WESTERN POWER DISTRIBUTION

INNOVATION

NEXT GENERATION NETWORKS

Communication and Engagement Report January 2018

Electric Nation

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Contents

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Glossary

Abbreviation	Term
EV	Electric vehicle
EN	Electric Nation
WPD	Western Power Distribution
CRM	Customer Relationship Management
GDPR	General Data Protection Regulation
EOI	Expression of Interest

1 Introduction

This report details all communications and engagement update for the Electric Nation project from November 2017 to January 2018. DriveElectric handles all customer facing activity for the project. This includes: recruiting, qualifying, processing, and supporting the participants once the charger has been installed.

2 Customer Engagement

2.1 Overview of Customer Engagement

During January 2018 DriveElectric reached the project target of recruiting 700 participants to the Electric Nation Project. As of the 15th January 2018 the total number of installed customer - 535, combined with the participants with active applications – 165, totalled 700 thus demonstrating the recruitment target has been reached (figure 1). However, DriveElectric anticipate that the 'in process' figure will fluctuate in the coming weeks due to the installers not approving an application or the participant withdrawing their application. Approximately 20% of the 'in process' figure is expected to dropout therefore to counteract this fluctuation DriveElectric has activated the reserve list which was set up in October 2017. The reserve list allows customers to register their interest in the project by signing the 'Expression of Interest' (EOI) and returning this to the qualification team, then if a space becomes available an application can be sent to boost the total number.

	As of 15th January
Installed	535
In Process	165
Total (installed + active applications)	**700**
Available spaces on project	0

Figure 1 – number of available spaces on the EN project.

DriveElectric has received over 3000 enquires to the Electric Nation project. Out of all enquires, 37% were unable to move forward to the next stage of the project due to extra costs to the applicant (9%) or the applicant living outside of WPD distribution area (28%) - thus being a project requirement that all applicants live within their distribution area. The largest cause for applicants unable to progress to the following stage was due to DriveElectric being unable to contact the applicant once they applied to the project; 31% of applicants did not return DriveElectric's phone calls, voicemails and emails requesting to contact the qualification team to progress their application.

2.2 Overview of Data Protection Strategy

A minor adjustment to the Data protection strategy is still in process. This relates to use of geo data from vehicle telematics. DriveElectric will receive written permission from the participant that Crowd Charge can use and store this data before any data is captured.

The initial analysis of the forthcoming GDPR regulation will not affect operations as all the customers will already be in process by the time these come into force. This is to be subject of discussion with EA technology in the 2 weeks.

2.3 Qualification of customers

The qualification process has continuously developed throughout the EN projects' recruitment phase. Amendments to the qualification process were made during November 2017 and January 2018 - the following changes have been made to the qualification process from the October 2017 report:

- **Ownership of the charge point/communication kit:** From November 2017 DriveElectric has informed all prospective participants during the qualification call that the EN charger and communication kit that was due to be installed, subject to the installers approval, was not their property until the project's competition on the 31st December 2018. This qualification call amendment was made due to one participant stating they wish to leave the project and keep the charger only a matter of weeks after their installation date.

- **Reserve list activation:** From the start of 2018 all prospective participants have been informed on the qualification call that a reserve list is in use by DriveElectric. This meaning that once they return their EOI document, which is required to move to the survey stage, they will be placed on a reserve list so that if a space becomes available a survey will be sent to them. All prospective participants are informed that a space is not guaranteed until a home survey form has been sent to them via email. Furthermore, they are informed if they do not return their application promptly their application could be cancelled to allow a space for another prospective participant. They are informed that they have a space on the project once/if they receive their home survey email. Once a prospective participant receives a home survey this confirms they have a space on the project, subject to the installers approval. This reserve list helps to manage the customers' expectations.

As reported in the October 2017 milestone report, the qualification team continue to stress to each customer the importance of ensuring that the charger and communication devices are switched on indefinitely to comply with the project requirements. With the charger and the communication device switch off, or if only one of these is switched off, both the Crowd Charger and Greenflux demand management systems are unable to remotely manage the chargers and charging rate which defeats the aim of the project.

The time taken to complete a qualification call has increased on average to between 20-25 minutes up from 10 minutes at the start of the recruitment phase. This is due to an increase amount of information that the prospective participant needs to be informed about. This has increased the workload for the qualification team.

3 Marketing Phase

3.1 Website

The EN website remains unchanged from the previous milestone report which showed the reserve list was created and displayed on the EN website. Despite the reserve list creation in October 2017 the applicants up to January 2018 were able to gain a place on the project. As DriveElectric reached the 700 participants recruited in January 2018, the reserve list went live with all applicants placed on this until a self-survey application has been sent to them which confirms their place.

3.2 Event Days

Despite an expected decrease in leads due to Christmas and the New Year, November and December 2017 produced 83 and 78 enquires respectively therefore no event days were required to boost customer engagement.

3.3 Overview of lead sources

Marketing streams such as AdWords' campaigns and social media posts remain in-active due to the already large number of enquires received during November and December 2017. Furthermore, January has received 40 enquires up to the 15/01 therefore additional boost in leads will not be required.

DriveElectric achieved the 700 recruited prospective participants as the start of 2018 therefore all car dealer networks and installers streams were updated that no further leads were required. Despite this decrease in marketing activity and customer engagement, 10-15 leads were being received a week on average. These new applicants are now informed that a reserve list is in use and DriveElectric will send a self-survey document if a space becomes available thus managing the customer expectation.

3.4 Social Media

DriveElectric continue to utilise social media such as Facebook and Twitter to communicate with participants if a query is raised. Participants continue to contact the Electric Nation team via Twitter to ask questions or raise a query about a certain topic. Other Electric Nation participants will then regularly respond to chip in and help resolve the issue from their experience - this demonstrates a 'community spirit' with EV drivers. Social media proves to be a useful tool in handling a customer query or question.

3.5 AdWords

All the AdWords campaigns across WPD distribution area have remained switched off. Drive Electric anticipate these will not need be re-activated again, however various campaigns can be activated to boost enquires if DriveElectric decide it is required.

3.6 Customer Newsletter

To increase customer engagement monthly newsletters are sent from DriveElectric's CRM database to all applicants who have agreed to receive updates on the progress of the project. In December 2017 participants received a customer newsletter detailing technical support with the aim to help keep the participant's charger and communication kit switched on indefinitely. This is to help increase the communication up time on both the Crowd Charge and Greenflux demand management systems. The update also contained information with the projects recruitment progress. This was sent to 488 participants with an 80% open rate.

4 Installation Process

DriveElectric has installed 535 chargers to date with a further 59 customers booked in for installation or awaiting a confirmed installation date. DriveElectric anticipate the installations to be completed by May 2018.

4.1 Self-Survey Process

The Phoenix Works requested DriveElectric to add into the self-surveys emails a suggestion that participants have their charger points fitted to the external wall of the property opposed to their garage. This is due to numerous participants requiring groundworks as the garage supplies were not sufficient for a 32A charger which causes costs and delays for the participant.

The self-survey process remains challenging for the installer at times due to participants missing out certain sections of the self-survey. For example, customers do not upload their bonding photos this therefore requires additional conversations with the participant to retrieve the desired information which causes delays. DriveElectric support the installers by sending out, via the CRM system, charger order updates which details the next/outstanding action for the participants.

4.2 Order Process

Weekly charger order updates are still sent to each customer with the aim of encouraging the participant to interact and keep their application moving towards a final installation date. The update contains a 'next action/update' section which details any outstanding information the customer is yet to complete, an estimated target installation date once survey has been approved and confirms details of the participant's vehicle and charger.

Additionally, it informs the customer if the self-survey and participant agreement has been received or not. It states the installation has been booked and shows the date confirmed. The updates are sent regularly if there is an outstanding action for the participant. This order process remains a key tool in engaging customers.

If the installer cannot receive a response from the participant, or from the order updates, both the installer and engagement team will make phone calls to request missing survey information. In addition, DriveElectric also update the participant if they enquire directly to DriveElectric, however the team stress to contact the installer directly as this is the most efficient way to progress their application.

If an applicant does not engage after a reasonable amount of time with the installer or the EN support team during the order process, DriveElectric will send a 7-day cancellation email notice. This is to inform the applicant that if no response is received within this 7-day period this space will be given away to another applicant. A final email is then sent if no response is received confirming the applicant has been withdrawn from the process and the application will not be taken further.

5 Customer Management

5.1 Complaint process

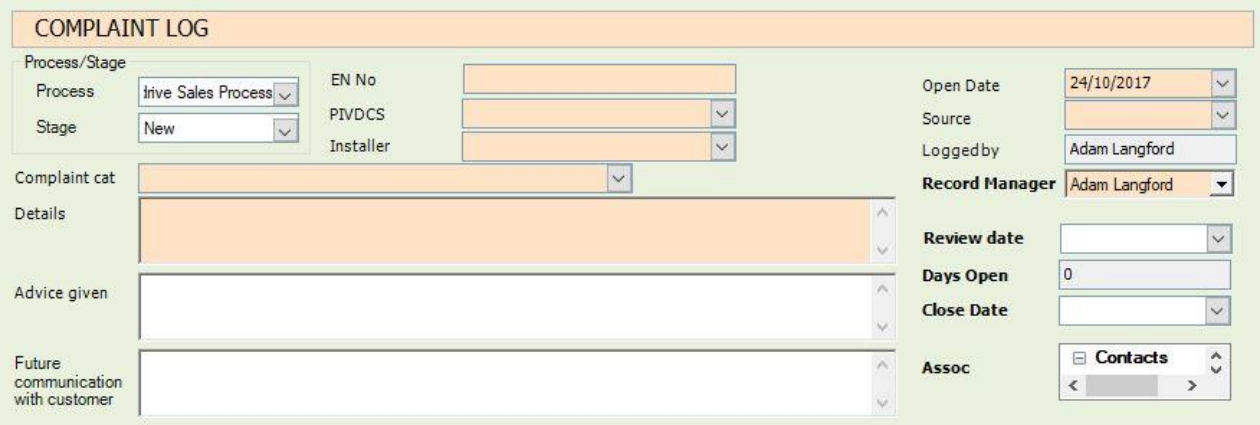

Figure 2 – New complaints log for all dissatisfied customers.

Complaints and instances of customer dissatisfaction continue to be recorded under the rigorous standards required for businesses regulated by the Financial Conduct Authority. During this quarter 2 major complaints were received. The first complaint was regarding a delay in charger supply. This was handled by a senior member of the EN support team by confirming the first available installation date with the customer for when the delayed batched of chargers arrived. The second complaint was due to the installer not responding to a customer with an update for 2 months. This was handled by confirming to the installer that they must contact their customers within 10 workings days of receiving their application. The installer followed up thus resolving the complaint. The complaints log

remains as the hub to record complaints or dissatisfaction as seen in Figure 2. This allows complaints to be categorised, details of the complaint to be logged and importantly allows the complaint to be managed through to resolution. Additionally, this allows DriveElectric to report on the complaints to the EN project team. Furthermore, advice and future communication given to customers allows for DriveElectric to increase their learning and to help avoid the same issue reoccurring in the future.

5.2 Customer support line

The support line remains the main means of contact for all participants to communicate with the Electric Nation Team. This phone number is also detailed on the chargers themselves in the unlikely event that their charger fails. The support line offers a 24/7 fault reporting line with faults logged with the DriveElectric team during office hours and a staffed recording service for out of hours which is then passed on to the DriveElectric team immediately to follow up.

The faults are logged based on their priority and dealt with by the dedicated fault team accordingly. Once the fault has been logged, it is assigned by the fault team to the relevant party to diagnose. If a customer cannot charge their vehicle, or the customer's travel plans are directly impacted by the issue the fault is logged as a high priority to be resolved as quickly as possible. All high priority faults are relayed directly to the fault team via an email and a phone call to ensure that they are actioned immediately. These customers are informed that they can use a taxi and return the receipts to DriveElectric to be reimbursed if required. Since the first installation of the charger in late 2016 only 2 participants have required a taxi. One occasion was due to user error of not plugging in the charger cable correctly. The second was due to hardware failure. Other faults such as communication failures are logged as medium-low priority as this does not stop the customer from charging their vehicle.

6 Fault logging and management processes

6.1 Fault recording process

DriveElectric continue to record all faults within the CRM database. This allows DriveElectric to monitor each fault from when it was first reported by the participant through to the final resolution. The learning from the fault is also recorded which can then be fed into other similar faults or queries when they appear thus reducing the amount of time required to reach a resolution on new faults (figure 4).

Since the creation of DriveElectric's CRM fault recording database 783 faults have been recorded to date. The faults are categorised into 13 various groups e.g. communication system, electrical, hardware, enquires, behavioural and enquires etc. Communication system, hardware and configuration are the categories with the largest volume of faults.

Communication system faults total 48% of all faults recorded to date. These have been recorded by either the participant or by Crowd Charge/Greenflux upon noticing the communications are offline. The high volume of communication faults has required DriveElectric to invest extra resource to diagnose a large section of the comms faults over the past 3 months. DriveElectric diagnosing these faults was unsustainable therefore January 2018 has seen communication faults passed onto The Tech Factory to analyse, diagnose and resolve. Hardware faults have accounted for 14% all of faults to date, with Crowd Charge and Greenflux owning 47 and 63 respectively. Configuration faults have totalled 13% to date, however this figure is greater due to configuration issues that have been resolved in a matter of hours and not recorded. DriveElectric decided that if a configuration issue affects a batch of chargers it will be recorded in the monthly report appose to the CRM. This is due to it taking a large amount of time to input a fault against each charger. On occasions configuration issues have affected over 100 chargers with Alfen/Greenflux.

Faults which are not resolved within 14-days are created on an exception report each month for EA Technology, WPD and TRL to track the progress of.

REPORTED MONTHLY PERIOD:	December																						
DATES OF REVIEW:	11/12/17 TO 08/01/18																						
	Faults														Tickets								
	Crowd Charge							Greenflux						Total	Crowd Charge				Greenflux			Total	Grand Total
	App	Comms	Communication system	Configuration	Electrical	Hardware	Sub-Total	App	Comms	Communication system	Configuration	Electrical	Hardware	Sub-Total		Admin	Behavioural	Enquiries	Sub-Total	Admin	Behavioural	Enquiries	Sub-Total		
New faults in month		3		1		4	8				11	1	17	29	37			2	2		3	1	4	6	43
Closed faults in month		15		1		4	20		1		38	10	14	63	83		7		7	1	7		8	15	98
In month change	0	-12	0	0	0	0	-12	0	-1	0	-27	-9	3	-34	-46	0	-7	2	-5	-1	-4	1	-4	-9	-55
New faults opened last mont	1	45	1	3	3	5	58		3	2	109	5	4	123	181	2	23	1	26		4		4	30	211
Faults closed last month		21	1	5	4	4	35		12	1	50		2	65	100	4	20		24		6		6	30	130
Last month change	1	24	0	-2	-1	1	23	0	-9	1	59	5	2	58	81	-2	3	1	2	0	-2	0	-2	0	81
Faults reported to date	1	268	3	29	22	43	366		93	1	284	28	65	471	837	12	47	23	82	4	31	13	48	130	967
Faults closed to date		236	3	26	22	39	326		76	1	231	25	57	390	716	12	46		58	3	29	3	35	93	809
Faults presently open	1	32	0	3	0	4	40	0	17	0	53	3	8	81	121	0	1	23	24	1	2	10	13	37	158
Avg time to fully resolve faults to date																									
<1 day		19	1	2	4	3	29		10	1	14		10	35	64	4	12		16	1	6	2	9	25	89
1 to 3 days		29		2	2	3	36		11		15	2	6	34	70	2	6		8		6	1	7	15	85
4 to 7 days		14	1	3	1	8	27		3		5	1	8	17	44	1	13		14		2		2	16	60
8 to 14 days		23	1	2	2	8	36		3		36	3	6	48	84		2		2		1		1	3	87
>14 days		151		17	13	17	198		49		161	19	27	256	454	5	13		18	2	14		16	34	488

Figure 3 – DriveElectric's January 2018 fault report.

LONG TERM FIXES			
General	Action	Actionee	Complete
Restore comms to units by sending out recievers and repeaters to customer	TTF send out second batch of recievers to garner conclusive results	TTF	Awaiting stock - to be sent out 15.01.2018
Customer report too much bandwidth is consumed by the VPN	TTF to investigate how to control and block on the core router. Currently in testing stage	TTF	Data consumption greatly reduced currently consuming 96mb a week, was previously 950mb. Shall now consider this to be at an acceptable level.
Crowd Charge / APT	Action	Actionee	Complete
TTF reported oversites with commissioning process - i.e chargers not labelled.	APT to join ops review call to discuss commissioning process	CC	In progress
Driver Error comm message - loose energey meter or mode 3 controller	APT to attend, have taken on new staff member to ensure appointments are kept	APT	Complete
Greenflux / ICU	Action	Actionee	Complete
Comms board inside charger found by TTF to be faulty	HB to reraise ticket in Jira and Alfen to request that Strtaford attend	HB/Greenflux	On going
Chargers 216-318 are configured incorrectly so they don't auto detect between broadband and Sim for comms	Units installed and online shall be remotely configured. Units installed and offline shall require HB to request reset and Alfen arrange site visit when required	ICU/Greenflux	54 chargers have accepted the amended config. Remaining units are being sent wifi bridges for wifi units and TTF attending hardwired units
Chargers in stock affected by config issue shall have to be reconfigured with installer on site	Installers to contact support desk whilst installing so units can be remotely reconfigured. Installers to bring laptops to configur unit manually is unable to get online via broadband	Installers	On going

Figure 4 – DriveElectric's long term fixes January 2018

7 Learning reference communications process

Throughout the project ongoing feedback, reviews, analysis and developments has enhanced processes. This improves the customers experience while simultaneously streamlining DriveElectrics' and the installers' efficiency. All learning points are recorded within the TRL learning log.

A learning point arose from the Phoenix Works analysing their approval process. As a result, The Phoenix Works requested DriveElectric to add in a recommendation to prospective participants to install the charger on the external wall of their house as opposed to their

garage. This was due to prospective participants inadequate garage feeds. If the charger was to be installed within the garage extra costs would need to be paid by the participant due to upgrading the feed, or groundworks, if the cabling ran from the main fuse board within the property. By adding in this recommendation at the early stage in the self-survey process this helped manage customers' expectations and reduce the time taken to approve the customers application.