand equity. With little to no maintenance or downtime, EVs may save fleet customers around \$2,000 per vehicle per year (“Why GM EVs...”). Additionally, this could be an instance of a “rising tide raises all boats”; more customers are making decisions based on sustainability, and fleet customers who convert may use that sustainable choice as their own personal branding. This pressure to adapt to societal pressures will drive business and brand engagement with OEMs such as GM, given they can provide those sustainable product innovations.

One caveat and potential threat to GM’s brand equity in particular is the established cultural significance and allure of Tesla EVs. According to Exhibits B and C, Tesla as a brand is recognized as a mysterious, “first-mover” for electric vehicles. Its title as an EV disrupter is currently a roadblock in GM’s path to a leadership image in EVs. Likewise, EV value-adds are apparent and demonstrate great potential but are not being communicated effectively or consistently across the channel. There needs to be a collective effort to get the right GM EVs to

the target customer at the right time--all while making an effective case for lowered cost of ownership. Exhibit E outlines a continued discussion of this brand risk relative to the recommended plans of action for GM.

The recommendations harness personalization and contextual interaction to pull in prospective EV fleet customers now, while internal R&D innovation sets the stage for the long-term options for portfolio electrification

Customer Attribute Survey

To accurately identify preferences and perceptions of value related to EVs, a survey was conducted and distributed via Rep Data LLC to FMC managers. The survey questions were divided into two sections: qualitative and quantitative. The qualitative portion asked FMC managers about how EVs play into their relationships with clients. The quantitative portion posed importance-rating questions across five major EV attribute categories, followed by polls of a similar format related to attribute partworths within each category. The purpose of this was to conduct an attribute importance analysis to determine which attributes of EVs FMC managers value the most.

The customer attribute survey reached 21 individual FMCs/FMC Managers. Despite the smaller sample size, these individuals constituted a subgroup of what was deemed “market movers.” These were individuals with a mean level of knowledge in EVs at just under expert as indicated by the survey. Furthermore, these FMC manager respondents engaged in EV outreach with over 45% of their customers. EV fleet conversion will necessitate a transformative market shift, and so having the perspective of these “market movers” was crucial in understanding what incentives and EV attributes GM could pursue and enhance to make that conversion seamless.

IV. STRATEGIC & TACTICAL RECOMMENDATIONS

#1 - Technology Bundling

Via primary research, a survey was distributed with both anecdotal and quantitative questions for FMC managers to respond to. Ultimately, results show that FMCs understand the higher processing capacity of EV software while also incorporating EVs into discussions with clients. In other words, EVs are at the center of the conversation and have driven interest for them. Additionally, there is a demand for industry-tailored software packages with fleets.

On the quantitative side, FMC managers were asked to rate their level of importance in regards to five EV categories: battery life, charging station availability (CSA), GM support services, software capabilities, and brand status. Within each category, FMC managers were then requested to determine whether standard or premium technology was preferred. Battery life was by far valued the most, in line with GM's recent strategy to standardize battery production with LG (Exhibit D). GM should capitalize on the desirability of the ranked categories that followed—CSA, GM Support, and software— through the implementation of software bundling by industry.

With these insights, GM could start clients with a baseline software offering that incorporates all basic metrics and telematics that are currently used by FMCs, such as asset management. It would act as a foundation for all potential upgrades and personalizations, including mileage, tracking capabilities, and car-specific features for FMCs to properly measure total driver spend within each EV.

A standard software package could also be complemented by industry-personalized software packages that fleets can purchase at additional costs. FMCs would provide and implement these bundles directly in the post-purchase process. For example, a pharmaceutical company might use fleets to transport pharmaceuticals. Its vehicles may require hyper-controlled temperature capabilities for certain units of the electric vehicle, such as the trunk. While this is currently done with technology not native to the vehicle, EVs can address the temperature in key areas of the vehicle more efficiently with embedded technology, simply due to the nature of EV software.

By bundling technology, FMCs would have more flexibility to formulate the best possible software offerings to fleets like the aforementioned. It is also likely that the FMCs would benefit from increased commission opportunities because these specific features are needed for certain industries and will thus generate consistent demand. In addition, these industry-personalized software packages would be a value-add to the customer journey and a means to increase brand loyalty overtime. GM could emphasize any particular industry of fleets for initial testing. This might be service providers, the predominant industry focus of surveyed FMCs. Survey results demonstrate that, on average, these fleets would find it much easier to choose from industry-tailored packages (Exhibit D). They also already approach FMCs with bullish outlooks of the value EVs can bring, making them a likely worthwhile target. In a nutshell, the objective is to create a foundational software that GM can efficiently expand upon and tailor to different industries as new requests arise.

#2 - GM Support

The highest ranked attributes, battery life and CSA, are the respective targets of existing GM projects and governmental efforts to encourage sustainability. The subsequent attribute, GM Support, represents the first unmet need of FMCs uncovered by primary research (Exhibit D). This unmet need interrupts the EV adoption process for FMCs. The root of this problem, one of the largest identified pains that FMCs identified with switching to EV fleets, is the difficulty of getting accustomed to EV mechanics, training, and software use (Shadoin, 2021).

As a new arm of the FMC Marketing Management in place at GM, a more niche EV support center could act as an educational tool for FMCs to resolve this problem area. To alert clients of the GM Support resource, GM could begin by distributing a “go-to” handbook containing information on the operability of EVs and the lines of service that GM Support can provide. The GM Support team could also assemble a brief marketing guide for FMCs to reference, highlighting the benefits of EVs that they could communicate to fleet drivers. Along with these marketing materials, GM should continuously emphasize how FMCs have skin in the game with respect to EV promotion, perhaps dedicating portions of its present, weekly FMC meetings to reinforce that value, address any associated concerns, and construct a feedback loop about the effectiveness of GM’s and FMCs’ mutual effort.

GM Support would serve as a quick access button embedded in the vehicles for fleet drivers to conveniently and timely solicit the help they desire when they need it most. A possible division within the support center can act on these more technical requests. On the other hand, FMCs have direct access to the support center via their connection to GM that they are currently most comfortable with. This would ease the starting process of using GM Support as an effortless supplement to existing GM infrastructure, complementing GM’s valued one-on-one relationship style.

GM Support would both benefit the fleet driver at the end of the value chain and strengthen company-client relationships, as FMCs can communicate with GM on a more frequent basis. Since these FMCs essentially become the salespeople for the vehicles GM advertises, response time and rate is critical when corresponding with FMCs and the fleets they service (Scarpelli, 2021). Because they tend to follow the paths of least resistance in their operations, GM should foster that immediate connection with respect to EV support. Through GM Support, GM would solidify its current FMC clients as loyal customers by acting as a springboard for a comprehensive EV solution. GM could message this as a “safety net” for FMCs in the selling process to have more confidence in the dependability of their own EV recommendations to fleets. Finally, to inform and excite FMCs and fleets about GM EVs, those within GM must also comprehend the EV cause and how GM fits within that picture. Therefore, GM Support could keep the expertise of GM personnel up to pace with the brand’s accelerated transition into an EV leader, helping to eliminate internal friction points relating to the brand’s revamped identity.

#3 - OnStar + Smart Charge

OnStar + Smart Charge as a software package seeks to address the Charging Station Availability (CSA) and Software categories that FMCs deemed important in the Attribute Analysis shown by Exhibit D. In conjunction with, and to fill in the gaps of GM Support, Smart Charging would

reduce the pains of drivers who may be more unfamiliar with the nuances and technicalities of EV operations. Smart Charging would track the current charge in an EV and notify the driver once the level of charge drops below a pre-specified threshold determined by the FMCs or fleets themselves. The system could then reroute the vehicle to the nearest available charging station. This setting would help address the lack of CSA networks and streamline the charging experience in the short-term, as federal action spans over several years. Additionally, a preference could be set to display a short instructional video on how to properly charge the vehicle. In sum, the goal with Smart Charging is to (1) reduce downtime for drivers, thus lowering costs, and (2) enhance the experience of drivers with EVs given that they may not necessarily be proficient in using EV software.

The application of this recommendation hinges on the current software framework available. GM's existing investments in its OnStar platform has laid the basis for expedited telematic development and integration into the EVs that are germane to fleets. An extension of this software into the fleet space is inevitable. GM should act on this sooner rather than later by establishing the standard for EV software design and usage for fleets. Overall, Smart Charging decreases barriers of entry for EVs and contributes to a more efficient charging experience. The existing OnStar platform provides an ideal launching point for further software development, which in turn grants FMCs greater utility in terms of available KPIs and integration costs.

GM should also consider OnStar's compatibility with CPOs, prioritizing its software integration with the CPOs that dominate either GM's most profitable markets or the markets that predominantly consist of a chosen fleet type for initial implementation. However, this industry-based distinction may still be considered ambiguous in the nascency of the industry, with EV charging network company ChargePoint exhibiting the most influence ("Number of Charging Outlets..."). ChargePoint's merger with a special purpose acquisition company (SPAC) this year stemmed from progressive federal policy, general preference for clean mobility, and an increasing portfolio of EV options (Sensiba). To take advantage of the successful public listing, GM should tighten its grip on its partnership with ChargePoint to become a key element of the groundwork for CPO software development.

V. CONCLUSION

Ultimately, the recommendations above provide a high-level, long-term strategy for GM's success within the EV market, and particularly within fleets. The standardization of software packages in EVs, coupled with a standardized battery, will foster long-term cost savings by driving economies of scale in both key areas. Supplementing this rollout, GM Support would foster brand loyalty among FMCs due to value-adds to the overall purchase experience and promotion of positive CRM. Customers who consider transforming fleets to electric would know they have support across potentially intimidating touchpoints: charging, heightened software complexity, and post-purchase customization. Understanding the existence of a continuous line of support and brandpower of GM Fleet, customers would be more inclined to convert to GM EV fleet vehicles.

VI. APPENDIX

Exhibit A: Brand Audit

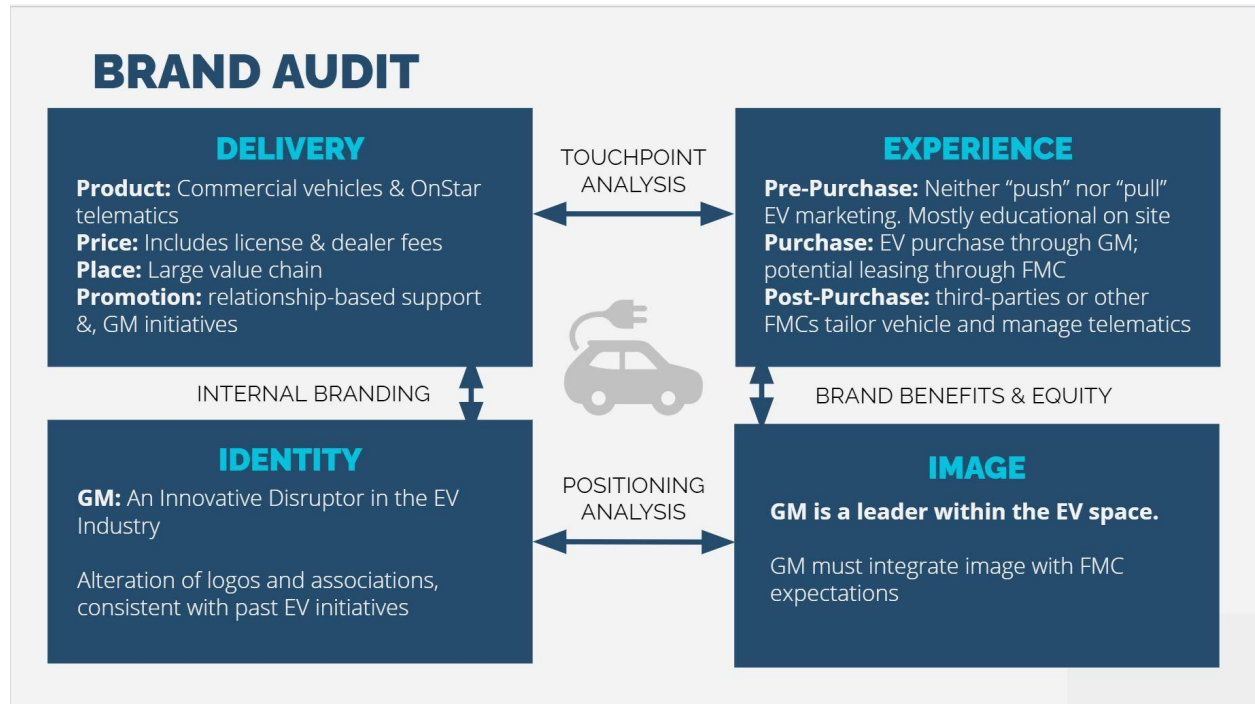


Exhibit B: Social Media Listening - GM
 (Source: BrandWatch)

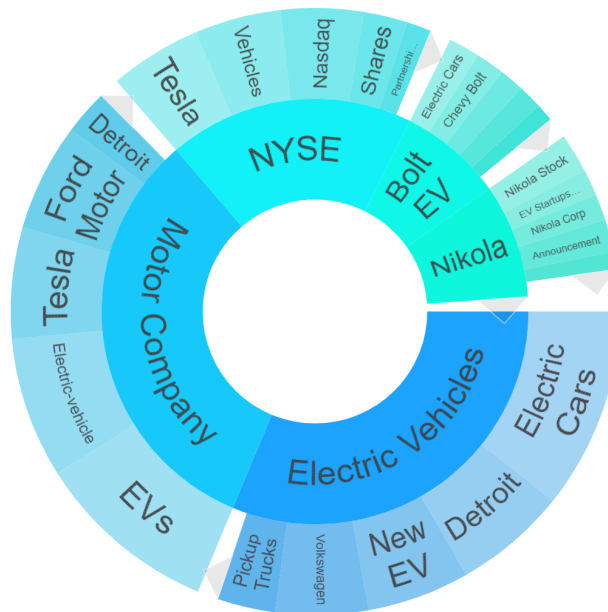


Exhibit C: Social Media Listening - GM EV & Fleet

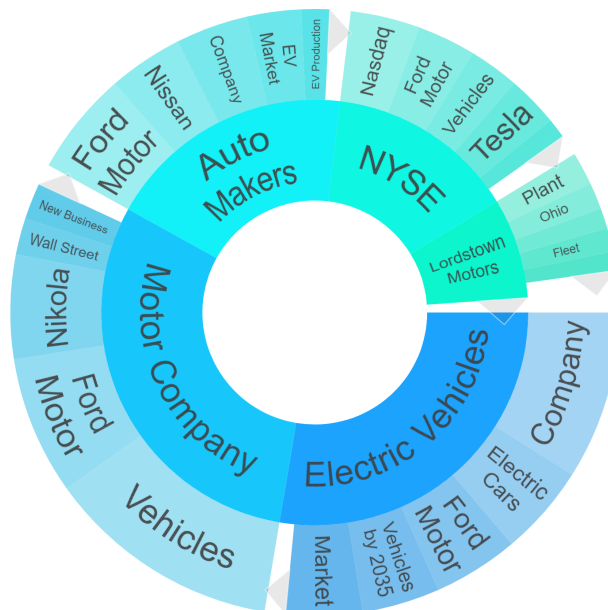
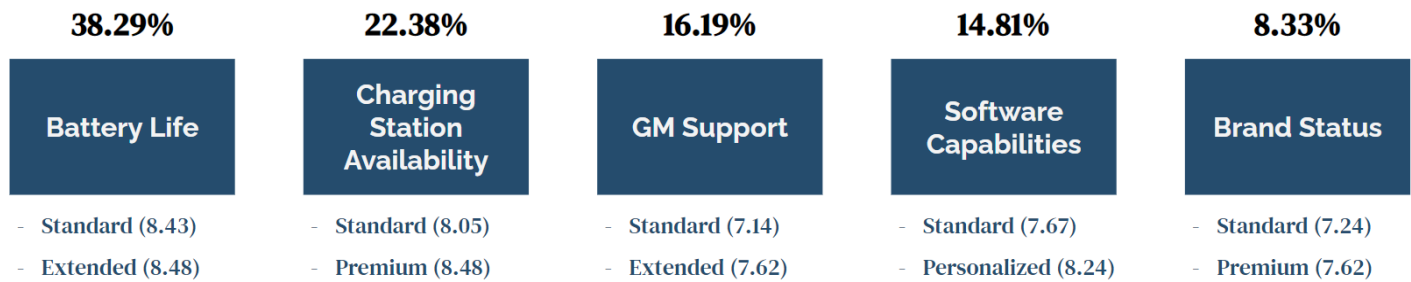


Exhibit D: Attribute Importance Ratings Among Five Electric Vehicle Categories



	Battery Life - <i>Extended</i>	3.25
	Battery Life - <i>Standard</i>	3.23
	CSA - <i>Premium</i>	1.90
	CSA - <i>Standard</i>	1.80
	GM Support - <i>Extended</i>	1.23
	Software - <i>Personalized</i>	1.22
	GM Support - <i>Standard</i>	1.16
	Software - <i>Standard</i>	1.14
	Brand Status - <i>Standard</i>	0.60
	Brand Status - <i>Premium</i>	0.56

Methodology: Respondents (FMC Managers) were first asked to allocate 100 points across the five EV categories (Battery Life, Charging Station Availability, GM Support, Software Capabilities, Brand Status) based on level of importance, depicted by the percentages above the first chart. Respondents were then asked to rate attributes (Standard, Premium) within each category on level of importance using a 1-10 scale, indicated by the numbers underneath each category. The second chart is the rank order of the attribute importance rating (1-10) multiplied by the percentage of importance respondents first allocated to each category. The result is a relative scaling of importance for various attributes across the five major categories.

Exhibit E: Additional Brand Implications

GM was founded on internal combustion engines and is known as an industry leader within the space. The implementations of these proposals that accompany the furtherance of an EV push could undermine GM's plausibility as an ICE provider among its clients and its own personnel. In other words, an aggressive focus on EV might amplify the risk of brand dilution post-EV market entry.

To mitigate this risk, GM may operate each recommendation independently.

1. The implementation of software bundles can be done at any point within the supply chain, including by GM, if FMCs prove unwilling or unable to do so. Although this would lessen the immediate cost savings and productivity improvements involved, it could still generate long-term learned efficiencies for GM itself as it discovers its most profitable fleet segments and what software attributes each segment values most;
2. GM Support could be enacted with minimal alteration to brand image, as GM already prides itself on and is recognized for its one-on-one FMC relationships;
3. It is also reasonable to expect extensions of OnStar to EVs in coming years, so expediting that application would not create any more conflict with who GM is as a brand than is already present. With this rationale, considering any existing conflicts, internal and external, is consequential to EV transitions as sunk costs that every company must overcome when entering the EV industry.



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