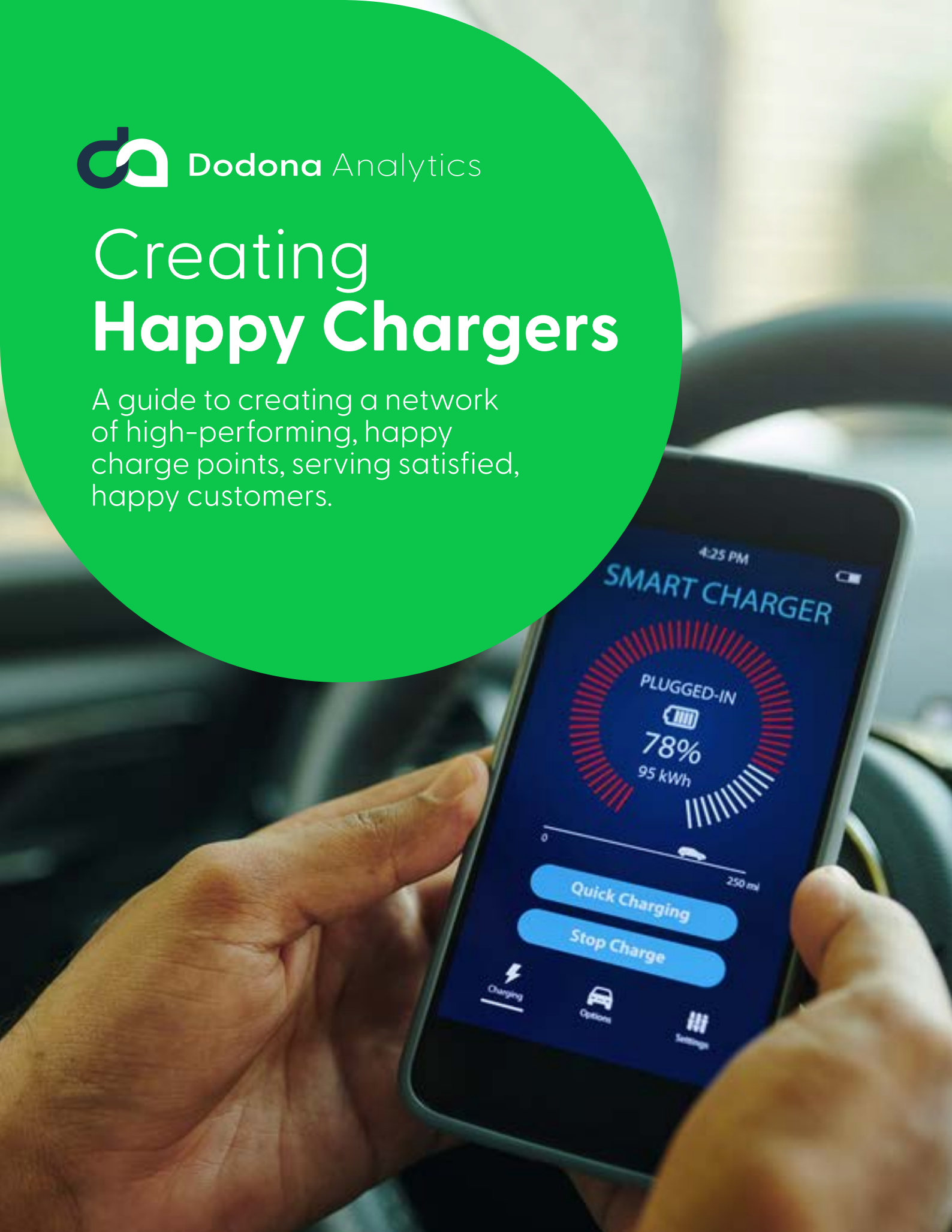
Dodona Analytics

Creating **Happy Chargers**

A guide to creating a network of high-performing, happy charge points, serving satisfied, happy customers.



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In the rapidly evolving landscape of electric vehicles (EVs), the success of a charging network hinges on strategic planning, data-driven precision, and a focus on both charger utilization and customer satisfaction.

"Happy Chargers" is a concept that embodies this. Referring to both the profitable and well-maintained charge point, as well as the happy and satisfied charging customer, it personifies what a successful EV charging infrastructure should be.

It is our mission to help Charge Point Operators (CPOs) achieve this. In this eBook, you'll find expert guidance on building a network of high-performing, happy chargers, for sustainable success.

We discuss:

1. Effective site assessment
2. The importance of location
3. Leveraging data and predictive modeling
4. Monitoring network performance
5. Operational efficiency for scalability

Effective Site Assessment

The foundation of a successful EV charging network is effective site assessment.

With effective site assessment in place, a CPO can accurately and efficiently evaluate a location's viability and feasibility, so it invests into the right locations for its customers and its network.

This can be a big challenge for CPOs, however, with generic data and manual processes hindering access to the insights they need in order to fully assess a site's full potential. And, with some businesses looking to identify and assess the viability and feasibility of thousands of locations at once, effective site assessment can become extremely demanding.

There are three aspects of site assessment that address this challenge:

- **Data quality:** Access to accurate, up-to-date, and relevant data tailored to EV infrastructure needs.
- **Predictive modeling:** Employing advanced models to forecast site viability and profitability both now and in the future, according to the criteria for the business's needs.
- **Custom data:** Incorporating custom data relevant to your strategic network growth goals, can further define the site assessment model according to a business' needs.

These three key considerations should combine to deliver effective site assessment through comprehensive, EV-specific insights evaluated in an intelligent, central framework.

The Importance of Location

The adage "location, location, location" holds true in the realm of EV charging.

Being in the competitive position of securing the right sites now, is central to ensuring sustainable success. The wrong location is a costly location, with ill-informed or hurried site assessment opening businesses up to both immediate and long-term risks ranging from deploying the wrong type or number of chargers at a location, or being dependent on a grid infrastructure which just cannot support a site's needs, to simply being in a location where EV drivers are not and have no incentive to be.

As well as avoiding costly mistakes, securing the right locations based on accurate, predictive insight also kicks the competition to the curb. It delivers on the projected return on investment (ROI), and, as we all know, this in turn supports further investment for further network expansion.

"We depend on Dodona as a unified source of dependable data, especially up-to-date competitive information of existing chargers, which is critical to the viability of our sites"

An Established UK Charge Point Operator

But with a vast amount of data available, it is imperative to draw on data sources which are both EV and business-relevant. We list a number of important data points which are just a bite out of the data pool CPOs need to draw from when planning out a network of happy, well-utilized charge points:

- Current traffic patterns and volume
- EV registration density
- Non-EV registration density
- Typical dwell times
- Grid infrastructure
- Demographic data
- Local business
- Competitor locations

Making sure that these factors (along with the many others which are unique to each CPO's particular business needs) underpin site assessment puts EV charging businesses in competitive positions in the market.

Leveraging Data and Predictive Modeling

Data is the lifeblood of effective charge point planning.

In the previous section, we listed a number of EV-specific data points which should form the basis of site evaluation - now we look at how this information can be manipulated to provide accurate and predictive insight. When informed by the right mix of basic and custom data sets, what is known as "predictive modeling" enables CPOs to forecast key performance indicators such as utilization rates, as well as anticipate maintenance needs and make informed decisions about equipment types and quantities.

There are 3 key aspects to consider when leveraging data:

1) **Aggregated data:** Combining various data sources into a unified repository for comprehensive and consistent analysis.

2) **Custom data integration:** Incorporating data sets which might not form part of the usual mix, and are specific to a business's goals or needs. Integrating such custom data with industry standard EV data can elevate the outcomes of data analysis, as it incorporates a business's specific needs.

3) **Derived insights:** Generating unique insights through the synthesis of multiple data points.

"It [Dodona Analytics] has given us confidence in site selection, which is really key. And it's also probably educated us as well. Your product brought additional themes and data points to us that we wouldn't otherwise have used. That's something that we've taken a lot of benefit from."

Stuart Douglas, *Managing Director*, PoGo Charge

Monitoring Network Performance

Continuous monitoring of a charging network's performance is vital for business health.

While assessing the potential of new locations is imperative to an individual's site's success, monitoring the performance of your network as a whole is just as important when it comes to creating and maintaining a network of profitable and happy chargers.

This is done by understanding the health of each site at a granular level, monitoring factors such as utilization rates, to allow the CPO to identify and address any issues on a site by site basis. This could include hardware upgrades, installing additional charge points, reassessing grid capacity, or the creation of destination amenities such as the ability to purchase refreshment or even supplies.

With each existing site being treated as a valued building block in a charging network, ensuring that charge points are already well maintained and reaching their full utilization potential, its performance will likely increase thanks to the attention of the CPO, and contribute successfully to a charging networks' overall value and output.

To understand the performance of a charging network, CPOs should look to monitor a number of key performance indicators, including:

- **Utilization Rates:** Tracking how often chargers are used.
- **Peak Usage Patterns:** Identifying times of highest demand.
- **Dwell Times:** Measuring the duration of charging sessions.
- **Energy Demand:** Monitoring the amount of energy delivered and grid capacity.
- **Charger Downtime:** Recording periods when chargers are non-operational.

By analyzing these metrics, CPOs can make data-informed decisions to bolster their existing portfolio of sites, meaning that they can confidently plan for a successful and sustainable expansion.

Operational Efficiency for Scalability

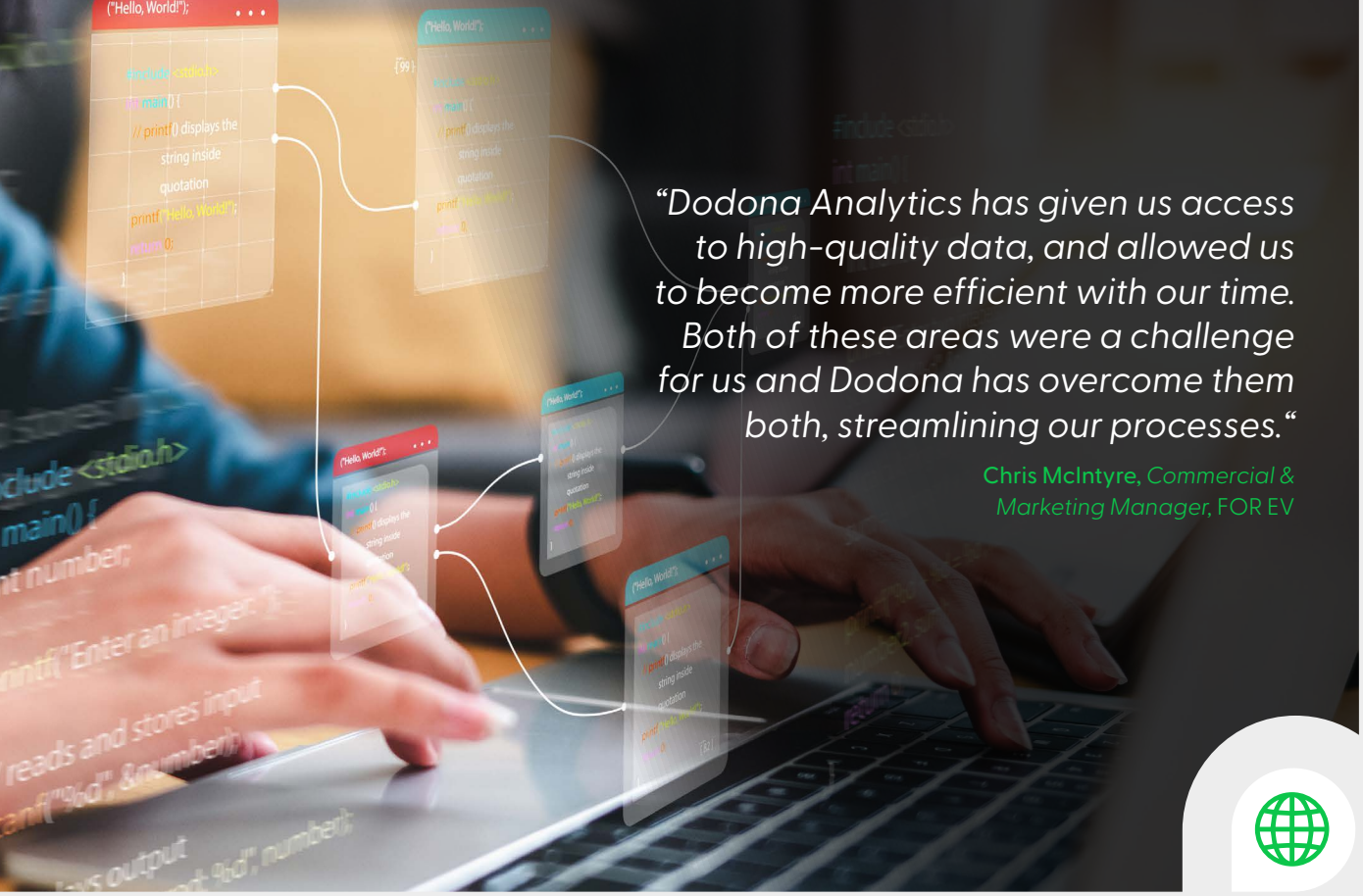
The ability to scale a charging network is essential in meeting the growing demand for EV charging.

Keeping up with the increasing need for reliable and present EV infrastructure requires CPOs to scale their business and networks at speed. Some are currently looking at assessing thousands of potential sites for their network expansions, and it can be extremely challenging to execute this efficiently and accurately.

Central to whether this can be done successfully or not, is the efficiency of the processes in place. The ideal site assessment process for scale is quick, easy, and accurate in its outcomes, as well as replicable across any number of potential locations.

So, what does this look like?

- **Centralized site-assessment:** Data is collected, aggregated, and evaluated in a central location
- **Integrated tools:** Data analysis takes place in a system which is integrated with project management and other functions such as reporting, streamlining the workflow for the full site-assessment lifecycle
- **Seamless collaboration:** All roles and stakeholders involved in the site-assessment and planning processes are able to view the process, as well as collaborate and communicate across a central platform or system, and benefit from data and insight transparency.
- **Integrated systems:** Compatibility between CPP solutions and other business systems like CRM and CPMS further enhances collaboration and communication between business functions and stakeholders.



Operational efficiency is not to be underestimated in this rapidly developing market. It not only accelerates deployment but also reduces costs and improves the overall customer experience. A good extra here is the last bullet point - ensuring that data is integrated to other business systems, such as a CRM or CPMS.

Creating A Network of Happy Chargers

The journey to creating "Happy Chargers" is multifaceted, involving strategic planning, robust data analysis, and a commitment to continuous improvement. By focusing on accurate and comprehensive data utilization, optimal location selection, vigilant performance monitoring, and operational efficiency, CPOs can build charging networks that are both profitable and pivotal in advancing the adoption of electric vehicles.

How Dodona Can Help

At Dodona Analytics, we are on a mission to create "Happy Chargers". We provide a Charge Point Planning (CPP) platform which supports CPOs and other charge point businesses in building and scaling successful, profitable EV charging networks.

A leading, all-in-one solution from discovery to installation, our CPP solution is designed to enhance and accelerate charge point planning through intelligent scoring and actionable insights. It forms a central space for site assessment, delivering business-specific insights derived from over 50 aggregated data sets, incorporating custom data sets too. It also enables one view for the collaboration of stakeholders across multiple projects, and reporting for proposals, site reviews and financial forecasts.

This data-driven approach allows operators to make faster and more confident decisions, and ensure that they are building charging networks which consist of happy, well utilized and maintained charge points, and servicing happy, satisfied customers.

Dodona Analytics

The Dodona Analytics EV Charge Point Planning platform is trusted by innovative companies building tomorrow's charging infrastructure, helping to deploy tens of thousands of profitable chargers every year across Europe and the US. Dodona Analytics is passionate about transforming transportation to create a cleaner future.

Learn more at: dodonaanalytics.com