

ELECTRIC VEHICLE ADOPTION:

How utilities can charge up EV adoption in the US with marketing efforts

A Professional Project

Presented to

the Faculty of the Graduate School

at the University of Missouri – Columbia

In partial fulfillment

of the requirements for the degree

Master of Arts

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December 2022

ACKNOWLEDGEMENTS

First, I would like to thank Holly Higginbotham for agreeing to serve as project chair without hesitation, especially when approached during the middle of summer. I am so appreciative of your guidance and support, along with the many hours of copy editing, feedback, and project suggestions. In addition, I would like to thank Jamie Flink and Brad Best for serving on my committee and for taking on an unfamiliar student. You made the scary seem doable and provide the expertise I needed to understand the academic research journey. I am so grateful for the Committee's time and professional insight, which has allowed me to finalize this study.

In addition, I would like to express how thankful I am for the team at Evergy, including Katie McDonald, Cari Ferrara, Courtney Hughley, and Chuck Caisley, for supporting me during my return to school and for helping me find my passion for EVs and marketing. Also, a special thanks to the utility professionals who helped with this project by sharing connections, participating in interviews, and providing your knowledge. Lastly, I want to thank the many family members and friends who provided encouragement and reassurance, especially my parents and Justin Sailer.

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CHAPTER ONE: INTRODUCTION

U.S. electric power utilities (EPU) have a rare opportunity to help drive the adoption of electric vehicles (EV) in their communities. Similar to how many of these same EPU helped to promote a more electric home (Sprenger & Webb, 1993) in the 1960s and 1970s, EPU's knowledge of their customers and energy usage makes them a trusted source to help encourage the EV renaissance, not to mention the financial incentive of increased energy use. But research is showing that many factors are fighting against the quick adoption of electric vehicles and more work will need to be done. As Garling and Thøgersen (2001, p. 54) describe it, "A product like this hardly sells itself to potential customers. Hence, in addition to regulation backing the EV, skillful marketing is needed for it to be accepted and diffused throughout society" due to the unknown technology of an EV and barriers like range and costs of the EV.

In the early days of advancing a more electric home, EPU used education and marketing tactics to push home electrification, including developing items such as the *Electrical Handbook for Women*, electric cookbooks and how-to tea towels (Sprenger & Webb, 1993). EPU were successful in helping the quick adoption of electricity in the home by the "marketing of electricity to the domestic consumer – specifically, the women in the home" (Sprenger & Webb, 1993, p.59). These marketing promotions would focus on the benefits of electric appliances, using messaging like home-labor savings, including one advertisement that "...announced thousands of women in the United States are playing tennis on wash day because their leisure had been increased by the time-savings use of electrical appliances" (Sprenger & Webb, 1993, p. 62). So, should

utilities bring back this history by helping promote EVs, possible with test drive events or their own EV showrooms?

Most current passenger EVs use about 30 kilowatt-hours of energy to travel about 100 miles, which is about the same that a normal American house would consume each day to run their household appliances (Brown, 2020), meaning just one EV in the home could almost double the electric load and costs for that house. This large increase in sales for EPU could come at the perfect time as many EPUs have seen declining residential sales. Local EPUs are looking to EVs as a new revenue opportunity after years of lower and flat electricity sales (Lacey, 2014). In addition, with society facing a threat from climate change, largely due to the transportation sector (Timperley, 2020) and non-EV drivers spending about 60 percent more on fueling costs than EV drivers (Lindwall, 2020), the increased adoption of EVs could bring both business and societal benefits. Auto manufacturers promise a future of EVs that could be helped along by all-time high gas prices (Patterson, 2022) and a recently passed U.S. infrastructure bill with billions of dollars for EV support (Bellon, 2021). Thus far, though, EV purchases have stayed relatively low, with the U.S. adoption rate of less than 3 percent (Desilver, 2021).

Since EVs can provide a major opportunity for EPUs and with EPUs having shown past success pushing the adoption of electric products, **what ways can an electric power utility market, promote and grow the adoption of EVs?** As EPUs across the U.S. work to capitalize on this opportunity, what solutions have EPU marketing managers tried? What tactics and messages have worked for EPUs so far? How are outside factors, like gas prices, affecting purchase behaviors? Which benefits of EVs are resonating with customers? By interviewing EPU EV marketing and program managers

on how they are improving EV adoption rates, a new how-to guide could be developed for the industry to establish best practices to help improve EPU marketing efforts and grow EV adoption.

Overview of theory

To investigate the topic of how EPUs can grow the adoption of EVs, the study will examine and use the *Diffusion of Innovation (DOI) theory* to explore what might encourage and motivate a group of individuals to adopt a new product. This theory is defined as the “process by which an innovation is communicated (and adopted) through certain channels over time among the members of a social system” (Rogers, et al. 2019, p. 415) and uses time as one of the largest variables. DOI theory works to explain the process of how innovation moves from being created to being embraced or being denied by consumers (Hubert et al., 2019).

DOI theory looks at how product awareness and information move through social networks as a main component of the theory (Rogers et al., 2019). In Rogers' (2003) DOI theory, he describes innovators and early adopters as those customers who are likely to purchase new technology and are willing to pay a higher price to have the newest item.

There are two main parts of this theory, both of which are very important to the proposed research question. First, what is the current marketplace adoption rate for the idea or invention. Second, how can you use mass media and social network channels to speed up the time it might take to move someone from awareness to conversion of the new product. Using the theory's “S-curve” model, which compares adoption rate versus time (Rogers, et al., 2019, p. 425), the study would examine the barriers that are preventing a greater acceptance of these new vehicles and explore how an EPU might be able to speed up the time it takes to move individuals or a group through the purchases

process of awareness, consideration, and finally, adoption, which the theory will help address.

Currently, most of the EV adoption research has focused on the customer traits and perceived vehicle value in the innovators and early adopter groups of the DOI theory. The DOI theory works to explain the process of how innovation moves from creation to either being embraced or denied by consumers (Hubert et al., 2019). In Rogers' (2003) DOI theory, he describes innovators and early adopters as those customers who are likely to purchase new technology and are willing to pay a higher price to have the newest item. Current research of early EV adopters finds that they are mostly pro-environmental, are highly educated, may have owned a plug-in hybrid car, and show signs of concern over using oil (Carley et al., 2013). Many scholars have concluded that Rogers' DOI theory is the most appropriate theory for looking at technology adoption (Sahin, 2006). This DOI theory is defined as the “process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers et al., 2019, p. 415) and uses time as one of the largest variables. Distinct from other communication and marketing theories, DOI theory looks at how product awareness and information move through social networks as a main component of the theory (Rogers et al., 2019).

While early DOI research focused more on the time and speed it takes for an innovation to move from early adoption to most of the population accepting the product, more recent studies have also focused on why some products make it to mass adoption and others never do (Abrahamson & Rosenkopf, 1997). To become accepted by a majority of the population, the innovation would usually need both mass media (advertising) and personal social networks to be successful, and the theory not only looks

at the overall awareness of a product, but on how customers' understanding, attitude, and purchases change over time (Rogers et al., 2019).

Research Method

In the review of research, past studies indicate a connection to emotions, stereotypes, and misunderstandings with the adoption of EVs. These findings helped develop the research question, which then guided the selection of a qualitative research approach.

This research project hopes to better understand the following research questions:

RQ1: What current methods and messages are EPU's using to improve EV adoption?

RQ2: What are the perceived results of those methods and messages for different audience groups from EV program and marketing manager perspectives?

Qualitative research methods are suggested because Busetto, et al (2020) suggest that qualitative research is best when focusing on more than just what will work, saying "...addressing questions beyond what works, toward what works for whom, when, how and why" which are all major focuses on this research. Message segmentation will be an important outcome of this research, getting to the understanding of the "who and how" mentioned by Busetto, et al.

The method used for this project was a semi-structured qualitative interview with EPU's EV program and marketing managers involved in EV adoption. This method supports the research goals of understanding meaning, which is often used in qualitative research and is "less concerned with data collection and instead strives to understand the meaning of information, options and interests in each respondent's life" (Brennen, 2013,

P. 28). In addition, Brennen finds that “information accessed through interviews helps to broaden our knowledge base...” (Brennen, 2013, P. 27). The semi-structured format also allowed for some flexibility to adapt the interview based on answers and allows the interviewee the opportunity to help participate more in the fact-finding mission of the interview. Brinkmann and Kvale (2018) support this case saying semi-structured interviews “make better use of the knowledge-producing potentials of dialogues by allowing much more leeway for following up on whatever angles are deemed important by the interviewee, and the interviewer has a greater chance of becoming visible as a knowledge producing participant in the process itself, rather than hiding behind a preset interview guide” (p. 579).

Method Process

The research project conducted 9 semi-structured interviews with EV EPU professionals who either manage EV adoption marketing or lead a residential EPU EV program. While Brennen (2013) suggests that there is no perfect number for how many interviews need to be conducted, the length of the interview and number of participants ensured a geographical diverse representation of the U.S. and provided enough interview insights to make recommendations. To recruit these individuals, contact information for potential interviewees was gathered by searching LinkedIn using job title and industry filters. Additionally, an EPU professional organization member list from Edison Electric Institute was used to get additional names. A recruitment email was used to ask individuals to participate in the interview, which included a link to a screener

questionnaire to ensure participants had experience and knowledge of their company's efforts to drive EV adoption.

Interviews were conducted over 5 weeks in September and October 2022 during the work week, and each interview took about an hour to conduct. The interviews took place over web conferences system Teams and a transcript was provided as part of the meeting recorded. An interview guide was used with questions developed in coordination with learnings from the DOI theory of adoption. Some interview questions focused on Roger's adoption curve and if EPU's are using different messages or tactics based on audience and adoption rates in their area. Interview questions also focused on how the EPU professional is measuring the effectiveness of EV marketing and what messages and marketing tactics they feel most meet their success criteria and why.

To help identify major themes in the research, the researcher reviewed the transcripts to understand and find any themes that might have emerged from the sessions. A coding method was applied to the interviews to help identify themes or topics for each question.

As part of the professional component of the research, a resource guide was developed to help EPU EV marketing managers better understand what messages and tactics work best for different audiences within the DOI adoption curve based on the experience and findings of EPU EV professionals and from work done as part of the researcher's on-site experience at an EPU during the Fall of 2022. It is the hope that the resource guide can help marketing managers with audience segmentation, message and creative development, and advertising tactics to help speed the adoption of EVs. In addition to conducting the interviews, the researcher worked on-site at Evergy, a Kansas

City-based EPU. The on-site work involved reviewing data on marketing messaging, attending EV test drive events and the Kansas City Auto Show, and talking with current and potential EV drivers.

Some limitations to this study included outside market factors, longitudinal effects, self-reported data, and selective or exaggerated memory. As a new technology, EVs are rapidly changing and can be quickly influenced by multiple non-EPU factors including supply chain, costs, gas prices, government policies, and the economy, among others. Major changes in these factors during the study or after could impact the results and effectiveness of the resource guide. Another limitation of a new product is the limited time that the product has been in the market and how long the EPUs have spent trying to grow adoption. The age and maturity of each EPU's program limited the research. In addition, during the interviews, participants were asked about the success of their efforts, adoption rates in their area, and additional data points, which were self-reported and were not all available for independent verification. Another limiting factor for this study is selective or exaggerated memories in which the interview subject might have shared or remembered details differently than they happened. It is possible the participants attributed positive results to their marketing and education efforts and gave negative outcomes to other factors.

CHAPTER TWO: LITERATURE REVIEW

An examination of the growing body of peer-reviewed academic literature was developed to understand the factors that may both positively and negatively affect the growth of electric vehicle (EV) adoption in the U.S. The review of the literature found several important findings, including perception and stereotyping issues with current EV drivers, the lack of understanding of EV charging and vehicle range, and how marketing segmentation and tactics could help narrow the focus and messages. There is evidence that developing a system to help segmented audiences understand EV charging could create solutions to help customers understand EVs and those who drive them. This review of literature will evaluate the current EV adoption studies and research in the areas of social acceptance, perceived value, and marketing and incentive performance and how those areas are helping or hurting customers through the phases of the DOI theory.

Social Acceptance: Stigmas of EV Drivers

As we examine the factors that may be causing slow EV adoption, the perception and stereotypes of EV drivers may provide insights. Past product adoption research has shown that stereotypes that are connected to a group of people who purchase a product can have either negative or positive impacts on how others view that product (Bennett et al., 2016). A shopper's negative view of buyers of a product has been shown to influence buying discussion and growth of the product by other groups (Jamal & Goode, 2001). In a review of DOI theory research, studies have shown that the acceptance of a product is seldom an unbiased process and that customers often have strong feelings about the innovation or company, finding that "the learning process is potentially emotion generating (independent of net benefits), and this emotion colors product evaluations"

(Wood & Moreau, 2006, p1). Customers of Apple and iPhone fans are often one example, where there is a strong emotional attachment to the company causing customers to want a product even before they have seen or experienced that product (Wood & Moreau, 2006).

Recent research on EV drivers found similarities across several studies that determine that early EV drivers do have more of a pro-green attitude and environmental worry (Rezvani et al., 2015) and that factors of green concerns and personal pro-environmental behaviors are greater indicators of a person's positive attitude and adoption of an EV (Malik et al., 2021). Moons (2012) found that emotional reasons like someone's opinion of themselves and a sense of helping the environment can be important factors in developing positive perceptions and purchases of EVs and can even overpower rational arguments about the limits of EVs. This was supported by additional research that detected EV drivers sharing emotions of having a good feeling and feeling less guilty (Graham-Rowe et al., 2012). EV drivers seem to be conscious of how others perceive them, with Burgess et al. (2013) finding through surveys that EV owners realize that they are easily vulnerable to stereotyping by others.

While EV drivers may feel a sense of duty and view themselves positively for undertaking their part in helping the environment, those same opinions may not be held by the general population which may be hindering new EV car sales and hurting additional EV car sales. Survey data from several academic studies found that the view of EV drivers among non-EV drivers tends to be disapproving, including opinions that EV drivers are "ineffectual idealists, political radicals, hypocrites who enjoy showing off, tree huggers or dull people with limited mobility needs" (Burgess et al., 2013, p. 34).

Graham-Rowe et al. (2012) support Burgess' findings in his study which found that when participants were asked how they thought others would describe them if they purchased an EV, respondents mentioned terms like no fun and boring. One possible reason for the negative feelings toward EV drivers could be the general public's connection between EV drivers and negative images of an environmentalist as being a hippy and an activist (Bennett et al., 2018).

Bennett and Vijaygopal (2018) wanted to investigate these negative feelings even more by experimenting with non-EV drivers. The study wondered if attitudes towards an EV may be more about the driver and less about the actual car. In the experiment, researchers first asked participants about their opinions of EV drivers and EVs through a survey. Then, they had the non-EV drivers play a video game, where the game character was an EV driver, followed by another survey. The researchers found that after playing the video game, study participants' negative stereotypes of EV drivers improved by 19 percent and their thoughts on EVs improved by 17 percent. The study did not look at car types, but it is possible that car brands, like a Tesla, could be affecting the perception of who a Tesla driver is to the greater population.

In a review of literature on the Planned Behavior theory, Moons and De Pelsmacker (2015) found that emotional reactions are often a big driver in new product adoption. This emotional versus logical mindset could be affecting adoption rates. Much of the literature is supporting the theory that early adopters of EVs do pride themselves on their pro-environmental attitude and their feeling of doing better. While this sense of pride may be a positive for the EV community, a growing body of work is showing this somewhat self-important attitude is causing negative feelings towards EV drivers from

others. This raises the question for additional research on how to overcome the negative views of EV owner stereotypes to help encourage greater adoption of EVs by the public.

Perceived Values and Understandings

Roger's (2003) DOI theory highlights five main areas that can have the biggest impact on a consumer's decision to adopt an innovation, which includes observability, complexity, relative advantage, compatibility, and trialability. In a review of EV adoption studies, three main barriers of EV adoption have emerged – price, range, and charging. These barriers correlate with two of Rogers' impacts on adoption categories: complexity and relative advantage. Rogers (2003) defines complexity as how difficult the new product is to use or to understand, and he defines relative advantage as the degree to which the product is viewed by the public as being better than current options. If consumers find EVs to be hard to understand, like how to charge them or how far they can go on a charge, then the DOI theory would suggest they likely will have trouble gaining overall adoption.

As mentioned, a review of the literature has found that purchase price, range, and vehicle charging continue to be the biggest factors that are having a negative effect on persuading car buyers (Coffman et al., 2016). Also, the research shows that the combination of personal factors, like can I afford this car, and controlled features such as charging station locations, are likely additional contributing factors to purchasing (Moons & De Pelsmacker, 2012). The DOI theory tells us that the customers in the market for a new product will not embrace a new product all at once, so most of the current research on EV adoption has focused on innovators (Rogers, 2003), creating a need for continued research as we move from innovators to early adopters. Work done by the research firm

ESource, found that even after a decade of major EV brands on the market, the low number of EVs in the market indicates that we are still in the innovators and early adopter phase of the adoption curve (Nixon, 2021).

While the DOI theory research shows that early innovators of new products are likely to pay the early higher costs of a new product, the cost hurdles are usually an issue to get to a greater adoption rate (Rogers, 2003). In the reviewed research, the lack of understanding of the total cost of ownership of an EV and the overall costs compared to their gas car continues to show up as a barrier (Rezvani et al., 2015). In addition, past studies have shown that drivers are not interested in paying more for a car that they also see as being less convenient (Burnce et al., 2014). The EV adoption literature is showing that surveyed participants who identify as pro-environmental are still likely to stay away from an EV due to their thoughts on the high costs of purchasing one over a traditional vehicle (Ye et al., 2021). While EVs tend to have a lower cost of ownership compared to their gas car, the reviewed research demonstrates that potential EV drivers don't understand how to calculate EV costs, especially since EVs don't have the traditional car maintenance costs like oil changes (Caperllo & Kurani, 2011). One study showed that about 70 percent of participants underrepresented how much they would save in fuel costs each year (Carley et al., 2013).

In addition to overcoming the price difference, having enough range to get to a destination is another barrier to entry for EV drivers found throughout the EV adoption research. While many studies have concluded that EVs have enough range today for most travel needs, the issue is still raised by many study participants as a barrier (Franke et al., 2012). These perceived fears in much of the EV adoption research should be taken as an

important concern as it goes right to the relative advantage category in Roger's (2003) DOI theory, which will likely slow or stop adoption if consumers don't see an advantage in the new product. Having to wait to charge your car causes drivers to change up their normal routines and adopt new behaviors (Burnce et al., 2014), which will likely take education and marketing to help drivers make the change. The issues with the range of vehicles have a direct relationship with the third main barrier addressed in much of the EV adoption studies, which is charging.

The research found that one of the biggest fears of EV drivers is the notion that they will run out of charge during their travel and will not have a place to charge up (Caperello & Kurani, 2011). Non-EV drivers seem confused about how the charging process works, believing that the process to charge a car would be inconvenient and that they could not travel as far as they would want to go before stopping (Bunce et al., 2014). Likely, the familiarity with how gas cars fill up and the well-known filling station model makes it hard for potential EV drivers as they try to compare the two. While non-EV drivers are confused about the process, the research is showing that those who have an EV feel that the charging process is easy and that they enjoy the opportunity to charge at home every day (Graham-Rowe et al., 2012). In a study conducted by Graham-Rowe et al. (2012), once participants drove an EV for one week, they ended up preferring to charge at home compared to going to a local gas station as they did in their traditional gas vehicle. The research is showing that there is a disconnect between what non-EV drivers think about charging and the actual experiences of EV drivers when it comes to charging their vehicles. Understanding how to share the real experience of EV charging and educating non-EV drivers on the benefits of charging at home could help change the

misunderstandings about this new way to fuel up a vehicle. This research raises the question of how best to explain EV charging to a general population.

Marketing and Incentives

For new products to successfully survive and make it through all five stages of the DOI theory's adoption curve, communicating and marketing relevant materials to possible adopters is a must (Song & Parry, 2009). Studies on high-tech innovation adoption have found that marketing is often hurt by not having a clear understanding of how to find the most likely people to adopt the new product (McDonald et al., 2013), causing marketing strategies to often fail or take longer to succeed.

Currently, the most common tactics studied for EV adoption included government policy changes, incentives, traditional marketing promotions and education. Early EV research suggested that marketers should only target very interested customers and dissuade those customers whose needs could not fully be met by an EV from purchasing (Garling & Thøgersen, 2001). More recent research on EV marketing finds it more important to focus on ensuring that the right message is hitting the right segment audience (Garling & Thøgersen, 2001). The studies suggest that the traditional marketing approach should currently focus on individuals who are already showing a more positive view of EVs and use elements of persuasion to move those individuals to adopt. In addition, studies suggest marketers focus on Rogers' DOI's observability and trialability classifications (Garling & Thøgersen, 2001), which is the need for the targeted consumers to be able to interact with the car and be seen in public.

Additional marketing research has demonstrated that incentives, like a coupon or rebate, are effective in increasing overall adoption (Song & Parry, 2009). In one study,

Song and Parry (2009) found that promotions that included a monetary reward had a large positive effect and that those promotions that were able to also expose the product to the customer had the greatest effect on overall product sales and adoption. EV research has shown that monetary incentives that help decrease the overall costs of an EV, like a tax rebate or manufacturer incentive, are effective in moving adoption (Ye et al., 2021). Wee et al. (2018) has backed up this discovery, finding that a rebate of about \$1,000 can lead to about a 5 to 11 percent increase in EV purchases in areas with the incentive. One of the early pushes for EV adoption was from federal and state tax incentives. Findings have included that non-EV drivers do favor incentives, like rebates, over more regulation like a carbon tax (Brückmann & Bernauer, 2020). While these incentives are helpful (Zgang et al., 2018), additional research has found that they are not enough and need to be joined with a psychological attribute as well (Ye et al., 2021). Overall, little research could be found that combined both psychological attributes of a person and promotion or policy attributes to understand the best combination of target audience and message.

Past marketing research has shown the importance of finding a target customer group and messaging to their beliefs and behaviors (Bator & Cialdini, 2000). This raises the question of how to identify possible audience segments for marketing and what messages are most appropriate for that audience.

Review of Literature Conclusion

Research that focuses on EV adoption is taking shape across many different fields of study, from policy to financial to marketing. Not surprisingly, current early adopter EV drivers were motivated by advancing technology but still struggled with the battery range (Bechhold et al., 2017) and lack of public charging availability (Coffman et al., 2016). In

addition to the issues with range, the purchase costs of current EVs are a big struggle for most car shoppers (Rezvani et al., 2015) and for the early majority to come on board, the cost compared to traditional vehicles will need to get closer (Lee et al., 2018). While tax incentives can help with the overall costs, most car shoppers are simply not paying attention to the EV market, and organizations need to find better ways of providing target messages to highlight incentives and charging networks (Kurani, 2018). Target messaging may be a key, as demographics and living trends – like shorter commutes or apartment living – likely influence overall social acceptance (Cooper, 2020) and that range, incentives, and reliability are important components when developing an EV marketing process (Higuera et al., 2020).

CHAPTER THREE: PROFESSIONAL ANALYSIS

Introduction

While they may not sell EVs, electric power utilities (EPU) are in a solid position to drive EV sales in the U.S. market. As shown in the literature review, EPU have a history of successfully promoting products that can help drive electricity sales. These EPU are the main and often only sales channel for the electric energy that power these vehicles, which can help grow electricity sales for the utility company.

To help understand how utilities are working on this effort, nine 1:1 semi-structured interviews were conducted with EV marketing and program managers who work at EPU. The interview findings indicate a strong feeling from all interview participants that their work was responsible for the current growth in EV sales. In addition, all participants felt that the local EV market adoption rate was directly correlated to the strength of their EV marketing efforts. When asked on a scale of 1 to 10, with 10 being the high, how successful their EPU had been in helping grow EV adoption, the average score was a 7, with 3 of the participants scoring their work in the 8-9 range. It was evident in the interview findings the EPU feel they have an essential role to play and that their work is one of the drivers of EV adoption.

To help EPU who are just starting out with the EV adoption marketing efforts and to see where all EPU might be able to improve their work in EV adoption, interviews were conducted to understand what marketing and education efforts are effective in growing adoption and where changes might need to be made to improve the effectiveness of their work. The research findings provide guidance, suggestions, and recommendations on identifying EV adoption barriers, providing effective marketing

messaging and tactics, and thinking about customer audience and segmentation to improve success.

In an analysis of the interviews with EPU EV marketing and program managers, four main conclusions were found:

- External factors – including the increase of EV car types, high gas prices, and environmental awareness – positively affect EV adoption and could be essential to highlight in marketing messaging. These messages may work best in mass awareness tactics and upper funnel advertising.
- Potential EV drivers still need help understanding EV charging and vehicle range, the overall cost of the vehicle, and finding a car to test drive due to supply chain issues. EPU's may want to find ways to overcome these barriers. The analysis suggests that these issues be addressed in the middle of the marketing funnel, where an audience will likely give more time and attention.
- EVs are stereotyped as for both 'liberal environmental hippies' and 'rich white men' and could be preventing the influential middle from seeing themselves as an EV driver. To overcome these stereotypes, representation in marketing creative could be used to help potential buyers see themselves in the vehicle.
- EPU's have moved too quickly in audience segmentation by targeting customers further down on the adoption curve, and as a result, likely are focusing their messaging and tactics on customer groups not ready to hear the message. Using EV adoption data with the Diffusion of Innovation

(DOI) adoption curve could help ensure a better return on investment.

External factors, barriers, and stereotypes are found to hurt EV adoption.

One way EPU's can help grow EV adoption is by alleviating customer concerns. Potential car purchasers are faced with several external factors, barriers, and stereotypes of EVs that interview participants felt were both helping and negatively affecting EV growth. By identifying these outside factors and then building them into EV marketing messages, EV marketing managers may have more success and return on their investment as they work to move car buyers to the EV market.

When asked what external factors out of the EPU's control are positively affecting EV growth in their area, two-thirds of the interview participants (6 out of 9) mentioned that the recent increase of EV models on the market by vehicle manufacturers are helping EV sales. Participants felt that the strong commitment by these traditional car makers to add EV models is helping reach additional buyers who are looking for larger cars like SUVs or trucks. Another top external factor that may be moving the market is the recent increase in gas prices over the last year and the heightened awareness of foreign oil due to conflicts with Russia, a significant oil producer. Lastly, most participants felt that more awareness of climate and environmental concerns was a top external factor to EV adoption. While none of these factors are in the EPU's control, knowing that the addition of EV models, the increase of traditional gas prices, and the heightened concern for the environment are all likely helping to grow adoption, EPU's may be able to use these factors to their advantage by ensuring their customers are deeply aware of them and connecting the issues with a solution, the EV. These topics are likely high on a

consumer's mind, which help align both the timing and consumer receptivity, and could be good topics for mass awareness and upper funnel type messaging.

In addition to understanding what factors may be helping EV adoption, interview participants also responded to questions regarding outside barriers that may be hurting the EV purchasing market. While interview participants mentioned that vehicle manufacturers' commitments to EVs have positively affected adoption they also found that the lack of vehicle inventory and the slow follow through on manufacturer's commitments are harming EV adoption. Supply chain issues, which have hit the car market especially hard in 2021 and 2022, are hurting vehicle availability and limiting or even eliminating the option to test drive the new technology. Over half the participants also felt that EV infrastructure, battery range, and charging were significant factors preventing the quicker growth in EVs across the country. The EPU participants expressed concern about the lack of EV public chargers and the understanding of how to use the chargers. In addition, most participants felt that their customers were still very concerned with the range of the car battery and being able to make it to their destination. The topics of charging and battery range continually came up as a concern among interview participants, based on some utility survey data and their perception of customer feedback. Charging is likely a top issue for EPUs to tackle as they address buyers' concerns. Lastly, the overall cost of the EV was another negative factor expressed by most of the participants. One interview participant summed up the fears by saying, "...the mindset is that it's (EVs) for wealthy individuals." Finding ways to address EV ability, charging and battery concerns, as well as overall vehicle costs, will likely be critical in helping a customer get over the hump to purchase.

EVs being seen as a car for wealthy people came up again from interview participants when asked about negative stereotypes that may be preventing EV adoptions. Six of the nine participants said that EVs are seen as a luxury car or "only for the rich". This sentiment was a major concern that participants felt was hurting some buyers from looking at EVs during their car shopping journey. On the opposite side, four of the nine also felt that EVs had become part of a political and environmental debate, leaving EVs to be viewed as a car for "green hippies and tree huggers" or those who vote on the political left. These findings are particularly interesting because they show signs that EVs are being viewed negatively by both sides of the political landscape. EVs may have a stereotype of being both for liberal hippies and rich-white republicans, leaving out customers in the middle, who could feel like they don't fit either side and cannot see themselves in the vehicle. The research shows signs that EPU's might want to focus more on those in the middle of the political landscape and the non-white driver to help grow the possible audience base for an EV.

The research found that while participants felt that some positive external factors were helping EV adoption growth, particularly in vehicle manufacturing commitments, gas prices, and environmental concerns, negative stereotypes and barriers also put pressure on overall adoption rates. By understanding these barriers and stereotypes, EPU's can address them in marketing messages and tactics to help drivers push past what they may think about an EV and start to see themselves as an EV driver. When asked during the interviews, the EV marketing and program managers did feel like it was necessary and part of their role to help customers overcome these perception issues. Many participants mentioned that they work to address concerns within their messaging.

Marketing Messaging, Creative and Tactics that Motivates

When thinking about the types of messaging, creative, and tactics to use when trying to grow EV adoption, almost all EPU interview participants (7 of 9) mentioned that they do consider and think about EV adoption barriers when developing marketing messages. But participants did not consider creative development or marketing tactics when trying to address these barriers. More attention to how creative development and marketing tactics can also play a role in helping to address EV barriers could be helpful for EPUs to consider.

When discussing what messages work best to grow EV adoptions, the research did find many similarities to issues raised earlier in the interview regarding barriers and stereotypes. As mentioned by the interview participants, two main message areas rose to the top: EV cost and EV charging. Most participants said that they work to address the issue of EV cost with affordability messaging and consider the total cost of ownership as a critical message component. Messages often included information about the up-front costs, rebates, tax incentives, and the maintenance cost of an EV. Two interview participants mentioned that they address the high gas prices in their messages by comparing the cost of filling a traditional vehicle with the cost of charging an EV. The other main message that six of the nine participants mentioned as a top messaging theme was centered around charging. Most EPUs are working to address charging education in their messaging, including how to charge and the battery range. Due to the more complicated nature of these topics, it may be best to focus these messages on middle-of-the-funnel tactics and items where more detail can be shared or linked to.

Surprisingly, many of the interview subjects stayed away from the vehicle's technology or the sustainability factors, which may successfully avoid some of the stereotypes found earlier in the research. While most participants agreed on messaging themes, what type of creative elements to use varied widely amongst the EPU's. Three interview participants mentioned that most, if not all, of their marketing creative featured an electric vehicle in the advertisement. They felt it was important to show an image of a car so that a consumer could quickly understand the subject of the ad. In addition, about half felt that having charging equipment in the creative was important, especially to show the connection back to the EPU. A few participants mentioned that showing an individual using the charging equipment was essential to help a viewer understand the ad, and they wanted the customer to see everyday-looking individuals using the charging product. Only one of the participants addressed the importance of diversity in their advertisements and wanted to break down the barriers in both race and wealth. While most participants had expressed concern regarding stereotypes in race, sex, and class earlier in the interviews, only one said they were trying to address the issue within their advertisement creative.

Interview participants were also asked about the marketing and outreach tactics they have tried and what success they have had with them. The number and type of marketing tactics used by the EPU's wildly varied among the participants. Still, almost all mentioned the importance of social media and driving consumers to an informational website. Seven of nine participants said social media was one of their leading marketing tactics, followed by general digital advertisements and emails. Only two participants

mentioned doing wide mass advertising, like radio and television commercials, with many citing the overall costs of mass marketing as prohibitive.

While all nine participants said they measured and analyzed their advertisements' results, many felt unsure about which activities were the most successful in their efforts. Issues like not selling the product, long lead times between seeing the ad and purchasing a car, and inability to track their success all contributed to participants saying they could not determine their most successful tactic.

Interview participants all mentioned the importance of getting customers comfortable with an EV and EV charging equipment. Still, only three EPU's said they often hold in-person events or offer EV test drives. While digital and mass advertisements may be effective in getting someone interested in a vehicle, the EPU's might need to provide more in-person opportunities to help get customers more comfortable with the cars and how to charge them. Only one EPU mentioned that they routinely offer EV test drives for customers and felt it likely was a significant factor in helping a customer become more comfortable with the vehicle. While test drive events might be a large burden for utilities, partnering with organization and dealerships could help provide the support needed for such an effort.

As found during the literature review, for an innovation to become accepted by most of the population, the creation would usually need both mass media (advertising) and personal social networks to succeed (Rogers et al., 2019). EPU's using both mass advertising and breaking into social networks, possibly using social media advertisements or in-person social event, may have the most success in growing adoption.

Audience segmentation and the Diffusion of Innovation curve model

Rogers's Diffusion of Innovation (DOI) theory has been shown to predict the adoption rate of a new product based on when a customer is willing to adopt that product, and the theory uses an adoption curve model to predict the phases a product must go through to gain full acceptance by the general population. When asked if the interview participants were familiar with the DOI theory and adoption curve model, all nine participants said they were somewhat or very familiar with the model. In addition, most mentioned that they use the adoption curve model for other EPU products they market. But when asked where they think the EV adoption rate currently stands on the adoption curve model, almost all interview participants perceived the current EV adoption rates to be much higher than they actually are in the U.S., placing it much further along in the model than the EV adoption data indicates. The interview research findings signal that EPU marketers may have moved too quickly in their audience segmentation.

The DOI's innovation curve groups customers into 5 stages, Innovators (2.5 percent of the population), Early Adopters (13.5 percent of the population), Early Majority (34 percent of the population), Late Majority (34 percent of the population) and Laggards (16 percent of the population) (Rogers et al., 2019). While there has been much attention and media noise around EVs, the U.S. adoption rate is still around 3 percent (Desilver, 2021). When asked where they think the EV adoption rate currently sits within the DOI curve, 4 of the 9 participants placed the adoption rate in the Early Majority, and 3 of the 9 placed the adoption rate in the Late Majority. Based on those DOI curve placements, 7 of the 9 participants have the adoption phase at the Early Majority or later phases, which would put the EV adoption rate at almost 50 percent, whereas again data shows it is only at 3 percent.

Most participants did mention that they do some segmentation in their marketing, at least by residential and business, with others breaking out the residential customers even further. Unfortunately, the interviews showed that those segmentation efforts might focus on the wrong population groups, hitting customers who aren't ready for EV marketing.

Roger's theory suggests that when a new product does fail, it is because the product fails to get past the Early Adopters phase, an area known as The Chasm (Rogers et al., 2019). For EVs to make it as a mainstream vehicle, it would be important that they cross this chasm point. EPU marketing managers may need to take a step back and focus more on the Early Adopters segment, with some mass awareness towards the Early Majority, before moving too quickly down to other segments.

Conclusion

EPU's are prioritizing EV adoption in their area and have started developing internal teams to address the future of EVs. The interview participants felt that the EPU has a responsibility to help grow awareness and education around EVs and EV charging. They think their work is having a significant effect on EV adoption rates. The interview analysis found that the participants think that some prominent external factors are helping their efforts, including increased EV car types, higher than average gas prices, and more concern for environmental issues. While these factors may be helping change customers' minds towards EVs, interview participants were concerned that customers still need help understanding EV charging, battery range, overall costs, and the ability to find an EV to test drive. EPU's need to find a way to balance these headwinds and tailwinds in their messaging as they work to pursue potential EV drivers. One possible solution would be

to address headwinds, like all the different vehicle types and gas prices in mass awareness and upper funnel advertising. Then, address the barriers, like range and charging, in more middle of the funnel and direct marketing. Lastly, EPU's can help close the purchase with test drives or vehicle availability information.

In addition, addressing segmentation and EV stereotypes may ensure a better return on marketing investment and ensure EV efforts are hitting audiences who are ready to hear them. The research found concerns that EPU's have moved too quickly in their audience segmentation, with almost all EPU's stating that they are targeting customer groups that are later in the adoption curve and may need to take a step back by focusing on the DOI's Early Adopters phase. The research found that many interview participants had started to focus on the Late Majority group by using tactics and segmentation strategies geared towards this segment, an audience segment that is likely more than five years away from making an EV purchase.

By tailoring messaging to address both positive external factors and potential barriers and ensuring marketing and outreach tactics address the right segmentation group, EPU's could improve their efforts and hopefully help move EV adoption more quickly. To do this, EPU's should use the DOI theory to help understand motivations of customers in each phase of the adoption curve. Then use EV adoption data to understand where the consumer adoption rate is in their area and match messaging and tactics that best support customers in the current adoption phase.

A Utility's Guide To...

2022

ELECTRIC VEHICLE MARKETING



Version 1.0

Prepared by:
Jeffrey Beeson

By learning from the past...

UTILITIES ARE IN THE DRIVER SEAT



Top Images: Historical photos from KCP&L's appliance store, which promoted and educated customers on electric appliances.
Bottom Images: Recent photos from KCP&L's customer walk-in center which features an EV showroom and offers EV test drives.

Electric vehicles (EVs) are expected to redefine modern transportation. Today, major automakers are reconfiguring product lines and increasing production capacity to meet what is expected to be rapid adoption in the EV market in the coming decades.

The electric utility has an important role in helping their customers understand EVs and EV charging. Through EV marketing, educational campaigns, test drives, and utility programs, utilities can help customers overcome the barriers to purchase and support customers in their EV transition at home and in public.

This type of marketing is not new for utilities. Electric utilities have a history of helping customers understand electric

products. In the past, they built showrooms and demo homes to help customers understand electric stoves, lighting, and other appliances as the utility worked to push for a more electric house in the 60s and 70s. Today's utilities can learn from their past as they work to promote EV adoption.

This guide hopes to provide utility EV marketing teams with suggestions and strategies to use when developing EV marketing and outreach plans. The guide was developed after conducting in-depth interviews with utility electrification teams, analyzing and reviewing past EV and product adoption research, and hearing from current and potential EV drivers through outreach events.

KEY STEPS

When developing an EV marketing strategy, marketing managers should consider 5 key elements in their planning to ensure the most effective marketing. These elements include an effective segmentation strategy, developing impactful messaging, improving representation in advertising, having a multi-channel tactical approach, and using measurement data to be ready to adjust campaigns based on adoption rates and customer feedback.

01

Understand current adoption rates in your area to help with your segmentation strategy

02

Develop a messaging plan that helps customers overcome the top EV barriers

03

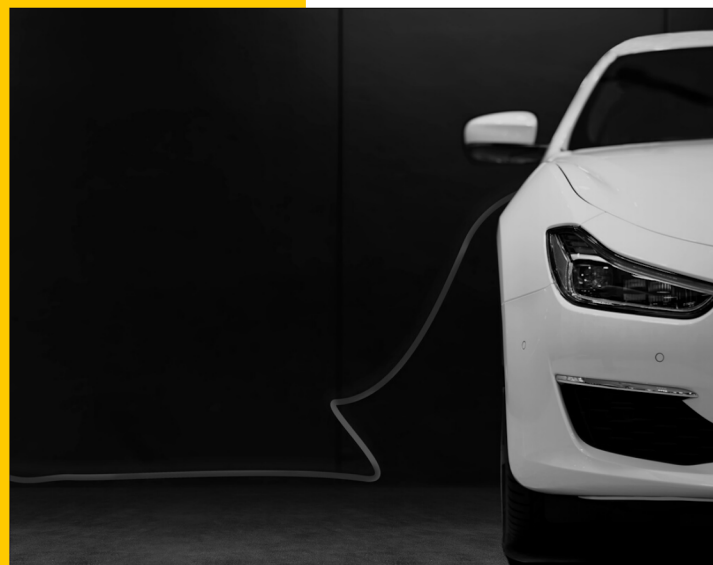
Help people see themselves in an EV & be ready as new EV models come onto the market

04

Invest in both awareness tactics, in-person opportunities & online tools

05

Measure and report on your results and be ready to adjust as adoption changes



CHARGE UP YOUR SEGMENTATION STRATEGY

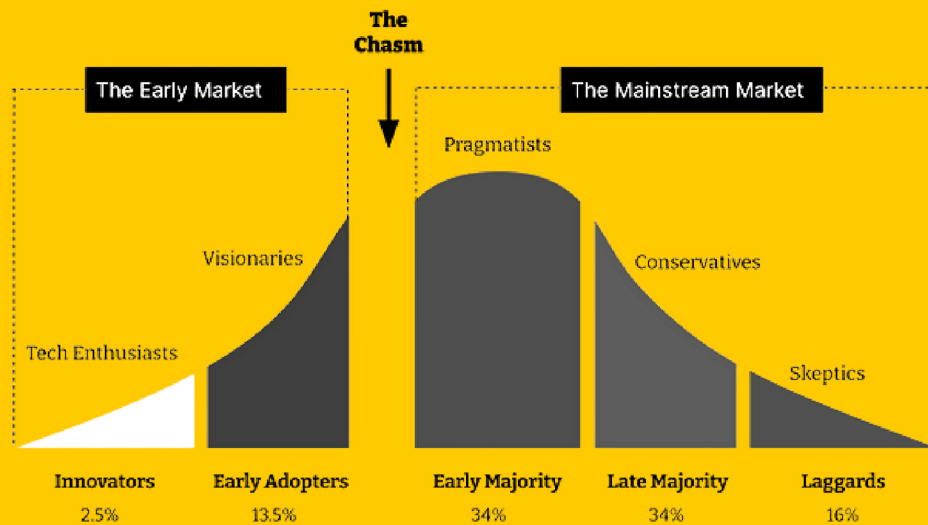
Key Step #1

With the EV adoption rate at about 3%, the market has just crossed into the Early Adopter phase and has yet to make it past The Chasm, where most new products fail.

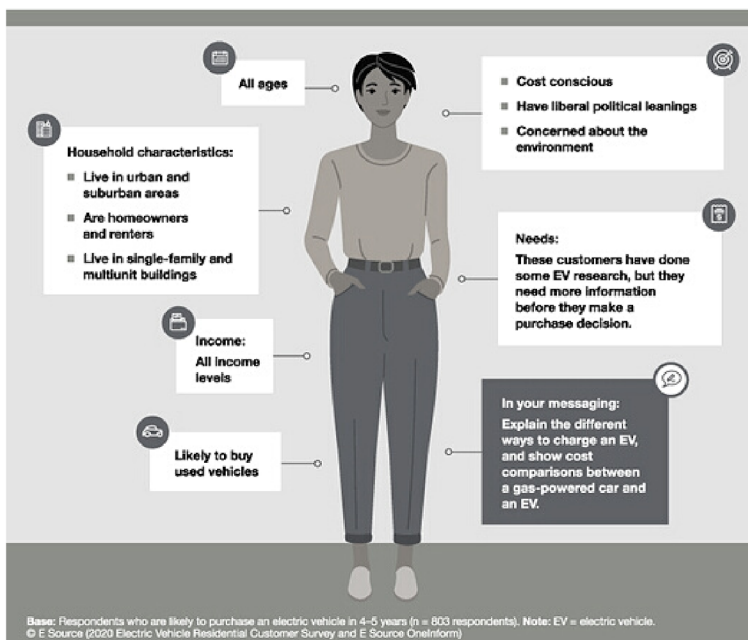
While it is easy to get caught up in the hype of a new product, it is important that your marketing strategy doesn't get ahead of who's actually ready to hear the message. Focus most of your efforts on the Early Adopter phase, especially for middle and lower funnel marketing tactics.

Use limited mass-awareness tactics to start preparing the Early Majority for what is to come. While most of the Early Majority audience may be a few years away from purchasing, by sharing high-level messaging now, you can start breaking down barriers or misperceptions, while getting them ready for your future marketing efforts.

There is still a large amount of the population, over 50 percent, that isn't ready to be sold on EVs. Resist the urge to move too quickly down the adoption curve.



So, who are EV early adopters?



Early Adopters tend to be more oriented towards social and technological trends. Environmental benefits are also a strong driver for this segment.

But Early Adopters don't always mean rich. There is a large proportion of middle and lower income consumers in the Early Adopters category, which means that marketing and education approaches will be relevant to wider income population. So, this phase of EV buyers tends to be more price sensitive than you may have noticed with the Innovators.

Use the characteristics on the left to filter your utility customer data to find your Early Adopters. Also, use 3rd party segmentation data, like Acxiom, as an additional filter to help narrow down who may be in the car buying process. Or try using your program participation data from other environmental programs to help build additional segments within the Early Adopter group.

Helping customers overcome their barriers towards EVs is an important part of your messaging strategy. Between making customers feel like there is an EV for their lifestyle and helping them overcome sticker shock to the costs, your messaging should follow the customers as they go from awareness to interest to evaluation.

To start, lean into external factors that make EVs look like a better option, which can allow you to take advantage of topics that are already on the minds of your customers. Use these tailwind messages in your upper funnel marketing tactics, like mass awareness channels. Since these issues are already on peoples' minds, you're likely to have a better chance of getting their attention.



TAILWINDS

EVs for Everyone: The days of small EV sedans are over. Highlight the number of EV options, from trucks to SUVs.

01

Cheaper than Gas: With high gas prices remind customers it's cheaper to fuel up an EV.

02

Better for the Environment: With concern for climate change on the rise, showcase how EVs can help shrink their carbon footprint.

03

HEADWINDS

01

EV Charging: People don't understand how EV charging works. Develop easy-to-understand messaging, like how simple it is to charge at home, as a way of taking the guesswork out of how and where to charge.

02

Vehicle Range: While most people drive less than 30 miles a day, they still have a fear of running out of power. Message both the larger vehicle ranges and charging networks.

03

Overall Vehicle Costs: EVs can seem more expensive, but with incentives and lower maintenance costs, these vehicles can cost less. Show them the math to help customers get past the sticker shock.

04

Trying it Out: With supply chain issues and bad dealership experiences, it can be hard to test drive an EV. Provide information on where and how to find an EV.

Next, as customers start to show an interest in EVs, use your middle or lower funnel messages to help overcome their perceived barriers. This messaging works for your Early Adopter segment, who are ready for a stronger sales approach. It is important to tackle multiple barriers across your marketing.

These headwind messages often need a little more explanation and detail, so make sure to include ways for the customer to learn more or dig deeper into the topic. Headwind messages are all about persuasion, so find ways to take these complicated issues and make them easier to understand. Also, try to tailor the messages to different segments within Early Adopters, like homeowners vs renters.

FIGHT THE STEREOTYPES

Help people see themselves as an EV driver



While the Toyota Prius and Tesla both get credit for launching EVs into the mainstream, they also should take some of the blame for slower EV adoption. The Prius and Tesla were marketed to select customer bases, which showed up in the advertising and car price points. Toyota went after the environmental hippy, showing the Prius as a car for the tree hugger. On the flip side, Tesla went after the rich techy, positioning the EV as something for the wealthy. Both focused mostly on white drivers. Together, these early cars created stereotypes that are hurting those in the middle from seeing themselves as an EV driver.

Luckily, there is still time to reverse this trend. And with new EV car types and price points coming onto the market every year, there are options for any type of car buyer.

To help overcome these stereotypes, it's important to use messages, tactics, and creative to reach out to customers in the middle, who haven't seen themselves in an EV...yet.

- Representation matters, so embrace a range of races, ages, sex, and income levels.
- Help people see themselves charging at home, at work, and out on the town.
- EVs aren't just for people with a garage. Consider how to showcase multifamily properties.
- Show customers that EVs can fit their life by mixing up images with different lifestyles, like those with families.
- Be aware of what car brands you show in your ads. Avoid the extremes, like a Tesla, when possible.



Key Step #4

FOLLOW THE JOURNEY

Use a multi-channel approach by tailoring your tactics to different points of the marketing funnel

By deploying segmented tactics across each phase of the EV buyer journey, you can ensure a more relevant message is hitting your customers where they are in their buying journey. In addition, by using digital and social retargeting ads, you can highly target messaging as customers move throughout the marketing funnel.

Awareness

Audience: Early Adopters and Early Majority

Sub-Segment: Cost and Environmental Focused

Message: Gas Prices, Vehicle Types, Environmental Impact

Tactic: TV, Radio, Digital Ads, Paid Social, SEO

Interest

Audience: Early Adopters

Sub-Segment: Under 45, Homeowner & High Income Renters, Mobile & Social User, Green Utility Program Participant

Message: How to Charge, Vehicle Range, Costs

Tactic: Website, Email, Digital & Social, SEO, Events, WOM

Consideration

Audience: Innovators and Early Adopters

Sub-Segment: Middle/Upper Income, Small Households, Homeowner, Current Car Buyer

Message: Availability, Test Drives, Installing Charging, Total Costs

Tactic: Test Drives, Email, Retargeting Ads, Dealerships Outreach

Pro Tip: Use the filter options within Google ads, social ad platforms, and other paid media to help you target the right audience and sub-segment.

GET THEM BEHIND THE WHEEL

Find creative solutions for test drives



Utilities are traditionally risk averse, so taking on the liability of offering EV test drives may seem impossible, not to mention getting cars and staff support. But as mentioned in the introduction of this guide, utilities have a successful history of providing in-person experiences. So, don't shy away from this past when thinking about your EV adoption strategy...get creative.

If offering test drives yourself isn't an option, work with local environmental groups, like your Clean Cities chapter, to see if they might host a test drive in partnership with the utility. As another option, work with local car dealers to host test drives at community events. Partner with dealerships to ensure EV models are kept in stock for potential buyers to drive.

Key Step #5



DRIVING MEANINGFUL MEASUREMENT

Trying to measure results for a product you don't actually sell is no easy task and is made more difficult because the lead time on a vehicle purchase can be over six months. But keeping track of marketing performance, along with area EV sales data, can help you understand how to adjust your marketing strategy. It also ensures that your segmentation strategy is in line with overall adoption rates.

To accomplish this task, it's recommended that you routinely monitor three different types of performance data: marketing channel and message performance, customer feedback, and area EV vehicle registration data.

Don't forget to share your results! In a survey of EV utility marketing managers, over 80 percent said they share their EV marketing results with executive-level managers at least once a quarter. By building a dashboard, you can present your findings in an easy to understand way for you and your stakeholders.



TRACK ALL ADVERTISING

Make sure each marketing tactic is measurable. Add tracking, like Google's UTM tagging, on all links to be able to track performance by channel and ad type. As a bonus, set up A/B testing on different messages.

CAPTURE CUSTOMER FEEDBACK

Understanding changes in customer opinion is important. For your events and test drives, provide before and after surveys to track the experience. On your website, provide feedback surveys.

MONITOR LOCAL EV SALES

Use state vehicle registration or utility industry data to track EV sales over time in your area. Measure against similar size cities to see how your EV sales compare.

BUILD REPORTING DASHBOARDS

Create a dashboard or a standard report to make it easy to track results and share with stakeholders. DataStudio or PowerBI are two such software options that allow you to see all your data in one place.

CHAPTER FIVE: CONCLUSION

A few years ago, my local electric power provider posted a few historical photos on their social media account as part of a “flashback Friday” post. The images contained a storefront with lamps and home appliances on display in the store windows with the former name of the utility, Kansas City Power & Light, painted across the top of the building. At first, it struck me as odd that the utility would be selling home appliances, or even have a walk-in ‘store’ at all. But, after some research, I became aware that it was very common for electricity providers from across the U.S. to promote and sell electric appliances like stoves, microwaves, and lamps.

While not their traditional product, the utility had the foresight to know that they could increase electric sales by promoting products that used electricity, but they also helped change the American home. This took me down the path to ask why utilities aren’t learning from their history by taking a bigger role in helping customers adopt EVs. While EVs have been making headlines for years, the overall adoption of these vehicles still seemed low, but utilities have the know-how, brand awareness, and built-in customer data to create powerful marketing that can help get adoption rates over the chasm and into the mainstream. This curiosity, along with those social photos, led to this project proposal and overall research study.

Having the opportunity to talk with EPU marketing and program managers from across the U.S. was an amazing experience. I believe that their work will be something that future generations will look back on, like that “flashback Friday” social post. People will be amazed that the utility was such a major player in getting the world

to adopt this new technology. I hope the utility will remember this current time when they are wondering in the future if they should be getting involved with the next great invention. Each of the interview participants had a passion for EVs, and I felt like I could hear both their optimism about the future of EVs and their struggles with getting customers to adopt these vehicles. To me, it felt like they knew they were part of the future and something big, but they just couldn't figure out how to get over the hump.

Unfortunately, that passion and excitement for EVs may be what is hurting their EV marketing efforts. With so many years of EV headlines and car announcements, EV marketing professionals want the adoption rates to be further along than the data would indicate, almost like they are trying to push adoption by moving faster than the consumer is ready for. Hopefully, this study will help EPU's take a step back and re-examine their audience segmentation strategy, while also giving them guidance on what messages and education opportunities to focus their efforts on.

As I put a cap on this project, it is amazing to look back and see how I got here. I was lucky to have so many supportive professors who helped to guide me in this process. The research method was very new to me and learning about communication theories, literature reviews, interviews, coding, and writing findings has allowed me to understand my profession so much better. I look forward to using these new skills as I continue to grow in my career.

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APPENDIX A: WEEKLY FIELD NOTES

Week 1: Aug. 20 – Aug. 26

After a long summer of preparing my research proposal, I received approval from my committee about two weeks ago, and now I am working to finalize my interview screener survey. This is my first time using Qualtrics, so I've had a deep learning curve as I try to understand the software and how best to code the survey with logic and automation. This process has taken a little longer than expected, but I continue to get close to sharing it with my committee for review.

Outside of the research prep, I am also helping the electrification team at Evergy prepare for the Kansas City Auto show. Evergy has decided to sponsor this year's Auto Show, so the team is trying to decide how they want to handle this sponsorship. We've been meeting about how to set up the Evergy booth space and what information to share with customers about EVs. The company also sponsors an indoor EV test drive opportunity, where people at the auto show can test drive multiple EVs. The Evergy team will then be able to talk with those people as they leave the test drive and share more EV information. I'm looking forward to talking with Auto Show customers and learning what they think about an EV before and after test driving.

The company also hosted EV test drives at their in-person walk-in center called Evergy Connect. Customers can sign up for a test drive time slot and then come to Connect to test drive 2-3 vehicles and get charging education. I talked with customers to help them understand their feelings towards EVs and what barriers they might have towards purchasing.

Week 2: Aug. 28 – Sept. 3

Preparations continued this week as the Evergy team prepared for the KC Auto Show. The booth design and what educational information to share was decided, and I was also able to help develop some handouts that will be used during the Auto Show. The team is working with a local non-profit group, Clean Cities, to help manage the booth and test drive event, so planning calls with this team happen to help coordinate efforts.

Over the weekend, I finalized by research pre-screen survey and sent the survey to members of my committee for review. Professor Flink provided great feedback on the survey content and how best to work with the software system. I also received some additional questions from Professor Higginbotham that helped me think a little deeper about how to help someone schedule an interview.

Week 3: Sept. 4 – Sept. 10

The KC Auto Show started this week, and we spent most of the early part of the week setting up the Evergy booth space, getting EV cars ready, and working with printers to prepare all materials. I worked the booth space most of the weekend, allowing me to chat with many Auto Show participants about their feelings toward EVs. I noticed a big difference in customer feedback after they had taken a test drive and started to feel that getting people into the seat of one of these cars is important.

I watched the Evergy electrification team talk with customers about EV charging. There seems to be a lot of questions, confusion, and misinformation about how these cars charge, how long it takes, what type of equipment is needed, and how much they cost.

The team did a good job trying to educate, but the learning curve seems large. Most customers seemed positive about the cars and interested in learning more.

During my research prep, I made edits and changes to the survey suggested by my committee and then sent the survey back out for final review. After a few more questions, I received final approval to move forward with my research recruiting. I also started to search for research participants, making a list of potential participants. I spent a lot of time on LinkedIn searching for options based on job title and company. I had to purchase the upgraded LinkedIn package so that I could get better search results and be able to send messages.

Week 4: Sept. 11 – Sept. 17

The last day of the KC Auto Show was Sunday, and we spent Sunday and Monday cleaning up the booth space. It was a long weekend, but I had many great conversations with auto dealers, salespeople, and, most importantly, show participants. I felt overall, there was a lot of strong interest from consumers but still a lot of confusion on how the cars work. There is a lot of opportunity to help customers understand charging, which seems to be the number one question people have about cars. I also felt that this event was the right place for Evergy to spend time. They have people interested in cars and many ready to buy all in one area. When considering what types of events to attend, I think the ones with some type of tie to an EV are important. People are in the car mindset and ready to learn.

This week the Evergy team also got the new Ford Lightning Truck, so we went out to many of the power plants and service stations, offering test drives to workers in the

field. Many of these workers get a truck company car but have been worried about moving over to an EV truck, even if they work for the EPU. The employees were impressed with the Ford truck, and I think test driving started to change their minds. The car is powerful and fast, which the employees enjoyed. I got a better understanding of the employees' concerns about an EV work vehicle. This wasn't an audience I had spent much time thinking about, so it was good to get a different perspective.

In addition, I also spent much of the week sending out my recruitment emails asking individuals to participate in my research project. I've found about 20 people so far that I think could make a good candidates for the research, and now I am waiting on responses. Replies have been a bit slow, so I will likely need to continue to research more participants and continue to send out my recruitment email.

Week 5: Sept. 18 – Sept. 24

Later this week starts National Drive Electric Week (NDEW), so the Evergy electrification team is busy at work preparing for weekend events. NDEW is a national event that promotes EV education. Most towns will have many EV events for the public to come out and learn more about EVs. Most interesting about these events is that other EV drivers usually host them. EV drivers will bring out their cars and allow the public to view them and ask questions. I attended two events this year, one at a church and one in a park. I think the ability to ask another EV driver about their car, rather than a salesperson, was helpful for participants. It allowed them a very no-pressure environment. I was able to chat with participants and get a better understanding of the types of questions they had

about EVs. Again, the customers regarding EV charging and price seemed to continue to come up.

I also started to hear back from potential research participants and have been able to schedule three interviews for the upcoming weeks. I continue to look for possible participants and have gotten a list from a utility organization to help me in my outreach. While feedback has been a little slow, it has been positive, and part of the issue has just been finding time to schedule the interviews.

Week 6: Sept. 25 – Oct. 1

National Drive Electric Week continued this week, and the Evergy electrification team did a few events with fleet managers at different businesses. The team took cars to allow the fleet managers the opportunity to test drive them, especially the Ford truck. It was a great opportunity to hear from these managers about their concerns. Price was a bigger factor in these conversations as the managers worry about budgets and the higher cost of the vehicles. Even if EVs might save money in the long term, the cost of purchasing a car for the fleet and the cost of fuel and maintenance come from different budgets. So even if fuel and maintenance costs may decrease, it does not help them in their purchase budget. This was an interesting finding about one of the barriers to help overcome.

I was also able to again attend EV test drives that were happening at the Evergy Connect center on Tuesday and Thursday of this week. Between the two days, we had about 20 people take test drives. Customers seem to enjoy the ride of the cars and are impressed that the inside of the cars are larger than they expected. There may be some

perception or a stereotype that EVs are smaller than expected. I have noticed that most test drive participants continue to be single white people, so it may be important to find ways to increase the diversity of the test drive participants.

This week I was able to do my first interviews as well. I had three interviews this week, and I got a little better after each. I also adjusted my interview guide just a bit. Each interview went well, and I find myself learning more and more as I go. I am a bit nervous about how participants are starting to answer the DOI questions, as they seem to be a little off from where adoption data would indicate. I am interested in seeing if this trend continues after more interviews.

Week 7: Oct. 2 – Oct. 8

This week the Evergy electrification team attended the Kansas Renewables Conference, a conference of green companies, non-profits, and government groups who come together to discuss renewables in Kansas. Evergy hosted an EV test drive event at the conference. I went into the conference thinking that most people at the conference would be knowledgeable about EVs since they work in the industry. It was very surprising to talk with conference attendees and find out that so many of them had little knowledge about EVs or how to charge them. This was a bit eye-opening to me and expressed a concern that maybe we have assumed that some segments already know about EVs when maybe they do not. If these participants, who many have spent their careers in the renewable and green space, are still unknowledgeable about EVs, we may have more work to do than expected. EV marketers may be moving too quickly in their segmentation strategies.

I continued with my interview participants, conducting two more interviews this week. I am starting to see some possible trends and some interesting findings. The interviews take the full hour, and I am finding that participants have a lot to share. So far, most feel like their work is making a strong impact on EV adoption rates and that it's important for EPU's to be in this space. I'm glad to hear that these research participants feel it is important for the utility to promote EVs.

I also had the opportunity to sit in on a demo of a software product called ZappyRide. This software product allows fleet managers and businesses to see how moving to EVs may affect their budgets and costs. It also gives great information about the different EV models and education around charging. It is a powerful tool that Evergy is looking at purchases to help customers in their area get all the data they need to support that transition to EVs. I think it would be a strong educational tool.

Week 8: Oct. 9 – Oct. 15

This week I scheduled time with my committee member Jamie Flink to dive deeply into how to code research. I took one class where we discussed research coding, but I haven't done it before and felt like I needed some help understanding the best ways to code. Professor Flink gave some great strategies and suggestions on coding techniques that will be helpful when I start to code. She shared a color-coding chart format that she uses to help chart the responses for each question. I plan to use this method in my research.

I also continued and finished my last interviews this week and am excited to move to the next steps of coding. I got to interview an EPU marketing manager from Hawaii

this week, and it was interesting to get her perspective. I've worked to try to get interview participants from across the US, and it's been great to hear how things are a bit different by area.

I also started to review survey data from the Evergy Connect test drives. After a customer does a test drive at Connect, they are sent a follow-up survey. The survey data showed the customers feel they leave the test drive with a greater understanding of the EVs, and most felt the test drive was an important part of their buying process. The surveys show that people find 1:1 attention with a knowledgeable person helpful. Most said their understanding of EV charging dramatically changed after the test drive.

Week 9: Oct. 16 – Oct. 22

This week I focused on coding my research and reviewing all the interview transcripts. This process was much more time-consuming than I had originally thought it would be, but it was also exciting to start putting the pieces of the research together and see some trends that I did not notice during the interviews. The coding method shared with me by Professor Flink helped me shift through all the interviews. One-hour interviews provided a lot of content to review, so this process continued all week. I am now working on the data and am starting to outline the research results.

Week 10: Oct. 23 – Oct. 29

This week I sat down with the electrification team at Evergy to review some of the marketing analytics and campaign results from Q3. The summer and fall have a lot of outreach events, so much of the team's focus was on events and outreach this quarter.

The team noticed that they did see an increase in the number of EV Charging Rebate applications, which could be driven by the number of events. Another interesting finding was the number of Connect test drives increased after the KC Auto Show. It seems that maybe participants wanted another test drive after the Auto Show.

I also spent much of the week drafting my research findings based on the interviews and coding work. I think I found some interesting findings in the research and am excited to get the results typed up to see how the overall findings come together. Most surprising is the segmentation used by the EPU's and where they think they are in the adoption curve. I hope to finish my first draft and send it to my committee chair for review.

Week 11: Oct. 30 – Nov. 5

I continue to finalize the research section of my project report while also spending a lot of time cleaning up my interviews. While TEAMS worked great to help conduct the interviews and provide transcripts, some of the formatting and spelling were a little off, so I have been cleaning up those issues to put them into my report.

Also, this week I have been working on the marketing guide I plan to put together to help EPU marketing managers. I have been outlining what this guide may look like and gathering some creative elements that I want to use. It will likely take me a few more weeks to get this all together, but I think I have the direction I want to take. I've been trying to decide the format I want this guide to be in, and so I've been doing some research on other informational guides to see if there is a format I think will work best.

Week 12: Nov. 6 – Nov. 12

I sent the first draft of my research out to my committee chair this week, and I am happy with how the results turned out. I feel I found some important findings that will be helpful for EV marketing managers to consider in their work. Professor Higginbotham also provided comments back this week, so I've spent much of the week making the suggested edits and finalizing other elements of the project. I'm hoping to provide another draft next week for review.

APPENDIX B: INTERVIEW TRANSCRIPTS

Julie Dietrich – Interview

Jeffrey Beeson

So I want to first ask if there's any kind of external factors that you think are contributing positively to EV adoption?

Julie Dietrich

Sure. Yeah. The reduction of our dependency on foreign oil, I think is. Definitely bringing folks with opposing views together. The OEMs are now accepting that EV's are coming, and we're seeing more and more models of EV's out there. More and more people are getting exposed to the technology itself, and I am seeing some perception of just better performance.

Or for those that are really into sustainability find that participating in this is a way to kind of align with their sustainability beliefs or goals.

Jeffrey Beeson

Good. That makes sense. So, on the flip side, then what factors or barriers do you think may be hindering EV adoption right now?

Julie Dietrich

Probably going to be very similar to the first question, but some barriers have just been the slow acceptance of OEM's to adopt this new technology. They traditionally have been based on the service model and kind of lean to a traditional business model for OEMs and auto manufacturers. Now there's a slow movement that finally, you know, has propelled itself to start accepting that this technology is evolving and many of the OEM's are even considering operating as two separate companies, old versus new. So, I think that that can be a barrier.

Kind of like the COVID shot. I'm also seeing a perception of these vehicles being political in some way. School districts are getting, or starting to, be eligible for free electric buses, and in some districts are having difficulty even passing through their school board.

Approval to receive a free electric bus, and it's very politically motivated by that answer, even though it's going to save the district \$80,000 vs. buying a diesel bus. And \$80,000 for small rural districts can go a long way. Not wanting to participate in that type of activity for political reasons.

Also, just infrastructure, getting that infrastructure in place is definitely a barrier for folks because right now we have the freedom to go wherever we want to go and it's really just a lot of change management. It's going to have to happen for folks to go from one type of technology or fueling type to another type of fueling.

Jeffrey Beeson

Then you may have already kind of touched on this, especially with the politics, but going into that a little deeper. What kind of negative stereotypes about EV's or EV drivers do you think are out there?

Julie Dietrich

Yeah, I think the motivation behind this funding seems to lean blue. So it's just, folks that don't lean blue, they're seeing it as a blue issue, and if they ride that hard party line they're going to oppose it.

Jeffrey Beeson

OK. So, do you feel like there are any misunderstandings about EV's out there? Maybe about the cars, and the charging itself?

Julie Dietrich

I was just recently at a sustainability conference. So, here's a group of folks that, you know, they're selling solar and wind power across the state of Kansas, and many of them haven't even sat in an EV. And we got a number of takers, and they're telling us this is the first time that they've either ridden in or driven an EV. And actually, some even worked for Evergy – where you would think that access would be readily available. But some of them were just terrified to even try it.

And the regenerative breaking was concerning to them. They thought that it took a special skillset to drive it.

Also just that region didn't have a lot of charging infrastructure visible to them. We've known, Evergy has known, early on having just having that visibility of charging equipment, you know kind of helps people make that transition in their mindset that they can plug in a vehicle versus fill it with gas.

Jeffrey Beeson

So tell me about any lack of understanding around total cost of ownership compared to traditional car. If there is any.

Julie Dietrich

Yeah, you know, I work mostly on the fleet side. It is a bit of a challenge because, at least in early years of adopting this technology, you're going to have to build out some really expensive infrastructure. Where that would not have to happen if they continue to replace cars with traditional gas vehicles, so trying to understand that total cost of infrastructure of total cost of ownership even in those early years of making that switch, has been a little bit of a challenge. And so, you know, that upfront large investment and then trying to understand over time that investment. When will it pay off and how it will pay off? So, investing, and starting to invest in this now, will only enable you to benefit from that total cost of ownership over time, from a fleet perspective.

Jeffrey Beeson

Sure, any lack of understanding around how charging works and any difference between public and home charging?

Julie Dietrich

Working at the auto show, a lot of folks came up and were like, how long does it take to charge? And as you know, different vehicle sizes or ages or types have different sized batteries. Just like regular cars have different sized gas tanks, so it's kind of like asking the question, how much would it cost to fill this Ford F-150 versus a Ford Focus. So it's quite a difference and folks are not understanding that it also equates back to EV's, too. We try to break it down into replacement of miles driven or typical daily miles driven versus filling the car up from empty every time because the one thing that is different about EV versus traditional vehicles is that you're going to keep a constant state of charge versus deplete and refill, deplete and refill.

Jeffrey Beeson

OK. Well, great. That's kind of my barriers and misunderstandings section. Is there anything else that you could think of around this kind of topic around stereotypes or misunderstandings or barriers that may be helpful?

Julie Dietrich

A lot of questions about batteries, and to be honest, it's a tough nut to crack because we don't have a long history with replacement or disposal of batteries to fall back on. So when we talk to customers about this, it's kind of in concept or theory versus practice. So that does create a barrier because again, the opposition wants folks to believe we're going to be drowning in dead batteries, you know, instead of the dependency on fuel. And that's not the case, but it's a hard case to convince because of lack of data.

Jeffrey Beeson

Yep, that's a good one. Alright, so next section is really about audience and segmentation, and so I know you're not in the marketing day-to-day, but with your experience, maybe there's some of these questions you at least know of or think would be a good way of doing something. So that's OK.

First question is, are you using any audience segmentation and in marketing today, are you thinking about different audiences' kind of differently? Or are you grouping everything into one?

Julie Dietrich

There's definitely differences from B-to-B and B-to-C.

Decisions for B-to-B are sometimes fleet managers, or they come down from the top. If the desire to move forward originates with the fleet managers, then they have a tough road to travel to convince the senior management or senior leadership to approve these types of purchases, so there's definitely some different segments. And also just with additional decision makers, you know, right now fleet manager already has kind of that process down on who needs to be involved and vehicle purchases will now with electric vehicles and you have to involve multiple departments and many departments you're going to have a shift in this budget will be impacted in a positive way because we'll be spending less fuel or less maintenance where this department will now have to incur more costs for more electricity, so just more people are impacted than not making a change at all.

And you have to include facility managers so that those projects and costs will be managed for building out infrastructure. So just trying to understand those decision makers and the types of organizations can vary on who those decision makers are or how they make decisions or what their motivators are.

From a residential perspective, if I own my home versus I don't own my home, you don't necessarily have to invest in new infrastructure, depending on how many miles you drive a day, but most people believe that they do. Some regular access to charging equipment and just understanding what those different audiences are in the residential side and how they get access to charging equipment, how they make decisions, you know, does impact the different segmentation on the residential side as well?

Jeffrey Beeson

OK. And have you seen any other environmental or green type programs or products that the utility offers that may that match up? Like is there any connection between someone who might do solar or some green program, and get an EV? Have you seen any correlation there, either on the business or residential?

Julie Dietrich

Yes. A huge correlation, and right now our programs kind of operate in little silos, but I

am learning, I get more and more questions regarding solar. I think EV's and solar are cousins and they can work together. And we don't build programs that complement each other and I think that's an opportunity we should be exploring.

Jeffrey Beeson

Is it important to have a different approach to marketing and education for the kind of different audiences that you've mentioned already? Or do you think the same materials or creative is general enough to work for everyone and it's more just how you're having a conversation?

Julie Dietrich

I think there might be sound bites that can be leveraged across the residential audience, but you might have to, you know, use unique ones given who you're talking to.

On the business side, I do think there's probably a little bit more specialization that you have to really identify who's making that decision and what those barriers are, and the barriers can vary from organization type to organization type. But I do think more customization is needed on the business side versus the residential side.

Jeffrey Beeson

And next I want to show you an image and this is the product adoption curve. Are you familiar with this curve at all? Have you used it and any of your past life or products or services that you've worked on?

Julie Dietrich

I have, and I am noticing with this particular topic we're moving away from the far left and we're now definitely moving into the green.

Jeffrey Beeson

Yeah. So where would you, if you had to put a dot on where you kind of think your territory is, where would you put yourself today?

Julie Dietrich

I would say with fleet, we're in blue, the dark blue at the far left.

Jeffrey Beeson

OK. And on the residential side, just based on what you know, would you say they are all the green?

Julie Dietrich
Yeah.

Jeffrey Beeson

Do you think of this kind of product adoption curve or the segments within it when you're developing any of your tactics or messages or is it useful?

Julie Dietrich

I don't, and it's not because I shouldn't, but I think I'm so in the dark blue. The one thing I am doing, and it's not because I'm being intentional with this product and adoption curve, is I am noticing businesses are coming equipped a little differently and so, like, say the Wichita Transit Authority got a grant and as part of their grant they were also funded to get a program implementer to help them implement the best project. Wichita Transit comes to us, you know, we're really informed and are able to help direct as a utility to what they need. Amazon, you know, has deep pockets and they've got consultants and they know a lot about what they need when they come to us. We are starting to get into different types of businesses with different levels of support or knowledge, and that the utility is having to actually be a little bit more handholding and help bring them along or answer their questions versus them coming to us with answers if that makes sense.

So even though we're in the blue, there's various shades of blue and they're based on the capabilities or the funding support that organization may have.

Jeffrey Beeson

Do you think you'll have to do anything different once you start getting into the green or will things that you're doing today work for that green part?

Julie Dietrich

I think maybe things I'm doing today will evolve as I get into the green. I am thinking about putting together some sort of decision matrix so that I'm consistent. We do have consultation support as part of our Kansas filing. But it's not a one-size-fits-all. I'm not going to give Amazon the same kind of consultation as I'm going to give a small school district. So I'm building a decision matrix so that when I do spend those dollars and if I'm asked down the road, why did you spend this money on this customer versus that customer that there's some rationale or documentation around that.

Jeffrey Beeson

Gotcha. That's good. Alright, that's it for my audience and segmentation section. Is there anything else you can think of around different audiences or how you might think about different groups?

Julie Dietrich

I'm sure, but I'm it's not striking me at the moment.

Jeffrey Beeson

OK, that's alright. Next section is really around messaging and creative development. So what EV adoption kind of messages or creative do you think works best, and so kind of the first thing, we kind of talked about this above, but let's rephrase it: what do you think motivates a customer to purchase an EV?

Julie Dietrich

I don't think someone's going to spend a huge amount of money or additional funds for the same, you know, for the same thing just to do it. I think some of those early adopters or tip-of-the-spear folks maybe, but I think more often than not, that the cost has to be there to motivate them to give it a try. And then also just enough education to be prepared for that change.

So the better we can prepare them for that change management from doing something one way to doing it another way – just having the necessary resources and tools, you know, like if I'm going to travel from here to here, having that confidence that I'm going to be able to access what I need to do that.

At the point of fail, what's the buying experience going to look like? And if there is a rebate, how does that rebate mechanism work? You know, is it a tax rebate or is it an instant rebate? So just having the right data at the right decision points of the customer journey helps them flip that switch.

Jeffrey Beeson

Yeah, OK. Do you use any of that motivation in your messaging and education outreach?

Julie Dietrich

Yeah, we've done some minimal outreach to school districts, so leveraging time sensitive information about funding again, getting that cost at a competitive enough price point for the customer to go ahead and make that decision. Getting that rebate information in front of them as well as anything else that they need to know after the purchase that's needed so that they can make that decision.

Jeffrey Beeson

OK. It's kind of based on that. What are three to five themes that you kind of think could be used to help grow adoption?

Julie Dietrich

Yeah, connecting customers with funding or anything that reduces the cost and makes the price competitive. To providing that funding information is one. Charging education is the next one that for example, what type of charging do I need in order to operate the vehicle the way that I need to, so do I need level 1 charging? Can I get by with level 1? Do I need level 2 if I'm a commercial customer, can I get by with Level 2 and avoid having to invest in Level 3. Also, just the ongoing expense of the electricity. Understanding the difference on what I had spent in gas versus what I would expect to, you know, for electricity. What I expect to use in the future for electricity maintenance. And then, I think a lot of people want to know what happens after a number of years with that car. What is it worth? How do I dispose of it, or what's the future of this car? You know, after I purchased it and I need to dispose of it.

Jeffrey Beeson

OK. And then thinking about some of your main audiences, do you ever try to connect those themes to the different audiences? Do you think a different theme might resonate better with one or the other or is it kind of all the themes work pretty well for every audience?

Julie Dietrich

I think all of the audiences need to know a little bit about everything. I think that's what attracted me to the zappy ride tool. What I think is going to happen, and what happens in practice remains to be seen. I have talked to other utilities that have had the tool in place for a number of years and it seems to really help connect those themes together and educate the customer at the same time. So, it's a little bit of messaging mixed in with self-help I guess for fleet managers to kind of think through all the different components of that decision.

Jeffrey Beeson

And you mentioned some of the barriers to adoption. Do you try to address those up front in any of the messaging?

Julie Dietrich

I think addressing some of those common myth busters would be helpful. I don't know that I have. With the school bus, I think I just put the value proposition to work. My motivation wasn't to convince at that initial outreach. I haven't had a lot of experience doing additional outreach yet. I've been kind of reliant on starting up this tool and building a strategy around it. But I think my current stance, you know, just given that I'm in the utility space, is I'm not really here to sell vehicles, I'm here to help people that want to purchase them get what they need from Evergy.

Jeffrey Beeson

So switching from messaging over to creative. What kind of creative elements or themes do you think are important in any outreach materials?

Julie Dietrich

It's a very complicated. There's just a lot of themes that, at different points, need to be conveyed. So, I think putting them into bite-sized chunks allow for better understanding. In doing that, either using visuals or, you know, very concise messaging to bring a complicated point down to something that can be digested quickly, I think is very important.

Jeffrey Beeson

And do you think, is it better to use graphics of people, or cars themselves, or chargers? What have you found? Think any kind of direction for creative.

Julie Dietrich

You know, I think when it comes to something that fits a theme that's kind of data-driven, simple graphs are pretty effective. If you're needing to make a point, an educational point, having an advocate or someone you know, someone in a position of influence is effective.

Jeffrey Beeson

And then, thinking about the audiences and your segments you mentioned earlier, do you develop any different creative for each of those or can you get by with the kind of the same across the board?

Julie Dietrich

I keep gravitating to the B-to-B. If I've got a segment that they need to convince their manager to do something, I probably need to do something that helps arm them to help build their business case for that versus if I'm, you know, if I'm talking to just the decision maker themselves and they can just convince themselves.

Jeffrey Beeson

Sure. Anything else in kind of messaging or creative that you think is important to know or understand?

Julie Dietrich

You know the more you can build something that is multipurpose, it makes it easier for

you to leverage it for multiple audiences. So, when you do creative development, if you start with what can be applicable to the masses then back into the special needs of the few that can be a more cost effective way of building out, you know, kind of a portfolio of messaging and creative.

Jeffrey Beeson

Yeah, good point. Alright, so the next section of the around marketing tactics.

So tell me about the tactics. I could mean anything from a webinar to billboard to a social ad. Just any kind of things you might be doing to grow adoption through kind of marketing and outreach activities. So just start. Can you kind of list or tell me the different tactics you're that you use that you think are most successful in growing adoption.

Julie Dietrich

I know the ones I like to use. I like to use the digital ones because they're measurable and they give me information and I feel like the traditional media is effective, but it's, for me as the marketer, you know, I like to have an ROI and it's just a little bit more difficult for me to get to an ROI with the billboards and the print. So, I do like leveraging the digital and I feel like I can target much better. The message is reaching the person, the right person, at the right time.

You know, I do like using video because if you have other folks that are trying to deliver the message on your behalf, you know, if it's at the dealership where these customers are at the point of sale – third party folks that are delivering your message for you, thinking about how to make that easy for them to do. I think it's important.

Jeffrey Beeson

So building off that, have you used any incentives as a tactic, like a rebate or a coupon or any kind of incentive?

Julie Dietrich

No. Nothing outside of just a regulatory rebate for a charger. I don't have access to a lot of budget, so I haven't contemplated incentive for that.

Jeffrey Beeson

Have you tried to expose a customer to an EV? Let them feel it, touch it? Or even an EV driver? And what's been the response that you have?

Julie Dietrich

Yeah. So, we've promoted some bus ride and drives, and placed ourselves at auto shows and sustainability conferences. I want to make sure it's the right investment for the company and a good use of time. So, I do think using a strategy and making sure you're targeting the right people at the right time is important because I think for people to experience the technology, even if they even aren't considering it, does help tip the scale and the direction. I've heard a lot of people say, I think my next car is going to be an EV, after driving one.

Jeffrey Beeson

Is there any benefit of getting them in front of an actual EV driver to talk with?

Julie Dietrich

Yeah. I'm an EV driver, and so when I talk to folks I have, I think I have, a lot of credibility because I can myth bust pretty quick because I have first-hand experience of operating those vehicles daily. So, I do think putting a person in front of it who has experience is very effective.

Jeffrey Beeson

Are there any tactics that you've tried that maybe aren't as successful or didn't work out the way you hoped?

Julie Dietrich

I would say I found myself in situations where people are already bought in. So, I wouldn't say it's not effective, but if you're prioritizing, that would be something I would have to decline since they're already adopters.

Then to the audience that would never in a million years be convinced. You know, just even at the auto show, you have a mix of people that were generally just inquisitive. Some of them were like, yay, I came to visit you because I'm so excited about this. And then you had some people just come to express their distaste.

Jeffrey Beeson

And then have you changed up any of your marketing tactics based on how adoption has changed in the area? Especially when you think how to get to early adopters here soon, or is there any tactic that maybe works for one section versus the other on the adoption curve?

Julie Dietrich

No, I think what I have been doing though is when I first was in the role, anybody that

talked to me at any stage of their readiness, I am giving it my full attention, even if you're just thinking about it. So now I've already started to kind of size up this group and I kind of know where people are in their readiness. So, for folks that are just barely thinking about it, that would be a person maybe you could get them some resources where they can self-educate customers that are ready to maybe make that decision to make a purchase. I'm going to prioritize them a little differently.

I'm starting to segment people on their stages of readiness based on my bandwidth. So, the fact that my bandwidth is shrinking, that says something about where we're, and where the population as a whole is moving.

Jeffrey Beeson

Yeah, really good point. Is there any other things on tactics or outreach that you think have worked well or haven't worked well?

Julie Dietrich

I think budget should be under consideration. Have high, medium, low or, I guess, nonexistent budget.

My mind has always been, I've got no budget, mode so I haven't thought big yet because I've just always had, like, a very teeny tiny budget, but the case studies have worked really well.

Just give them a reason to give you that moment. We're all competing for people's attention and so you really have to come up with that solid value proposition for them to even give you the attention to get your message across, and for me, it's probably in the cheapest way possible.

That's again what really attracted me that the zappy ride tool. If people need the money to pull the trigger, then giving them quick access to funding information and kind of pulls them in instead of me having to push as much, if that makes sense.

Jeffrey Beeson

Yeah, it does. Well then last section here is just around success and measurement. And so, I want to ask if you could describe any strategies you have around measuring success of your outreach and marketing efforts.

Julie Dietrich

Yes, I'm trying to get used to this really long sales cycle. You know, like a crock pot. You might be dumping something partially cooked into the crock pot and it cooks, or you might be putting all those ingredients in that crockpot. So just really trying to document

every contact that I make, and I try to size them up a little bit too on the scope of their fleet or the level of effort required.

I report back a measurement of just the total number of inquiries and projects that I have kind of going into the funnel and then slowly, I'm starting to see project completions, very small handful thus far.

Jeffrey Beeson

So it sounds like into my next question around metrics, and you kind of mentioned this, but is it around number of touch points or what kind of individual metrics might be necessary?

Julie Dietrich

The touch points you know; I really would love to get a CRM on. I'm sorry if that makes you cringe, I do think I need a tool in order to be able to more effectively manage the touch points and also just my follow up.

I get a lot of people that have inquired and then have come back. "Hey, you talked to so-and-so, where are they at now?" And I'm like: you know, I really should have followed up. I haven't done a lot of good work with putting a strategy around measuring those touch points.

Jeffrey Beeson

Then on some of the items, you mentioned some ride and drives and case studies and maybe some other digital materials. How do you measure success of those things?

Julie Dietrich

Yeah. So, at every event, we do try to quantify the number of touch points. How many people did we reach? I think right now our goal with some of these things is just to do the education. So, a successful event probably is a percentage of people that I touched versus the total population that was there.

Like for this most recent sustainability conference, we knew we had about 250 people there and I estimated we probably had facilitated 75. That's a pretty decent percentage of the total population and that's kind of the test. But I'm not measuring how many of those people are going to go out and create a policy around electric transportation or buy one themselves.

Jeffrey Beeson

OK. And then how do you report, and how often, do you report on your performance and measurement?

Julie Dietrich

Yeah. So, we do have an energy solutions dashboard. So, we do report monthly activity.

Jeffrey Beeson

So monthly, you're reporting results.

Julie Dietrich

Yeah. And how I measure success is the total number of inquiries, total number of active projects, and total number of completed projects.

Jeffrey Beeson

Last question here is how successful do you feel like the utility has been at this point in growing EV adoption if you rated it on a 1 to 10 scale?

Julie Dietrich

I would actually rate us really high. We recently participated in it ESOURCE and they have a leadership meeting ahead of the forum for different focus areas and they had an electric transportation focus group and even though we were in the Midwest, it's pretty progressive for a utility in our region and of our size to have a dedicated electrification team.

I think that stems from our early participation in that clean charge network. So just getting involved in that has positioned us to, you know, we're not ahead of any California company, but as far as peers and our region I think we're definitely better than average.

Jeffrey Beeson

Ok, thanks. So that's all my questions. Is there anything else that you can think of that came to mind that I didn't ask or might be helpful in growing adoption?

Julie Dietrich

No, not that I can think of.

Robin McAlester – Interview

Jeffrey Beeson

The first section here is really just around any barriers, stereotypes or misunderstandings that you're seeing or hearing. So, first question to kick us off is, what kind of external factors do you think have contributed positively towards EV adoption in your area?

Robin McAlester

I think the growing desire to do better for the environment has really been a main driver in this. Next generation is coming up and they're much more environmentally conscious than generations before them. So, I think that has been a positive.

The technology growing so rapidly and the cost coming down is another factor that's really going to make the math work for everyone to get into an EV. You know, gas prices being what they are, the cost of a gas or traditional vehicle is closer to an EV than people think. Financial and environmental benefits happen simultaneously, so this is like the stars are lined up on this one.

Jeffrey Beeson

Yeah, that's a good point. So, on the flip side, what kind of barriers are hurting adoption right now?

Robin McAlester

I think, in my opinion, a couple of major ones. Charging infrastructure for one. We just don't feel comfortable about buying an EV with the uncertainty of being stranded out there, that just makes people really nervous. Nor do most Americans have money to just have a car that they buzz around town in and then another vehicle if they wanted to take, you know, out for a couple 100 miles.

The other major factor, at least in in our area, is the make and model availability. You know, we live in pick-up truck land. The Ford F-150 and Chevy coming out with theirs next year will be a game changer. But we really need to have options that fit all lifestyles, from minivans to four-wheel drives to SUV's. We've just got to be able to meet that demand. And I think between those two is really what's hindered adoption.

Jeffrey Beeson

Great info. Are there any negative stereotypes about EV's or EV drivers that you've seen that could be hurting?

Robin McAlester

You know, I don't know if it could be hurting, but if I were just to stop and answer that part of that question and say, what are some perhaps negative stereotypes, I think it's that you have to be a "tree-hugger" to care about driving an electric vehicle.

Although similar to one of the first questions, I think that has helped with some of the early adopters. But just because you drive an EV doesn't mean that you're chaining yourself to a tree. It's that kind of negative connotation of who drives an EV, or that you have to be rich – like with Tesla's six-figure price tag. Everyone who wants an EV can't afford a six-figure vehicle to drive and pricing of the vehicles are much lower than what a lot of people anticipate.

Jeffrey Beeson

And do you feel like, as the utility, you have to work to help overcome any of those stereotypes or do you feel like that's not really your role?

Robin McAlester

No, I actually do see it as my role, especially since our utility really started putting in some charging infrastructures and launching a program back in 2015, 2016 – that was incredibly early. The car dealerships, their sales teams didn't understand them or know them. The availability of vehicles was difficult, and now with the supply chain issues, it's hard to get one, but there was just not at a place that customers could one-stop-shop to understand how EV's would impact them. Is a gas vehicle going to be more expensive than an EV? Will you understand your electric bill and understand what that's going to do to your residential bill? What kind of savings might there be?

So, I feel like, you know, as an electric utility, we are seeing customers look at us as an end-all-be-all. You know we're not car salesman, but if we can help our customers understand better and keep more money in their pocket than and that's what we do.

Jeffrey Beeson

So going a little deeper into that, are there misunderstandings around the total cost of ownership you mentioned?

Robin McAlester

I think there is, and it's hard and it's complex because it's technology that we're not comfortable with yet. There are so many things that someone looking at buying a new car, which next to their house is one of their largest purchases that they make. Imagine yourself going down to the dealership, the sales team, you know, they make money off commission and you're going to ask ten questions to every one question that you might for a regular gas vehicle. So, it's going to take the sales team longer to sell you a vehicle.

So, are they going to spend that kind of time? Customer's will need to do the research before they get there.

Jeffrey Beeson

Do you think there's any misunderstanding about how charging works and how long it takes? Do you get questions around that often?

Robin McAlester

We do. That's probably the most asked question that I get: how long will it take to charge my car? And I would start with: well, it depends. You can almost see the customer's dismay – they just want to know that it takes 10 minutes or 15 minutes. But sadly, it depends on many factors. It depends on the state of charge of your battery. One thing I find that customers don't understand, is it's two numbers that you're looking at. The kilowatts of your charger and how many kilowatts your car can take. So, they think they're going to take their Chevy Bolt and run up to a Electrify America charging station that, you know, can crank out 350 kW, that they should charge much, much faster. But the reality is Chevy Bolt only charges at 50 kW. So, it doesn't matter if you plug into a 350 or 150. So it's the smaller of the two numbers and I don't know how many times customers were just shocked by that. They didn't even know that that was a question they should ask when they're considering purchasing their EV.

Jeffrey Beeson

That's a great example. Is there any other kind of barriers or stereotypes or misunderstanding that you've found that we haven't mentioned yet?

Robin McAlester

No, I don't think so. I think we covered.

Jeffrey Beeson

Right, well, now I want to move to the next section, which is really around audience and segmentation and understanding if you use any audience development or segmentation as you're thinking about promoting and marketing. First one is just the basic question. Are you using any kind of segmentation today in your marketing and outreach? And if so, kind of what are those audiences?

Robin McAlester

Yeah, for us it's pretty cut and dry – we have two different paths with our programs. We have a residential program and then we have some commercial programs, and what I mean by commercial is our customers who have a fleet that they are converting or maybe have like a large workforce, you know hundreds of employees who want to charge while

they're at work. So, our commercial programs target them directly and do look at size of the business.

When I think about our public programs and meaning our public charging programs where companies can host, and we're really looking at those high traffic areas, the amenities that might be around a certain targeted area.

Those are pretty much the main segments, and of course schools. We have a program very specific to them.

Jeffrey Beeson

Do you take a different approach to those groups in your outreach?

Robin McAlester

We talk with the transportation director at a school, or a Superintendent or board of directors. One of our goals for next summer, very specific to that group, is to host a half day ride and drive event for school buses so they can kick the tires, if you will, and look under the hood. Maybe talk to other schools that have made that transition. So really that direct one-on-one business-to-business kind of communication.

Where our residential approach would be more targeting zip codes or IP addresses in our area that are likely looking for an electric vehicle. And our business customers, like I said, it's more of the size that we look for.

Jeffrey Beeson

OK. And then the residential side, do you just treat all residential as one big group or do you do any kind of slicing that segment?

Robin McAlester

You know, we do not. I think early in the days, like I answered before why people think you must be rich if you drive an EV – thinking about Tesla, I think there was a time in this early adoption that it was the more higher income folks that were purchasing EV's. But now we're seeing that with expanded makes and models, you know Chevy Bolt and Nissan Leaf, you can be in any bracket.

We've got customers in their eighties that are driving an EV and those in college or high school that drive an EV. We actually had a high school student petition us, and it was one of his school projects to get a charging station at his high school. So, we don't see really any of those age barriers and we think the income barriers are really fallings as well.

Jeffrey Beeson

OK, great. Well, speaking of where you are in adoption, I want to show an image. I'm going to share a screen real fast, and this is the product adoption curve. Are you familiar kind of graphic?

Robin McAlester
Oh yeah, yeah.

Jeffrey Beeson
OK. So, you know what most people call the product adoption curve. Do you use this kind of curve at all in any of your marketing when you're thinking about who to market to and when?

Robin McAlester
You know. No, I don't. I mean, we know that exists, so maybe subconsciously we do. But I can see that, as of late, majority of adopters are more conservative. But our marketing is just geared toward it as a whole.

Jeffrey Beeson
Sure. Well, if you had to kind of put a pin on this chart of where you think your customer base might be?

Robin McAlester
Certainly in the green on the visionary. If I could pick the white line between the visionaries and the pragmatist, that's probably where we sit right now, because there's some people that I know would have never thought they were looking and could be considering an EV and they've just ordered themselves a Tesla. So, it's pretty cool to see that and I feel like we're getting into that early majority, but we're still very early into it.

Jeffrey Beeson
Would you think you need to change your approach at all as you get into that early majority or is what you're doing today working? Do you think that would work for the future as well?

Robin McAlester
I do. Which is not typical, but with utilities we know we have a certain audience, our customers that our programs are for and to segment them out. We don't have millions that we're trying to reach. We're talking 100,000 that we're really trying to engage.

Now, do we have different messaging? Yes, but that would be messaging around the topic because if you are, you know, concerned about the environmental impacts, I have a message for you. But did I mail that to the 80-year-old and the 20 year old? Yes.

Jeffrey Beeson

Yeah, that makes sense. And that moves me right into the next section, which is around messaging. So, I'd love to know what kind of message, themes or topics do you think work best?

Robin McAlester

I think it's really two: and that's environmental, you know, that EV's are cleaner for the environment and money. That there's a cost savings. If I were going to sum-up our marketing, it's going to fit in one of those two buckets.

Whether you're a residential customer or you're a commercial and industrial customer, you're either going to have a foot in one or both of those categories, whether it's a corporate mandate to reduce your CO2, a vehicle is the easiest way to get that done if you needed to do something quickly.

And who or what business out there doesn't want to save money. So I think it's going to be one of those two messages that gets their attention.

Jeffrey Beeson

And did those two changes over time or have they been pretty constant?

Robin McAlester

Yep, they've been very constant with us.

Jeffrey Beeson

OK. And do you see them staying constant as you move to that early majority, as well?

Robin McAlester

Yeah, I do.

Jeffrey Beeson

Great. And then I think you mentioned, you're not necessarily today hitting up one group with money messages and another group with sustainability messages, you're hitting kind of everyone with both and you're using both of those kind of themes within most of your marketing or outreach tactics?

Robin McAlester
That's correct.

Jeffrey Beeson
OK. Then you mentioned a few barriers at the beginning of this call. Do you ever try to address those within the messaging as well or do you stick to those motivating items?

Robin McAlester
We stick to those motivating items, but we also help them feel more confident in their beliefs. So, if you were one that was just all about the money you were going to save, you know, \$100 a month on fuel and it's completely worth it to you and you're all bought-in. The environmental benefits aren't a concern for you, but if I can talk to you about how you are making an impact on air quality, which then affects, you know, healthier air to breathe – this all just further validates your decision to go electric.

It may be something that you had never even considered if you are solidly in one of those two camps and to marry those camps together, if you're on the fence, our messaging explaining one of those two areas may help you make that decision.

Jeffrey Beeson
Yeah. Great. Switching now to creative, what types of creative elements or themes do you use within the design of your outreach?

Robin McAlester
When I'm directing to residential customers, you're going to see families. Example: mom helping her son plug in the EV as they carry in groceries. You're going to see how plugging it in can be just another thing that you do, just one of your daily routines. Do you know what I mean? Like, that's just part of your home life routine. For commercial customers, you may see an image of, you know, several white cars, because most fleet vehicles are white, lined up in a row charging stations to really kind of get an image that can connect you to that person who makes those decisions.

And the reason why I said mom and son is because we know females tend to make the decisions in a household. And for commercial, your fleet guys are the ones that are going to make that decision. So, what kind of image can I do that's going to get your attention with all the other noise that you have out there and it's going to be an image that you connect with.

We do use graphics too, especially when we're trying to explain a pretty complicated matter. So, we've created some graphics that help describe that the nuances of how power

is delivered to your meter and your charger in the garage to show connection in a broader spectrum and how it's linked to the greater network.

Jeffrey Beeson

Yeah, that's great. So, it sounds like when you're picking creative, maybe correct me here if I'm wrong, you're picking creative based on the audience and then you're adding a message versus picking a creative based on the message. That's good to know. Alright. Is there anything within messaging or creative that we haven't covered that you think might be interesting or that you found in your work?

Robin McAlester

No, except that because this is new to everybody, it's ever-changing, so we have frequently asked questions as we see that customers are really confused about one particular area then we'll dive into that to help give some clarity. A little different than maybe marketing, but it's about that message and really watching how customers respond to it.

Jeffrey Beeson

Right. OK. Well, the next section now is really around tactics, and for clarification when I say tactics it's just really understanding anything that that you're doing, whether it's a marketing piece, a flyer, a in-person one-on-one, so kind of trying to identify what kind of tactics you think work best. The first question is really around that and maybe we'll start with the residential side, what types of marketing or outreach or education tactics do you think are most successful?

Robin McAlester

Yeah. On the residential side you're going to find that the end result, whether it's a mass mailing or an IP address targeted message, at the end of the day, it ends with us talking to the customer.

Everybody has very specific questions to their looking for answers to, whether that is a school who is on a certain rate with their building, or their bus barn isn't connected, or their fleet is out of town versus in town. There are so many specific questions you can provide them with some broad messaging and education, but again, at the end of the day, they have very specific questions themselves.

As we're bringing customers along through that journey from, you know, the hook and getting them interested all the way into signing up for a program, that one-on-one conversation really connects us with our customers, but it makes our customers feel better and more confident, not only in their purchase, but in in making that decision.

Jeffrey Beeson

And so the mass marketing tactics that you might be doing, that's kind of the direct mail or are you doing any digital?

Robin McAlester

We are. Yeah, we found that these customers are going to be tech savvy for the most part, so we do a lot of digital whether through social media marketing or, like I said, some targeted ads based on their location. Really focusing on that digital footprint for all I would say, except the schools because we just work one-on-one with them, but everybody else, even with our commercial industrial customers we target them through digital advertising as well.

Jeffrey Beeson

OK, have you tried any incentives at all like a coupon or discount or rebate on anything?

Robin McAlester

Yeah, our programs do have a piece to that. It's kind of a turnkey option where we've installed charging stations and they get deeply discounted off-peak charging. Certainly to help them incentivize and feel better about the impacts to the electric bill

Jeffrey Beeson

OK. And have you done anything to help expose a customer to an actual EV or an EV driver or you know, something that's tangible?

Robin McAlester

Yeah, we have absolutely. Meeting them out there in the field, letting them look at even our demo vehicles. But as far as hosting ride and drive events for the general public, we have not. Just coming out of COVID, it's something that we've talked about doing, but yeah, nothing to date yet.

Jeffrey Beeson

OK. Are there any tactics that you tried that you thought maybe weren't successful or that maybe you wouldn't do in the future?

Robin McAlester

You know, I think bill inserts are one thing that's going by the wayside, especially again when you look at this market, they likely pay their bill online and just don't get a physical utility bill. So, we don't focus any of our efforts on those kind of paper mailing pieces,

really just more of that that digital. Now we have materials that once we connect with you and we meet with you that we can leave some information, but we don't blanket mail them anymore.

Jeffrey Beeson

Then do you change up your tactics at all based on how adoption might change over time? Or do you think these same ones you mentioned will continue to work for you?

Robin McAlester

There's no plans to change it up, at least in the foreseeable future. Who knows what might be out there later as we get more savvy with this technology, but for now, that's going to be our game plan?

Jeffrey Beeson

OK, great. And then that's next section is about metrics. Interested to know if you're measuring any of your EV outreach success and how you might be doing that?

Robin McAlester

Yeah, absolutely. We measure the basic things that I think everybody does as far as website hits, where are they coming to us from, what page they spend the most time on, most frequently viewed, and certainly try to drive people there. So if we run a campaign and see our website isn't getting enough attention, we might alter our messaging digitally to target people. So we certainly utilize our website as the tool we tend to drive them to, as that's where most of our analytics come from.

Jeffrey Beeson

And then do you kind of measure different messages or tactics separately?

Robin McAlester

Yeah, at a high level, we certainly look at those kinds of analytics that are able to point back to a campaign that that drove activity. We do that for each one of the messages that we have, or the reverse being we ran this and haven't seen anything happen so what's wrong with it? Is it not getting to the right people, is it not engaging enough for people to care? And that's OK if that's the answer, we just need to know so we can make corrective action.

Jeffrey Beeson

If you had to rate your utility's success today and growing the adoption rate, where would you put yourself on a scale like 1 to 10?

Robin McAlester

Gosh, that's a hard question to answer because we just started, even though I mentioned we started back in 2015, the program got delayed and it's just now picked back up again. But if I were to rank it, I think the utility has been critical in the adoption that's happened to date and we'll be watching to see more.

Jeffrey Beeson

Do you think your role at the utility within EV adoption will change in the next two to five years? If so, will it be more or less active?

Taylor Tuomie - Interview

Jeffrey Beeson

So the first question is around kind of barriers and stereotypes, and any misunderstanding. So, interested in any kind of external factors out there that are going on that you think are helping contribute to EV adoption?

Tuomie, Taylor M

External factors helping contribute to adoption. Yeah.

Yeah, I'd say. Just generally speaking, some of the recent discussions around climate change and Uh, recent reporting that's been released about it is helping. A potentially both helping and causing confusion as the Inflation Reduction Act and legislation involved with that. In a short term basis, it seems to have caused quite a bit of confusion about which vehicles are eligible and in talking with some of the dealerships that we work with anecdotally, we know that some customers who've had vehicles on order have cancelled their orders.

In the long term, I think it's a great thing and will increase adoption, but right now I think that's probably caused a little bit of confusion. Other external factors. Certainly, gas prices fluctuating and increases in gas prices over the past few months, I think is helped adoption of electric vehicles. I know all that. We've heard from customers who have purchased or have gotten closer to making that decision. In part because of high gas prices.

Jeffrey Beeson

Right. So then on the flip side, those are great, great answers. On the flip side, any kind of barriers or factors external that are kind of hurting adoption?

Tuomie, Taylor M

Yep, Yep. I think in our research with our customers, we've heard that range anxiety is still one of the bigger factors. So, uncertainty about public charging stations and. Umm, what comes up a lot is like, what happens if my EV completely runs out of juice, and I'm stranded?

Jeffrey Beeson

Yeah. Have you seen that same constant since your time? Like it's the same? Or have people been less or more?

Tuomie, Taylor M

I think once you have the ability to explain, or at least at least have a discussion about how that shouldn't be too much of a concern for most drivers.

Their perceptions can shift, but yeah, it has remained constant in the year and a half that I've been here. That range anxiety is still one of the top concerns.

Umm. And so sorry that question. What has hindered adoption of? I'd also say cost. EV's, being a higher upfront cost. Is still, I'd say the top reason that we hear that people aren't purchasing an electric vehicle.

Jeffrey Beeson

Right. And then kind of thinking about stereotypes have, do you feel like there's any stereotypes around the out there either about EV's or EV drivers that that could be hurting or helping Evie adoptions?

Tuomie, Taylor M

Yeah, yeah. That we've heard from customers that electric vehicles are for wealthy white men. Also in our service territories, Colorado and Minnesota are two biggest. Biggest service territories where we serve the most customers. Uh, I think regionally some of the some of the topics that we hear a lot about is like, what will happen to my battery in extreme cold in Minnesota?

We've also heard from people in Colorado saying, like I need 4-wheel drive to go up into the mountains for camping or whatever. My outdoor activities are. Again, generally speaking, like there are certainly vehicle similar to ice vehicles, there is just such a wide array of options out there and you can certainly find one that would fit your needs. If you're looking but some of the messaging around them is still. Some of the negative messaging around them is still like EV's aren't capable or aren't great for colder weather, or colder climates, or going offroad, etcetera.

Jeffrey Beeson

So thinking of some of those negative stereotypes or some of the barriers that you just mentioned, do you feel like you have a need to overcome those types of things in about EV's or EV drivers, or do you like? Well, that's not really our role. Our role is something else.

Tuomie, Taylor M

Yeah. So, Excel Energy has a goal of powering one out of every five vehicles in our service territories by 2030. So, I would certainly say that it's part of our goal of getting

customers educated and up to speed on the technology, but I'd also say that we aren't alone in providing that education right like the OEM's manufacturers of these vehicles are doing plenty of work to educate people on the specific features and benefits of their own vehicles really are messaging is comes down to like the total cost of ownership over time.

If electric vehicle can save you money, especially if you're charging with one of our charging programs that you're either on an off peak rate or receiving a bill. Credit back to you annually. And then two that it's better for better for the environment. So, I do think that it is part of our efforts to educate customers on really like just general Electric vehicle awareness and then we want to provide the information and allow for customers to be able to find the factual information that they need to make an informed buying decision.

We're never sneering somebody in like the direction of any one vehicle, though, right? So, we can get you to the Volkswagen dealership. We can get you information on the VW ID for Umm. But we're never pushing you in any one direction. Or at least we're not trying to.

Jeffrey Beeson

OK. And then you mentioned some of these items, but do you feel like there's any kind of misunderstandings about EV charging or cost of charging compared to gas? Today, or is that worse, better than before?

Tuomie, Taylor M

I'd say it's still probably about the same in that it's pretty unclear. To people who aren't electric vehicle owners. I think there's a pretty good, yeah, the charging part of the equation. Then the overall costs involved with it with it. In part because it really depends on the charging station that you're going to. And that's in part why we put so much effort into attempting to educate our customers on home charging because it is more reliable. Your energy cost fluctuates a whole lot less than the dollar of a or the price of a gallon of gasoline.

Umm, so I would say that for non-EV owners. that is definitely a challenge. They might read an article where somebody's saying that they paid. I don't know the equivalent of \$4 per E gallon or something like that at the public charging station when in 80% of the cases, if you're charging at your own home, you're Dollar per gallon equivalent is like a dollar.

Jeffrey Beeson

OK. And then on the public versus home charging, is the confusions about the same as they're just as confused about home versus public or do customers get one better than the other?

Tuomie, Taylor M

Umm, I think. That could be wrong on this, but my perception is that non EV owners understand the concept of public charging better than they do home charging. In part because I think they see the public charging stations either that grocery stores or mall parking lot or something along those lines or a travel rest stop or something.

And it's more of a challenge to envision what charging at home might look like when in reality is that you can plug in your electric vehicle with a level 1 charger in any standard outlet, and so most garages in America are equipped to be able to charge your electric vehicle.

Tuomie, Taylor M

Yeah, and that's definitely. Definitely something that's built into a lot of our messaging and certainly.

When we're out and about at events. A lot of our event work is letting people be hands on with like mock chargers. Display for you here so I can show you sort of what our usual event activation looks. So, UM at both like larger scale events and then smaller scale events we bring Like a mock charger with to our activations and normally they're plugged into. Like, we'll plug this much charger into the vehicle just to like help people envision what a charger actually looks like that would be installed and, in their home, or in their garage.

I think there's this like a I don't know. For some people, it's tough to like. What's the size of this thing that I'm planning on putting in my EV it the same size as one of the public charging stations that I see and? Uh, I don't know the Cub Foods parking lot or the mall parking lot? Or is it like the size of a microwave? Is it a toaster? Is it going right down my wall? And so that's a helpful visual for people who really don't know any better.

Jeffrey Beeson

Well, great. OK, well, that's kind of my barriers and kind of understanding what people's thoughts are in your mind. I want to switch over to audience and think about segmentation and audience. And just if you guys are doing anything and, in this space, OK, if you're not so kind of the first question is are you using any segmentation in your marketing and outreach? Are you kind of grouping customers in any certain way or it's just kind of all residential all business?

Tuomie, Taylor M

Yes, yes, we are. Segmenting our messaging and I'm pulling up a probably should have had this. Documentary pulled up, but we definitely are segmenting our customers into

different groups that we know to be more prone to Uh, be electric vehicle owners or more receptive to some of our messaging.

Jeffrey Beeson

And how are you determining that or thinking how?

Tuomie, Taylor M

Yeah. UM, it's a mix of a few different things. So as a company we have these customer segments that we've created. And then on an annual basis conduct some pretty in-depth surveying and Uh focus groups. With our Consumer insights group within the company. Umm. And this will be a sampling of both our overall customer base at Excel Energy and then drilling down into customers who are enrolled in some of our electric vehicle programs are charging programs.

Jeffrey Beeson

Have you ever look at if there are there any other programs that the utility offers that are good matches for EV segments?

Tuomie, Taylor M

Uh, yes, yes, we've done less work. Must work on that, and that's a priority for us in the near future is to start thinking more of our Energy efficiency programs and Renewable energy programs more as packages that can sort of be the can. Pick and choose or like a la carte menu, right? Yeah, exactly.

Jeffrey Beeson

Underline that. Nice. OK. Yeah, that'd be cool. And so, it's a lot of times when you're doing the segmenting, you know, it's a little more work. Have you found that it's it pays off to kind of think about those different audiences at this point and adoption? So is it worth the squeeze?

Tuomie, Taylor M

It is a lot of work. It is a lot of work. I don't know. I don't know that I could answer whether or not it's been if the juice is worth the squeeze. Ah, the way that we've used our segmentation. I think in the most thoughtful way is with our e-mail campaigns, and that's in part because of how many e-mail messages get sent out to our customers for other programs, right? So, like EV programs aside. Working with our channel managers for the e-mail channel. That is a concern of theirs that we don't wanna burnout our customers by promoting. And so, we do segment our e-mail campaigns pretty heavily. And their messaging behind it.

We might drill down, double click and look at a segment like our Starter segment, which is younger couples. It's over 1/4 of our total customer base, but their tech savvy, they're affluent. Uh tend to live in, I don't know, major metro areas or in the suburbs surrounding it. And they tend to have better open rates at least UM, our e-mail channel has been good in the sense of being able to drive awareness to our programs. Umm, less effective in getting people to convert.

Jeffrey Beeson

In how are you measuring conversion on that? Since you're not selling the cars, how do you think of it there?

Tuomie, Taylor M

The gold standard is an enrollment in our Electric vehicle charging programs.

Jeffrey Beeson

OK. But it maybe it's a lag, could be a lag between purchase and then enrollment.

Tuomie, Taylor M

Yep. And that's the that's the one of the trickiest things that as a marketer right now to.

It's our customer said as our customer set right being a regulated utility. We have six and a half million or so customers. That won't change. People will move in and out of our service territory, but really our customer set is dictated by the public utility commissions, right?

We're trying to answer the question of like, how do we find out who in our customer base already owns electric vehicles? Right. And there's some you talk about some pretty clever things that can be done with smart meters and load disaggregation. That's still a ways out. And so right now we are pretty reliant on some of our segmentation and then retargeting efforts for social media. As long as that's an option, which I think there is, talks of constantly talks of that changing.

Jeffrey Beeson

OK, OK. The next thing I want to show you a little diagram in. It's likely something you've seen before, but if not it's that's OK too. All right, that pop up for you. So, this is the product adoption curve. So, marketer you probably seen it maybe in your current or past life.

Tuomie, Taylor M
Yeah, we live in this.

Jeffrey Beeson

Yeah. So wanna ask if you're using this at all in your EV kind of thinking about where your territory is and EV adoption and thinking about that for this product, you're EV kind of product line?

Tuomie, Taylor M

Yeah. So, on a portfolio level? So, all of our electric vehicle products are relatively new. I should back up too, so the scope of my work. Is in our residential electric vehicle programs, right and a counterpart who is a marketer for our commercial programs and our fleet programs. All of this is actually relatively new for Excel energy within the last three years or so is probably when we rolled out our first electric vehicle pilot programs. And so, I'd say we're still, we're still targeting early adopters. Especially with some of our newer programs. One of those being optimized your charge, which is a charging optimization program.

I've heard some utilities call what we what is our electric vehicle charger rental? Service charging as a service. Which is? Uh, I like that term. We're not using it, but it is pretty much just that like we rent A level 2 charger from us. Uh, an electrician stops out to your house to install it. And then we'll maintain it for the life of the charger. Yeah, I am. You rent it and your rental fee goes on your electricity bill every month. Whatever you're charging, costs are go on your electricity bill. Them too. And if you're depending on the service territory that you're in, your rate might be reduced. We're very much still, I'd say in the green Ohh area where as far as our conversions go, I think we're messaging. Right now.

Our marketing messages and our advertising maybe aimed more at the early majority and we're thinking about how we start engaging the late majority, I'd say.

Jeffrey Beeson

OK. So would you. So where would you put a guess on this chart, you're EV adoption rate not maybe your product enrollment, but just like EV adoption rate throughout your territories? Would if you had, like, pinpoint that somewhere on this chart, where would you say you are today?

Tuomie, Taylor M

EV adoption rate. So overall electric vehicles in the markets that we operate in. I'd say we're still still in the blue.

Jeffrey Beeson

In the dark, in the dark blue there OK that innovators.

Tuomie, Taylor M

It's dark blue. Yeah. Sorry. Yeah. Innovators. I want to say that I had recently heard. So we're still in like the 10s of thousands in Minnesota for electric vehicle adoption. So, I wanna say around 30,000 last that I'd seen some of our Department of Transportation. Umm, registration data and then Denver or sorry, Colorado is probably twice as far along.

Jeffrey Beeson

So maybe they're closer to the green or in the green somewhere in between there. But then you would you. So then if I heard you right, you'd say, but you're marketing messages, tactics are probably more for that light blue. And you're thinking about the yellow or the late majority.

Tuomie, Taylor M

Yeah, I might even back that up to. Our marketing messages still being targeted at some of the visionaries, because now that I think of it, we are still pretty. Early on in the overall adoption of electric vehicles in our service territories.

Jeffrey Beeson

Do you do anything different? Based on like where you are today where you wanna go. Either message or tactic, or is it about the same?

Tuomie, Taylor M

Yeah, I would say that some of our mass media tactics, so like TV commercials.

Being the primary one that I'm thinking of is likely targeted at that larger chunk of the bell curve. Right. So, like some of our ad campaigns that are on both well on regional television and definitely target at a larger chunk of that Bell curve.

Jeffrey Beeson

When you say that because it's a mass tactic or is the message within that commercial for that audience or both?

Tuomie, Taylor M

Both. Both. I'd say it doesn't, uh. It's a softer message than. To softer message to the recipients of it. So, it's not as specific as far as like your cost savings or environmental? Benefits, I'd say so it's more like alluding to those or Umm mentioning them. But really in like in awareness type campaign. I'd really say that that's targeted at like an awareness level rather than consideration.

Jeffrey Beeson

OK. And it was there anything that maybe the utility did in the past if you if you know I know you're somewhat newer but that really focused on those innovators that worked well for.

Tuomie, Taylor M

Yeah, pilot programs I'd say and really targeted really targeted campaigns. So, one is probably the best example that I could think of is we have a program in Colorado called. Charging perks. Sorry. The name was slipping my mind. It's a smaller pilot program I'd say about 3 or 400 customers are enrolled in it. Umm. And this is a program where with a piece of software sitting on the vehicle, we're able to work with the customer to determine a time that they need their vehicle charged by. So, say for instance Jeff, you need your vehicle charged by 8:00 o'clock in the morning for your commute you don't care when that charging happens. So, like you could come home at 5:00 o'clock at in the at night, plug your vehicle and in your garage, you don't care when that happens, you just need your vehicle charge by 8:00 o'clock in the morning the next day. The software sitting on your vehicle and our systems are able to determine when the load is optimal on the grid for us to charge that vehicle. So typically, it's in the overnight hours when wind power is coming online and people aren't firing up their air conditioning units and washers and dryers and whatnot.

Uh, we reached a lot of those tech enthusiast innovators through very targeted social media messaging. Part of this group allot of this group ended up being Tesla owners. I think that was pretty easy to be able to target using Facebook advertising. And we had some pretty successful social media campaigns for that program.

Jeffrey Beeson

So, so kind of the small tailored messaging with kind of maybe new programs or test programs that kind of resonated with that kind of early adopter group?

Tuomie, Taylor M

Yep.

Jeffrey Beeson

Great. Well, that's, that's perfect. That's been kind of audience section next to a few questions, just around messaging and creative, so interested in what you think motivates a customer to purchase an EV?

Tuomie, Taylor M

What motivates a customer to purchase an EV? Total cost of ownership overtime is normally a message that we lead with Uh. From our customer insights surveys that we do annually, we've found that that is an effective message and important factor for the electric vehicle owners that are in our customer base.

Environmental Impact is, I think the secondary reason that somebody is likely to purchase an electric vehicle. My hunch? Is that that messaging may be less important to that larger chunk of the adoption curve. So even though we're, we're still focusing on that early majority, I think was the Bell curve there. I feel as if the total cost of ownership over time that would be one of the reasons that people would purchase an electric vehicle.

There's also these I wouldn't say that they're true outliers in the sense because it's still important. I don't know group of electric vehicle owners and purchasers, but they're interested in performance and technology, right? Like there's, there's certainly the set of customers who really like their Teslas because they're fast and fun to drive and their great technology product.

Tuomie, Taylor M

There's also people who are extremely excited about the Ford F-150 Lightning for many different reasons, it's a nice-looking truck. And finally, there is an electric truck that can stand up to I know that internal combustion engine trucks that are available.

Jeffrey Beeson

Yeah. OK. And then would, would you say you're using those motivations within your marketing tactics or items?

Tuomie, Taylor M

Yes, certainly, yeah. Certainly, total cost of ownership that's woven into a lot of our different messaging. That gets included in a lot of our search engine marketing, which is a heavy. Tactic that's on throughout the course of the year for us that gets included in many of our emails that do get sent out. Environmental benefits or impact less so I would say and in part because it's tricky to nail down as a utility to nail down the exact impact, right? Like you can estimate it pretty, pretty close and I think that's where we're at right

now for a long time are messaging around environmental impact was that driving electric is 2/3 cleaner than driving an internal combustion engine vehicle.

Jeffrey Beeson

And do you feel like that message worked or resonated or too high level?

Tuomie, Taylor M

I do think it. I do think it resonated. Where we're at right now is that we no longer use that messaging because that was on a national scale. In our service territories we the best estimation that we have is that it's like 58% cleaner than in internal combustion engine and that's using our own energy production.

Yeah, numbers and then also estimations based on the different electric vehicle models that are out there and efficiencies there.

Jeffrey Beeson

So then, are there any other messaging themes that you can think of use account like cost or cost of ownership and then maybe environmental. You cannot use that off and on any other big themes in your messaging that you've used or just those?

Tuomie, Taylor M

Let's come back to that question. I think I could probably I could probably think of some more, but those are the two big ones.

Jeffrey Beeson

And then earlier, we kind of talked about the different audiences or segments that you've focused on, especially maybe an e-mail where you're really segmenting. Are you connecting any different messaging with each segment or are you just using those cost and environmental with everyone?

Tuomie, Taylor M

Nope. There certainly segments that the cost of ownership resonates more with and then environmental messaging is more important for and within our own Uh customer personas that we have, I'd say that the younger audience the environmental factors generally speaking, are more important to them.

Jeffrey Beeson

And then you we talked about some of the barriers to entry before. Are you try to address

any of those in the messaging and I guess cost is one of them? So, sounds like cost for sure. Anything else?

Tuomie, Taylor M

Yeah, I think I'd also add to the barriers as availability of so supply chain is certainly uh. And has been a hurdle for adoption.

Jeffrey Beeson

So do you try to do you address that at all with the customers or you leave it alone?

Tuomie, Taylor M

Yeah, we do. We do address it. So, one way that we address that is we've developed this electric vehicle dealership network within our service territories and that's grown to about 60 dealers over the eight states that we operate in, primarily again in Minnesota and Colorado that we have majority of them. So, I'd say probably 25 in Colorado, 25 in Minnesota.

And then sprinkled throughout Wisconsin. But I want to say there are some dealerships coming on in New Mexico as well. Those dealerships are trained to the point that they can point customers in the direction of our charging programs.

If somebody is asking about Uh, how they charge their vehicle once they purchase it? These dealerships we've also identified as ones. That are active actively, you working and making sure that they have electric vehicles on hand or at least on order we know that that has been a challenge in some of our out state. Areas that we operate in in the more rural areas is that dealerships just don't carry electric vehicles.

Jeffrey Beeson

OK. And then moving a little bit to creative. How do you think about creative? What do you use in your creative that you found being successful on so? That could be the do you use stock image you use people, do you use the actual cars? Use chargers, graphics, illustration. What have you found anything that kind of works best?

Tuomie, Taylor M

Yeah, we don't do a ton of testing on imagery we do some message testing certainly imagery. For a lot of our electric vehicle creative does include people, so if there are people plugging in an electric vehicle or a charger into an electric vehicle, that's certainly something that we've used before. We have some imagery we like to incorporate, not necessarily like nature scenes, but a lot of like trees and tie electric vehicles to the environmental benefits or the reduction of impact on the environment.

Jeffrey Beeson

When you're showing the cars, do you show them like moving out in that environment or are they always charging? I mean, how much do you focus on the actual plug and the charging versus people or cars?

Tuomie, Taylor M

Uh, I'd say it's probably 75% moving vehicles and 25% stationary, people plugging in a charger or in their garage?

Jeffrey Beeson

OK. And then it's the message always kind of related to that creative or you just have, you know car out drive in and you might have you know one of five different messages you could put there?

Tuomie, Taylor M

Uh, typically it's related to the creative. Yeah.

Jeffrey Beeson

OK. And then based on those like segments that we talked about earlier, are you using different creative for the different segment groups like in your e-mail campaigns or?

Tuomie, Taylor M

Yep, for sure for sure. Yeah, so Umm I had one of the segmentation documents pulled up and that does say what messages and creative resonate with them. So like for example for a customer's segment that we've called the streamers and these are younger customers who are less financially independent, sort of just starting out on their own. I think we probably think a lot of like fresh out of college. They are more perceptive to some of the cost specific messaging. But then when we look at a larger segment of our customers, which would be Starters. That's the segment that I was looking for. Starters are the younger couples who have often are new homeowners purchased their first home. Have more buying power and so some of the environmental messaging might be more of a fit for them.

Jeffrey Beeson

OK, wait. Well, next section is really around marketing tactics are almost wrapping up here. So just wanna ask kind of what are the main tactics that you use for kind of your marketing and outreach that you think have been most successful?

Tuomie, Taylor M

Yeah. Yep. So that was sort of falling into a few different buckets. Mass media, digital. Media relations is something one of the tactics at a company level. I think we're pretty good at just being 100 year old utility. I think those relationships have been formed. Umm, e-mail. So, our owned channels, e-mail and social media. And then I'd say an important one also is events. Umm. So mass media being some of the TV commercials that we produce. To date, one of the bigger, more important ones that we've created, it's called our EBA Anthem, which has some very nice environmental imagery, but then also like some pretty technology heavy imagery too. I think it also probably bucket some of our paid search in that mass media.

For our programs and then also on, I don't know, awareness level, we're doing both more like specific messaging. For our targeted messages, when we know that we have somebody who is more prone to be receptive to those messages. Based on keyword. Targeted keywords and then some more awareness. Social media is a tactic that we use that is both paid which is again always on throughout the year and we're constantly tweaking messages, doing some testing with ours. We work with an advertising agency who manages a lot of our social media advertising but then also on an organic level. Uh, we use it to promote some of our events. Interact with customers who have interacted with our posts. Umm. And then do some light boosted posts around either events or some other messages. If there's a new story, for example, we might link to it.

Jeffrey Beeson

Are you doing anything to expose a customer to an actual EV? And maybe these are your events or an EV driver.

Tuomie, Taylor M

Yes, a lot, a lot. Last quarter in Q3 and then know this just cause I've reported on it yesterday, but we did 200 events that we had initiated. We had reached, and I'm gonna throw in one huge caveat here. We had reached over 2 million people throughout that quarter. So, two million impressions. The huge, huge caveat there is that we're also including the Minnesota State Fair, which had a million and 3/4 attendees. 200,000 impressions for events alone over the course of for July, August, September.

I'd say throughout the year, probably double that and then actual quality interactions where we're speaking with people where people are grabbing the charger off the stand, plugging it into a vehicle.

That's probably closer to maybe 50,000 individuals.

Jeffrey Beeson

Are you doing any test drives?

Tuomie, Taylor M

We are, we are. That normally centers a ride and drive event. That's typically like the main attraction. If it is an event, right? So that's happened at a big venue for us, our auto shows. But when cities auto show we did about 4000 ride and drive, so over the course of like 10 days, that was huge for us, for the Minnesota Territory. In Denver. Uh. The Denver Auto Show was cancelled this year, but in 2021 we did about 2800 ride and drives over the course of around 5 days, I wanna say Denver Auto Show was conducted and then we work with groups like Drive Electric, Colorado, who is very like very capable, have awesome volunteers who know their stuff. We probably hosted four or five ride and drive events that that end up getting.

Jeffrey Beeson

Are there any marketing tactics that haven't been successful or that you no longer do?

Tuomie, Taylor M

Ooh, haven't been successful.

We are in the process of evaluating our events. Not yeah, not all events are created the same, I'd say so like those ride and drive events, we find a ton of value, and we've known from surveying customers that the auto shows. Ride and drive events are a great way to get somebody to change their perception about electric vehicles if they are less certain about them, or if they have negative perceptions of them that might move them into the direction that they're more comfortable with. It is less, less fearful about the performance or it being just like a regular vehicle that they've driven before events that we've shown up to you that haven't been super conducive to a quality conversations, right? So from a brand level, it might be a good way to tie to Excel energy to electric vehicles and make that connection in the Persons. It's tough to quit ROI behind or like actual results behind that connection though. Like how do you value that connection and how do you even measure whether or not? Somebody has made that connection in their mind, so some of the events that come to mind might be like a Jazz Festival or something, right where the attendance is great, there might be 10s of thousands of people throughout the course of a day or two. Uh, the number of quality interactions might be lower just because our involvement is so secondary and not the focus of the event.

Typically, anything that is EV focused, so like we've been involved in. There was a group that does retrofits of old vehicles, but then a lot. Some manufacturers were also involved

in being sponsors of that event and so that was a pretty neat one to be at and people are already in like the mindset of interested in electric vehicles. I'm interested in vehicles exactly so those are normally good ones.

Jeffrey Beeson

That makes sense here. That would be alright. Well, then my last little section will end. Tried to get you out of here. Right. Time is just on success and measurement. So, wondering you know how are you measuring your success and how often? Kind of metrics are you using?

Tuomie, Taylor M

Yep. So, on a broader scale with some of like our umbrella tactics are bigger. Mass media purchases and search engine, marketing, e-mail, etcetera. We work with our strategic communications group and our channel managers within Excel energy to receive reporting on effectiveness of those tactics on a quarterly basis. We also have some informal check-ins throughout that time to. If there is a larger campaign that's gone out, e-mail being one of them. Like if an e-mail campaign goes out to a large group of customers, we wanna know how effective that has been.

I'd say we review the performance of events, maybe on the monthly basis with our team. We are always looking at least a weekly basis at the number of enrollments in our electric vehicle programs. So that's like our real bottom line number that we want to know. In Minnesota, we recently surpassed the 1500 customer mark enrolled in our electric vehicle program charging program, which is pretty neat. Colorado is inching its way up there. It's a younger program that was launched only about a year ago, Minnesota was launched maybe a year and a half. I should go. Maybe a little bit longer.

And effectiveness of our marketing campaigns. Yeah, that really depends on the channel depends on the way that those campaigns are managed them too, I guess right, because like our search engine, marketing is a set of like ad groups that we launch at a given time and will run them for two months before evaluating and tweaking.

Jeffrey Beeson

And then how often do you do like an official? You know, report out to maybe executive letter level or higher up levels that once a year quarterly?

Tuomie, Taylor M

Uh, quarterly, certainly quarterly is probably the baseline. Our leadership team, probably on a monthly level on overall like are. Our baseline metrics, so really like our enrollments get included on executive level dashboards and those are being reviewed on a monthly basis at the very minimum.

Jeffrey Beeson

OK, great. And then very last question for you. How successful do you think you've been? The utility has been at this point in growing EV adoption kind of on a 1 to 10 scale. Hey, thinking like if you weren't there, would it, you know, would EV adoption be what it is today?

Tuomie, Taylor M

Yeah, sure. That's a good question. Maybe, seven like I do think. I do believe that we're doing a good job in educating our customers and making them aware of both the benefits of driving electric and then also easing they're some of their concerns on charging those vehicles. So I'll give us a 7. Maybe that's overshooting. Maybe that's being overoptimistic, but what if other people answered for that?

Jeffrey Beeson

I would say pretty in that range just above half, just above half. It's kind of the common answer, but it's also interesting to match that to their adoption numbers from the data. So that's the fun part to see if.

Jeffrey Beeson

They're actually growing your every year based on what they think. So, no. Well, thank you that. That's everything. I'm sorry. Took a whole hour, but I really appreciate it. Time. Great conversation. Yeah, a lot of good stuff.

Tuomie, Taylor M

No, that's OK. Good conversation. Yeah, great conversation.

Jennifer Deaton – Interview

Jeffrey Beeson

Thanks for your time. Hopefully this won't take too much of your time today, but what I'm doing is I'm just interviewing marketing managers from across the country on the EV programs and how you know what's working and what's not. As far as growing EV adoption with their customer base.

I've kind of four sections, one on kind of barriers, one on segmentation, one on messaging and one on Penner reporting. So should be painless. No, wrong answers. So, to start, what are there any factors or barriers that you think are kind of hurting your fleet customers in, in growing adoption?

Jennifer Deaton - Oncor

Right now. I mean it. This is just my observation. From just being in in the industry, I would definitely say OEM. Umm, you know, speed of manufacturing and delivering products is a huge issue right now. There's a lot of fleets that I've heard say, even if I wanted to, I couldn't get one.

So I would say far and away that is probably the biggest issue. That fleet customers are facing right now is just like the supply chain issues and he is manufacturing.

Jeffrey Beeson

Sure. OK. And then are there any stereotypes or like negative stereotypes that you've seen that may be hurting?

Jennifer Deaton - Oncor (Guest)

Umm. I don't think so. So, Umm, you know, obviously there is some real concerns in certain industries obviously like bucket trucks for example if the electric goes out, our job is to bring it back on. And if we can't charge our electric bucket tracks like that's hugely problematic. You know, that's just my opinion.

But I don't think so. I really don't think that. I've seen a whole lot of that. Umm, to be honest, it's really a business decision. More than anything and that's how I see fleets approaching it. And when it's a good business decision, they'll do it. And if it's not, they don't. And it really has been kind of that black and white. And in my experience.

Jeffrey Beeson

OK. Do you feel like there's any misunderstandings that you've seen around how the cars work or the how they charging works that you'll have to overcome?

Jennifer Deaton - Oncor (Guest)

Umm, I think that. Maybe people don't understand that it's kind of just like plugging in your phone. They think it's a lot more complicated than that. And it's just really not.

Umm, but I think that's just lack of experience in in dealing with EV's and stuff. But once you kind of show them and explain it, it's always like ohh well, that's really easy and it is a lot like plugging in your phone. So that's an analogy that we use when we, you know, do community outreach events and stuff like that. And we just did one on Sunday.

So I talked to a lot of people, not necessarily fleet. These were like residential type things, but yeah, that just so to really quick demonstration and that seems to go away pretty quick.

Jeffrey Beeson

No. Good. OK. So, then kind of following on to that, is there any lack of understanding in like the ownership in like the cost compared to gas that you've? That you think you'll need to overcome.

Jennifer Deaton - Oncor (Guest)

I mean, obviously that's not our responsibility on Oncore doesn't do that kind of consulting. I can tell you that there are a lot of consultants that do that kind of analysis for fleets. And I see a lot of fleets hiring consultants to do that kind of work for them.

Umm, but that is, that is what I've seen the fleets that are interested will usually hire A consultant to do a lot of the math. Which vehicles make sense to transition, and which ones don't and things like that?

Jeffrey Beeson

OK. Any lack of understanding, just around like public charging out and about versus that company charging it at the location or even in homes if people are taking work trucks homes?

Jennifer Deaton - Oncor (Guest)

I think that there is a. There's a general concern about lack of public charging and like, where they're available and umm, you know, I think that there's probably more than people realize, but I think that if it's not something that you look for or need on a daily basis, then you probably just don't think about it. But there is definite concern about the infrastructure of the charging you know.

With gas, there's a gas station on every corner, you know, so there's a lot of comfort in that that I just think that the EV infrastructure hasn't caught up, obviously to an industry that's been around for, you know, a century. So, it's not a super fair comparison, but it is still rational.

Umm to be worried about that? And I do think that there are a lot of people, especially like residential customers that are worried about that about buying a personal EV now for fleet, it's a little different because.

Umm, a lot of the use case for fleet that we're seeing is you know delivery vans that have a hub and they usually install their own chargers. So, they do a route and come back, things like buses and stuff. So, there's not that much anxiety because they own their own chargers and a lot of those aren't dependent on public charging at the moment. Umm so I don't see a lot of that in that type of fleet customer. Eventually you'll get to the larger trucks that do over the road driving and that will be an issue with them.

Jeffrey Beeson

OK, great. So next kind of moving to a new section really on audience and segmentation and again putting your fleet filter on here. So obviously you probably have different types of fleets or businesses and so you may message differently at you know that's kind of the question. I think I'll start with are you using any kind of segmentation to adapt kind of your outreach and marketing today or is it kind of 1 size fits all right now?

Jennifer Deaton - Oncor (Guest)

Now when we do like our education material, I definitely think that we're trying to.

I'll call it cluster Taylor because we have so many different types of fleets customers that there's really no way for me to tailor actually tailor it to every customer. So, I'm trying to segment a lot of the fleets into different categories by kind of operational schedules like for example, are they 24/7 operation, are they A2 shift five day a week operation where they have like a night shift and day shift Monday through Friday or they just work seven days a week or they just work Monday through Friday 8 to 4.

Umm, I'm trying to categorize them by their operating schedules because that will tell me a lot about what they're charging. Schedules are going to be like. So, from the utility perspective and just the education that I'm trying to provide, that operating schedule helps me a lot know what they're going to need in terms of charging and then we can talk about charging like off peak and things like that. So, from my perspective, that is one of the ways that I'm trying to look at them. And tailor education to their operating schedules.

Jeffrey Beeson

OK, great. And then the next I want to show you a quick image that you may or may not be familiar with and see find it here. So, this is the product adoption curve, alright. Have you seen this type of curve before?

Jennifer Deaton - Oncor (Guest)

Yeah.

Jeffrey Beeson

OK, so yeah, pretty standard, and so just wondering first you know base where do you think kind of your audience is kind of on this curve if you had to pinpoint?

Jennifer Deaton - Oncor (Guest)

Umm, I mean to be completely honest like. It's it's just as a business decision to a lot of people.

Jeffrey Beeson

OK, so that you don't think they're on the curve at all?

Jennifer Deaton - Oncor (Guest)

I mean it when it makes financial sense, I think people do it when it doesn't make financial sense. People don't do it. I don't think as much of it has to do with their opinion on. The idea of it, and it's just like, doesn't make financial sense for our business or not. Umm, you know if you can get a lot of federal funding to pay for things like buses and trucks and stuff like that and pay for chargers and infrastructure?

You know, a lot of school districts, it makes sense for them. The use case where the buses make sense for them, you know, long haul over the road trucking. It doesn't really make sense right now, so. I don't know. It just to me, it's doesn't. This doesn't make sense. It's like it's a business decision.

Jeffrey Beeson

Yeah, that's totally fine. I'm sure, yeah, with a fleets and businesses a little different than your traditional consumer customer. So, is there anything you're doing to kind of help or could do or should do to help those who you know the business decisions kind of maybe right in the middle right now for them?

Jennifer Deaton - Oncor (Guest)

I'm just targeting anybody who has any interest because the partnership with Encore needs to be pretty solid. I just want them to be as educated as possible on all the things

that on core does and does not do. Umm it, especially if you have a business that spans multiple states. Ours is kind of unique so I like to provide that education to anybody that wants it. Umm I am targeting probably the fleets that are most likely to electrify, but obviously is open to anybody who's interested in the education.

Jeffrey Beeson

OK. And then so you said that the biggest motivation is probably that that business cost benefit. Are there any other motivations that you can think of that might motivate them to go electric?

Jennifer Deaton - Oncor (Guest)

And some of the bigger companies have, you know, like ESG goals and environment goals and pledges. Great plain green pledges and things like that. You can tell that the companies that have those kinds of things are usually. More likely to electrify. So, we do kind of correlate that and offer, you know, I've been proactively reaching out to those types of customers because they are more likely to electrify based off of their stated environmental goals.

Jeffrey Beeson

OK. So, would you say you kind of use some of those additional messaging points in your outreach material besides just the cost savings?

Jennifer Deaton - Oncor (Guest)

Well, we don't really talk about cost savings. Umm, strictly like it's strictly kind of black and white from the utility perspective because we're really not marketing anything or advertising anything. So, we just talk about, hey, if this is what you want to do, we're totally here to support you. And this is the infrastructure that you could possibly need. And this is what we would have to do. And this is the time that it would take if you wanted to do batteries, if you want to do solar, if you wanna do interconnections with the grid like, this is all the things you have to do. It's really just meant to be, like I said, an education on how to work with the utility.

Jeffrey Beeson

OK. No, that's great. So then switching over to kind of your creative that you use in any of your stuff, are you? What approach are you taking? Are you using cars, chargers, illustrations, people you know? What do you? What kind of is it just text?

Jennifer Deaton - Oncor (Guest)

I will. I'll be above kind of. Well, not cars, will we really? We just not finished a

YouTube video that I made. Umm, that talks a little bit about why partnering with Encore is important. I can if you just give me a second, I can give you that.

Jeffrey Beeson
Should be great.

Jennifer Deaton - Oncor (Guest)

You can look at it. I'm working on a series of videos that look something like this and kind of walk customers through all the things that I just explained. And then also we're working on an education material where I go out to the customers and do kind of a seminar of education on a bunch of different topics, kind of a one stop shop for the customer. So, they don't have to navigate through like a couple of different departments within the utility and they can get a high-level education.

Uh, so yeah, we're doing the videos and the kind of seminar type education, and then I'll have a packet that I can e-mail them in a PDF, but also, I'm creating a portal for the fleet customers to log into and all this material will be housed in the portal as well so that they can. It's beneficial for both of us because they get the education and then I'm collecting data on the back end to see what types of fleets and where they're at so that I can start kind of heat mapping our service territory to see if there's potential hot load. Hot spots caused by the fleet electrification. So yeah, that's what we're doing.

Jeffrey Beeson

Now, that looks toll sense. So, you so switching over to kind of tactics, it sounds like you're using kind of impersonal events, packet, flyers? Any other web presence, video, any other kind of tactics, marketing outreach, kind of tactics?

Jennifer Deaton - Oncor (Guest)

No, I don't think so.

Jeffrey Beeson

And is there any that are most successful like the most successful kind of that maybe that one-on-one or that in person is probably your bread and butter or?

Jennifer Deaton - Oncor (Guest)

But right now, yeah, we're still in the process of setting up a lot of these programs. So they haven't been all fully launched. But you know, I'd say that just the one-on-one conversations are really beneficial to them.

Jeffrey Beeson

OK. And then are you using any kind of incentives or rebates or coupons or discounts in any of your materials?

Jennifer Deaton - Oncor (Guest)

No, we're not really allowed to do a lot of that.

Jeffrey Beeson

OK.

Jennifer Deaton - Oncor (Guest)

Uh, we have an energy efficiency program that has a pilot for some of the. The fleet customers to talk about charging off peak and just intelligent charging to work with the market, but that's really it.

Jeffrey Beeson

OK. And then have you done anything in that actually exposes those customers to an actual EV? Do you give them ride and drives you let them take a car out, have you done anything where you're getting them in or in front of a car?

Jennifer Deaton - Oncor (Guest)

We haven't, we sponsor an event for National Drive Electric Week though actually we just did on Sunday. We just sponsor the event and the, but that event offers ride and drives for like residential customers and stuff like that. But we don't actually do that ourselves.

Jeffrey Beeson

OK. And then are there any things that anything that you've tried or put together materials that you're like, you know what that just didn't work, it may be too early or?

Jennifer Deaton - Oncor (Guest)

Umm, I don't. Not yet. This is the first real big launch into this kind of category, so ask me in a year I'll see how what I'm planning to do fails.

Jeffrey Beeson

Yeah. No, no problem. I understand. Understand that. OK. So, the last section here is just really around metrics and success. Are you doing anything to measure kind of your outreach success and your education efforts?

Jennifer Deaton - Oncor (Guest)

Yes. So, through the portal, that's one of the reasons I wanted to do the portal because I can measure the data on the back end and I'm going to measure things like how many enrollment fleet enrollments we've had over a period of time.

Compare that to the number of actual projects that we get in. See, you know if there is a consistent turnover rate between the partnership program and then an actual project. So, there's a lot of different metrics that I'm trying to create out of that portal.

Jeffrey Beeson

When you think about kind of the customer type and the tactic, do you look at those individually or just together like for example, are you looking at like, ohh this type of customer really responds to webinar and this one?

Jennifer Deaton - Oncor (Guest)

Yeah, we're not there yet. That's definitely something that's going to look into and start trying to find trends like that to tailor the program accordingly. But yeah, we just haven't got there yet.

Jeffrey Beeson

Sure. And then kind of final question and you may not be here, yet you know just how successful to date do you think your efforts have been if you had to rank it? I'm on a 1 to 10 scale.

Jennifer Deaton - Oncor (Guest)

Umm. Well, like I said, we're really in our infancy.

Jeffrey Beeson

Sure, that's fine.

Jennifer Deaton - Oncor (Guest)

So. We'll see and maybe like in a year when I get both of the programs off the ground, and we'll see how everybody likes them.

Jeffrey Beeson

No, that makes sense. Well, that's all. All I have. Is there anything that you think I didn't ask that maybe helpful or on your mind with interest?

Jennifer Deaton - Oncor (Guest)

No, it's thought that's it from our perspective. Like I said, our stuff pretty, pretty.

Jeffrey Beeson

Yeah, you're in. Yeah. Well, well, thank you for your time. Like I said, we did.

Jennifer Deaton - Oncor (Guest)

Yeah.

Jeffrey Beeson

So thank you so much for your time. Really appreciate it. And feel free to reach out if if we can ever do anything.

Jennifer Deaton - Oncor (Guest)

Yeah. Thanks so much.

Jeffrey Beeson

OK, nice to meet you.

June Chee – Interview

Jeffrey Beeson

Alright and if the transcript is annoying on the side and it pops up for me. You can always exit out of the there. So, the first group of questions is really just around barriers and stereotypes and misunderstandings. And so, I want to start and get your thoughts on what kind of external factors out there today are helping EV Adopting. Do you think is anything having a positive effect on adoption?

Chee, June

OK, I'll type perspective well aside from just like automakers being fully on board. Yeah, I would say absolutely this year there's been so much more like in the media and the news. You see celebrities in commercials, driving them. Hurts has a lot of great commercials out about their adoption, so I think just hearing electric vehicle mor, and seeing more of them outside of luxury vehicles is definitely helping adoption.

I'm sure everyone said this but the amount of federal support for electric vehicles. As well as States and governments and people adopt with the new rebates as well so that's a huge benefit. Yeah, I think just with the automakers putting out more varieties. Larger electric vehicles, lower price points, and the dealers themselves getting more informed educated on the technology.

Jeffrey Beeson

Right and then on the flip side what? What do you think is hurting adoption? Are there any barriers out there hurting?

Chee, June

Yeah, I think specifically here in Hawaii. There's definitely still a mindset that in and maybe this is nationally as well but there's definitely still a mindset that it's for wealthy individuals' electric vehicles. Our highest model of adoption is the Tesla here and you can see them everywhere. And so, I think that perception is still something that we're trying to educate and break the barriers down.

Jeffrey Beeson

OK and then are there any negative stereotypes about EV's in general or EV drivers that you've experienced?

Chee, June

I think some stereotypes you know this is specifically with the Bolt. But the fact that they were kind of you know the battery was catching on fire from time to time, and parking

lot, so we have you know, and I'm sure there's other parking lots too. But we'll signs that say that the bolts aren't allowed to park within certain areas of that, so I think that's yeah, definitely like something to be a little concerned about.

Jeffrey Beeson

Yeah, any negative stereotypes about EV drivers or EV.

Chee, June

Yeah, I would just say I would just say wealthy and then the technology is unreliable.

Jeffrey Beeson

OK and then what do you think of some of those barriers or those stereotypes do you have a responsibility to help them overcome?

Chee, June

Yeah, we have, I you know, I I go back and forth with this question a lot and I think in the work that I do and when we're helping to kind of develop policy, but I think I adoption and education as I would say one of the experts in this state around EV charging and electric transportation is our responsibility, definitely to help.

Our partners called Drive Electric Hawaii we lean on, and we support them in funding and then also are just part of the working group. But we kind of lean on them to help with education around the vehicle specifically and then also you know, kind of multiple modes of a larger transportation so they kind of focus on Micro Mobility as well. It is it is our responsibility, and we just try to do it in creative ways.

Jeffrey Beeson

Sure, OK, no that's great and then any misunderstanding? Then you may have already mentioned some around total cost of ownership compared to gas that you.

Chee, June

Yeah, I definitely think there's still a lot of education that could go that could go into that. You know, there's a lot of great calculators out there and resources. We're trying to get those into people's hands. I do think we need a Hawaii specific one because oftentimes our electricity rates are so high you know, kind of the benefit of it is still seeing but it's a little less and I think getting more accurate state specific numbers would be helpful.

Also, you know, I think a misconception people have been they forget that the classic would be spending on fuel. It's actually gonna show up on their electricity bill or like other areas, so even though it is a savings. I think they're always like surprised if they're

charging at home. So, I think that's a frequent question, we get from our customer service line.

Jeffrey Beeson

OK, great and then any misunderstandings around public versus private charging like home charging versus out in the public or there's one more understood than the other?

Chee, June

Yeah, we work, a lot in the public charging space. I think we're still kind of working to bolster our residential charging services and programs, so you know just from that experience. I think there are a lot of misconceptions, I'm speaking from our experience of like sighting. And I'm finding those locations, finding the partners. I think the broad community and legislators think that you know you can pick wherever and drop a fast charger, so trying to explain the partnership aspect. That's involved with finding a willing site host and then within the site. All the kind of different considerations. You need to make along with capacity, but also like flood zoning and safety of a lot of different things that go into that. So, we're trying to educate in that aspect too. You know outside of cost.

And then I think the maintenance of the Chargers is still just like a huge you know learning curve. I think across the board so. We we're trying to get better. I think in our messaging when charges are down and making sure that's out in the community and they know that we're working on it, so they don't just see a broken charger for a long time. So yeah, we're trying to get just more transparent with how that process works and then also how quickly we're trying to get them back up and running.

Jeffrey Beeson

Looks great, that's kind of my section around misunderstandings and stereotypes. I want to move next to audience and segmentation and so a lot of this is thinking about kind of any marketing or outreach tactics you might be doing, but it also could be within your programs as well, wondering if you're using any audience segmentation today?

Chee, June

Yeah, so our all of our programs are pretty segmented. We're launching a commercial make ready program, which is gonna be specifically for you know commercial properties like shopping malls, but also for multi-unit dwellings and workplaces are fleet operators. So, we're very much doing like pointed outreach to those customers for that program.

Jeffrey Beeson

And does your messaging change with those certain groups so like a resident a multifamily versus a shopping center or you?

Chee, June

Yeah, I yeah, I think we're learning, so this is our pilot with this, so I think the outreach portion is definitely something we're just ramping up and still learning from as well, but mostly with the shopping centers. We're speaking with like a facility manager so they have a bit more understanding of you know the make ready infrastructure side and what that would entail apartment and condos. We're talking to like Association board so I think it's a little bit more on the service that would provide. How about could exactly be managed and then the numbers so it's a yeah? I guess a little bit different messaging.

Jeffrey Beeson

OK are you doing, anything on the residential side you segmenting those customers at all?

Chee, June

Yeah, we actually don't have like a residential you know, kind of like rate or charging program for like single family homes. As of yet and it's mostly focused on meds but. We're talking to our broad customer base. You know which is made-up of all the residents more on like where they would like to see public charging so trying to get their feedback on locations that would be helpful to them and trying to understand. They're transferring transportation needs and like community patterns.

Jeffrey Beeson

Are there any current programs non-EV programs that you the utility offers that you've seen match a potential EV driver or like you know customers who enrolled in this other program are also really interested in EV's or?

Chee, June

That's a That's a great question. I'm sure off the top of my head. I'm you know, kind of just making a dramatization that are eV program, oftentimes if they have EV they have an electric vehicle too. We have a new battery storage program as well. That's been highly adopted and again this is kind of just.

From what I've seen is that if you have a single-family home and you have the PD and the battery. You're often having electricity cycles. Well, I don't have the specific stats on that for you, though.

Jeffrey Beeson

No, that's fine just interested there. So, isn't important yet have you seen if it's important to kind of reach out to those different customer groups differently or at you know

segmenting's a lot of work can be because you're creating different messages and creative or you know is that this is that worth the squeeze at this point do you think or not yet?

Chee, June

Yeah, I think I think absolutely it is. I'm we're having a lot more focus. You know with our Commission or staying in than us as a company. I'm really trying to get more information out to underserved communities as well, and the messaging and even the platform that you're doing that communication is very different than talking to like a state partner or like a commercial shopping center and yeah. I think we're at a point now where we need more understanding from the community, and we need to understand what their needs are.

On the as we're getting ready to ramp up and like add in more Chargers. I think the worst thing we could do is put an asset in an area that doesn't want it or won't be using it. So yeah, we're doing our best to kind of understand their needs. And I think it is worth the effort right now to try to tailor it to those individuals.

Jeffrey Beeson

OK great then the next thing I want to show you an image. I'm going to share my screen and you may or may not be familiar. It's kind of often referred to as just the product adoption curve have you seen? I don't know if it's popped up yet.

Chee, June

Yeah, I can see it and I I've seen I've seen this I'm sure yeah.

Jeffrey Beeson

Yeah, so what I want to start in just ask where do you think kind of your area your territory is on this adoption curve as far as EV and maybe we think about the residential space.

Chee, June

That's a good question. So why electric our service territory is made-up of the three major counties of the state so all the counties except kawaii. I would say each of those counties. Or maybe falling in a different place on this curve. I would say a walk who's probably in the early majority.

I thought Maui has a good number of electric vehicles now, too. So maybe Maui and Oahu would be early majority in the Hawaii Island this late in shorty. There's just a different consideration with each of the islands based off of like mass and then availability for charging so.

Jeffrey Beeson

OK is there any not super familiar with the whole area? Are there any economic differences between those different counties that are affecting at all or?

Chee, June

Yeah, why Island is uh is the largest island and it's much more rural, we have a lot of our agriculture out there as well. So, I think there needs and a vehicle are different as well as the distancing distances. They're traveling as much different as well.

I was recently looking at kind of an underserved communities map Hawaii Island has. A good majority I would say of like underserved or lower income families. Now we island. Not so much. I would say more on the wealthier side, but again, you know they have won like giant mountain in the middle of the island so the land, the land mass for public charging.

As a little more challenging and like a mixed bag. Our most populous island, but also smaller for driving ranges and we do have a lot of electric vehicles here, but our West side of the island. I would say is more of the underserved and lower income, but also mixed within our metropolitan area, too, so.

Jeffrey Beeson

OK and when you developed outreach materials, have you thought the adoption curve of where your customers are?

Chee, June

Yeah, absolutely. I think Umm when we speak to each of the counties and each of the islands. It's a different message for all of them. There is a smaller island based off of Maui. It's part of the county. It's called Molokai and it's very small really rural a lot of lower income, but also the electricity challenges that they have out there. The capacity needs just to meet kind of daily households' electricity needs is so much different than you know, we're one of the larger islands. So, when we're chatting with them. I think it's still very.

Umm cautious messaging and in more kind of I would say basic education around electric vehicles. And why it's important to like the longevity of our renewable energy goals more so than educating them on like the models of the vehicles and this is how you charge which is kind of how we're speaking with the other items.

Jeffrey Beeson

OK and then I don't know how long I can't remember how long you've been there, but

you know you, said most of your territories were either in the early majority or at least the early adopters. Is there anything. You remember doing early on with that innovators group that worked that maybe you're no longer doing or not needed.

Chee, June

That's a great question. You know, honestly, I think we're probably still utilizing a lot of the same strategies that I started in this work back in 2011. I was with this day around the office, and we were specifically working on electric vehicle adoption on Maui Cuz. We had a Japanese charging company come and do a pilot program there. So, we were kind of supporting with the outreach around that which I think is where a lot of the uptick. What you this kind of started on that island but I would say a lot of the basic education?

Language that we're using kind of charger 101 stuff we're definitely still utilizing. I'm doing a lot of writing drives still different community fairs. I would say we're maybe partnering a bit more with dealers now and trying to have kind of that back-and-forth conversation, then we, we did, and say like 10 years ago, so maybe that's a new kind of newer effort. I would say additionally there's a lot more emphasis on mapping.

You know like GIS mapping and trying to see all the different community makeups and demographics and then also kind of all the different roadways where I'm sure we have that technology before, but we just didn't we didn't utilize it so much so.

Jeffrey Beeson

Yeah, that's really cool. I that that's the first I've heard anyone kind of using that technology is you looking for hot spots of were other EV drivers.

Chee, June

Yeah, I'm kind of a number of different things and we're right now really working internally as a company to try to consolidate all these different maps that we've been putting together but recently we've been trying to there's A. The federal electric vehicle charging tax credit just came out, but it has new specifications on where those can go within underserved communities or non-urban communities. So we've been mapping to kind of see where exactly those are within our service territory also last year, we did a large.

Community outreach campaign and that map still up actually is called charge of Hawaii. But we asked the community to drop pins where they would wanna see public charging and that we're kind of using to really see where the highest concentration of pins were, and interest was and that's probably where we're gonna look to target our next kind of roll out of charging stations.

And then with the Navy program, the 50-mile radius on the quarters. We've been mapping. That, too, and trying to see so we're just trying you know, we don't have a lot of landmarks and we like there's definitely overlay in these areas and trying too just be really strategic. Kind of our next phase of Chargers and then who else would be doing. You know if the states putting charges here trying not to overlap that too much.

Jeffrey Beeson

No, that's great that's really impressive. Thanks for sharing that alright so the next kind of section. I wanted to cover is really on messaging and any creative development, so first I wanted to understand what you think motivates a customer to purchase an EV?

Chee, June

Umm so for wind electric and then also for our government. I think a lot of the motivation was a lead by example approach. One electric does have a lot of fleet vehicles and so they'll light duty ones that were able to meet you know transferred over to electric vehicles. We are really trying to gain that experience for ourselves and but also lead by example for the community. So I would say kind of on the business side, there's that.

For consumers I'm also thinking about myself. They don't have electric vehicle at the moment I add typically bicycle everywhere but. I the friends of mine who do have EV's. They're they definitely are seeing cost savings with that. They've also really proactively went and found second hand electric vehicles are starting a ton of those right now, so for kind of the middle class looking to afford's I would say if you can get it second hand. That's definitely a motivator around the environment and then the cost savings from fuels.

And then yeah, a lot of other EV owners have talked to the earlier adopters. It's you know they love vehicles they love. The idea of the Tesla and the technology and heard a lot of good feedback about. Just all the different kind of control and safety features within the vehicles, so I think it's yeah, really huge wide range of those who are occurred transitioning.

Jeffrey Beeson

And then do you use any of those motivations?

Chee, June

Yeah, absolutely. And I would say when we were doing the charge of Hawaii map outreach. We did like a lot of a lot of brought outreach so with the messaging with that was trying to not be was trying to break down a lot of those misconceptions and you

know, so I showed an image of the Tesla and the Ford 150 but then also showed our fleet vehicles second hand electric vehicles as well as all the electric buses that we're trying to put into the system so I'm just trying to kind of widen the image and mindset of what?

Don't let your vehicle actually is and how it can serve. Someone personally or their community if they're drive if they're writing on the electric bus so.

Jeffrey Beeson

OK, you know that and then so are there any other themes that you're using and your messaging besides on those motivators that we talked about earlier?

Chee, June

Yeah. Good question. I'm trying to think of so lately our messaging. You know this year is been tweeted slightly just because the our energy rates have increased so much so we're trying to be really sensitive to that when we're speaking about trying to get people to transfer to an electric vehicle when they're having a hard time with their home energy bill so we've been trying to kind of reiterate. The message of why electric vehicles is important to our statewide renewable energy goals and our resiliency goals.

Electric vehicles are huge part of that and getting us there and so we're trying to kind of reiterate that message as to why it's important, and how it you know plays into meeting those and.

But even as gas costs have gone up.

Jeffrey Beeson

You're still shying away from maybe the cost benefit because the kilowatt cost has also gone up is that.

Chee, June

Yeah, exactly, yeah, they're trying to sense it to that.

Jeffrey Beeson

is that do you guys use natural gas a lot or but what's the driving your guys's cost up?

Chee, June

Yeah, we just closed our last coal plant on the islands. We were running coal up until

September and so all of it now is imported you know petroleum that we're. You're burning here, so it's just our the import costs. Obviously are much larger and we're not using natural gas white islands using a little bit of hydrogen. And Yeah, but for most of the other islands, it's just petroleum based.

Jeffrey Beeson

OK, Alright That's good. And then we mentioned some barriers at the beginning. Do you talked about those at all in your messaging?

Chee, June

Yeah, I don't I the shy away from the Bolt conversation with the battery. I don't really address that one, too much. But definitely kind of easier for the wealthy. We're constantly trying to break down that barrier and I'm showing there are more second hand. EV's in the market. Now also our rental fleets are being really active and transitioning that over so we're trying to do more messaging with the tourism authority as well about.

Renting you know, renting and trying out an electric vehicle and then our electric bus program. I think is kind of a huge driver? That's helping us kind of talk about the wealth gap conversation.

Jeffrey Beeson

Yeah, it's good and then switching to our creative now. What have you found or do you use a mix of things works best and that could be thinking about to use cars versus people? Do you use Chargers versus you know scenery? Do you use graphics? What kind of creative are you? Are you going with?

Chee, June

Yeah, that's a good question, we are Umm still kind of doing a lot of iterations and seeing what sticks right now, so the charging map that I mentioned earlier had a whole story map component and kind of walked people through locked vehicles and why they're important showed some different types of EBS so trying to learn some feedback from that. I think cuz that was very digital based. We probably left out a good number of people who aren't able to see that at the time and we also just did a campaign. We put in two new fast Chargers.

That museum here Bishop Museum and we actually did a sponsorship with a local artist. They're called Wood and wave and they did a vinyl wrap on both of the Chargers, which looks beautiful and I think you can find it if you look online now but that was an effort one because of this site. It was at it was at a museum. So we thought it'd be a good opportunity to kind of beautify those Chargers and then also there is an artist here that specifically works with vinyl, wrapping and they were able to tie in the.

The partnership and sustainability story in Hawaii and then our partnership with the museum so that was really successful. They did an awesome job. The Turners looked they know those charges are huge so it's like nice that they're not just like a white box and so I think that will probably be we're gonna explore how we can do those at multiple sites so.

Jeffrey Beeson

So that I have not heard that before so you're using the Chargers.

Chee, June

Yeah, or just pay people to like look at them and like Oh wow. This is when EV charger looks like even if they're not you know, an EV driver or using the charger. But if they're coming to the museum and just seeing it as another piece of Art. Yeah, because I think a lot of people haven't seen electric vehicle Chargers before oftentimes. They're in like the back of a facility summary. You know, so making them more prominent or if they are gonna go in the middle of a neighborhood and community in a park or library. You know, making them nice to look at could help.

Jeffrey Beeson

OK, I love that so any other creative examples that you're using you talked about trying to overcome that wealth gap or does creative help with that at all. Have you found?

Chee, June

Yeah, I don't know what creative exactly this is, but we do a lot of ride and drive events and so getting as many models as we can out into communities that often wouldn't be shopping for EV's and then also incorporating the electric bikes and the electric quads and things like that.

And I think it's helping to get people in EV and kind of break down their barrier, too, so.

Jeffrey Beeson

Yeah, well great, that's kind of my messaging and creative section. I wanna talk now about tactics and when I think of tactic that could be anything from a flyer to a digital ad, a social post, a ride and drive so really broad. I want to understand what you think is the most successful tactic tactics could be a couple of them.

Chee, June

Yeah, we a lot of things get utilized on our local news station like I mentioned. We got

coverage on three different news a lot of people watch our local news station, so that's always a good way TV commercials were still utilizing why public radio segments lot of social media. We don't utilize tik T.O.K, which I'm wondering if we should. I'm very unfamiliar with it. So, it's not like I don't know if we should do this, or not, but.

And then yeah, our charge of Hawaii. Now, if we did like a huge push so we have, like magazine ads. Radio TV tons of social media like constantly. Our Transportation Department within White Electric. We do accordingly quarterly newsletter, we try to like introduce the different team members and just tell people what's up with their programs. So, I don't think those have a high open rating at the moment e-mail so.

Yeah, I don't know I'm still assessing kind of what's been most successful it seems like when people are just like inundated for a short period of time with information those seem to get you know cuz. We're like actively trying to get their insight on stuff we've done raffles, too like online raffles.

And our director does a lot of kind of like interview segments as well so we're really running the gambit and I think our outreach events just to like tabling in a neighborhood are also still so beneficial being able to chat with people one-on-one.

Jeffrey Beeson

So yeah, it's home and sounds like most when I think of like the news stations and TV commercials and radio ads. That's all pretty mass seems like you're doing a lot of mass advertising anything that you're doing that may be tailored or segmented to certain groups at this point or is it or do you think you're kind of for further not the long and adoption that you really just gonna after the masses?

Chee, June

Yeah, I'm thinking of specifically our two main great programs, which were for bus operators and then this commercial make ready, which I'm I'm talking about work ramping up the outreach for that in the next couple of months. But we're trying to do tailored meetings for condo boards. Invite them all. You know give them breakfast and that'll be specific to them. So we can kind of hear the questions that are coming from that specific segment doing the same for like hotels or fleet operators. So yeah, in the next couple of months.

I'll have more feedback on that and then the bus make ready was you know very specific to bus operators, which there's only a handful here, so those are really kind of tailored to them and there's a lot more hand holding that can happen in that kind of space.

Jeffrey Beeson

And that you mentioned a raffle, which I love that any other kind of incentives like a rebate or coupon or anything that you've tried?

Chee, June

Yeah, our I mean, our state has our state has an EV charging station rebate that again is administered through another nonprofit that we you know partner with often and that his state administered funds to them and those charging stations do have to be publicly available, though, so it can't be for like a single-family home. So we try to partner with them and helped to cross promote that rebate program as much as possible.

And yeah, we always have you know creative talks of being able to raffle off you know like a charging card so people? Can charge if they help to participate charge. It our fine electric own fast charge. We haven't quite figured out how to do that, yet, but because we're still contracting out the network, but that would be awesome. I think people would really enjoy those so.

Jeffrey Beeson

Well and then are there any tactics you've tried that didn't work or the ROI wasn't there?

Chee, June

Umm I'm really rethinking our accordingly newsletter, like no reads those and I put so much time into them so but maybe I just need to like. Yeah, those I'm reassessing I think emails. I don't know, people aren't opening this anymore.

Jeffrey Beeson

have you done anything to expose a non-driver to an EV or to an EV driver at all?

Ohh so our fleet vehicles you know the any employee can rent them out. If they need to use them for a meeting so I think those have been really successful in getting people into electric vehicles who normally haven't been I. I was just kind of a high-level brainstorming. This yesterday would be like awesome. If the company did like you know.

Kind of like hosting EV for a week and like got more because our company's huge or like 2000 employees are so like that alone would be such a big impact. If we could just within the company. Do an employee based program so I'm trying to think of how to pitch that to our HR team

Jeffrey Beeson

Alright so then that kind of last section is understanding. How do you measure success and think about successor or failure, so you know just a high-level question? Do you have any kind of strategies to measure your efforts and what might those be?

Chee, June

Yeah, I mean, our program metrics besides like numbers of charges you're getting in and utilization. I would say yeah. I'm definitely looking through constantly. You know like the click through rates on our website and then also through our emails. The charge employee map was really awesome because we could actually have metrics of how many pins are dropped, and how many people filled up survey so those are really good and then like a visual of like this is where people want charges so that was a really helpful metric.

Frank communication we recently did our first in person event, which was around national drive electric week and so that we were able to you know count? How many people were there, and we were taking out of like what was the most commonly asked question and so I think that helps kind of feed into our program development as well.

We we're probably going to go through a rebrand with our charging stations next year. And so we're looking at hiring and outside. You know marketing or communications firm to specifically help us with how to exactly manage that transition and you know what like the logo should look like and everything. So, I'm thinking will probably get some better like measurable metrics with the support of an expert in the field.

Jeffrey Beeson

Very nice and then do you have to report up any metrics to executives at all or is it just program enrollment?

Chee, June

Yeah, I don't know if for communications if it's 1/2 to but our director, you know, loves sharing our successes and she wants to be very transparent, especially for hiring and spending money on an outside firm like that, so we, we definitely do that again.

Jeffrey Beeson

OK and then really to sum up just how successful do you think the utilities been at this point and growing adoption if you had to put it on a 1 to 10 scale.

Chee, June

And to tense beyond helping to drive adoption. I'd say, we're at a 5. I think we're at a pivotal point right now, we're tipping into like a lot more programs. Our public charging program. We have, we're gonna have just about 30 Chargers and that was under a pilot. So, we're looking to ramp that up to a great number more and also starting our main credit program so I think within the next couple years. We'll be. You know, pushing that closer to the 10 range and we're very active in policy.

I'm so, although that's not like us specifically, I think being able to support that and a lot of the initiatives that the state Legislature has passed we've been we've been supportive of those so.

Jeffrey Beeson

Right well that's everything I have is there anything else that I miss that you thought. Hey, we, we did this, it was really successful or any other thing on your mind.

Yeah, I think I just the vinyl wrap has been really. That was just like a fun project to work on. I think we'll see. That's been really successful. The charge of Hawaii map and then just start focus or refocus on underserved communities. I think in the next couple years. Hopefully we'll be able to think through some better messaging and we have should be able to like to go out to communities and do that. I think in person not having it for two years. We're you know it's so important. You just don't get anything that kind of replaces that so.

Jeffrey Beeson

What do you think the number one need for those underserved communities?

Chee, June

I really think you know, getting people into the vehicle, especially like, at a price point. They feel good with and, like getting them to be able to drive them because I think there's just like a lot of yeah, preconceived ideas of what they are, and then like how they feel, and here you know, Hawaii is such a truck state. It's like if you everyone has trucks so like that would be a huge tip Oh my God, so it's like that poor enough 150, there's a mile long wait list for that. But so, I think as soon as we get.

Larger EVs that'll help the price points come down. But yeah, I think trying to bring the vehicles to them and show them like this is how you charge it. This is how it would work and really kind of.

Chee, June

Yeah, walk them through what like the day in the life of an easy owner would be like would be really helpful.

Jeffrey Beeson

So you think it'll be a little more hand holding or hands on with that with that group.

Chee, June

Yeah, I think so. I think so, and it's just like I don't know being able to tangibly you know, see these it's not just the flyer. It's not like a social media post it. It changes the game, I think.

Karl Bloss – Interview

Jeffrey Beeson

The to start I really am looking at kind of barriers, stereotypes and misunderstandings and so that's kind of what this section is all about. But first I want to ask you what you think are the external factors out there that have contributed to adoption at this point?

Karl F. Bloss

Umm well I what I typically say there's been a confluence of factors. So, number one is that EVs are becoming less expensive, more attainable for a decent range. And so, you know, as we're starting to see the Chevy Bolts, the Kia Niros, you know the Hyundai Kona, that sort of vehicle become available.

Umm, you know, people are getting them and then seeing really how great they are. I mean, my first EV was a Nelson Leaf that, you know, it was fine around town, that sort of thing, but it would become kind of a gateway to other things. So, there's the availability. Obviously, recently there's the price of gas. So that I think we found there was a huge spike in interest.

And then I think there's also this growing. Awareness of climate issues. You know, basically telling us, you know, stop burning stuff. And so, the other thing is, as the industry is growing, you're seeing more of the, I guess, influencers for lack of a better word or that I'm not really crazy about that word. But the YouTube channels that are becoming, it's not just you know some guy with an EV, they're becoming slicker and I don't know if you're familiar with transforming evolved. They're out of the UK.

Umm, uh, sorry. Transport evolved is actually in in their based out of Oregon, fully charged is the one out of the UK and they're actually running live events. So, I went to one in Austin, I guess it's been. Umm, you know actual events which showing cars and things like that. So, there are a lot of things like that, there's availability, there's awareness, there's the price of fuel so.

Jeffrey Beeson

Yep, and so on the flip side, what kind of barriers are hurting adoption at this point?

Karl F. Bloss

Well, surprisingly at the moment it's the supply. So, we all know the phrase supply chain these days. So, the people that are interested in getting one are struggling to actually get one because they're not as available as they could be. But then more from the kind of

fundamental is there's a in my mind, there's still a misconception about how charging works. So, if people have this idea that it takes hours and hours to charge an EV on road trips and people get hung up on the.

Karl F. Bloss

The road trip, part of it, right. They want. They want an EV that that replaces their F-150, which does everything from take the kids to school every day.

All the way up to hauling a trailer, pulling a boat and you know here in Michigan it's, you know, go up to the Upper Peninsula where there isn't a lot of charging infrastructure, right. So, you get the questions like, yeah, but does an EV do that? Yeah. But I'm going up to my cab and then, yeah, but, you know, I can't find charging. So, it's all really typically about the charging. So, the barrier in my mind is an education barrier of how EV charging works, you know, cause.

Jeffrey Beeson

Next question is around stereotypes, and have you seen any negative or positive stereotypes around EV EV drivers and are they hurting adoption at all?

Karl F. Bloss

Yeah, there definitely are stereotypes. So, I think there's a couple of classes. One of them is sort of the tree huggers, right? You're driving around in the, you know, used to be the Prius now and then it was the leaf. And then on the on the flip side, as you know, somebody like Elon Musk makes the EV cool. You have the Tesla fanboys who are driving these luxury cars that other people can't afford. So there are those two kind of a little bit on the negative side.

Karl F. Bloss

Uh, but then I think somewhere in the middle there you're starting to see more of a positive, like, OK there, there's this group of people that now getting these mid-range EVs that are Umm, you know, they're driving cheap and economically and that sort of thing and there's some. I think there's some interest in that. So, there's a little bit of both.

Jeffrey Beeson

Didn't do you feel it's like the utility US have to work it out to overcome those perceptions or not your role or where do you guys fit in on that?

Karl F. Bloss

Umm yeah. And. And one of the things that we use along those lines is that that EV guide, this idea that you know, I don't know if you have you seen that?

Karl F. Bloss

Hang on a second, I actually keep it bookmarked cause I use it all the time and we print it, I'll put it in the chat here. They have two. They have two things. One of them is the EV guide and then the other one is the thing that's like the level of charging.

And so, the one thing that that EV guide is 1. It's one of the pieces of paper we give out the most people, they look at it and it's like, wow, I had no idea all these vehicles were available. And of course, it's sorted by range, which means the top is gonna have the high-end Tesla's and things like that. But then you go further down to the page in the bottom, right. It's got that red Key and Niro. And it's like, I just heard somebody say today I was in an event today.

There's like I had no idea. I mean, these prices are in the 30s and the 40s. This is approaching normal, normal car, normal quote UN quote car ranges. And I had no idea. So now I'm gonna go out and look. So, I think, you know, we as a utility, we don't sell the cars, but part of the issue is that the car industry is still doing such a terrible job at this.

So that's where we can get involved and I don't. This doesn't really, this is not your question directly, but one thing that I found that works very well is we've gone to some car shows like we've gone to the Grand Rapids car show and where you have the manufacturers, you have local dealers and they have their plug-in vehicles, but then they don't have any idea about how home charging works. And then we found that those folks then drifted over to us and then they got their questions answered. So, I think there's this complementary relationship where the utility can get involved.

Jeffrey Beeson

No, that's great. So, you have brought up charging a few times. What are the misunderstandings about charging both at the home and in public that you found?

Karl F. Bloss

Well, number one is it takes too long. Umm, you can't. Number two. You can't find it. Then some people still think it's expensive. Right. So, you know, and that you can't find it, that the corollary of that is I can't take a road trip.

Umm did I mention takes too long, right? There's. So, there's this idea that charging an EV takes, you know, even with a level 2 high-powered charger, it's gonna take you 4 hours. Well, who wants to sit around for four hours on a road trip and then we get into

discussion about charging levels? And that's why that link I sent the other piece of that is the charging level thing. So that one is hugely helpful, which by the way that same level one Level 2 DC fast is actually on the back of the.

EV guide so I don't even bother printing that separately anymore, so it's the whole concept of how charging works, right? So that's.

That there are different levels and that yes, you can take Rd trips, but actually it's even more convenient to charge at home. That's one of those barriers that we have to get through and then you know, the people that come out as volunteers, they're like, yeah, this is so much more convenient already. I've never had to stop at the gas station. The only thing is, like, I had to buy my own squeegee, but that's about it.

Jeffrey Beeson

So you mentioned your you're using some guides and you're talking to people out of events are there anything else you guys are doing to address on total cost of ownership charging overall benefits that are?

Karl F. Bloss

Umm, I mean, so I mean, we've completely revamped our web page. So, I don't know if you mean like an event or in general for the you know.

Jeffrey Beeson

Yeah. Just any activities or tactics or things you might be doing to address those.

Karl F. Bloss

Yeah, actually we. You know, I have to say when so when I when I I joined about a year and a half ago, I guess, and you know coming from Kansas City the stuff that you guys were doing with the Clean Charge network.

Karl F. Bloss

And the way that that Web page was structured was so much more intuitive than what Consumers Energy had done. So, I would say, you know, partly it was me that catalyzed that. And I think I even talked to the folks that were your vendor. I think I may have even I think I think I asked you who did that for you and I we talked to them and anyway we completely revamped things and we didn't end up going with that that company or those individuals we worked with Zappy ride.

I don't know if you're familiar with them, so they do sort of a white label stuff. So, I think

those are some tactics and maybe that's a good discussion point because we as an organization, we're not that big, we have about less than 10 people in our organization. So, I can't be I or the people in our group, we can't be updating vehicle guides and things like that. So that's why we contract with Zappy ride to do some of the white label stuff kind of behind the scenes on our web page.

Umm, so you know, I think that's a good use of money because they tend to keep up on all that stuff for other organizations and they have the tools to, you know, screen things. I know one issue we had in Michigan was that not all manufacturers were bringing plug-in vehicles into Michigan, right. So whereas you might be able to find certain vehicles in California or Colorado or Maryland or some of 0 mission to vehicle states, we couldn't get those here. So, we needed somebody to do that sort of.

You know, like I said, we restructured our web page to be more. Again, a little bit more like what the Clean Charge Network did, where it's well, where are you on your EV journey? You are you looking at cars? Did you buy one and now you're looking at home charging. And then beyond that? OK, now I'm need redrover. I have home charging. Now I want to know a little bit more about Rd trips and maybe some of the fun stuff. Like we write a write a newsletter. Now for the taking EV Rd trips and again taking some of those little bit elements of what the Clean Charge Network did.

Jeffrey Beeson

Oh, want to switch down to a little bit about audience and any segmentation. And so, when you think about the different tactics you are using, whether it's event or online or anything, are you thinking about

Karl F. Bloss

Umm. I'm going to say we haven't really done a really good job with that yet. I know we've all gone through internally through some training on. On, marketing products per SE, right, and we don't really have a product, it's not a traditional product let's say, but I know one of the concepts that's comes has come up is that of a persona.

Right. So, it's like who is it the person that you're actually marketing to? And I'm going to say we haven't really exploited that yet. We haven't, we haven't. We haven't said. Well, here's the EV driver who's a young single person coming out of college that is not going to have a lot of money versus here's somebody who has a family that needs to haul a bunch of you know, pack and plays and stuff. And, you know, versus the person who's kind of the sports person or outdoorsy person.

The answer is unfortunately no, we haven't. We haven't really done that. We're it's kind of

a in, in some sense A1 size fits all from a persona, but we are trying to address you know, where are you in your EV journey part of it?

Jeffrey Beeson

Do you think there's a need for that kind of detailed messaging or is kind of the general working OK?

Karl F. Bloss

I mean, I think if you have the time and resources, it's worthwhile doing it. The thing is, we're a small organization and I, you know, so we it's basically in terms of education and outreach. We have three people now we have me and then we have two EV specialists.

You know, one of the things we have done, this is maybe less segmentation, it's more of a personal touch is we have two people that you know you can basically get in but you can't call them directly, but you can leave a voicemail in our one 800 number or you know go to a web page and have somebody call you back and then they will work individually with those customers. And so that they can actually.

Say, well, what? What is the problem we're trying to solve here? So, from that sense it's more of a white glove approach as opposed to I'm gonna segment my customer base. Now having said that, we started with two and that went live on August 15th and there already slightly overwhelmed so.

Karl F. Bloss

Umm, because there's because there's so much. There's so much interest and people really like not having to go through a like a phone index system. You know, press one for English, Press 2 for this. Right. They like actually being able to talk to somebody. And, you know, when I've done it on a personal level, I inherit some of the calls that some of the other folks can't deal with yet because I don't have that level of experience.

Your mindset a little bit or solve one of their problems, they are absolutely elated. I mean, I and I actually went to, for example, some lady's house and figured out her how to program her Mustang mock Eve for overnight charging because it was one of those things. She managed to figure out everything else on her own, but she couldn't get that. And I have to say it was slightly cryptic. And once we got that going, it's like, I mean, she just about gave me a hug when I left. Right. So, there's that. I think if you approach it.

From an individual basis like that, you can do a lot of good. Just understand that there's that could turn into a resource issue because you know in in Michigan we mean we have.

We have a customer base of 6 million people, so you know as we're finding that the growth in EV is now, you know from 20 to 21, it was 70% and the first half of 22 it's another 50% growth in EVs. And you can see that from our charging data as well. So, I don't know if having two people talk to individuals is sustainable.

Jeffrey Beeson

Sure. Are there categories of questions that you guys are commonly getting like a couple kind of big buckets or they all over the place?

Karl F. Bloss

Well, you know, there's the big stuff. How far does it? How far can the car go? How long does it take to charge? What does it cost me to charge? So, we have those kinds of things and we've developed some FAQs or some, you know. A kind of a myths sheet. Yeah, there are some very basic questions that we get that pretty much everyone asks and then you get the yeah, bots. Yeah, but what about this or where do I charge when I when I go on a road trip and, you know, we have answers for that use plug share or.

Umm, so I think most of them, they do fall into some very basic categories. Umm. And then obviously at some point you get into the details like, hey, somebody's bought a particular vehicle and they're on board. Charger is this many kilowatts. So which home charging solution should I use to works the best for me? But oh, by the way I have a detached garage in a really old house with 100 amp service. So then you start to get into the really nitty gritty like.

You know how. How? How big of a charging circuit should I put in? And that's not something that you can put into a flyer. We did develop something called an EV Ready home guide and that's not.

Umm I you know when I started developing that? Umm, you know, I noticed some other utilities have that because people want to know like, what do I like I'm not going to install myself, but what do I tell my electrician and you get sort of a guide. Like here's the typical EV ready home.

Jeffrey Beeson

True. OK, great. I want to. Are you familiar at all with the, like, adoption curve? Like a normal product this this kind of graph here?

Karl F. Bloss

OK, I'm familiar with the S curve from zero to 100%, but yeah.

Jeffrey Beeson

Yeah, so S curved kind of does go along with this too. They are joint, but it's that kind of early innovators and or innovators early adopters, where would you say kind of your territory is kind of on this curve if you had to guess today?

Karl F. Bloss

I think so. If you if you when I think of it as the as the S curve right when the inflection period comes, I'm going to say on here we're somewhere between visionaries and pragmatists.

Umm, so we're kind of somewhere in that green to blue. And I think we're just on the edge of the blue. I think we're starting to see the visionaries are the people that you know. Hey, I'm. You know, this is really saving me a lot of money and You know, now I'm thinking about a second EV kind of thing. And then those folks are starting to be the ones that they, their neighbors, see them in the neighborhoods with an EV or driving around or and then all of a sudden, the pragmatists start saying, hey, Joe's got an EV.

Jeffrey Beeson

OK. So, you kind of put yourself or almost to that early majority getting close

Karl F. Bloss

Yes, yeah. Now, I mean, as far as you know whom we address as a utility, you know, we try to, but that's where we focus most of our energy with you know with the answers to those questions. Because, you know, driving an EV is a bit of a paradigm shift. Umm, so you know, we're I don't think we're going after the Conservatives or the skeptics, you know, those are the people that when we put stuff on social media you get all the negative comments and there's no point of even engaging.

Jeffrey Beeson

Sure. Well, that was. So that's my next question and maybe you just answered it is when you think about your tactics or your messages or any ads you put out or are you thinking about this curve at all? And it sounds like your kind of are you're not really trying to reach the end, you're more kind of in that middle, would you say?

Karl F. Bloss

Yeah, I mean, we're still educating, we're edging. We're educating the people that are willing to be educated. Umm. And you know the people that are. That are going to be conservative, or in particular skeptics, you know, there's pretty much, there's almost nothing you can do. The only thing that's gonna end up changing minds there is that

everybody else in the world has an EV. And you know, they're starting to pay way more and they can't find diesel anymore or they can't find parts for their old vehicle. And at some point, they just have to make the jump.

That, that's. That's where we're at and we. And I don't you know, it's also. You know how much energy do you want to put into that? Because I think there's some diminishing returns, quite a bit of diminishing returns there.

Jeffrey Beeson

Absolutely. And then so you talked about you're almost to this early majority. Would you see yourself doing anything differently? You know, as you move to that, that next group or are the tactics that you're using today for kind of the early adopters?

Karl F. Bloss

When EVs become mainstream, has everything to do with charging infrastructure. So, you know we have programs to give rebates for, for public charging and we also work with in Michigan, the organization, the state organization that administers or in the past that administered the Volkswagen TDI funds is called Eagle Environment, Great Lakes and energy.

So, we, we work with them to get charging infrastructure out there. So, I mean that's kind of the next thing that's happening as EVs become more mainstream is that you go to a charging station and there are not enough of them or some of them are broken and you just you can't charge, and people get frustrated. So, I think that's kind of the next hurdle is to first make sure that.

We do whatever we need to, and we don't own the stations. That's the other thing. So, we need to work with others through influence and through funding to keep those stations going. So, when we write specifications for participation in our rebate programs, we have to put things in there about uptime.

But I think I think it's all about that. And then also like in our newsletter, we're starting to in our and I some of these this content is going to end up on our web page as well is you know the things for the people that are already EV drivers you know. Like you know, here are some suggestions for an EV road trip. Or, you know, there's a, you know, most people know by now electrify American charge point, but we have a couple of other small charging networks. There's one here in Michigan called Rede. And they're using juice boxes. And so, we put a little newsletter story into here's how you activate a station on The Ready Network. And, oh, by the way, here's where you're going to encounter these stations to make.

Jeffrey Beeson

OK, now I wanna move to our kind of a next section here and talk about any messaging or creative. So, I know you're doing a lot of events and outreach and using some pliers. Are you guys doing any like digital advertising or traditional advertising billboards or any kind of? Kind of marketing advertisements besides events and Flyers.

Karl F. Bloss

Yeah, there's quite a bit going on now. We do have a separate marketing group for that. So, you know, I can't speak to everything that they do, but I kind of see a little bit what they do there's, there's a lot happening in the social media space. So, like particularly right now with National Drive Electric Week, where we're putting a lot of stuff out there. And but we do also have some billboards. Some of that has to do more with.

Karl F. Bloss

The time of use plans. So, we we've gone to time of use plans which between us chickens here and the utility we're actually starting to move away from again we've had a lot of negative backlashes from that.

And I think maybe the way we're gonna, you know it's the people that, you know, their hair, they run their air conditioner all the time. And of course, with COVID it wasn't advantageous because you had a lot more people working at home. And so, their energy bill went up because they were staying at home. So, I think maybe what direction we're going with EV's is more not the rates themselves, but maybe give incentives for charging off peak or moving forward. As you know, you start looking at the duck curve. You know, getting more into managed charging.

So yeah, I've, I know we do have some billboards when we have some, you know, like spokespeople. That's like, you know, use your dishwasher and with the timer for after 11:00 PM and trying to message here's why we're doing this. It's not as much EV specific. I would say that message is mostly been on social media.

Jeffrey Beeson

What? What kind of messaging do you think motivates a customer to purchase? You were kind of deciding what to message, what would be those?

Karl F. Bloss

I mean mostly it's the cost, the total cost of ownership, how cheap it is to charge. Umm, I know I've developed a graphic that kind of shows, you know to quote UN quote fill up for 250 miles. Here's what it would cost you to charge overnight. And here's what it would cost to charge, you know, on peak during the day. Here's what it would cost at

public chargers. And here's what it costs for a 25 MPG vehicle at 375 a gallon. So, it's a lot of people are just cost.

You know, UM, emissions associated with EV's, and you know why? Why are ice cars, you know, notoriously bad in terms of emissions, simply because of their efficiency? Right. I mean, we get this all the time like, well, Gee, you're just running your vehicle off of coal and fossil fuels. And the answer as well partially. You're correct. However, if you look at the efficiency of an EV versus an ice car right off the bat.

You're already out of a savings, so we do that kind of messaging, but it tends to be more, you know, around events like Earth Day or Earth month. I guess it is anymore most of April. But cost is cost is a big one, yeah. Yeah. And the right. And there's still this perception that you must put this super expensive thing in your garage. So, there's some messaging around. You know, we give you a rebate to charge at home and so to make that barrier to entry a bit easier.

Jeffrey Beeson

The I you mentioned, your marketing groups handling some of this, but if you had the reins and the budgets of marketing, what approach, what tactics would you use to drive, would you? Did you do anything different than what they're doing today?

Karl F. Bloss

I mean we advise them. So, I would say probably not a lot different it's you know it is the cost, it is the environmental aspect, maybe the one thing I would if I could put sort of an umbrella over those two. And this starts to stretch the kind of awareness of the general public a little bit, but I don't know if you're familiar with the concept of a green premium.

Umm so which is, you know, let's say we need to make steel or concrete in a different way and a carbon neutral way. We may have to do that in a way that it costs more or let's say anything else that you do trash. Maybe you have to pay a little bit more so that you have recycling separate from your trash, and you have somebody else that has a compost bin. So, we have to pay a little bit more. The neat thing about EVs is that you don't have a green premium overall, right, so. It's actually cheaper to run an EV.

You know, maybe one place where there's still a bit of a barrier there is that the up-front cost of a new EV is still a little bit more than the equivalent ICE vehicle, so. I think you have to do you know and I come from a background of project management where you know you pay some money up front and then the project pays off. So, this kind of idea that you have a cache flow curve, I think for some people that's still.

Karl F. Bloss

They don't really understand that, and I don't know if there's some messaging that you can do that's really that speaks to the lowest common denominator.

Karl F. Bloss

You know, I don't that, I mean that could be an approach by just I I wonder we would almost have to do some marketing research like does that actually resonate.

Jeffrey Beeson

When you think of those social posts and some of the marketing items you've done, but the creative, the look and the look and feel of those or even with your Flyers or anything like that, what? You know what kind of creative elements are you going with? What are you showing in the ads? What do you think are important?

Karl F. Bloss

Umm well, I think one of the things we've really focused on is. Is diversity equity inclusion, so you know you you mentioned some stereotypes. I mean there's sort of this still stereotype that EVs are, you know, rich white guy toys. So, I know we had actually used my vehicle in my garage because it was it was an older leaf and we had a model who was African American, for example. And this whole idea that EVs are for everyone. I think that's a that's a big deal.

Umm, again. And also, in in that same vein is that this is not necessarily a, you know race or culture or anything but that EV's are affordable for everyone. So. Ohh, you know, so we've also included some. Uh, you know, used EV's. Older EV's that not just showing everything that's a Tesla. And the other thing that's a little bit Michigan specific is we try to focus on vehicles that are built or at least designed in Michigan. So, your GM's, your Fords, your Chrysler's that sort of thing. So, while Tesla is certainly us made. Umm, you know, we whenever posed like my company vehicle. You can just barely see it. Here is the white Chevy bolt EV. So, I mean those kinds of vehicles were showing that it's the EV space is inclusive.

Jeffrey Beeson

Sure. OK. So, you would you say it's important than just show in those ads the car itself and people?

Karl F. Bloss

Yeah.

Jeffrey Beeson

Versus just a graphic or some illustration or something.

Karl F. Bloss

Right. So, for example, one of the things we did, we shot some photos and did some video within a garage with a charger showing like a kayak or a bike or something like that. That's, I don't know, it's just kind of this is normal. I can just add an EV charger in my garage and here it is. I plug it in and, you know, and then showing those people actually plugging it in and then walking away and that, you know, this stuff is not rocket science. It's you plug it in, you walk it away. Walk away. It's like a cell phone and in some sense.

Jeffrey Beeson

Next section and just have two, two this section, one more. So, we're almost wrapping up here. But and I and I know you mentioned your some of this we've talked about, and your marketing team does some of it, but just when you think of all the tactics or things you could do to promote and educate around EV's, what do you think are the most important tactics? And when I say tactic that could be anything from an event to a flyer to a ride and drive to a billboard, to a social post.

Karl F. Bloss

You can only capture so many people with social posts and things from afar Umm, the things where we get the biggest wow moment are the events when people sit in a car and if you can swing it or ride and drive. Umm, so we ourselves only have limited experience with that because you always run in a little bit into the liability issue, right. It's also tending to be a little bit expensive. I know that our counterpart in the eastern part of Michigan DTE, they have done some ride and drives, and they actually engage organizations to kind of set everything up and bring the cars and that sort of thing. And I know those are hugely expensive and we don't have the budget for that. But the one thing that we have found also.

Using internal events, so we have like you know, we have these family safety days which are essentially employee picnics and then we'll bring in a vehicle and then liabilities not much as much of an issue. We still get people to sign a waiver. But you know, we basically loaded some drive around the parking lot or even on the local St and the wow factor for some people is like I had no idea. I always thought this was this crappy little car that was like a golf cart. And then you put them behind the wheel of even a bolt.

Or particularly something like a Tesla with a lot of acceleration. And you know all of a

sudden there's interest there. So, tell me more, how I get into this, that sort of thing. So, if you have the resources for a ride and drive for people to actually touch and feel and get in and smell and look at the screens and all of a sudden, it's oh, it's not that weird, right? It's like a regular car. It's got a shift, or it's got a brake pedal. It's got an accelerator. It's got lots of space for my car seats. Umm. Then people all of a sudden really wake up.

Jeffrey Beeson

So you would say probably that that ride and drive is the number one and that's kind of a very one-on-one type of tactic. Are there any? Kind of mass tactics that you think still work or, you know, work good enough. I know you mentioned your website, so that would probably be one.

Karl F. Bloss

I mean, sure, I mean the website is always a good to have a quality website that has relevant and changing content is important. So, you know one of the things we wanna do is we wanna be a resource for when people finally decide they're gonna do research that there's enough content there that people can do something with it. But they also know if they have detailed questions, there's somebody that they can talk to.

Umm. And then of course driving people there so, you know, traditional advertising, whether it's, you know, print is becoming less and less effective, but you know on online print or ads in the news or. You know, one of the things we do is also we sponsor content with radio stations and TV stations. So what that does is it makes the questioning a bit more friendly. And then you know and then we drive people either to the web page or like I've done a ton of radio interviews this week, just driving people towards National Drive, Electric Week events.

Jeffrey Beeson

OK, great. And I know you guys have some rebates, but talk to me about any use of like an incentive or a coupon or an instant rebate or any kind of incentive type marketing that you've done, any costs off the cars, anything like that?

Karl F. Bloss

Umm, so we haven't gotten involved with the cars. Our rebate is for the home charger. So, there are there are and basically the way that works is we have data sharing agreements with some of the charging networks like NYX and charge point. And so, what we do is we give a \$500 rebate on a home charger that's either an NLX or a charge point home.

And so, the people buy the unit they, so they have to have a receipt for that. They have to

prove that they actually own or lease electric vehicles because we don't want people buying them and flipping them on eBay, that they're obviously one of our electric customers. And then we get them to go on a time of use rate where it's cheaper at nighttime. And with those three things, they get a \$500 check.

For those people that have their own charger already or the car came with a high-power cable, you probably seen these programs bring your own charger. And there the way it works is again we want to incentivize people to charge overnight when. The energy is available, so using advanced meter analytics we look and see you know when people are charging and as long as they consistently charge during the off peak or super off-peak periods then they get 10 bucks a month. And the way that works is they actually get it by either Venmo or PayPal. It doesn't come off their bill directly. Umm, now one of the things that we're exploring, but we haven't done it yet is on Bill financing. So, I know for some people.

You know, just put putting up, you know, \$500,000 for a charger installation even after the rebate is going to be a struggle. So, we're looking at ways to.

Have them be able to finance it through their utility bill. You know, it's kind of like, you know, buying a cell phone, a \$700.00 cell phone and just paying whatever it is. 2030 bucks a month until it's paid off. So, for some people, that upfront cost is a big barrier, and they don't necessarily want to put it on a credit card that they have high interest rates on.

Jeffrey Beeson

Yeah, I know. We do that for some energy efficiency appliances but haven't tried that for every equipment. So that's really interesting. Do you think that those incentives are just help people maybe get a charger or get them to charge overnight, but it, are there any of those incentives getting them to buy an EV or growing adoption, do you think are they really just kind of convincing them to charge at a different time they would have bought anyway?

Karl F. Bloss

Umm I think it certainly helps. I think when people start putting the whole picture together and they start busting some of those myths, as far as you know what it what is my barrier to entry for EV's? It's one of those things like oh. Well, that's really great. So that's one less thing to worry about, right? Uh, along those lines, it's less of an incentive, but we also do work with electricians, so if somebody doesn't have an electrician.

Umm, we, we now have a vetted list for each county in Michigan in our service territory

and one of the incentives there is for a standard installation, which there's a definition for that. You know this many feet from your breaker box and not having to do a panel upgrade and that sort of thing. There's a capped price with those electricians. So, then it becomes less scary. So, we made those agreements with the electrician. So, are we actually giving money to that? No.

But we negotiated contracts with those electricians so that. You know, there's less of that scariness. Like, oh. I'm. I'm going to get to have a \$2000 installation or something, you know, because I don't know what I'm getting into.

Jeffrey Beeson

Sure. OK. No, that's all hopeful on moving to the last kind of section here, just on well for first, is there anything you've tried kind of from a marketing outreach education point of view that you think hasn't worked or wasn't successful you wouldn't do again?

Karl F. Bloss

There have been some venues that we've gone to with our kind of the roadshow, the table, the, the tent, things like that where it just kind of fell flat. And I would say we thought maybe home shows. And I remember when I was still at in, in, in Missouri, I think KCP know went to the home show and I remember actually going there and seeing the leaf and the charger and I thought well that's a pretty good idea. But I really had no idea how well that would work. So, I took our table and everything to one of the home shows here in the wintertime and it was an absolute bust. I mean I think I gave out five sheets of paper and the rest of the people we had You know an energy savings table next to us is that we're giving away the LED light bulbs and the. You know the smart power strips and stuff like that, and you know, they had way more traction than we did. So, I think you got to pick your audience. That I mean that's pretty important.

Umm, the other thing, maybe that hasn't worked super well is you know we have, you know within Consumers Energy we have some community affairs managers. They just keep in touch with the communities. And I had one of them in my area that service is also like a rural community is like hey, we sponsor a lunch for this Chamber of Commerce, and I can't go can you go and maybe give them the EV song and dance and I said yeah fine I'll do that.

Uh, and I got a lot of pushbacks, I think in some in some rural communities, you know, people were literally telling me I we're never gonna run out of oil. And, you know, I need to.

Karl F. Bloss

You know I need to take my fifth wheel, pick up and pull. Pull it up, you know, and I go 1000 miles and I never stopped the pee. You know, I had to listen to that kind of thing. And you know, it's like, OK, I'm not gonna get any traction here. So. And it was a small community. I was maybe gonna talk to him about charger rebates for hotels and bed and breakfasts. And they just weren't having. It's like, yeah, we're.

You know, they're telling me that the industry is not ready for it, which is it's unfortunate because I see the opposite. I live on the same block as a level 2 charger that the city of Muskegon keeps free, and it is used all the time. And I talk to people there from Illinois. They're from Wisconsin. We have a ferry here that goes across Lake MI to Milwaukee and I get a lot of people that come to the downtown. They're like, yeah, I pulled this thing up on plug share and I decided I'm gonna, it was free. And so, I thought, well, come here and I'll walk to a restaurant and get a bite to eat and go to the coffee shop and So that I think they get used, but I think the some of the people in the rural communities don't understand that yet that that this sort of thing can actually drive business.

Yeah. Speaking of which, and I know you didn't ask this question, but we actually have somebody that works for us, but he's starting his own business and he got the OK to do this externally to pursue like incentives for people that are charging like for example. Locations where there are chargers, he'll put up this little. Stand with a QR code and said OK, scan this thing and you can get 5% off of this at this store or you can get you know \$0.50 off a cup of coffee at this particular coffee shop and part of it is actually to research how much that gets used, how much business it is driving. But obviously there's also this you know, hey, I'm as an EV driver, maybe that's gonna make me go to one place versus another.

Jeffrey Beeson
Yeah.

Karl F. Bloss

So you know, one of the things that I had talked to my boss about is, hey, can we give like charge point credits for, you know, people EV drivers that are gonna come to the?

National Drive Electric Week events and show their cars off. Can we give them like a gift card that's like? \$10 credit on your charge point account and I talked to charge point about it and actually they said Well, we don't really have a good mechanism for this. But I feel like that sort of reward things like you know you go to hyvee and you get fuel perks. Umm I think there's some opportunity there, but of course that's for established drivers You know, I'm gonna go buy an EV. Although you never know. You know, you

go to a hyvee and people I used to be. You know, I lived in the Northland and the Hy-vee that I went to had, I think, Ivey's to this day and keep everything free. Right. So.

And people would come up to me and says, hey, tell me about charging is like, how much does it cost like? Well, actually, right here it's free because I'm shopping at Hy-vee, right. And then. Whoa, OK, that's interesting. So those are the little things, right? Top of mind advertising. The one ad isn't gonna sell you a car or a washing machine or something bigger. But when people start putting this picture together of how this all works.

At some point, they're going to say, OK, now is the time for me to dig deeper, and I'm gonna, you know, maybe this is the time, right? My, my car. Just I I do get a lot of stories about. Hey, my car died, and I decided to get an EV this time. So those little things that puts everything together and all of a sudden, they're like, OK, I'm gonna make the jump. But how do you how do you put those pieces of the puzzle together? It's a little bit of a mystery.

Jeffrey Beeson

Great. OK. Well, last few questions here that just wrap up is really around success and how you're measuring success and you kind of mentioned this that when you talked about the home show and just traffic there. But do you have kind of a strategy for your for your team on what success looks like with your efforts?

Karl F. Bloss

Yeah, we have. So, we have two main metrics that we measure and umm well, one of it has two components and that's the rebates. So how many rebates do we give out? So, we have a weekly team meeting, and we look at a graph of here's our goal. We wanna give away this many rebates of home chargers for the year. So, we track on a weekly basis, how does that breakdown on a weekly basis? And so, we find that we're. You know, we're on track or over and I don't even think on a weekly basis we've ever been under even for one week and we do see spikes where like National drive electric, weaker when we have events or that you know that we do see good feedback from that and the subset of that is enrollments in the bring your own charger program.

Umm, I think we are also moving away from the home charger incentivization to either the sort of bring your own charger incentives for charging off peak or also the court of sort of overall home charger. Is the circuit installation. So, we're seeing more and more and more EVs, right the plug, the NEMA 1450. So we see more and more EV companies are providing home charging solutions. With the car. So then obviously people don't need that, but they still need the installation. So. So that's one thing. And then the other thing is we whenever we have in person events, well actually.

Uh, we have. We keep track of how many people we engage with, so each person has to we put an estimate of how many people have you, how many customers have you engaged with on e-mail, by phone, in person and then it events. So, for me, the big one is events. So, it's always like this morning I my colleagues and I, we were at Marriott, and we had a little splashy thing out front when people were coming in and I had asked him, like, no, you get lost in the shuffle and how many people do you think we actually talked to was like? Four day was the 50, so we do measure the actual engagements. Umm. And it does not just internal, but we actually report that to the Michigan.

A Public Service Commission because you know a lot of our we we're a regulated utility. So, we have to report back on our on our programs. Ohh so yeah, it's the engagements and then the actual rebates.

I guess the other thing from a public charging standpoint, we give away so many rebates. You know, we have a certain budget based on those MPSC rate cases. So, we have a budget for those and we have a target then of how many level 2 stations we rebate and how many DCS we rebate. And so that is one thing. We another thing we measure is how many did we actually get in the ground.

Jeffrey Beeson

OK. And then so last here is just how successful do you feel like you, you're the utilities ban at least in year two years? At this point of really growing adoption in your area. Maybe that's a scale one to 10.

Karl F. Bloss

Yeah. And we always find that this is very difficult and toto gauge because you know we're not in the business of selling cars and yet. We're trying to incentivize. I don't know how to give you an answer on that. I'm gonna put it. I think we're doing good stuff. I get a lot of; we get a lot of good feedback that we're doing the right things.

Umm, so let's give it a 6. Umm, you know, we're not. I would say we're not knocking out of the park, but we're also not ineffective. Like if we just stop doing what we were doing, we will definitely get less adoption. If the utility wasn't on board, I think and I do see that a little bit on social media, I have a group that I I'm the admin on and I see some people that are in other utility areas of like well, my utility doesn't give any kind of rebates and they don't.

I like I don't get any special rates. It's like it's an all-uphill battle. And this is less EV's. But like, hey, I want to put on solar panels. But there, like, actually resistant to me putting

that on. So, then people kind of get shut down. So, I think if you say, hey, we're in the EV space, we're doing these things and we want to help you adopt them, I think you can have a positive impact, but certainly with the time and the resources that you have, you can't do everything.

Jeffrey Beeson

Yeah. Well, that that's perfect. Thank you for your time. I know this is extra at the end of your day, so I really appreciate you did mention you had some people in marketing that help you out if you're willing to forward kind of my request over to them, I'd love to talk to them as well from their point of view if that's OK.

Sandra Odunze – Interview

Jeffrey Beeson

So my first kind of section that I'm interested in is really identifying any barriers, stereotypes or misunderstandings that customers are feeling. Are there any external factors that you think are contributing either positively or negatively to EV adoption?

Sandra Odunze

I think one thing that we see is just the misconception about what it entails to have an EV and you know the infrastructure and the ability to support EV's. So, you know, gas is the norm and people are used to going to go get, you know, gas whenever. And we have, like, people that will come up and say things around. You know, what if there's a power outage and it's the same factor that applies if there's a power outage, you can't get gas either. So, or what if the apocalypse happens, or whatever the case may be. So, you have those kinds of theories that there's a norm and what people are comfortable with versus trying something new that's a little bit different, but a lot of the same factors do apply. So just education around what it entails to have an EV would be one thing that I do believe that there's a lot of, there's a lot of opportunity and not a lot of people understand what it entails to own it need be.

Jeffrey Beeson

That's great. Do you think there's any stereotypes about EV drivers that are also hurting or helping?

Sandra Odunze

I mean, general, just, you know, the younger techie people are using EV, but it doesn't necessarily need to be that way. So, there are the stereotypes there. There are some stereotypes, I haven't heard too much of it in the market, but just as a person just being out in the world, I think there's that aspect of, you know, it's for the younger tech people type of thing. And that's not necessarily the case.

And then also the fact that you know there's not enough support for charging for EV's, which it is something that we are working to grow and expand. The amount of charging stations is available. There's a gas station in every corner. How can we get to the point where there's an Evie and every corner there's that aspect and that is something that, you know, see? And the state is actively working towards adjusting.

Jeffrey Beeson

OK. And then do you think there's any misunderstandings or a lack of understanding in

three areas here. The first is kind of total cost of ownership especially compared to a gas car. Have you noticed any kind of lack of understanding on ownership costs?

Sandra Odunze

I have not because I do think there there's a lot of information around that and the savings and things like that. So, I have not come across that personally.

Jeffrey Beeson

OK. And how about how EVs charge in public versus home charging? Is there any lack of understanding there to the general public?

Sandra Odunze

There, there's room for growth with more education in that aspect and how they're charged and where you can charge them and the cost of charging, there's definitely room for more education in that aspect.

Jeffrey Beeson

OK. And then finally in this area, just kind of like overall benefits of EV, do people, do you feel the general population understands and knows kind of the benefits of why any might be better?

Sandra Odunze

I think people understand on a high level, but it's what does it? I think it's getting it to a more personalized. Umm, term that we need to get to. I think in general we know it's good for the environment, but what does that matter? Like how does that impact me as an individual? I think there is we still have the opportunity to tell that story a little bit more. But I do think people understand the general aspect of the pros of having EV.

Jeffrey Beeson

OK, great. Well, that's kind of my section. Just kind of understanding on barriers and misunderstandings or not? And so now I want to focus a little bit on audience and segmentation.

And how and if you're using any of this and your kind of outreach marketing to grow EV adoption. And so, my first is kind of when you think of audience segmentation, are you using, are you when you're marketing about EVs or trying to grow adoption in your area? Are you thinking about different segmentations or different audience groups or you kind of using the same kind of message or creative or theme for everyone?

Sandra Odunze

We are looking at different segments, so each person is going to have a pain point and a value prop. So, we are trying to do a better job of continuing to tell that story for each individual segment. So, for a multifamily property, the segment, the value prop of EV's and charging infrastructure would be a lot different than if we're talking to a consumer. And then on the consumer level, they're still deeper segmentation that could be done. So, it's something that we're actively looking to do a better job and on a consistent basis.

Jeffrey Beeson

OK, great. And is it important kind of in your opinion, to have a different approach for different audience groups?

Sandra Odunze

I, as a marketer, I would say just because if you don't reach people where they're at, it's easy for people to, you know, miss the message that you're trying to get to them. So as a marketer I would say that it is important to ensure that you are talking to the right segment with the right message.

Jeffrey Beeson

OK, great. And next I'm going to show a quick image on the screen on the product adoption curve, probably something you're somewhat familiar with or seen before.

Sandra Odunze

Yeah, I've seen this.

Jeffrey Beeson

Alright, so you I don't know if you are you familiar at all with this kind of product adoption curve image. OK yeah, so pretty typical in a product or marketing kind of space. Interested in in kind of where you think you're kind of customer base is in this adoption as it comes as it relates to EB.

Sandra Odunze

I'm thinking. I'd probably say. Either earlier or majority adopters is where we're at.

Jeffrey Beeson

OK. So, kind of maybe right in between there somewhere or jumping over to the majority?

Sandra Odunze

Yeah, because in certain aspects. Exactly for customer it. And again, it depends on the segment that we're talking about, certain segments. We're good and certain segments. We're still working to get.

Jeffrey Beeson

OK. And that your you say you're definitely past the innovators, you know more in, in really deep into the early adopters and maybe moving even away from them by now?

Sandra Odunze

Yes, that would be my feeling.

Jeffrey Beeson

Thank you. And then do you kind of think at all about that adoption curve or those different kind of segment groups when you've kind of developed your marketing strategy, do you?

Sandra Odunze

Yes, yes. Yes, we do look at that. We don't look at it in a crazy deep way, but we do look at it because it doesn't impact what we're saying and how we are getting people to convert. So it doesn't impact our marketing for sure.

Jeffrey Beeson

So you know, you mentioned that you kind of have already had the innovators and early adopter group you know, was there an approach that you took in those early days, especially the that innovator day that you remember or even that that's kind of different than where you are now?

Sandra Odunze

I unfortunately would not have the answer for that to that cause I was not around during that time frame. But from what I am aware of there were different pilot programs and things like that. There were done to try and basically understand and understand the consumer need. And also understand how we will reach the how best to reach consumers. So, there were pilot programs that were conducted, and different things and they were phased approach to how we kind of go out to market.

Jeffrey Beeson

Great. And now that you're kind of, you say, you know, you think you're kind of on the top of that that curve now and really in almost you know half the population are getting close there. Is there anything you need to change or do differently now that you know your past those first two phases that you can think of?

Sandra Odunze

I'm thinking. I don't know that there's anything specific right now. I think it's throughout. It's just a messaging. That's what would be changing often, like how you're approaching it from that. Educational standpoint to the hey, it's time to go. Don't get left behind.

Jeffrey Beeson

Yeah.

Sandra Odunze

You know, because it you know, most people aren't doing this already. So is your property. Does your property have this or are you part from a consumer standpoint, are you saving? Are you still wasting money on gas? So, it would impact the messaging is what I would think of.

Jeffrey Beeson

OK, great. That's perfect. So that's kind of my audience and segmentation section kind of my next section that I ask a few questions on is kind of messaging and creative development. So, what kind of messages are you using network kind of creative are you using in and are you using different ones for different segments? So first to kind of kick off the section, what do you think motivates a customer today to purchase an EV?

Sandra Odunze

I would say savings would probably be the top one on my list. Umm, so being able to, being able to save, I would say also being able to adapt to what's new. Umm. So just the fact that you know. There's something new and better out there for you, so say buy and yeah, those are the those would be the top 2.

Jeffrey Beeson

OK. And do you use those motivations when you're developing messaging? Do you use you talked about like cost savings, is that a big messaging topic for you or?

Sandra Odunze

I think that's one of the top ones. It's like you see the cost calculator for what it is to have more consumer to have EV versus for a, you know non consumer to have an EV. What's

your how much would you save in gas? What would your electricity bill be like, things like that? So, we definitely pull on that cost thread a lot just to educate customers as to what it entails to have in EV.

I was just going to add also just the rebates too. So, the savings in the sense of if you get EV, you're going to get this rebate, you're qualified for this rebate, things like that. And those are limited times to kind of get that rush.

Jeffrey Beeson

So. So that's great. I want to go off of that. So that do you use incentives? So, it sounds like you used at least some rebate incentives or are there any other kind of incentives you used in the past or now?

Sandra Odunze

We definitely do use incentives. Our program, our programs are based on, you know, state requirements and the CPU C so they're usually for a limited time. It's not like they last forever. So, most of our rebates are only. You know, they only last for a certain period of time, whether it's a year, two years, but they only last for a certain period of time. And then I know from Jen in general, not necessarily SE, but I know there was you know depending on the car.

Sandra Odunze

You know, trying to encourage people to buy certain cars or encourage people to kind of, you know. Get on with what's going on or like, you know, Tesla was a big one initially, so there were a lot of rebates there. But then now there are others. So, then there may be not as many rebates for Tesla versus other cars, for instance.

Umm, so yeah, we definitely use rebates, and we use incentives based programs and there are always time sensitive.

Jeffrey Beeson

And do you think those have worked or would people buy a car anyway and they're just getting a little better deal, or do you think they was really growing adoption?

Sandra Odunze

I think it helps with conversion, so if somebody where it's getting those like we said on that curve, we're in that early adopter of like I don't really know it does help with pushing people over to the side of well, it doesn't hurt you know, and this is you know I am going to save this much. So, it definitely does help and I even if you look at the auto websites

and things like that, when you look at your vehicle, oftentimes they'll give you the cost of including savings which may not even be your actual cost, but it's like.

Sandra Odunze

Ohh this is a cost minus what you would pay in gas for a year type of thing. So, I would definitely think that it does have some impact.

Jeffrey Beeson

OK, great. So earlier you mentioned some of the barriers that you think are hurting adoption? When we talked about some of the positives and you use something like the cost savings and your messaging, do you ever try to address any of the barriers in your messaging or do you really focus on the positive side by cost savings?

Sandra Odunze

Yeah, we do, but not necessarily in a direct way. So, I would say we're we stay probably leave more on the positive side, but we do educate customers about the negative aspects of not doing this and what it could cost to the environment and things like that. And that's more of on the education aspect. So, we do try to educate customers.

Jeffrey Beeson

And so again, you'd say kind of the cost savings is maybe the number one message. And I think you mentioned maybe environmental. Are there any other kind of main? I'm themes or topics that you think really help drive adoption in in your messaging?

Sandra Odunze

I'm thinking none. Not that I can think of off the top of my head, I'm. Yeah, not that I can think of off the top of my head.

Jeffrey Beeson

OK, no problem. So, switching over now to kind of the creative side of the of kind of advertising or marketing or education here. Do you use any of those kind of motivation elements in the creative? Do you use photos or cars or illustrations? What? What kind of elements of creative do you think work best?

Sandra Odunze

We're actually using a little bit of everything, so we are using stock photography. We are using animation. It depends on what aspect of it. Maybe if it's on the website, we're probably using more heavier on the stock imagery. But then when we go to like videos, we're using animation and things like that's kind of tell that story a little bit more.

Jeffrey Beeson

OK. Are you showing in those stock photography? Are you showing people or cars or charging or combination of all of it what kind of stock images?

Sandra Odunze

Combination of all of them. Yeah. Combination of all of them. So, we'll show like people will show cars will also show the infrastructure when we look at animation, we're going even deeper than the top level infrastructure. But what's behind the walls to get that understanding of what we are selling or pushing out there?

Jeffrey Beeson

OK. And do you, it sounds like maybe what you're showing or the type of creative you're using as base a little bit more on the channel versus the audience group. Would you say that or the segment?

Sandra Odunze

Yes, yes, there is some segment, there is some well, yes and no. So yes, it does. It does depend on the channel, but then in addition to that for when we're pushing to B to B, it's going to be more about the infrastructure and more about cars than necessarily about people when we're in the consumer level, we're going to show more people than we would show on a business level.

Jeffrey Beeson

OK. Yeah, let me that makes great sense. The next section is on those kind of panels or I call them tactics or kind of the marketing or education kind of tactics. Can you talk about what types of tactics are channels you use to help educate and do outreach? And in which ones you think are most successful?

Sandra Odunze

So we're doing from everywhere, from digital to print. So, we are doing social media e-mail marketing webinars for education, case studies. We have fact sheets, we already events. So, we're doing event marketing. Ah, of course. Our website and different websites based on the audience. So, trying to segment a little bit more there. We're doing a little bit of geotargeting. Not as much, but I think that's a channel that could be very helpful and.

Sandra Odunze

Yeah, those are the top ones. Ohh speaking engagements as well.

Jeffrey Beeson

Ohh, good one. Yeah, that's a I never always forget about that one. Is there anyone that maybe you've done in the past or r you're doing now but you're just feeling like it's not as successful or maybe the ROI isn't there?

Sandra Odunze

Umm. I'm thinking. I think social media. So, it depends. So, there is an aspect of marketing that's always tricky because there's a legion aspect of marketing. And then there's also the. Brand awareness or program awareness aspect of marketing. So, with that, social media may not get us as much conversion, but it does get us more impressions. Umm, so more people being aware of the program. So, we're seeing it seen by more people so it's hard to say that it's not successful because we use that we use social media for more of that branding aspect of things of just getting people aware of the program and we know the marketing saying it takes 7 times before somebody is able to even make do something. So, with that, it could be three times on social they heard this on the radio.

They saw they saw an e-mail and then all of a sudden, now we're having a webinar and that's what made them convert. So, we are seeing traction in each of our mediums. I don't think there's one that's like not performing. That's like ohh yeah, we can't do this anymore because we're not seeing anything. We are seeing some traction in each of our mediums.

Jeffrey Beeson

OK. Are you doing anything to try to expose the actual car or an EV driver to a customer?

Sandra Odunze

No, from SC standpoint, no, not necessarily cause we're more soldiers trying to push our program, not necessarily the vehicles.

Jeffrey Beeson

And then we kind of talked about what what's worked and what's not, if there was one tactic that you would say is your most successful?

Sandra Odunze

Umm, I'll give you 2. I would say like our Google ads or our search campaigns, sorry I don't know if I mentioned we're also doing retargeting ads, so our search campaign reviewing retargeting, and programmatic bot media buys. Those are really, really those have been really good, and then I do think e-mail marketing has been successful for us

and ordered to kind of get people to, you know take an action. So, I think that would be my talk to if I could only do two, those are the two that I would do.

Jeffrey Beeson

And on that e-mail marketing, are you doing anything to kind of how, how do you determine who to e-mail?

Sandra Odunze

Umm, we do create, we create different propensity models to understand which areas, how it has a higher propensity of meeting EV's or wanting EV's and customers that are converting. So, we look at that and then we're just sharing it with, you know.

Jeffrey Beeson

Is that by like ZIP code?

Sandra Odunze

Zip code. We also like looking at data to see you know where from a business standpoint, we'll look at data to see where there is more EV, so that those are the areas that we wanna push businesses. Hey, make sure you have charging fictions because you have more EV's in this area. So, things like that. So, we are looking at different data sources to kind of understand who's the best customer to push this to. At the same time, we are sharing the general and this is where that whole brand awareness aspect is. You don't know. So, we may think this. It's this area is a right area, but we still share with most areas. We'll just do heavier target in in certain areas.

Jeffrey Beeson

OK, great. I think that is there anything else you would add on about tactics or marketing strategy that that maybe interesting or helpful to know?

Sandra Odunze

Nothing much, just that the strategy changes each year so you know what work this year may not work next year because like we said, we're moving in the curve and we're trying to do more segmentation to talk to you know, get the right message in from the right people at the right time. So, I'm just that the strategy is constantly changing.

Jeffrey Beeson

OK, great. Not that makes sense. So, my last kind of section to talk about is really around success and metrics and wondering if you're measuring and if so, how you're measuring so?

Sandra Odunze

Yes.

Jeffrey Beeson

Do you have the kind of a strategy for measuring success with your EV education efforts, and if so, you know, how does it work?

Sandra Odunze

So we are looking at metrics on a regular basis at minimum monthly, but oftentimes more than monthly. And then with that, we're looking at everything from impressions to conversions to time to conversion. And we're also looking at engagement. So, if we have an article, are people reading all the way through the article, are they stop in the in the middle, things like that? I forgot to mention content marketing, that's another one. Uh tactic? But yeah, we are measuring on a regular basis and we're looking at engagement as well as conversion.

Jeffrey Beeson

OK. And on your engagement metrics, can you give me an example of a couple things you're measuring there?

Sandra Odunze

So a couple things would just be. It would be impressions, specially it would be time on site. It would be looking at the area maps to see where people are looking and where people are spending more time on. On the website things like that.

Jeffrey Beeson

OK, great. And then so I think you.

Sandra Odunze

Or like quick.

Jeffrey Beeson

Yeah, go ahead.

Sandra Odunze

I'm sorry. I was just gonna say also like page click through. So, it's not about just getting them to the site, but are they popping around to get more information in the site or are they just like bouncing off the website?

Jeffrey Beeson

Got it. OK. And then on that, are you thinking about the different audiences and the different messages and measuring that kind of differently or you're just looking at kind of your whole campaign?

Sandra Odunze

I'm currently we are prime like from a marketing standpoint. We're looking at just the overall, but the data team does kind of do a deeper dive on their end for their reporting purposes.

Jeffrey Beeson

OK, good. And then you mentioned you're kind of reporting at least once a month. You know, how do you report on your measurement? Do you have, like, an official report out with a team, or is it just kind of spot checking?

Sandra Odunze

It is a dashboard reports that are sent out to leadership monthly.

Jeffrey Beeson

OK, great. And then have you done anything, or can you give me an example of how you've used that data or that report to kind of optimize or change or campaign? Anything. Any samples better?

Sandra Odunze

Yeah, I mean, there was a, there's a period where we're at, you know, when we start, we thought initially were like ohh social media is going to be the best way to reach some of these businesses for a specific program.

Umm. And it didn't. You know, we notice the search did a lot better. We put a lot less money in search and that had more leads than the money that we put in social. So, then we had to adjust and say all right, let's flip this. Let's move some more money over here because we're seeing more conversion over here and not again, not that we would stop the other area. We would continue the other area but would keep that more on and awareness because again the impressions are going to be strong. But there's the impressions aspect of educating customers. And then there's the conversions of OK, we're actually getting somebody to fill out an application.

Jeffrey Beeson

Just from up here, how successful do you think your utility has been at this point and growing adoption would? But adoption be where it is today, if it. If your efforts weren't there.

Sandra Odunze

I don't think so. I think we're doing a lot to ensure adoption and we are not only just from a marketing standpoint, but from a sales and customer support. We're actually going out there and putting in a lot of time and effort to not just making sure people are educated, but also making sure that they have the resources and tools they need to take the next step. So, I would say that it's been very impactful.

Jeffrey Beeson

If you had to rate kind of your efforts on a 1 to 10, how successful, what, what kind of number would you give your utility?

Sandra Odunze

I'd say a solid 8 or a 9. Just because nobody can be perfect.

Jeffrey Beeson

Of course, that sounds like you're doing a whole lot of stuff. Well, right, those are kind of my main questions. I want to turn it over and just see if there's anything else that you've thought of that that may be of interest or helpful as we kind of look at what utilities are doing and what what's working and what's not working.

Sandra Odunze

Nothing additional at this point, but I'm just want to let you know I'm extend myself. If you have additional questions, feel free. Like you have my e-mail. So just like ping me because I know things come up or you need additional clarification as you're kind of going through the transcript. Definitely happy to help.

Jeffrey Beeson

Well, thank you so much. I really appreciate that. I appreciate your time. I know we're all super busy, so thank you. And I'll say the same thing. You have my e-mail. So, if you ever need anything from me or us, feel free to reach out.

Sandra Odunze

Thank you. Thank you.

Tara Williams - Interview

Jeffrey Beeson

So alright, well, my first group of questions is really around kind of identifying any barriers or stereotypes or misunderstandings about EVs and to kind of kick off the section. I'm interested in any external factors you're thinking, so external factors are kind of anything that utility is not doing, are there any external factors that are contributing positively to EV adoption right now?

Tara A. Williams

OK. So positive factors that we are considering or that we are seeing is from, you know purely from the utility perspective. So, we are seeing OEMs making these huge commitments to EV's. That is that is something that is interesting to me. So, these OEMs really didn't consult utilities, they really didn't, you know, go in into this as like a group project. And you know, we're we have this idea, but we really need you to update the infrastructure and put in these charging systems and, you know, educate our residential customers. It was really this is where we're going and this is our goal and you know, we kind of all had to play catch up so.

Umm, you know, probably spring time last year we saw this turn of events and we I don't want to say we were scrambling but we had to really prioritize EV's internally and make sure that we were prepared and you know educate our customers on the change of what the OEMs are doing. So not only the OEMs are moving from ice or internal combustion engines to EVs.

There's federal grants coming. There are clean energy goals at several different you know, corporation and organizational levels. So, we really seeing this turn of clean energy and taking care of the planet. So those are external factors that we really look at from, I would say, a global perspective, even though consumers are a very regional or state.

Organization or company we have about 2.4 million customers in our in our territory. So, while we're just, you know really a spec in this whole scheme of EVs, we really have to make sure that our customers are educated. So, when they go purchase an AB or build a new home that they're ready for this transition. So. I would say if we took that down a notch from maybe the umbrella view OEM, just making this huge commitment down to maybe more of a local external factor. And when I say local, I mean the state of Michigan, you know we have big goals and inspirations here as far as you know, we're the home of the automotive capital. So, we kind of take this, I think a little more to heart and OK these OEMs, GM and Ford are in our backyards. You know, what are they doing? And you know they have this big view. So we really have to make sure that we

know what's going on.

When we, when we look at that external factor, then I look strictly at what are my residential external factors and where are my customers at in this whole journey, right. So external factors, there are consumers territory in Michigan. You know we have a lot of the mid-Michigan area in in a little bit Northern Michigan, you know South of obviously like Traverse City and those more high-end towns up north. But now we have a lot of farmers and a lot of country communities that we really need to educate, so we need to educate on how EBS will work. You know, if they're buying a new tractor, is there an equivalent to that? So, there's a lot of factors from, I would say, global to national down to state that we're looking at to figure out this whole journey and the speed of how all this is happening.

Jeffrey Beeson

Sure. No, that's great. Those are great, great answers. So, on the flip side then what kind of factors are barriers do you think are hurting adoption right now?

Tara A. Williams

I would say a lack of education, so we really haven't gone through a transition like this, you know you think about, OK, what was the last big thing in our lifetime? Really. So, was it the iPhone? And you know how many years did you or I or our neighbor say, oh, I don't need that thing in my pocket? I don't need to have a touch screen. You know, I don't. I don't need that. But, you know, over time it just became the norm. And now everyone has a phone in their pocket. People aren't having home phones because everyone has a cell phone. You know, you think back to the transition of computers and I mean these are big life changing items and we're lucky enough to be in that with EV, whether it be a headache or whether it be you look at it as we're a part of this and we can, we can help this adoption and help overcome these barriers.

And so I would say education and awareness is #1 and what we like to think of as you know, consumers as we want to be a partner in that we want our customers to look at us as a partner in their transition, their journey and the EV that they can trust us to, you know, ask US questions. We just launched these EV specialists and customers can call our specialists and ask any question like what EV is for me, what type of EVs are there.

So really trying to help customers understand that you know your plugin, your phone, when you go to bed the night before and when you wake up the next day, your phones fully charged, and it gets you through that whole next day until you charge it again. So really thinking about that in the EV sense too. And I guess if we want to compare it to like a gas vehicle, you know, you wake up in the morning with a full tank of gas or a full charge and you go about your day. And when you come home, you just plug it in again.

So, it's ready to go, then next day and it's just really trying to help customers understand that mindset shift. Which leads me to the next barrier I think would be range. Umm, we talk a lot in our communications to our customers about range anxiety and again you know customers think of. You know these cars that are coming out that are 203-hundred-mile range and they're thinking, oh my gosh, that's not, you know, big enough range for me. I need an EV with further range well. When we look at that, you know how many miles do you do you travel a day and when we did?

Uh survey and when we looked at what that truly looks like, it's around 30 miles a day that people drive on a daily basis. Well, yes. Do we all take that color tour up north or do we take a weekend and do a road trip? Sure. But when you do that, you also have to plan ahead of time for you have to fill up your car and with gas ahead of time. So, it's really just getting customers to understand EVs have all those same options.

And I guess barriers, but so does gas as well. So just really trying to look at that range anxiety and really is that or should that be an anxiety if we're all just doing, you know, short term driving throughout the day, I guess you know, acknowledging too that everyone has specific examples where they may drive further on more of a uh, you know cadence that they may need something different, but another barrier that that we address or that we look at is types of vehicles and the cost. So, our demographics specifically, you know we don't really have big Metro or urban suburban areas you know like I mentioned before, we have a lot of farm country, a lot of local small communities. So that adoption rate is going to be much smaller than say if you know.

Focus on the state of Michigan like the Detroit area that is a different electric service territory, so their adoption rate is a little higher than consumers. Umm. Service territory. So, you know, looking at that, the cost of the vehicle is a barrier. Those are coming down. So, I wouldn't say that's a huge barrier, but we do acknowledge that. Umm. And then with that also you know for me personally we do a lot of travel sports. So, we we're traveling a lot, we pack my I have you know the biggest SUV extended SUV you can get.

And they don't make that equivalent in an easy. So again, you know, we're really early in the EV product life cycle. Will that come 100% just you know announced their SUV which is pretty good size in you know the Hummer has a storage too, but you know that's the other thing is who EVs are targeted to, and you know that's shifting now as we get into this EV world from the original EV or image of the EV. You know, like a sports car or like the Tesla where you there's not a lot of storage.

Umm, so I would say those are the big barriers that we really look at. And then the last one obviously is the infrastructure. So where are the public charging stations? We don't have a lot on the highways, they're more in local communities, downtown, Main Street

type locations. So, infrastructure is another thing that I would consider a barrier, but I also if you have a home charger and you, you know, you charge every night at home, then that wouldn't necessarily be such a big barrier because you know, you just plan ahead.

Jeffrey Beeson

Sure. No. So are there any negative stereotypes that you've heard that are kind of hurting EV's?

Tara A. Williams

Yeah, I would say. The cost? Uh. That's one thing that you know people. You know, when they when you think of an EV, you know, someone like me who is working on EV's every day. You know, obviously I think of something different, but if you were to just take a poll and a random St when you think EV, you think Tesla. So right there, you're thinking of this luxury model, sports car type feels maybe, you know, older generation that has no kids at home that doesn't need a lot of storage, that has.

Extra income to spend on that. So, I think that is kind of the view right now on EVs. I also think that.

The other negative is you know, like the hurricane that just hit Florida. So, what happens when these people, you know, are without power for X number of days? How are they going to charge their card? So, there's things like that that I don't think that we as consumers as have really addressed. We're, you know, more putting the tools with our customers on you know, this is the type of EVs there are. Here's the cost range you can get. You can even get use DVS. So, we're really trying to help address some of those things. But I would think those would be the big.

The big ones, I guess. Umm, you know? And then I always think too you think like the Jetsons. So, the Jetsons cartoon right back. And what was it liking the Six seventies 60s.

Tara A. Williams

OEMs with floating cars, you know, I feel like that's what we're living in right now. And so, it's still this big in the sky idea that is now grounded. And here we are growing the adoption. So, I think 2 is just you know, we're so early in that life cycle of Ivies.

Jeffrey Beeson

Sure. OK, well, good. But that all you know, is there anything else that you feel? That you need to overcome. So, when you're thinking of those barriers or those stereotypes, do

you? I think that your responsibility is the utility to help overcome or is that not your concern?

Tara A. Williams

We do take it as an as something that we should own because, so my position is the product marketing manager for electric vehicles. I also support our renewable energy, so I support solar carbon offset and then we have a new program that we're looking about launching too about just renewable energy. So as the utility, we are making huge strides and becoming a cleaner, greener, you know Michigan future.

And we want to be able to enable our customers to do the same and to be able to have those options to make those decisions. Umm, I think that we do have a big piece of this. You know, when we look at what's happening with EV's you, we kind of look at it from a hub and spoke type model. And we really think of ourselves maybe at the at the hub, we have to be that common denominator between the OEMs, right, because they're making a product that our residential customers will buy or even our commercial customers if they convert their fleet right or if they want to put in public charging.

And we need to make sure that we have the education and awareness to our residential customers. So, I mean I'm a, I live in my territory and consumers, energy territory and so I look at my neighbors and I, I do feel that sense of I need to make sure that everyone has the tools available to make the best decision, whether it be an EV or community solar or if they want to offset their carbon use to make those decisions to become.

Umm, you know, just a cleaner future. And I think too. You know, we have to also educate our customers and EV from a charging perspective, the utility, right, we power the homes, but we need to make sure customers understand you don't want to be charging your EV at 2:00 o'clock on a summer day because it's just like putting another air conditioner on your house. So, you'd be running two air conditioning units versus educating them on there's more capacity on the grid at night when we're all sleeping, we don't have air conditioning is running at night in the summer as an example.

So, get on a time of use rate that will help. Then charge your vehicle. We do a lot of cost comparisons of gas and EV or sorry gas and ice vehicles versus charging rates or electrical rates with EV. So, I do think we have a big piece of ownership in this EV adoption.

And that is just to make sure that we ensure that we provide the information to all parties, whether it be a commercial customer and they want to electrify their fleet, whether it be a

residential customer that they need help installing a charger or buying me be. So, like I said, we kind of think of ourselves as like hub and spoke model where we're the hub and then we have all the spokes, which is the OEM.

You know the installation of the charger compared to maybe a corporate customer that wants to electrify their fleet. So just a lot of moving pieces there that we want to make sure that we're looked at as a trusted partner in that.

Jeffrey Beeson

OK. Well, that's great. That's the kind of my section on understanding any barriers or stereotypes, I I want to move next to audience and segmentation. And so, to start, I'm just wondering if you're using any kind of audience segmentation in your marketing today. Do you divide up any of your audiences or is it pretty general across the board?

Tara A. Williams

No, actually I was just working on my strategy for 2023. Uh, so I have been on EV since 2020, early 2020. So you think how much just has changed in two years with EV's and before we were more of an awareness play to our customers back in 2019. So, I would say that was more lumped into one audience. The strategy that I'm doing now is I'm putting people in categories in the segmentation.

Since I guess of where they're at in that journey and then looking at the highest propensity of EV drivers, so you know we have an EV specialist that he was actually retired, we brought him, we hired him out of retirement to come in and help one educate poll workers and consumers about EBS. But then also he's kind of like our brand ambassador, he's out doing.

You know, farmer market type events and uh roadshow type events and letting people he has Navy obviously and letting people sit in his EV and ask tons of questions and open you know the charging port. So, what we're doing is you know he's a customer I'm going to talk to him differently as an EV owner then I'm going to talk to say someone who's never heard of it maybe or maybe is a little more hesitant on Eve's.

So, I break it down. Currently I have it into four audiences I talked to. So, if you think of like the marketing funnel and I don't know really how familiar you are with like a marketing funnel, but at the top at the widest, so that the funnel I guess, or pyramid would be upside down. So, at the top of the pyramid is the widest part of that upside down pyramid and that is what I look at as the awareness part of it and that's going to be my non drivers? That's people that, OK, I've heard of in EV. I have some of these misunderstandings about EV's. I might, you know, never wanna buy an EV. But

personally, me as a marketer and E vs for the utility. I still wanna talk to you because I wanna make sure you are getting the right information that if you do have future questions, you contact us. If you do, you know, say these people are going to build a house in the next couple years putting an EV charger in your garage is a great selling feature, but if you're not understanding the whole process of how you do that or you know what type of charger, I still want to talk to you, I'm not. I'm not leaving anyone out in my segmentation. The next group I kind of classify as my umm EV drivers.

So, there are people who are new to EV. They may have bought one because it was just, you know, they have extra income, or they want their early adapter they want to be the first person to have that new iPhone have the new EV. I want to talk to them because I want to make sure that they understand that we have rebates. So, if they put in a level 2 charger, they could get \$500.00 back on that charger and they might not even know that I wanna talk to them because they. Should be on a time of use rate, so when they charge at night, they're getting a lower electrical rate to charge their EV. So, while it's fun out for them on the outside, they have this funny V that they're driving all over. We really wanna make sure that they also have the tools to make sure that they're charging it the most efficient and effectively. And then I move over into that next group of. So, these are the EV drivers. So again, another EV driver group.

And their ones that are enrolled in our program. So, they've received a rebate, they've installed the level 2 charger. So, they're charging at a faster speed than just say that you know a normal charger that comes with your vehicle. I wanna talk to them because they might not know that we're putting in all these public charging stations, so if they're gonna do a road trip with their EV, maybe they don't know that we just installed one right before the Mackinac Bridge in Michigan so they can, you know, sit there, have lunch, charge their car, and they can go up and do a tour in the UP because we have, you know, grown that infrastructure to allow them to continue their journey. So, you can see how the funnel is going from the top, very wide, very broad to narrowing down. Since the EV drivers right now in Michigan. Umm. Or in our territory I think is like 21,000 people. So, you can see, you know that upside down funnel or pyramid is kind of like narrowing down to the very point at the very bottom. That last group of customers that I talked to is they have an Ed, maybe they're on their third or fourth EV. How else can I as a marketer in at the utility help them make more decisions to be cleaner to be a green hair, brighter future for Michigan.

Because typically if you're drive an EV, you have some type of goal. Of having you know no emissions in the air. Maybe it is just cost of gas, but in return you know you're not putting, you have no tail pipe. So, then we talked to that Group A lot differently. We're gonna talk to them. And you know these are the other energy options that you can have you could, you know, subscribe to a program from the utility that you're getting solar credit. So now you can say. That you're subscribed to a solar program, and you have

an EV, so you're truly a renewable source at that point. So really trying to get people through that journey and at each step along the way, we talk to them differently depending on their spot and that right.

Umm. And then on the flip side, more on segmentation, what we look at is all our buying the EVs. So, when I talk about the different groups of people. You know, I, you know, the group in consumer territory is 2.4 million people. Am I gonna talk to 2.4 million? Probably not. Because, you know, say, a million of those don't even want to hear from us. They don't, you know, as a utility, they may not trust us. They might think that we just, you know. You are a bill in the mail because we haven't, you know, their energy in there, you know, heat.

Umm, so I'm really doing research through different sources, consultants and who is driving in EB. I look at the people who are enrolled in our program currently and then I take that profile whether it be say age 40 to 75 specific incomes specific even a county within my service territory. And then I kind of opened that up and say OK, maybe that same demographic, the same profile. Maybe they're the ones that looking at by any of these, or maybe they're the ones that have EV on order. But they can't enroll in our program because they don't have any EV yet. So, I really tried to make sure that I not only talk to the right audience from a demographic profile perspective of those with the highest propensity that would drive any EV, but also expanding that to making sure I'm talking to the right customer at the right time with the right message regardless of where they're at in their epic journey.

Jeffrey Beeson

Well, you mentioned the funnel and so I wanted to kind of piggyback on that and show you a quick I'm gonna share my screen real fast to see if you're familiar with this image as well that kind of goes with the marketing funnel. I'm kind of often called the product adoption curve, something you've seen before probably.

Tara A. Williams

Yeah. Yep. I have seen this. So, we, so this is the curve and then we I guess turn into more of a funnel just to make sure that we show. It is basically the same thing I guess yes, but we also look at it from. Umm so this is, I guess. So yeah. Innovators to like the skeptic. So, we do look at this as well.

Jeffrey Beeson

Where would you say kind of your territory if you had to put a pin on this chart where would you say your territory is today?

Tara A. Williams

I would say we might be in the blue.

Jeffrey Beeson

There are the light blue, that middle blue or the dark.

Tara A. Williams

Oh, I'm sorry. The light blue and maybe even a little into the orange, but that might also be unfair since it's hard too, because if you turn this adoption curve into a product life cycle, we'd also be on you know the early end in the growth part of it. So, when you pair, you know the adoption versus the product life cycle that plays a little bit of a role. But I would say our customers for the most part is open to hearing about EVs learning about them. But there's so many factors out there that that, you know, impact actually buying the EV and moving forward?

Jeffrey Beeson

Have you changed any of your messaging or tactic as you kind of moved through this cycle at all or this curve?

Tara A. Williams

Yeah.

Jeffrey Beeson

Has it been pretty consistent?

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Tara A. Williams

Nope. We have moved. So, I mean, if you think of so an early adapter may have been over in the conservative part way back when, but because they're typically an early adopter, they wanna be at the forefront. So, we have changed our messaging based on UH, where just customers are at in this funnel and where the industry is at. You know, when we started the campaigns for EV, that was before the OEM's, you know, forward and GM made their big announcement. So, we were more just educating our customers on hey, if you have an EV, you know we have a rebate for you.

Uh, you know you can charge cheaper at these times of the day. It was more of an awareness and education broad broadly spread, I guess. And now that we're really having other. Other factors so you know OEMs or dealerships, or you know even just other clean energy options are customers are really getting broke up into these different segments.

So, they're kind of separating from the conservative to say like the visionary is on your screen on where they're at and kind of how they're feeling about it. Umm, so we've really tailored it to depending on where that customer is at, and their journey are messaging will change.

Jeffrey Beeson

Great. No, that's very forward-looking. That's good to hear. So next section I wanna talk about is maybe kind of to messaging and creative and so. To start with, I'm kind of interested in what you think motivates a customer to purchase an EV?

Tara A. Williams

But I think it depends on the customer, right? It depends on where they're at. I think those early adapters, they want the new fancy, you know car and I'm just touching back on the, the question you or point you just had a minute ago about have we changed our landscape are, you know positioning. When I came into this role, we were in the EV space again from a very broad. Awareness, education space and one thing I noticed is we were using images that were car show images these shiny cars that were out of the reach of a lot of our customers and wow, yeah. EV's are shiny and fun and new, and they're kind of like a toy, right? For a lot of people, they also need to appeal, and they do appeal to everyday people running around doing groceries and picking up kids and you know those kind of things. So, what the one thing that I did first was break up our messaging into where people are at in their journey and then making sure that my images weren't all cars show shiny, you know. Kind of out of this world.

It was more of here's an EV on a back Rd. Here's an EV. Picking up kids from school, so I think that the biggest factor I guess would be it's just maybe the, but like right now, I guess it's different because the availability is the big one, right? Right. Right now, you can't even get an EV. Uh, four months out. But I guess you can't even get an ice vehicle either. So, but I would think availability and honestly is education slash range. So that's one thing like for me, you know, I drive a gas vehicle, but I support the EV.

Ohh products and that's the one thing you know I say is I would get an EV, but I need one that I can, you know pack to the brim for these, you know, softball tournaments and baseball tournaments so. What is my barrier when I think of that and you know, just thinking through the amount of people that I come across at these different tournaments that we travel all over the Midwest for is availability and range? So, I think that's the biggest thing.

Jeffrey Beeson

OK. Well Speaking of that, what are kind of the big four, you know if you had to pick

three or four or five themes that you use in your messaging in your app, you're advertising or creative, what would those themes be or maybe there's just one?

Tara A. Williams

So the things that we talk about are. Our uh, there's three really that we that we can plan on. So, the one is time of use rate. We wanna make sure customers know that. You know, especially when in into the winter season for Michigan, you know our bills are expected to go up quite a bit. Just natural gas pricing. So, we wanna make sure that customers know that there is time of use rates that you can get on with your utility to charge at a cheaper rate if you are charging at you know 11:00 PM to 2:00 AM you get a cheaper rate than charging at you know, noon to 2:00 PM. So, we wanna make sure that customers know time of use rates and that you know we're here to help educate them on that and get them involved in that. The other thing is Umm. Range anxiety. That's one thing that keeps coming up, you know, thinking about work customers are at in their journey. Umm. And so, range anxiety, slash infrastructure. So, infrastructure comes up quite a bit on you know. We have to help get these public chargers in the ground and we need to make sure that we have them in the right spots, you know, public charging. We have, we offer rebates to our commercial customers to help in install public charging and then they get a rebate for that. So. The one thing that came up recently is what about the highways? Where are the EV chargers along I-75, which is kind of the main highway in Michigan? So, I would say infrastructure. Those are kind of hand in hand, I guess. And then just the third one is that the lack of customers understanding. I guess the benefits of EV's if they have goals to reduce their carbon offsets or goals, you know, to meet a clean energy. Positioning you know, within their life. So, if they're trying to reduce their carbon output. So those are like the three top things that we really focus on.

You know, it just changes too. If there's something that comes up from what's happening at the federal level, what's happening at the state level with different grants and different rebates and things like that, that people can get. We try to make sure that our customers are educated and all of that.

Jeffrey Beeson

And then you mentioned a little bit about your creative process, and you know looking at what images you might use, what can you go in a little more detail like what themes within your creative are using people or cars or graphics illustrations, what kind of main creative elements?

Tara A. Williams

So within our creative strategy, we really want our electric and combo customer. So, if you have electric service or electric and natural gas service. To be represented and respected in the area, but they're EV adoption. We want to make sure that we're talking to

again the right people at the right time. The things that we really look at from like a tone, imagery and design. Is EVs are affordable by all. So, we want to make sure again that we aren't using Tesla in every image we want to be using EVs that cost \$30,000. We want to use EVs that you know, reach all of our audiences, doing everyday Michigan activities on Michigan roadways. I mean, it's a Michigander, right? We're super proud of how beautiful our state is and especially like up north with the road trips and the color tours and you know, all the beautiful lakes up there, we want to use that to really bring it down to the Michigan residential level. Another thing that we use not only from Uh, but you also know, so we want to make sure we have a car in a vehicle. The one thing that I touched on too is we don't always want to show, and EV tied to a charger. The one thing that I changed also when I came in was well, yes, we need to show that you have the charger in your garage, or you have a public charger and you have to show how you're charging, you know, plugging that charger into the car when you see a commercial for an internal customer combustion engine, they're not standing at the gas pump with the gas pump connects into their car, right? We have to show what these events are capable of. They can be out on Michigan roadways, they can be at the soccer fields watching a soccer game. They can make coffee because you can plug in a coffee fat to an EV and make coffee or hot chocolate or something.

So we're trying to make it look as you know, EVs are affordable, but they can do everyday Michigan activities. We want to also show in some of our imagery that with our specialists that you can call a specialist or, you know, get personalized information on how to install a charger. In your house, if you have to upgrade your electrical panel so we use some imagery there. But the other thing that we do too and that's and it's big within Consumers Energy is our DE and I perspective. Uh, we make sure that in every piece of creative, whether it be our wording or our creative imagery that we touch on diversity of our target audiences. So, we have group and the Southwest region that is very, Uh, Hispanic, fluent. And you know, we make sure that we translate our website, so it's in Spanish so they can understand everything we have to offer, and they can understand and become educated with EV's. So, we want to make sure that we encourage all customers to take part in the EV journey no matter where you're at.

So we, you know, we always have that component as well is it's for everyone. We want to make sure that people feel they can come to us with questions that it's not for a middle-aged man sport cart type thing. So that's what you know. We just break it down into, you know, I guess we've just scope with that EVs are affordable by all and can do you know every day Michigan activities.

Jeffrey Beeson

Yeah. Well, that so then moving kind of from creative to different tactics and by tactics, I mean, anything from a flyer to an event to something in between. But just wondering

what you think you know, what are your one or two or three most successful tactics, marketing tactics, outreach tactics that you do to grow it adoption?

Tara A. Williams

Mm-hmm. So, we break our tactics down into different buckets. So, when I'm looking at my marketing strategy and my marketing plan, I look at an awareness tactic which, if we think about that upside down, pyramid awareness is at the top. I'm really not thinking that someone is going to see an awareness tactic, say a video, you know, ad on YouTube and they're going to go and roll in our rebate program to so they can get that rebate.

So each tactic has a different purpose. If we think about tactics for customers who have an Ed that want to receive a rebate, need to install a charger, those tactics that we see I had the best response. Our e-mail, you know Evie drivers, you know, they're that early adapter right now. So, they don't want paper bills. They want an e-mail. They wanna self-serve. They wanna be able to click on the button from the e-mail and go look at approved electricians we have and then they want to be able to call them. So, we've really tried to make it that customers can do like a self-serve just knowing that these are these early adapters, they're more digital, you know, they like to self-serve, but it really just depends. I take my strategy and I spread it across the whole funnel. So, I wanna make sure that I touch on someone who's maybe entering that funnel of the awareness. So that's more paid media and organic social or paid social search. We look at paid search a lot too. You know someone wants to a level 2 charger.

You know, paid search is big there just so that, you know, customers can see consumers pop up to the top, but then driving down, you know, into the center of the upside-down Pyramid e-mail is really where we see the big and you know, customers really respond well to our emails across the board with consumers. Typically, an open rate, and now that's changing to cause Apple is changing their security on emails and things like that. But we were, you know, at the average I should say from an open e-mail. So, if it's in the e-mail on another program or if it's an e-mail and you know visit our online store to buy light bulbs or whatever that is because our audience is so unique with EVs. And we're seeing like a 70% open rate and sometimes they'll be 40%, but it just it's so interactive with this group. So I would say e-mail is our highest. We still do send Flyers or postcards with QR code, so it's still really easy if you have a phone, you know you can scan that. So, we do everything across the board, whether it's paid media, organic media from our own Consumers Energy pages.

Two direct marketing tactics have e-mail postcards, but we also do events too, and I would say events kind of set up in that top bucket. Umm, we have our EV specialist, and they are very educated in that space. One of the things I'm Carl Bloss, who got you to me? He uses the phrase as butts in seats and what that is really getting customers to see,

feel touch in EV. We have not yet done a ride and drive DTE, our neighbor energy service provider in the Detroit area. They've done EV or ride and drives where you can sign up, go there, drive a Hummer. I think they had a Rivian actually there. So, you can actually drive it. We're looking at doing that, but that's just, you know, there's a lot of liability and in details to go into that, but really getting people to see the EV to see that they're not this like, you know, funny looking car that there's EVs out there right now in the road that you don't even realize are EV. So, they look like, you know, and I'm air quoting a normal car. It's not this like out of this world.

Ohh vision anymore. So, we do events as well. Again, that's not what we call, you know, a direct marketing tactic. It's more in that awareness bucket. So recently actually we just celebrated with the Michigan State University. They are electrifying their entire fleet. UM out there, their cars that they have through the university to electric. And they also put in public charging. And then what we did is we partnered with them at an event at a football game and it was before the game so people could come through the Fan Fest area and talk to consumers, energy people. We had EV's on site. They asked us any question, you know, from charging to what kind of cars, you know, anything. So, we are doing events like that where we can get out into our communities and with our customers want to celebrate customers who have made the switch like MSU, but also, they brought in you know. Uh customers or resident residential customers to the football game that we were actually able to talk to and have that one-on-one conversation as well.

Jeffrey Beeson

No, that's awesome that I didn't know that the university had made that switch. So that's great to hear. So, then my last section is really just on how you're looking at success. And so, wanted to understand any strategies or how do you kind of measure success of your EV efforts?

Tara A. Williams

So we measure success at a very, very high level. Yeah, high level view. So, there's a couple different areas that we measure. So, we measure at you know from a marketing perspective. I send an e-mail, how many people opened it, how many people clicked, how many people contacted a specialist or enrolled in the time of use rate or rebate, right. Like it's very, very tactical at that level and I send an e-mail to 7500 people and 4000 people called us or whatever that looks like very low.

Tara A. Williams

Detailed level. The one thing that we look at from a consumer's perspective is more than getting people on a rebate or on a time of use rate and getting a rebate. It's helping customers at the top of that you know upside down pyramid of education and awareness. So, we are looking at our goal that was set by our executives as one million one million

EV's on the road by 2030. So, we're tracking. We actually are seeing a faster growth in the Consumers Energy territory of EV's on the road versus the entire state of Michigan. So, while we do cover the majority of this state from a square footage perspective.

If you look at the, you know, area of Detroit in the suburbs and that they have a pretty fast-growing rate just because it's Uh, you know, Metro and suburban areas where, you know some of our areas vary country and firmly and but we're tracking faster than the state of Michigan from an EV growth perspective. So, we at a very high level are tracking against that. We have this goal of 1,000,000 EVs on the road and then we track that against how many registered EV's in the state of Michigan. So, we get that information is public information, but it's like from the Secretary of State and their numbers that they provide each year. So, we track, you know, if you think about even that, that site and pyramid that we talked about at the very high level.

You know, if they 22,000 EV's are on the road, you know, then how many people have one on order? We don't. We can't get that information. But how many people do we think based on the highest propensity of who would be buying an EV based on their demographic and profile? And then we pair that down to how many people we have enrolled in our in our program. So. But we really look at the success of the program of True EV adoption, so looking at how many customers are making the switch from electric or from ice to electric?

Jeffrey Beeson

And then how long are? How often do you report that to like an executive level? Is that monthly, quarterly, yearly?

Tara A. Williams

So that number we get. And we try to get on a quarterly basis, it's really delayed. So, we, it's a quarterly basis, but it's not on the quarter. So, you know January through March, we're not reporting out in March. We're probably reporting out on in more when that data comes through, but we also we have what we call the WOR weekly operating reviews, MO's monthly operating reviews. And we look at all the customers that we talked to and kind of where we were we think they are in that journey, how many people are moving through that journey, what's happening out with the OEMs with you know the backlog of manufacturing and then what we can do to help those customers prepare for either getting a vehicle or making that switch so.

We really talked to our executives UM on a weekly, monthly and then quarterly reporter report out sessions.

Jeffrey Beeson

Great. And then my last question is really just when you think about all the work that your utilities doing and have done, how successful do you think you are if you had to rate yourself on a 1 to 10? How you know how successful is the utility in going adoption? Would adoption be the same if your efforts weren't out there?

Tara A. Williams

I do believe so. If I one to 10 And 10 being the highest. I would say I would say we're eight. I would say we are a huge part of the adoption. We're making it real, right, you know, we go back to that EV for everyone. Umm, if you, you know, look at publications and articles and the news. They're at the Detroit Auto show showing these fancy cars that are showroom ready and you know, they remove that big red curtain or, you know. She off the car. It's very. You know, it doesn't. I don't feel like customers are like, oh my gosh, I can go buy a car because I went and saw this fancy brand new car at the showroom of the Detroit Auto Show. We're bringing it down and aligning it to our own brand strategy for consumers. Energy is that hometown service. So, we want to make sure that we're in our communities and we're educating our customers or answering the questions of our customers of how does an EV work for me. I you know, I live in a town of, say, 30,000 people. I have one, maybe nonpublic charging. How can I get an EV? So really trying to make sure that we put it in the hands of EVs are for everyone. Now if we look at a national level, one thing that we do put ourselves up consumers up against other utilities on the national level.

UM and a lot of utilities are in this space. It's this education awareness. Getting EV's, you know, out there to everyone just trying to help that adoption and you know, it's really a support mechanism as well to make sure our customers know that if they do make the switch, we're here for them or if they're thinking about it and have questions, we're here for them regardless of where they're at and that adoption.

Jeffrey Beeson

Next, we'll great. Well, that's everything I have. Thank you so much. You've given me so much to think about it. Really. You got the sounds like you guys have a great program going. So really impressive.

Hobie Parker - Interview

Jeffrey Beeson

Barriers and stereotypes and misunderstandings. And so, the first question is what external factors do you think are positively contributing to adoption?

Hobie Parker

Yeah. I think the biggest thing in my mind is the auto manufacturers getting behind it in full steam. So, it took a long time. But finally announcing, you know, billions of dollars in investment and new factories, sourcing batteries coming out with new models, having teams dedicated specifically to designing and creating the EVs, I think that was probably one of the biggest contributors to that changing tide that we're starting to see and an adoption increasing.

Jeffrey Beeson

Flipping sides. What barriers are factors you think are hurting adoption?

Hobie Parker

Yeah. You know, I think ranging anxiety, you know, I just saw a Today Show segment on EV. It was related to the hurricane. And the question was kind of like how do you charge these if there's no power at your home? And you know, a person considering an EV is probably range anxiety. Just, you know, they think they need five, 600 miles of range on the on the single charge, even though they don't have that with their gasoline powered vehicle, they don't. If you look at their driving habits, they don't. They don't do that. It's you know, most Americans drive about 40 miles or less per day, which is easily doable in an EV. And then you just plug it in overnight and refill that lost.

And that last range, but you know I think kind of some of those more fear tactic or headlines, you know, you see in the news about EV's running out of battery running out of charge. You get stranded on the side of the road or you can't make your road trip, or you must stop for four hours to charge, which really isn't true. You know, you stop at a fast charger and 30 minutes or so, you're filled back up and you're going on your way on your road trip. So, I would say that's probably the biggest, biggest -. 1 is range anxiety.

Jeffrey Beeson

And the kind of leading on that and you already mentioned it, but any negative stereotypes about either EV's or EV drivers that you think are hurting adoption?

Hobie Parker

Yeah, you know, I think there's kind of two camps that people think EV's are in right now and it's it does, you know, people think that's who EVs are for. The first one is kind of the, you know, like the green hippies who I guess you could call them tree huggers or something like that. So just the people that are you know, uber concerned about the environment.

And they, you know, you know, kind of like everybody makes fun of the previous driver. So, kind of like kind of like that kind of just super concerned about the environment. And so, they'll do anything they can to support that, and they get an electric vehicle. The other one's kind of people think EVs are really expensive. And so, they think it's a Tesla that's starts at 80,000 plus and gets over 100,000. So, kind of the that tech adopter, they don't care what the cost is, they just get the new technology, the new coolest technology.

And you know, with education, what we see is, you know, most consumers don't realize that EV models actually start in the low 30s and with tax incentives, you can get a new EV for mid-20,000. You know, there's always going to be those that range of model you can get \$100,000 plus. But prices are coming down, costs are coming down. Battery sizes are going and therefore range are increasing and so the values getting better every year.

Jeffrey Beeson

Thanks. I think you mentioned most of these but any other misunderstandings that you've seen and maybe around?

Hobie Parker

Yeah. So, most people don't realize that, you know, with an all-electric vehicle, there's no more oil changes. There's about 110th. The number of parts compared to a gasoline powered vehicle. And so therefore, there's a lot less maintenance. And so, over the lifetime of the vehicle. Umm overall cost of ownership is much lower, and people are usually really excited to hear that when you tell them about that, you know, basically you just got to go in and rotate and balance your tires and make sure all the fluids like windshield wipers are topped off. Yeah, well, I lost my train of thought was like, what was the question again?

Jeffrey Beeson

Well, anything on how about on charging public versus home charging anymore on just misunderstandings there?

Hobie Parker

Ohh yeah, so you know, most people don't even know that you can drive off the dealers a lot and plug into your standard 110 Volt American outlet with the cord that comes with

the vehicle. They think they have to buy special equipment, a charging station, pay hundreds or thousands of dollars to upgrade their charging, which you can do to charge at a faster rate. But again, with the driving habits of most Americans, you can refuel.

With electricity overnight in about 8 to 10 hours on 110 volts, so for home charging, that's usually the biggest light bulb that turns on for people is, you know, hey, I can do this at home. I don't need special equipment and it's really inexpensive. They're always surprised at how inexpensive it is to fuel with electricity than it is to fuel with gasoline. And then thinking about the public charging stations.

You know most if you don't have an electric vehicle, unless you frequent a spot that has a charging station, you're not really thinking about where these are or where they're located.

And so, you know, it's really just hopping on a app or a website and finding where these charging stations are and what people realize is they're all over the place. They're at the places that they frequent the grocery store they go to, they can plug in and yeah, you know, handful of miles of range while they're shopping and fill up. And they can, you know, at some charging stations, they can even fill up for free. And so, it's really just education about where these are just that a little bit different charging habits compared to fueling with gasoline. So, you know kind of keep the vehicle topped off your vehicle sitting at these locations for an hour, 30 minutes, plug it in and get some additional miles of range and be on your way.

Jeffrey Beeson

Right. That's great. Thanks for that. The next section is moving from kind of stereotypes and misunderstandings to really about audience and segmentation. And so, wondering if you're using any segmentation in your marketing today and if so, what are those kinds of audiences that you segmenting on?

Hobie Parker

Yeah, we are. So, we kind of have it separated into two different groups. The group that's purchasing or has a higher likelihood of purchasing and an EV within the next one to two years. You know, maybe one to three years and then the second group is those that would consider an electric vehicle, but maybe for their next vehicle down the road as more models and more charging stations get put in, they'll consider purchasing. So more in the three plus years range. And so, what we're seeing in in our region is that first audience, the ones that are purchasing within the next one, the two years that those are really still the early adopters. You know, we're kind of starting to approach that, that mass adoption phase, but we're not quite there yet. So really still in those early adopters, the ones that. You know, like the technology and like being on the cutting edge. Umm, you know, just are they're more open to new technology.

It and then that second group, the ones that are three plus years, they fall more squarely in that mass adoption phase. You know as something as a technology gets tested and is tried and true and as more models come out, they see more on the road, they get more comfortable with it. The prices come down and then we'll start getting into that mass adoption. So, what we're doing currently is.

You know, focusing our more adoption, so like getting people to purchase one, we're focusing that more on that on that first group, the ones that are purchasing in the near term and then for priming that second group with education on how to charge and how much it costs to charge and how easy it is to do so. And all you know, there's a model for everybody and really priming that audience for purchase down the road.

Jeffrey Beeson

That's good to hear. And the next is just, are there any other environmental programs or products that you have that you've identified as also crossing over to those EV segments or do you use any of any of your other programs?

Hobie Parker

Yeah, one of the most natural fits for EV when we consider our environmental programs as solar and wind subscription. So, people that like EVs also like contributing to environmental causes as well. And so, we see solar is a big one. So, our solar subscription program which lets you offset a portion of your monthly energy usage with clean renewable energy produced at a local solar array.

We do a lot of cross marketing there. So, people that are in solar subscription but don't have an electric vehicle, we mark it electric vehicles to them and educate them people that have electric vehicles but aren't in solar subscription. We advertised the program to them as well.

Jeffrey Beeson

And then in your kind of the opinion is it important to have a different approach to marketing to the different audiences or is it not worth the effort?

Hobie Parker

Yeah, I think it's really important. So, you know, going back to those two audiences, the you know the first one, they're, they're they've done their research about electric vehicles, they've heard about them, they've seen it. So not so much happened to go through the basics with them. There is a little education on. You know the exact cost of charging and some of those more advanced education things. But you know, you know more focused

on getting those people into the seat of a vehicle through test drive events and letting them experience the vehicle in a no sales pressure environment.

Umm, because you know, that's what our research shows is the best way to get somebody to adopt an electric vehicle is to get them in the seat of the seat of a car and let them answer their let them ask their questions. In an open environment, and so that's something that we really focus on with that audience. And then if we think about that second audience, the one that's further down the road, they haven't really started their EV research. They've maybe heard about them, heard about big names like Tesla, Rivian and things like that, but. You know, really, they don't have but they don't have a good idea about how EV's work, so it's really going back to the basics and saying, you know, you don't need special equipment, you drive off the dealers lot and plug into your garage with the cord provided with the vehicle. And here's how much here's how you do it. Here's how much it costs. Here's other things to consider. Here's all the different models that are available and things like that.

Jeffrey Beeson

You mentioned a little bit about some of the adopters. I want to show you an image of the product adoption curve and are you familiar at all with this type of curve?

Hobie Parker

Yes.

Jeffrey Beeson

Where would you say kind of the EV drivers in your area are, are located?

Hobie Parker

Uh in in our region. You know, we are mostly right now in that early adopter's phase that that green phase we have you know over. Uh. EV's in our region really took off in 2015, 2016, and the innovators played a big part there. We've kind of now squarely moved into that early adopter's phase. And our beginning to approach that early majority phase but aren't quite there yet.

Jeffrey Beeson

And do you consider this curve at all when you're thinking about audiences or tactics or different messages?

Hobie Parker

Yeah, definitely. So those two audiences that we talked about. So, the first one, the ones considering to vehicle in the next one to three years, that would be you know taking the

considerations of the early adopters. Into play and in that audience, and then that that more, you know, three plus years of considering and the EV that's looking at the behaviors of the early majority.

Jeffrey Beeson

And when you're thinking about those innovators and early adopters, what kind of approach did you take to the innovators that maybe was different than the early adopters?

Hobie Parker

Yeah. So, innovators, you know, the innovators, they, they are the ones that you know, were behind electric vehicles from the very start. And so, they were very knowledgeable about EVs, loved their EVs, that they owned and wanted to tell others about the evils that they owned. And so especially in the early days of our marketing of electric vehicles, we relied heavily on those innovators to.

Help get the word out. Attend events. Offer test drives with their vehicles, and really leaned on them to be advocates and tell others about electric vehicles.

Jeffrey Beeson

And then as you think about moving to those early majority, what kind of things do you think you might need to do differently than you're doing today?

Hobie Parker

Yeah. As we move into early majority. You know, probably a heavier reliance on test drive events. Getting people to actually experience these vehicles, not just talking about telling them how to plug in with a static Facebook ad, but rather having in person events or having innovators and early adopters who have a vehicle. You know and empowering them to offer test drives to their friends and family and really getting people into the seats of the car, letting them plug in that plug to the car, to the car and hearing that click and seeing how easy it is. So, I'd say that's probably the key to success moving forward.

Jeffrey Beeson

OK. Yeah, that all makes sense. I think that's all on the audience and segment part. Anything else come to mind that that you can think of as far as segmentation or audience development?

Hobie Parker

Think so?

Jeffrey Beeson

Great. So next section is on messaging and creative. And so really this is all about kind of identifying EV adoption messages and what creative might work for your, the different audiences you mentioned earlier. So just start, what do you think motivates a customer to purchase an EV?

Hobie Parker

You know, I think the biggest motivator is finding out. Umm. The so its all-around cost finding out that the sticker price of these vehicles aren't, you know, 80,000 plus there's a there's a model for everybody. So, there's lower end models. So, you know that start in the 20s, thirties, so sticker price is the first one and then the overall lifetime cost of the vehicle.

Hobie Parker

Is lower and learning that compared to a gasoline powered vehicle that kind of helps as well. And then the charging costs. So that's probably the biggest one you know right now and in our region we our data shows that with at home charging on the standard electric rate, gas would need to be around a dollar a gallon to break even with electricity. So, as we see gas prices at. 345 dollars plus that just becomes a winning message.

Jeffrey Beeson

And then do you use any of those to any kind of mention that you probably do, but do you use any of those motivations in your messaging?

Hobie Parker

We do. Yeah. So, you know, over the years we've had a few different marketing campaigns. You know, we started out with dispelling myths about electric vehicles and, you know, EVs are. Like you know, they don't operate as well. They're as a as a gas-powered car. They're like a golf cart. And so just spelling those various myths that people hear about, whether it's a news headline or from a friend who doesn't like electric vehicles. And then we kind of transition to, well, you know, an EV is just like a traditional gas-powered car except for its better in XY&Z reasons. And so, it really the message there was, you know it's not a big lifestyle change. You don't have to learn a new way of driving. You don't have to.

You know, make big sacrifices to go electric, and in fact, EV's are better for this reason. This reason and this reason. And then recently we've really kind of really focused on EV basics. You know, surrounding charging and the different models that are available and

how easy it is to charge and how easy it is to drive electric. And so that's kind of our progression over the years.

Jeffrey Beeson

And what so when you're thinking about those messages? What kind of an approach or strategy? How do you build out that plan?

Hobie Parker

Yeah. So normally it's, you know, every couple year we kind of revamp our messaging strategy. You know, it's there's a lot of customer research. So, we partner with, you know, industry leading experts and finding out what the. Uh, you know what our customers look like? Where do they fall within that adoption curve? You know, a couple years ago, we thought we may be approaching the, you know, the.

The kind of that more mass adoption phase. But you know we partnered with a group and the research showed that hey, we were still kind of in that early adopter's phase and weren't quite into that mass adoption. And so, kind of all that we take all that research into consideration about who our customers are and where they are in their EV journey and then lay a plan for OK, here's how we're going to.

You know, talk about electric vehicles with the early adopters and get them in the seats of cars and get them to consider an EV for their next purchase. And here's how we're going to talk to and prime that next audience that's and really load up that top of the funnel so that a couple years down the road as we get into more of the mass adoption phase, those people are primed and ready to consider an electric vehicle.

Jeffrey Beeson

And then some of those messaging, you know, you talked about individual messages, but if you had a group or bucket kind of your message into categories or big themes, what would be kind of the two to four kind of themes you might?

Hobie Parker

One big bucket would be charging and that could include, you know, public charging home charging, how to charge, that sort of thing. One bucket would be sustainability and or environmental. So, you know, EB's don't emit any tailpipe emissions. You know, all our public charging stations are powered by 100% renewable energy. So, when you plug into a clean charge network station, you're fueling your car with wind and solar energy.

You know, I would say those are those are probably the two biggest buckets and then you

know a third one would probably be. Umm. Cost or affordability. So, there's an EV for everyone. They don't cost you an arm and a leg and they'll save you money over the lifetime of the vehicle.

Jeffrey Beeson

Great. Good, all very helpful. Thank you. So, I want to talk. Going back to kind of those main audiences that you talked about and in the segments. That's kind of a key message that you use for each of those kinds of groups.

Hobie Parker

Yeah, that's a great question. So, you know for the for that that first audience, the ones that are. Considering an EV in the near term, really you know the key messages are. But you know, the EV's it. It's easy to drive electric, come experience it for yourself. So, getting them into that seat of the car. There, and letting them experience the vehicle and ask their questions and getting them over that hump to adoption and then for the that second audience, the ones that are considering it more in the long term, early the key messages are EV's are affordable both from a you know sticker and charging perspective, upfront cost and charging perspective, and it driving electric is easy. There's no better time to drive electric. So, I would say those are really the key messages.

Jeffrey Beeson

And then thinking of creative, what types of creative elements do you use or kind of themes? Are they

Hobie Parker

Yeah, it's changed over the, the past few years. So, we've gone through, you know, kind of grittier animated you know, motion videos and then move to more, you know. Icon you know iconography and then more recently, what we focused on is photography that focuses on the vehicle. So.

You know, we kind of have three phases that we like to focus on. The 1st is the vehicle. So, kind of more zoomed out and it's our wider message of EV's are affordable. They they're they don't cost very much to charge and then we get into kind of more a little bit more zoomed into the vehicle and that's where we're talking about our EV charging rebates. And test drive experiences and then our final setup creative is inside the vehicle and talking about charging education of EV drivers. So, you know, hey, you have an electric vehicle.

Hobie Parker

There you know, you most people just kind of plug in their vehicle when they get home.

You know, we think there's benefits and potential cost incentives of charging during the overnight hours and it's easy to do so. So, from your in-dash screen or your smartphone app, you can plug in your car when you get home, but then set it to charge at a later time.

Jeffrey Beeson

Perfect. Yeah. Thank you. And then. Do you develop different creative pieces for each of those audience or segments? Kind of how do you decide which? Creative works best for those different audiences if you do.

Hobie Parker

Yeah. So, we do. So, I'm thinking about this year, we had one set of creative with you know, three different versions across those 3 phases. That we tested with both audiences. So, what we what we do is we.

You know, do a lot of AB testing, putting out different messages, swapping the message that's on the ad to keep things fresh and really use data from Google Analytics and other sources to see what's working and what's resonating with the audience. And if it's not, we switch it out with something else and you know to improve performance.

Jeffrey Beeson

But I think that's all kind of my messaging and creative questions. Is there anything you would kind of add or what I missing?

Hobie Parker

I don't think so.

Jeffrey Beeson

OK. Well, then we'll move on to kind of tactics. And so, this is really, you know, what are those marketing channels or tactics that you're using? So, if you had to pick two or three, you know what are the marketing or outreach tactics that you think are most successful in growing adoption?

Hobie Parker

Yeah. So, you know, social media is helpful. Facebook ads. Instagram. You know those sort of different social media channels that that helps drive a lot of traffic to our websites, a lot of signups to our test drive events. And you know, the social is a big player. Digital advertising is effective. So, you know, the suite of Google advertising tools.

You know, digital billboards. You know things like that and then, you know, video is

really effective, you know, showing EV's and promoting test drive events. And so, you know, online video. You know promotions during big events like Monday Night Football, things like that. Just you know, more mass awareness of getting the message in front of a lot of people and loading up the top of that funnel.

Jeffrey Beeson

And then what can you describe? Do any of the mass tactics that you use?

Hobie Parker

Yeah. So, we've used, you know, you know, billboards. So, you know, on major highway corridors, advertising vehicle incentives or, you know, different marketing messages. You know, I mentioned television, so Monday Night Football promotions, different commercials during high traffic times like that. We've done radio advertising, you know, on different public radio stations in our region.

Jeffrey Beeson

And then is there any tactic that you think works better for some of those segments you mentioned earlier or? Is it more about the message?

Hobie Parker

Yeah, I think it's more about the message for the different audiences. You know, I would say. And considering tactics, you know for that. That audience, that, that first audience that's more aware of the EV's and has done their research, kind of the more targeted tactics are more effective. So, feeding them a Facebook ad that they see. And they click on and to attend a test drive event. Those would probably be more effective for that audience and then considering the more you know longer term audience that that larger mass adoption audience, you know that don't know about electric vehicles, some of that the more mass awareness tactics are sometimes helpful you know getting that message in front of very wide audience. Where you know they might not click through to something right at that moment, but they're learning about electric vehicles and they're getting more comfortable with them. So that down the road, they're more open to considering that for a vehicle purchase.

Jeffrey Beeson

Right. Have you used? What kind of incentives have you used like a coupon or rebate? And what was the response to that?

Hobie Parker

Yes. So, there's been, you know we we've done partnerships with manufacturers, you know, at one point I think there was up to \$16,000 off, one of the popular EV models.

And I think what we saw is a lot of you know, a lot of people adopted that vehicle because of that incentive. You know, you could get that car new for a very, very low price after that incentive so. But you know, vehicle incentives are really helpful. We've partnered with local dealerships to offer, you know, the cars at MSRP Plus an additional \$1000 off. And we've seen some good traffic and adoption from that as well.

And an EV charging rebate for residential customers that helps offset the cost of upgrading their home charging. So that just helps overcome that barrier of range anxiety if it is there. So, you know if somebody needs to drive 100 or a 150 miles in a day, they can replenish that range about five times quicker with that 240 Volt charging that we have our rebate to incentivize the installation.

Jeffrey Beeson

And then what activities have you done to kind of expose a customer to an EV or to an EV driver and have those worked?

Hobie Parker

Yeah. So, it's that's kind of shifted over the years as well. You know when EV's were newer, and our region and we relied on. You know those early innovators and adopters? And we really focused on creating a community where, you know, we had members, events and special promotions like concerts and sporting event tickets to sporting events and really fostering that environment where uh, you know, they were. They were great EV advocates and we, you know, thanked them for doing so ups our number of EV drivers have has grown exponentially over the past years, that's become much more costly.

And so, you know it's, it's changed a little bit, but we still rely on those, those EV owners you know to help out at Test drive events. You know we'll we have a couple company leased vehicles, but we also usually invite out an EV owner to come and you would just be surprised at how willing people are to let people get in their EV.

Uh, yeah. So, you know, really as we've over the past couple years, we've we have focused more on test drive events. So, getting people into the seat of the vehicle, letting them drive it around, make experience, the maneuverability and the acceleration that an EV has and just helping ease their any fears or concerns or barriers that they have. And then we have EV experts at all of these events to answer questions about, you know, how much does. Uh, you know how much does charging cost or, you know, I've heard that a battery cost \$30,000 to replace. Is that true? Those sorts of things.

Jeffrey Beeson

Yep. That all makes sense. And are there any activities that you tried that haven't been successful?

Hobie Parker

Hmm. That's a good question. I'm sure there are. But none are coming to mind. Why I'm blanking.

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Jeffrey Beeson

That's OK. And then you are maybe you've already kind of answered this, but as adoption has kind of changed, you've kind of changed tactics. Is there anything you could add to that?

Hobie Parker

Yeah, you know, I think as we get into.UM, more as we get into people that are not as gung-ho about EV's, you know, totally sold on them. And, you know, chomping at the bit to buy one. And you know, we're getting into people that are more, you know, they're considering one, you know, they've heard good things, or they have friends. That and family that have them, but they're kind of on the fence and so really. Education around those barriers that people may have and really focusing on those test drive events and letting people experience the vehicle, that's what we see as the key to success.

Jeffrey Beeson

OK. And so next section, last section here is just on metrics and so wanted to understand what's your kind of strategy for measuring success of your EV efforts?

Hobie Parker

Yeah. So, we measure everything. So, you know thinking about digital ads, we use Google Analytics to measure the performance of each ad variation we have. So, if we put. You know 10, you know the same image out there with ten different messages. We see which one performs better and we optimize. So, we say, OK.

You know, these three messages really resonate with this audience. Let's focus on these three. And at that point, you know, we can kind of switch out imagery and, you know, kind of fine tune the messaging. But it gives us a good groundwork of what's resonating and what's not resonating with the specific audience for test drive events. It's, you know, it's about. How many people are getting in the seat to seat of the vehicle? So, test drive numbers? Are we filling our events to capacity or are they kind of lagging behind? And then our is everybody, everybody showing up or are 50% of people showing up. So, you know really considering how many people are in the seat of the car.

Are doing a lot of follow up work, surveying to see, you know, one month, six months, a year down the road. Did that test drive event lead to someone purchasing an electric vehicle? Umm. And then you know it's a little harder to measure. The more mass

awareness things like billboard and radio and in television. But, you know, mainly through website traffic and seeing where people are, what pages people are going to once they hit the website and then kind of fine-tuning pages and making it easier, requiring less clicks for somebody to get where we want them to go. So, it's an, it's an ongoing process.

Jeffrey Beeson

Yeah, makes that's what. So, the metrics you're using, you've kind of mentioned the clicks, any other metrics that you would say?

Hobie Parker

Uh. Yeah. So yeah. Clicks click through rate. So, you know on emails like are, you know open rate. So are people opening it and clicking through to where we want them to go you know, when once they hit the website time on page, web pages visited so are they just, you know, bounce rate is a big one, are they, are they just clicking and add and going to the web page and then saying I don't want to read any of this and then bouncing off the web page or are they interacting with additional web pages and so you know spending 2-3 minutes on the page interacting with the content and really digesting it. And I would say those are the probably the biggest metrics.

Jeffrey Beeson

OK. Do you measure kind of audience message and tactics separately or do you measure it all as kind of one group?

Hobie Parker

Yeah. So overall it's, you know, it's by channel. So, you know we look at direct mail performance at a macro level. Digital performance display television. But then we also have the capabilities of really digging down deep and looking at specific audiences. So going back to the two audiences that we like to target. So, we'll send, you know, we'll deploy a digital ad to each of those audiences and we'll designate that in the tracking code, so that when we're looking at performance. We can see, you know, these three messages really resonated with the early adopters. And these three messages really resonated with the mass adoption audience. And, you know, sometimes it's kind of.

You know the same message doesn't resonate with both audiences. And so that's why it's important to, you know, any piece that you put out, put a tracking code on it so that you can really dive into that data and make data-driven decisions moving forward to optimize.

Jeffrey Beeson

Yeah, man. Wait. How often do you report on your performance and what kind of process do you go about reporting metrics?

Hobie Parker

Yeah. So, we look at the performance, you know, every day, every day we're in there looking at how things are doing. You know, as far as our stakeholders, normally its quarterly process where we give an update you know really for the most part we have a, a, a really.

A close relationship with our stakeholders and so you know, we're meeting every couple week either every week or every other week and you know kind of updating nonperformance and talking about you know this is doing well and here's what we're changing and here's what we're optimizing as far as the larger report outs. And the, you know, try to do it every quarter, for sure. You know every.

And yeah, and then we have a big end of the year report out saying, hey, here's what we accomplished over the year. You know, here was our marketing strategy. What we what we said we wanted to do and here's what we accomplished. And here's what the performance was from what we accomplished.

Jeffrey Beeson

And then last question. How successful do you think you're your utility has been on growing media adoption?

Hobie Parker

A successful our utilities been.

Jeffrey Beeson

Yeah, like if you had to rate yourself maybe on a 1 to 10 scale, where would you, where would you put yourself?

Hobie Parker

Yeah, I would. You know, I'd put us, uh, probably up closer to the top, you know, maybe like an 8:00 or so. So, you know, going back a couple years. When we really, you know, jump started electric vehicle adoption in our region you know we installed 1000 plus charging stations and that was you know really one of the first utilities in the nation to do so on such a large scale and what we saw was that our region actually led EV growth per capita. You know, beating out places like California and New York.

Umm. And we, you know, we maintain that top spot for a couple years and then we've

continued to be in the in the top 10 for EV growth. So, you know I would say clean charge has been in you know a leading innovator and continues to strive to do so. Absolutely.

Jeffrey Beeson

Great. Thank you. Well, that is all my questions. Thank you so much for your time.

APPENDIX C: RESEARCH PROPOSAL

Electric Vehicle Adoption: How utilities can charge up EV adoption in the US

Research Proposal

Jeffrey Beeson

Introduction

U.S. electric power utilities (EPU) have a rare opportunity to help drive the adoption of electric vehicles (EV) in their communities. Similar to how many of these same EPU helped to promote a more electric home (Sprenger & Webb, 1993) in the 1960s and 1970s, EPU's knowledge of their customers and energy usage makes them a trusted source to help encourage the EV renaissance, not to mention the financial incentive of increased energy use. But research is showing that many factors are fighting against the quick adoption of electric vehicles and more work will need to be done. As Garling and Thogersen (2001, p. 54) describe it, "A product like this hardly sells itself to potential customers. Hence, in addition to regulation backing the EV, skillful marketing is needed for it to be accepted and diffused throughout society" due to the unknown technology of an EV and barriers like range and costs of the EV.

In the early days of advancing a more electric home, EPU used education and marketing tactics to push home electrification, including developing items such as the *Electrical Handbook for Women*, electric cookbooks and how-to tea towels (Sprenger & Webb, 1993). EPU were successful in helping the quick adoption of electricity in the home by the "marketing of electricity to the domestic consumer – specifically, the women in the home" (Sprenger & Webb, 1993, p.59). These marketing promotions would focus on the benefits of electric appliances, using messaging like home-labor savings, including one advertisement that "...announced thousands of women in the United States are playing tennis on wash day because their leisure had been increased by the time-savings use of electrical appliances" (Sprenger & Webb, 1993, p. 62).

Most current passenger EVs use about 30 kilowatt-hours of energy to travel about 100 miles, which is about the same that a normal American house would consume each

day to run their household appliances (Brown, 2020), meaning just one EV in the home could almost double the electric load and costs for that house. This large increase in sales for EPU could come at the perfect time as many EPUs have seen declining residential sales. Local EPUs are looking to EVs as a new revenue opportunity after years of lower and flat electricity sales (Lacey, 2014). In addition, with society facing a threat from climate change, largely due to the transportation sector (Timperley, 2020) and non-EV drivers spending about 60 percent more on fueling costs than EV drivers (Lindwall, 2020), the increased adoption of EVs could bring both business and societal benefits. Auto manufacturers promise a future of EVs that could be helped along by all-time high gas prices (Patterson, 2022) and a recently passed U.S. infrastructure bill with billions of dollars for EV support (Bellon, 2021). Thus far, though, EV purchases have stayed relatively low, with the U.S. adoption rate of less than 3 percent (Desilver, 2021).

Since EVs can provide a major opportunity for EPUs and with EPUs having shown past success pushing the adoption of electric products, **what ways can an electric power utility market, promote and grow the adoption of EVs?** As EPUs across the U.S. work to capitalize on this opportunity, what solutions have EPU marketing managers tried? What tactics and messages have worked for EPUs so far? How are outside factors, like gas prices, affecting purchase behaviors? Which benefits of EVs are resonating with customers? By interviewing EPU EV marketing and program managers on how they are improving EV adoption rates, a new how-to guide could be developed for the industry to establish best practices to help improve EPU marketing efforts and grow EV adoption.

Overview of theory

To investigate the topic of how EPUs can grow the adoption of EVs, the study will examine and use the *Diffusion of Innovation (DOI) theory* to explore what might encourage and motivate a group of individuals to adopt a new product. This theory is defined as the “process by which an innovation is communicated (and adopted) through certain channels over time among the members of a social system” (Rogers, et al. 2019. P415) and uses time as one of the largest variables. DOI theory works to explain the process of how innovation moves from being created to being embraced or being denied by consumers (Hubert et al., 2019).

DOI theory looks at how product awareness and information move through social networks as a main component of the theory (Rogers et al., 2019). In Rogers' (2003) DOI theory, he describes innovators and early adopters as those customers who are likely to purchase new technology and are willing to pay a higher price to have the newest item.

There are two main parts of this theory, both of which are very important to the proposed research question. First, what is the current marketplace adoption rate for the idea or invention. Second, how can you use mass media and social network channels to speed up the time it might take to move someone from awareness to conversion of the new product. Using the theory's “S-curve” model, which compares adoption rate versus time (Rogers, et al. P425), the study would examine the barriers that are preventing a greater acceptance of these new vehicles and explore how an EPU might be able to speed up the time it takes to move individuals or a group through the purchases process of awareness, consideration, and finally, adoption, which the theory will help address.

Currently, most of the EV adoption research has focused on the customer traits and perceived vehicle value in the innovators and early adopter groups of the DOI theory.

The DOI theory works to explain the process of how innovation moves from creation to either being embraced or denied by consumers (Hubert et al., 2019). In Rogers' (2003) DOI theory, he describes innovators and early adopters as those customers who are likely to purchase new technology and are willing to pay a higher price to have the newest item. Current research of early EV adopters finds that they are mostly pro-environmental, are highly educated, may have owned a plug-in hybrid car, and show signs of concern over using oil (Carley et al., 2013). Many scholars have concluded that Rogers' DOI theory is the most appropriate theory for looking at technology adoption (Sahin, 2006). This DOI theory is defined as the “process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers et al., 2019, p. 415) and uses time as one of the largest variables. Distinct from other communication and marketing theories, DOI theory looks at how product awareness and information move through social networks as a main component of the theory (Rogers et al., 2019).

While early DOI research focused more on the time and speed it takes for an innovation to move from early adoption to most of the population accepting the product, more recent studies have also focused on why some products make it to mass adoption and others never do (Abrahamson & Rosenkopf, 1997). To become accepted by a majority of the population, the innovation would usually need both mass media (advertising) and personal social networks to be successful, and the theory not only looks at the overall awareness of a product, but on how customers' understanding, attitude, and purchases change over time (Rogers et al., 2019).

In addition, the study will use Cooper's (2000) research on marketing planning for a radically new product to help understand marketing strategy. Cooper (2000) finds

that three areas have the greatest impact on consumer demand for a new product: education and information (marketing), the value proposition, and social acceptance.

Literature Review

An examination of the growing body of peer-reviewed academic literature was developed to understand the factors that may both positively and negatively affect the growth of electric vehicle (EV) adoption in the U.S. The review of the literature found several important findings, including perception and stereotyping issues with current EV drivers, the lack of understanding of EV charging and vehicle range, and how marketing segmentation and tactics could help narrow the focus and messages. There is evidence that developing a system to help segmented audiences understand EV charging could create solutions to help customers understand EVs and those who drive them. This review of literature will evaluate the current EV adoption studies and research in the areas of social acceptance, perceived value, and marketing and incentive performance and how those areas are helping or hurting customers through the phases of the DOI theory.

Social Acceptance: Stigmas of EV Drivers

As we examine the factors that may be causing slow EV adoption, the perception and stereotypes of EV drivers may provide insights. Past product adoption research has shown that stereotypes that are connected to a group of people who purchase a product can have either negative or positive impacts on how others view that product (Bennett et al., 2016). A shopper's negative view of buyers of a product has been shown to influence buying discussion and growth of the product by other groups (Jamal & Goode, 2001). In a review of DOI theory research, studies have shown that the acceptance of a product is seldom an unbiased process and that customers often have strong feelings about the

innovation or company, finding that “the learning process is potentially emotion generating (independent of net benefits), and this emotion colors product evaluations” (Wood & Moreau, 2006, p1). Customers of Apple and iPhone fans are often one example, where there is a strong emotional attachment to the company causing customers to want a product even before they have seen or experienced that product (Wood & Moreau, 2006).

Recent research on EV drivers found similarities across several studies that determine that early EV drivers do have more of a pro-green attitude and environmental worry (Rezvani et al., 2015) and that factors of green concerns and personal pro-environmental behaviors are greater indicators of a person’s positive attitude and adoption of an EV (Malik et al., 2021). Moons (2012) found that emotional reasons like someone’s opinion of themselves and a sense of helping the environment can be important factors in developing positive perceptions and purchases of EVs and can even overpower rational arguments about the limits of EVs. This was supported by additional research that detected EV drivers sharing emotions of having a good feeling and feeling less guilty (Graham-Rowe et al., 2012). EV drivers seem to be conscious of how others perceive them, with Burgess et al. (2013) finding through surveys that EV owners realize that they are easily vulnerable to stereotyping by others.

While EV drivers may feel a sense of duty and view themselves positively for undertaking their part in helping the environment, those same opinions may not be held by the general population which may be hindering new EV car sales and hurting additional EV car sales. Survey data from several academic studies found that the view of EV drivers among non-EV drivers tends to be disapproving, including opinions that EV

drivers are “ineffectual idealists, political radicals, hypocrites who enjoy showing off, tree huggers or dull people with limited mobility needs” (Burgess et al., 2013, p. 34). Graham-Rowe et al. (2012) support Burgess’ findings in his study which found that when participants were asked how they thought others would describe them if they purchased an EV, respondents mentioned terms like no fun and boring. One possible reason for the negative feelings toward EV drivers could be the general public’s connection between EV drivers and negative images of an environmentalist as being a hippy and an activist (Bennett et al., 2018).

Bennett and Vijaygopal (2018) wanted to investigate these negative feelings even more by experimenting with non-EV drivers. The study wondered if attitudes towards an EV may be more about the driver and less about the actual car. In the experiment, researchers first asked participants about their opinions of EV drivers and EVs through a survey. Then, they had the non-EV drivers play a video game, where the game character was an EV driver, followed by another survey. The researchers found that after playing the video game, study participants' negative stereotypes of EV drivers improved by 19 percent and their thoughts on EVs improved by 17 percent. The study did not look at car types, but it is possible that car brands, like a Tesla, could be affecting the perception of who a Tesla driver is to the greater population.

In a review of literature on the Planned Behavior theory, Moons and De Pelsmacker (2015) found that emotional reactions are often a big driver in new product adoption. This emotional versus logical mindset could be affecting adoption rates. Much of the literature is supporting the theory that early adopters of EVs do pride themselves on their pro-environmental attitude and their feeling of doing better. While this sense of

pride may be a positive for the EV community, a growing body of work is showing this somewhat self-important attitude is causing negative feelings towards EV drivers from others. This raises the question for additional research on how to overcome the negative views of EV owner stereotypes to help encourage greater adoption of EVs by the public.

Perceived Values and Understandings

Roger's (2003) DOI theory highlights five main areas that can have the biggest impact on a consumer's decision to adopt an innovation, which includes observability, complexity, relative advantage, compatibility, and trialability. In a review of EV adoption studies, three main barriers of EV adoption have emerged – price, range, and charging. These barriers correlate with two of Rogers' impacts on adoption categories: complexity and relative advantage. Rogers (2003) defines complexity as how difficult the new product is to use or to understand, and he defines relative advantage as the degree to which the product is viewed by the public as being better than current options. If consumers find EVs to be hard to understand, like how to charge them or how far they can go on a charge, then the DOI theory would suggest they likely will have trouble gaining overall adoption.

As mentioned, a review of the literature has found that purchase price, range, and vehicle charging continue to be the biggest factors that are having a negative effect on persuading car buyers (Coffman et al., 2016). Also, the research shows that the combination of personal factors, like can I afford this car, and controlled features such as charging station locations, are likely additional contributing factors to purchasing (Moons & De Pelsmacker, 2012). The DOI theory tells us that the customers in the market for a new product will not embrace a new product all at once, so most of the current research

on EV adoption has focused on innovators (Rogers, 2003), creating a need for continued research as we move from innovators to early adopters. Work done by the research firm ESource, found that even after a decade of major EV brands on the market, the low number of EVs in the market indicates that we are still in the innovators and early adopter phase of the adoption curve (Nixon, 2021).

While the DOI theory research shows that early innovators of new products are likely to pay the early higher costs of a new product, the cost hurdles are usually an issue to get to a greater adoption rate (Rogers, 2003). In the reviewed research, the lack of understanding of the total cost of ownership of an EV and the overall costs compared to their gas car continues to show up as a barrier (Rezvani et al., 2015). In addition, past studies have shown that drivers are not interested in paying more for a car that they also see as being less convenient (Burnce et al., 2014). The EV adoption literature is showing that surveyed participants who identify as pro-environmental are still likely to stay away from an EV due to their thoughts on the high costs of purchasing one over a traditional vehicle (Ye et al., 2021). While EVs tend to have a lower cost of ownership compared to their gas car, the reviewed research demonstrates that potential EV drivers don't understand how to calculate EV costs, especially since EVs don't have the traditional car maintenance costs like oil changes (Caperllo & Kurani, 2011). One study showed that about 70 percent of participants underrepresented how much they would save in fuel costs each year (Carley et al., 2013).

In addition to overcoming the price difference, having enough range to get to a destination is another barrier to entry for EV drivers found throughout the EV adoption research. While many studies have concluded that EVs have enough range today for most

travel needs, the issue is still raised by many study participants as a barrier (Franke et al., 2012). These perceived fears in much of the EV adoption research should be taken as an important concern as it goes right to the relative advantage category in Roger's (2003) DOI theory, which will likely slow or stop adoption if consumers don't see an advantage in the new product. Having to wait to charge your car causes drivers to change up their normal routines and adopt new behaviors (Burnce et al., 2014), which will likely take education and marketing to help drivers make the change. The issues with the range of vehicles have a direct relationship with the third main barrier addressed in much of the EV adoption studies, which is charging.

The research found that one of the biggest fears of EV drivers is the notion that they will run out of charge during their travel and will not have a place to charge up (Caperello & Kurani, 2011). Non-EV drivers seem confused about how the charging process works, believing that the process to charge a car would be inconvenient and that they could not travel as far as they would want to go before stopping (Bunce et al., 2014). Likely, the familiarity with how gas cars fill up and the well-known filling station model makes it hard for potential EV drivers as they try to compare the two. While non-EV drivers are confused about the process, the research is showing that those who have an EV feel that the charging process is easy and that they enjoy the opportunity to charge at home every day (Graham-Rowe et al., 2012). In a study conducted by Graham-Rowe et al. (2012), once participants drove an EV for one week, they ended up preferring to charge at home compared to going to a local gas station as they did in their traditional gas vehicle. The research is showing that there is a disconnect between what non-EV drivers think about charging and the actual experiences of EV drivers when it comes to charging

their vehicles. Understanding how to share the real experience of EV charging and educating non-EV drivers on the benefits of charging at home could help change the misunderstandings about this new way to fuel up a vehicle. This research raises the question of how best to explain EV charging to a general population.

Marketing and Incentives

For new products to successfully survive and make it through all five stages of the DOI theory's adoption curve, communicating and marketing relevant materials to possible adopters is a must (Song & Parry, 2009). Studies on high-tech innovation adoption have found that marketing is often hurt by not having a clear understanding of how to find the most likely people to adopt the new product (McDonald et al., 2013), causing marketing strategies to often fail or take longer to succeed.

Currently, the most common tactics studied for EV adoption included government policy changes, incentives, traditional marketing promotions and education. Early EV research suggested that marketers should only target very interested customers and dissuade those customers whose needs could not fully be met by an EV from purchasing (Garling & Thøgersen, 2001). More recent research on EV marketing finds it more important to focus on ensuring that the right message is hitting the right segment audience (Garling & Thøgersen, 2001). The studies suggest that the traditional marketing approach should currently focus on individuals who are already showing a more positive view of EVs and use elements of persuasion to move those individuals to adopt. In addition, studies suggest marketers focus on Rogers' DOI's observability and trialability classifications (Garling & Thøgersen, 2001), which is the need for the targeted consumers to be able to interact with the car and be seen in public.

Additional marketing research has demonstrated that incentives, like a coupon or rebate, are effective in increasing overall adoption (Song & Parry, 2009). In one study, Song and Parry (2009) found that promotions that included a monetary reward had a large positive effect and that those promotions that were able to also expose the product to the customer had the greatest effect on overall product sales and adoption. EV research has shown that monetary incentives that help decrease the overall costs of an EV, like a tax rebate or manufacturer incentive, are effective in moving adoption (Ye et al., 2021). Wee et al. (2018) has backed up this discovery, finding that a rebate of about \$1,000 can lead to about a 5 to 11 percent increase in EV purchases in areas with the incentive. One of the early pushes for EV adoption was from federal and state tax incentives. Findings have included that non-EV drivers do favor incentives, like rebates, over more regulation like a carbon tax (Brückmann & Bernauer, 2020). While these incentives are helpful (Zgang et al., 2018), additional research has found that they are not enough and need to be joined with a psychological attribute as well (Ye et al., 2021). Overall, little research could be found that combined both psychological attributes of a person and promotion or policy attributes to understand the best combination of target audience and message.

Past marketing research has shown the importance of finding a target customer group and messaging to their beliefs and behaviors (Bator & Cialdini, 2000). This raises the question of how to identify possible audience segments for marketing and what messages are most appropriate for that audience.

Review of Literature Conclusion

Research that focuses on EV adoption is taking shape across many different fields of study, from policy to financial to marketing. Not surprisingly, current early adopter EV

drivers were motivated by advancing technology but still struggled with the battery range (Bechhold et al., 2017) and lack of public charging availability (Coffman et al., 2016). In addition to the issues with range, the purchase costs of current EVs are a big struggle for most car shoppers (Rezvani et al., 2015) and for the early majority to come on board, the cost compared to traditional vehicles will need to get closer (Lee et al., 2018). While tax incentives can help with the overall costs, most car shoppers are simply not paying attention to the EV market, and organizations need to find better ways of providing target messages to highlight incentives and charging networks (Kurani, 2018). Target messaging may be a key, as demographics and living trends – like shorter commutes or apartment living – likely influence overall social acceptance (Cooper, 2020) and that range, incentives, and reliability are important components when developing an EV marketing process (Higuera et al., 2020).

Research Method

In the review of research, past studies indicate a connection to emotions, stereotypes, and misunderstandings with the adoption of EVs. These findings helped develop the research question, which then guided the selection of a qualitative research approach.

This research project hopes to better understand the following research questions:

RQ1: What current methods and messages are EPU's using to improve EV adoption?

RQ2: What are the perceived results of those methods and messages for different audience groups from EPU?

Qualitative research methods are suggested because Busetto, et al (2020) suggest that qualitative research is best when focusing on more than just what will work, saying “...addressing questions beyond what works, toward what works for whom when, how and why” which are all major focuses on this research. Message segmentation will be an important outcome of this research, getting to the understanding of the “who and how” mentioned by Busetto, et al.

The method proposed for this project is a semi-structured qualitative interview with EPU's EV program and marketing managers involved in EV adoption. This method supports the research goals of understanding meaning, which is often used in qualitative research and is “less concerned with data collection and instead strives to understand the meaning of information, options and interests in each respondent’s life” (Brennen, 2013, P. 28). In addition, Brennen finds that “information accessed through interviews helps to broaden our knowledge base...” (Brennen, 2013, P. 27). The semi-structured format also allows for some flexibility to adapt the interview based on answers and allows the interviewee the opportunity to help participate more in the fact-finding mission of the interview. Brinkmann and Kvale (2018) support this case saying semi-structured interviews “make better use of the knowledge-producing potentials of dialogues by allowing much more leeway for following up on whatever angles are deemed important by the interviewee, and the interviewer has a greater chance of becoming visible as a knowledge producing participant in the process itself, rather than hiding behind a preset interview guide” (p. 579).

Method Process

The research project proposes conducting 8 to 10 semi-structured interviews with EV EPU professionals who either manage EV adoption marketing or lead a residential EPU EV program. While Brennen (2013) suggests that there is no perfect number for how many interviews need to be conducted, the proposed length of the interview and number of proposed participants will ensure a geographical diverse representation of the U.S. and should provide enough interview insights to make recommendations. To recruit these individuals, contact information for potential interviewees will be gathered by searching LinkedIn using job title and industry filters. Additionally, EPU professional organizations, like ESource or Edison Electric Institute, will be approached for names of individuals who meet the interview criteria of working for a U.S. EPU in EV program or marketing management. A potential contact list below for possible interview participants is provide in Table 1. A recruitment email will be used to ask individuals to participate in the interview, which will also include a screener questionnaire to ensure participants have experience and knowledge of their company's efforts to drive EV adoption. The proposed questions for the screener are provide in Table 2.

Interviews will be conducted over 3 to 4 weeks in September 2022 during the work week, and each interview will take about an hour to conduct. The interviews will take place over web conferences such as Teams or Zoom and will be recorded. A suggested interview guide has been provided in Table 3. Interviews will be transcribed by a third-party transcription service in order to help with data analyses and reporting. The researcher will take notes during the session, which also can be used to analyze findings. An interview guide will be created with questions being developed in coordination with learnings from the DOI theory of adoption. Some interview questions will focus on

Roger's adoption curve and if EPUs are using different messages or tactics based on audience and adoption rates in their area. Interview questions will focus on how the EPU professional is measuring the effectiveness of EV marketing and what messages and marketing tactics they feel most meet their success criteria and why. These interviews should help provide real-world examples of what marketing methods are helping grow the adoption of EVs within the DOI theory adoption curve.

To help identify major themes in the research, the researcher will review both the recordings and transcripts to understand and find any themes that might have emerged from the sessions. Once the interviews have been transcribed, a coding method will be applied to the interviews to help identify categories of messaging and tactics, which will be broken out. A three-column coding approach will be used where column one will have raw interview data, column two will have preliminary code data and column three will have the final code. These codes will then be used to put together a resource guide for EV program and marketing managers to use.

As part of the professional component of the research, a resource guide will be developed to help EPU EV marketing managers better understand what messages and tactics work best for different audiences within the DOI adoption curve based on the experience and findings of EPU EV professionals and from work done as part of the researcher's on-site experience at a EPU during the Fall of 2022. The resource guide will help marketing managers with audience segmentation, message and creative development, and advertising tactics to help speed the adoption of EVs. In addition to conducting the interviews, the researcher will work on-site at Evergy, a Kansas City-

based EPU. The on-site work will be reviewing data on marketing messaging, attending EV test drive events, and talking with current protentional EV drivers.

There are a few possible limitations to this study including outside market factors, longitudinal effects, self-reported data, and selective or exaggerated memory. As a new technology, EVs are rapidly changing and can be quickly influenced by multiple non-EPU factors including supply chain, costs, gas prices, government policies, and the economy, among others. Major changes in these factors during the study or after could impact the results and effectiveness of the proposed resource guide. Another limitation of a new product is the limited time that the product has been in the market and how long the EPUs have spent trying to grow adoption. The age and maturity of each EPU’s program could limit the research effectiveness. In addition, during the interviews, participants will be asked about the success of their efforts, adoption rates in their area, and additional data points, which will be self-reported and may not be available for independent verification. Another limiting factor for this study will be selective or exaggerated memories in which the interview subject may share or remember details differently than they happened. The participants may attribute positive results to their marketing and education efforts and give negative outcomes to other factors.

Table 1: Potential Contact List

Name	Title	Utility	Location
Alisa Sobczak	Director of Electric Vehicle Program	Xcel Energy	North/Central
Hobie Parker	Marketing Manager	Evergy	Central
Megan Rigby	Customer Program Advisor	San Diego Gas & Electric	West
Natasha Contreras	EV Customer Engagement Program Manager	San Diego Gas & Electric	West
Grant Littman	Principal Manager of Marketing and Digital Customer Programs	Southern California Edison	West

Karl Bloss	EV Program Coordinator	Consumers Energy	North
Cedric Daniels	Electric Transportation Manager	Alabama Power	South
Glenn Halliday	Electric Transportation Program Manager	Georgia Power	South
Jessica McConnell	Sr. Marketing Manager – Transportation Electrification	Duke Energy	East
Lori Kalmer	Manager of Marketing	Ameren	Central
Kenneth Patrick	Electrification Manager	Ameren	Central
Nate Gillespie	Marketing Manager	Pepco	East

Table 2. Semi-Structured Interview Guide Screener

<p>Interview Screener Survey: Qualifying possible interview participants to ensure the person is the right participant and has expertise needed for the interview.</p>	<ul style="list-style-type: none"> • Name of your utility and state(s) located in (fill in box) • Describe your utility’s services (select from: electricity, water, natural gas) • Approximately how many customers does your utility serve: (fill in box) • Your name and title (fill in box) • Describe your background and your role at the utility as related to EVs? (fill in box) • Do you have a dedicated marketing or outreach EV position? If so, are you that person? • Does your utility actively work to grow adoption in your area? • Would you be willing to attach any marketing materials for review?
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Table 3: Research Semi-Structured Interview Guide

One-hour semi-structured interviews to be conducted with 8 to 10 electric utility EV marketing or program professionals.

Question Category and Intent	Questions
<p>Identifying Barriers, Stereotypes, and Misunderstandings: understand what items participants feel are barriers to adoption.</p>	<ul style="list-style-type: none"> • What external factors do you think have contributed to adoption? • What factors or barriers may be hurting adoption? • Are there any negative stereotypes that are hurting EV adoption? • Do you feel you need to overcome any of those perception issues about EVs or EV drivers? • Do you feel there are any misunderstandings about EVs? How about misunderstandings with EV charging?

	<ul style="list-style-type: none"> ○ Can you tell me if you think there is a lack of understanding in these areas, and if so, how you addressed them? <ul style="list-style-type: none"> ▪ EV total cost of ownership compared to a gas car ▪ How EVs charge? Public vs home charging? ▪ The overall benefits of EVs?
<p>Audience and Segmentation: understand how interviewee thinks about segmentation and how they might use the DOI adoption curve for audience development.</p>	<ul style="list-style-type: none"> • Are you using any audience segmentation in your marketing today? If so, who are those main audiences? • Have you examined any of your other environmental programs or products to identify any customer segments for EVs? • In your opinion, is it important to have a different approach to marketing and education for your different audiences? • I would like to show you this graphic that is called the product adoption curve in Roger’s Diffusion of Innovation theory. Are you familiar with this product adoption curve? <ul style="list-style-type: none"> ○ If not, give more background. • Where would you say your area is within this adoption curve as it relates to EV adoption? • Do you consider this adopting curve when thinking about audience, tactics, or messages to reach customers? <ul style="list-style-type: none"> ○ If yes, can you tell me how you use this curve when thinking about or developing those items? • What strategic approach did you take to address the innovator or early adoption groups within this curve? • What strategic approach are you currently taking to address where you currently feel your area is on the adoption curve?
<p>Messaging and Creative Development: Identify what EV adoption messages and creative work the best and if different segments might respond better to different messages.</p>	<ul style="list-style-type: none"> • What do you think motivates a customer to purchase an EV? <ul style="list-style-type: none"> ○ Do you use your customer’s motivations to develop marketing and educational messages to help grow EV adoption? • What other approaches do you use to develop marketing and education messages to help grow EV adoption? <ul style="list-style-type: none"> ○ Has your approach to messages changed over time? • Can you give me the top 4-5 message themes you currently are using to help grow EV adoption? • I want to relate back to the main audiences you share before, what are some key messages you think work for each of those audiences/segments? • How do you determine which messages to share with your audience groups? • You mention a few barriers to EV adoption before, do you try to address those in your messaging?

	<ul style="list-style-type: none"> • Based on the customer motivations you mentioned, do you use those motivations to develop creative elements for your campaigns? • What types of creative elements or themes have you found to be successful in your advertisements? ex: cars, chargers, people, graphics • Do you develop different creative items for each of your audiences/segments? If so, how? • Do you work to match the creative with your ad message/copy? If so, how?
<p>Marketing Tactics: Identifying the types of marketing tactics used and how the interviewee feels those tactics have worked. Understanding success metrics and if different tactics are used based on audience or adoption rates.</p>	<ul style="list-style-type: none"> • Tell me about the types of marketing, education, or outreach tactics you think are most successful in growing adoption? • Can you describe any mass advertising tactics you use? • You mention some segments you focus on; can you tell me about some of the tactics you use to target those segments? • Have you used any incentives in your marketing, like a rebate or coupon? <ul style="list-style-type: none"> ○ What was the response? • Have you tried anything to help expose the customer to an EV or an EV driver? • Are there any marketing tactics you've tried that may not have been as successful as you hoped? • Do you change up your marketing tactics based on how EV adoption has changed in your area? If so, how?
<p>Success Metrics: Understanding success metrics and how utility is measuring success.</p>	<ul style="list-style-type: none"> • Describe your strategy for measuring the success of your EV education efforts. • What metrics do you use to measure success? • When thinking about audiences, messages and tactics, do you measure those items individually or together? • How do you report on your campaign measurements? <ul style="list-style-type: none"> ○ How often do you report on campaign performance? • Can you provide an example of how your campaign optimization led to a successful or unsuccessful outcome? • How successful do you feel your utility has been at this point in helping grow EV adoption in your area? <ul style="list-style-type: none"> ○ How might you rate your success on a scale of very successful to not very successful ○ What measures do you use to determine the success of growing EV adoption?
<p>Future Looking and Closing Out: See where the interviewee might be headed in the future or any changes that expect. Allowing for any other</p>	<ul style="list-style-type: none"> • What might you do differently over the next 2-5 years with your EV marketing? • Do you think the role of the utility and EV adoption will change in the next 2-5 years? • What might you wish you could do differently to help group EV adoption?

thoughts not covered in the questions.	<ul style="list-style-type: none"> • What do you feel are the biggest roadblocks to growing EV adoption? What else might you want to share about how the utility might be able to grow EV adoption through marketing?
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