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1 Executive Summary

- Consumers have significantly higher service expectations than ever before. The customer experience benchmark is no longer just competitor energy companies, the bar has and will continue to be set by the consumers’ best customer experience - regardless of sector, size or geography.

- Existing energy providers who do not have a laser focus on customer experience will lose out, particularly given the increasing number of players coming into the market, many of which are bringing with them higher customer experience standards from other sectors.

- Ultimately, the winners in this space will be highly-trusted organisations with an unwavering focus on customer-centricity and a keen understanding of the power of data to drive a personalised customer experience.

- When designing service solutions providers need to start from the customer’s perspective. Today’s digitally discerning customer wants simplicity, savings and speed. Energy companies need to constantly assess how easy they are making it for customers to interact with their services.

- Fundamentally, people’s needs haven’t changed. What has changed is how energy companies need to deliver on those customer needs. According to recent research, 41% of millennials interact most frequently with their energy supplier using social media. This represents a fundamental shift for energy companies and is a trend which they need to respond to and an area in which they need to become proactive.

- It’s all about the Data. Understanding a customer’s individual behaviour and requirements allows for the creation of personalized service experiences. This is key as organizations seek to connect, not just commercially with their customers, but also emotionally. Ultimately, effective use of data analytics can help drive valuable proactive customer engagement.

- Technology is an enabler of - not a panacea for - great customer experience. People, Process and Culture all have huge roles to play in the delivery of real transformation. The value created by a “smart” device is in the service it provides to customers, not in the device itself.

- A.I., Automation, Internet of Things (IoT) and Blockchain could be seen as a “perfect storm” of disruption across the broader energy landscape. However, the human touch will remain critical in delivering great customer experience with a focus on the more complex, emotional customer interactions.

- Smart Meters have the potential to revolutionize how energy companies interact with their customers. “Smart” is

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1 “The New Energy Consumer: Architecting For The Future”. Accenture 2014. This was a survey of 10,000 participants across 17 countries.
only getting started. Gartner is predicting that by 2022, the average home could have more than 500 connected devices. We are also seeing enormous projected growth in Electric Vehicle (EV) adoption with today’s UK figure of 90,000 set to reach 1.5mn by 2020. These growth rates present significant opportunities around the connected home.

- For all the talk of “Engagement”, there remains a significant cohort of customers who are not engaging with the market at all. This is evidenced by the fact that 9mn UK households have been on a Large suppliers standard variable tariff for more than three years. So, in spite of the unprecedented number of service providers in the sector, this level of disengagement does not point to a fully-functioning competitive marketplace.

- We are seeing the aggregation of ‘home services’ with the re-emergence of converged or “bundled” offerings. Trust, engendered by great customer experience, is going to be a key driver of this and will ultimately dictate who the winners are. Trust, authenticity, agility and the importance of your brand ‘meaning something’ all need to be viewed as ways in which energy companies can differentiate themselves from their competitors in this rapidly changing environment.

**Terminology**

This document uses the following terms to describe the groups of suppliers we see competing in the market

- Large suppliers have businesses that have been active in the domestic energy market since liberalisation and that service many millions of accounts. These companies are British Gas, SSE, E.ON UK, EDF Energy, Scottish Power and npower
- Medium suppliers are those that have entered the market from cold and built portfolios in excess of 250,000 domestic energy accounts
- Small suppliers are the companies that have fewer than 250,000 household energy accounts and stand below the current thresholds for participating in energy efficiency schemes
- Small and medium suppliers are collectively referred to as **SaMS**
2 Energy Market Overview

2.1 Supplier Numbers

In terms of the number of suppliers in the domestic energy sector, competition and choice has never been greater. **By the end of 2016, the number of suppliers in the GB energy market reached its highest level in the post-privatisation era at 66.** This reflects a notable expansion in the sector over the course of the past year, with 21 licensed suppliers being established – eight of which arrived in the final quarter.

“White label” entry, whereby an entity partners with a licensed supplier to undertake many of the day-to-day supply activities, remains an attractive option for councils and community-based entities. Likewise, the “supplier in a box” approach – where a pre-accredited supply licence is purchased, typically integrated with a software package to handle customer-facing elements – continues to provide a ready-to-use option that has accelerated entry.

![Figure 1: Licensed GB Energy Suppliers (Source: Cornwall)](image)

2.2 Market Share

Ofgem publishes market share data for the domestic electricity market, as defined by the number of meter points held by each supplier, since the start of 2004. As an indicator of market concentration, this shows the extent to which a single supplier (or group of suppliers) potentially dominates the market. Between 2004 and the release of the latest set of data (Q3 2016), the combined market share of the large suppliers has declined from 99% to 85%.

Ofgem has made available comparable data for gas since Q2 2005. A key point to note from this is the extent to which the market share of British Gas has fallen in the period under review, from 55% to 35%. The Large suppliers have seen their share decline from 100% to 84% over the analysis period.

In both instances, the new entrant supplier that has acquired the largest market share in electricity (3%) and gas (4%) has been First Utility – the company benefiting from a marketing strategy that stressed their nature as an alternative to the Large suppliers, and also from legislation that reduced switching times.

*The main point to note is the decline of the large suppliers and the growth of the challenger brands.* British Gas remains the largest supplier in both gas (35%) and electricity (23%), holding the highest market share of any company, although the Large suppliers remain dominant (84% for gas, 85% for electricity). This second point is of import given Ofgem’s “possible tacit coordination” between suppliers and the high proportion of those customers that are “disengaged” from the energy market.

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2 These figures do not adjust for any change in underlying number of meters assessed, i.e. according to the Office of National Statistics there were 27.1mn households in the country in 2016, which compares to 25mn in 2004. Therefore, the total domestic market has notionally increased by 8.4% since Ofgem started reporting this data

Looking at the first point, the large suppliers were cleared by the Competition and Markets Authority (CMA) of tacit coordination as part of the group’s investigation into the energy sector, although it did acknowledge that certain characteristics of the domestic supply market that “may be conducive” to this activity such as similar business structures and exposure to the same cost pressures.

Energy and Industrial Strategy Committee indicates that the majority of the customer base of the large suppliers is on the most expensive tariff type (the SVT) and has been for several years\(^5\). There have been a number of surveys that have looked at this subject (see below), with competition and customer engagement being interlinked as discussed in the following sections.

2.3 Customer Switching Rates

Switching is effectively seen as a proxy for the extent to which customers are engaging with the energy market, notionally reflecting the extent to which they are seeking lower cost deals and/or suppliers that can offer them a better service. Although not an exact science, i.e. switching figures do not show how many times an individual household has changed supplier, they are a barometer for the sector.

Data from Ofgem on switching has been published since January 2003 and originally looked at total electricity switches and total gas switches before being expanded by breaking switches down by supplier type (small, medium and large). The 2016 information from Ofgem shows that the rate of switching is at a six-year high with 7.7mn gas or electricity switches taking place out of approximately 26mn households. This was an increase of 1.7mn switches in 2015.

This, the regulator states, reflects the rate of new entry into the sector, technological developments that have facilitated switching, and initiatives that the regulator itself has introduced. With total switching up by 28% year-on-year, approximately 47% of the switches seen in 2016 were to small or medium sized suppliers.

The counterpoint to the growth of the challenger brands is the extent to which customers have either not switched or have chosen not to engage in the energy market, i.e. to join the active customer base\(^4\). Evidence given to the Business,

\(^4\) Note that the term “engagement” is used synonymously with “active” participation in the energy market. This reflects common industry parlance. An “engaged” or “active” customer may not in fact switch, but more likely to be aware of the options that exist in the energy market than a customer that is “disengaged” from the energy market. As a general rule of thumb, determining the level of engaged, non-switching customers is particularly difficult as there is effectively no real measure of their activity in reviewing the market.

As a comparator, customer switching in the personal mobile telephone market has historically been low due to the perceived complexity of switching. According to figures released by Ofcom in March 2016, only 6.6mn of the 47mn mobile telephone users in the UK had switched their provider in the preceding 18 months. This prompted the regulator to implement regulatory change to improve switching and engagement. This followed the introduction of comparable proposals in 2015 intended to promote switching in the broadband service provider market through a “one touch” process.

The post-privatisation period has been punctuated by a succession of interventions (and threats of such) in the energy market by the government and regulator alike. Throughout, the stated objective has been to improve competition and new entry, which is regarded as key to delivering lower prices and a better outcome for customers.

Although the tariff increases have been the catalyst for this action, there are deeper-seated issues at play. Firstly, the Conservative Industrial Strategy (assuming that it is implemented) proposes a more active role for the government than has historically been the case. Secondly, there is the political challenge of helping the “squeezed middle” deal with the rising cost of living. Thirdly, the political and media perception of a market-based system that creates winners and losers in the provision of an essential service like energy may be untenable.

The regulator has already introduced a price cap for those customers that consume their energy on a pre-payment basis, this being re-set on a six-monthly basis. However, the prospect of wide-ranging intervention is unclear at this stage. Indeed, the all-party Economic Affairs Committee has warned against the consequences of state action, stating that “constant intervention by successive governments in the electricity sector has led to an opaque, complicated, and uncompetitive market that fails to deliver low cost and secure electricity”.

2.4 Tariffs

The energy markets have long been characterised by a plethora of complex tariffs, reflecting the industry structure and, often, its internal costs of doing business. These tariffs effectively determine how much the customer pays, what the charging structure is for energy (e.g. per unit and/or per day), how long these arrangements are in place for (e.g. one year, two years etc.) and how they pay for their energy (e.g. direct debit). The resultant complexity has been cited as one of the reasons...
that a significant number of consumers continue to be disengaged from the market.

**About energy tariffs**

There are three main types of energy tariff:

- **Fixed energy tariffs.** This tariff type offers guaranteed rates for a fixed period. Fixed tariffs only guarantee the cost of the standing charge and unit rate of gas or electricity. This means if you increase your energy use your bill will also increase.

- **Pre-payment Tariffs.** These tariffs are for people with prepayment meters and enable you to pay in advance for gas and electricity by topping-up your meter.

- **Standard variable tariffs.** This is normally your supplier’s default tariff. It will have variable prices that can go up and down with the market. This type of tariff is not usually the cheapest option, but it can be a good option if you don’t want to be tied into a contract.

**Cornwall analysis indicates that, as at the end of February 2017, there were approximately 200 different energy tariffs in the domestic market, in addition to the regional variations of these.** There are a combination of gas, electricity and dual-fuel tariffs, different tariffs to reflect payment methods, those inclusive of discounts, different durations, and the provision of other broader social, personal or environmental benefits.

Although the recent years have seen a focus on removing “complex” tariffs from the marketplace, making a like-for-like comparison of products from different – or indeed the same – suppliers is still a challenge, and one that could potentially hamper customer engagement.

As a result, despite efforts by Ofgem and the CMA to simplify tariff offerings, the myriad of options can make it difficult for customers to choose a tariff that is right for them.

Addressing of this problem has been helped by the growth in the popularity of price comparison websites, but a simple like-for-like comparison between supplier offerings is still difficult for many customers – making it important for suppliers to be able to effectively communicate what it is that makes their offering different from that of their competitors. Furthermore, competing solely on price makes it difficult to establish a broader connection with customers outside of a cost-based dynamic. Clearly articulating this differentiation helps the evolution of the customer relationship away from a solely commercial one to one where there is a broader connection with the service provider.
3 Customer Participation in the Energy Market

3.1 Engagement

We are living in an age of significantly heightened customer expectations. The benchmark for ‘good service’ in the energy space is no longer other energy suppliers. Irrespective of the vertical, organizations are now benchmarked against the leading CX (Customer Experience) companies globally. With this in mind, traditional quality metrics such as ‘C-Sat’ (Customer Satisfaction) come to look quite jaded. The idea of merely ‘satisfying’ your customer is no longer sufficient. Heightened customer expectations mean organizations must strive to delight their customers to engender that all-important brand loyalty.

A significant barrier to delivering great CX in the energy space is the disproportionate number of customers who remain completely disengaged from the market. The active customer base is itself a small - although quickly growing - subset of the total customer base. In order to gain a foothold, new entrants have historically had to compete on cost or be increasingly innovative in their approach to market to gain a share of – and ideally grow the total size of – the active customer base. To defend their market shares, incumbent suppliers have sometimes responded in kind, leading to concerns from some that they are practicing predatory pricing.

Looking at the second point, the issue is the extent to which engaged consumers can put competitive pressure on suppliers. A supplier that has no incentive to compete on price and/or service has no real incentive to innovate or to improve its offering. In practice, this means that those customers that do switch are effectively creating a benefit for all customers (referred to as an “externality”). It is therefore essential that the number of engaged customers increases for the benefit of the market.

In their submissions to the CMA, some small and challenger suppliers stated that incumbent suppliers could offer very competitive deals by cross-subsidising from their disengaged customer base. This could serve as a barrier to entry and generally curtail customer engagement, ultimately adversely affecting all consumers. It is therefore important in the context of the relationship between competition and engagement that the number of engaged customers grows, otherwise energy suppliers would effectively be competing for this same finite subset of the total customer base.

As stated above, in June 2014 Ofgem referred the UK energy market to the CMA for a market investigation. Having conducted a State of the Market Assessment, the regulator suspected that features of the energy market were preventing, restricting or distorting competition. Having received evidence from stakeholders, the CMA unveiled the provisional findings of its investigation in July 2015. As part of its investigation, the CMA commissioned a survey into customer switching habits, this being one of a number on this subject, including one by Populus.

The CMA survey of 7,000 domestic customers highlighted a lack of engagement, most notably that 34% of respondents said they had never considered switching supplier, while 56% of respondents said they had never switched supplier, did not know it was possible, or did not know if they had done so.

Therefore, while there is the perception of a large disenfranchised group of potential switchers, in reality this may not be the case as some customers may simply not want to switch. Part of this may be down to such factors as demographics and social

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9 “The sluggish, the savvy and the downright promiscuous: The truth about energy customer behaviour.” Populus, April 2016
factors, which may represent an inherent and insurmountable barrier to some customers switching (e.g. a customer’s accommodation situation), and some may be in fact be possible to address through improved communication and awareness.

Looking at the Populus survey of 2,000 respondents, this highlighted the characteristics of those customers that do not switch (“inert customers”), these being a lack of awareness of their monthly energy bills, a lack of knowledge on whether they would have to cancel an existing contract, and concern over the potential complexity and/or cost associated with switching.

What is important to note is that the study states that the customer base of the Large suppliers is largely comprised of these inert customers (75% of respondents), these customers potentially being aware of the benefits of competition but choosing not to engage. Smaller and medium sized suppliers, by contrast, have a customer base that are engaged and much more likely to switch – so-called “savvy switchers” and “tariff tarts” that actively seek out deals that are better for them.

These types of customers will therefore require an offering that remains continually attractive in order to remain with a specific supplier. As it is difficult for a supplier to guarantee that it will always be the lowest cost tariff in the market, this implies engagement with the customer on a broader level to encourage them to remain. The issue is therefore evolving beyond an initially lower cost offering into something that creates a deeper connection with the customer, e.g. more innovative products, personalised communication and improved CX – thereby growing trust and loyalty over time.

This is a fundamental point in the new world in which energy suppliers find themselves. Competing on price is not a source of long-term, defensible competitive advantage. As such, organizations need to ask themselves, ‘What does my brand stand for?’ and, “How do I proactively engage with my customers in personalised and authentic way?”

As with the CMA report, Populus notes that the demographics of these more active switchers are
notably different to those of their less active counterparts in terms of age, income, housing status and market awareness. **One notable difference between the outcomes of the two is that price is not cited as the most important factor when considering switching or staying with a supplier, but rather customer service, transparency of bills, money saving advice and strong communication.**

This shows that broader engagement with customers beyond cost can and does play an important role for suppliers, reflecting the potential for greater interaction and brand perception over and above how much customers pay.

The lesson here for service providers is that when designing service solutions, start from the customer’s perspective and work back. Today’s digitally discerning energy customer wants simplicity, savings and speed. Energy suppliers need to constantly assess how easy they are making it for customers to interact with their organization.
3.2 Energy Supply and Beyond

From an economic perspective, a “competitive” market is one in which there are many buyers and sellers – none of which can dictate how the market operates – a lack of barriers to entry and exit, a homogenous product, and that marginal cost equals marginal revenue. In the energy market, the last of these – and the thorny issue of excess profit – remains the subject of ongoing state and regulatory review. We shall therefore focus on the other three from a customer viewpoint.

While the “many buyers” aspect is evident, the past two years have seen a growth in the number of suppliers, implying greater competition. Market entry has been facilitated by technology and the advent of the ready to go pre-licensed supply company. From that perspective, the consumer will benefit from another participant in the market and greater choice, although this is a major oversimplification.

Becoming an energy supplier is not as simple as a “plug and play” approach to entry. Smaller suppliers have a major exercise in building their brand and customer base in a controlled and manageable manner, whether doing so by looking to attract disengaged customers or focusing on their more engaged counterparts. Here, the issue of cost is crucial, as small suppliers commonly enter the market with a particularly competitive tariff offering that attracts customers.

Having attracted the customer, the challenge is then to keep them through a strong, proactive and personalised customer service offering. This is critical given the number of customers who are prone to switching. In the absence of a compelling retention strategy – namely, delighting your customers – suppliers risk simply churning customers they spent money acquiring.

Customer engagement has also been aided by technology, given factors such as online access and smart metering, both of which have improved transparency of tariffs and energy usage. These are discussed in more depth in the next section but can be epitomised by the rise of interaction through social channels – particularly among millennials. Other innovative solutions, such as the Flipper Community platform, take the switching decision out of the customer’s hands – and that of the supplier – by operating on an automated basis. This reinforces the importance of having a clear understanding of what your brand stands for and leveraging this to deliver proactive, personalised and authentic service experiences to your customers who, in turn, will become advocates for your brand.

This brings us to the second element – whether energy is a homogenous product. In the context of the actual gas and electricity itself, this is indeed the case, but the previous sections have highlighted that there is much more to energy supply than simply ensuring that pipes and wires are in place. The broader nature of the delivery offering and the manner with which suppliers interact with customers is one of the crucial ways in which kilowatt-hours of energy are transformed into a heterogenous product. Suppliers are becoming increasingly innovative in their offerings and their partnerships with other organisations, whether they be within the sector itself or external to it. Likewise, customer service is definitely not homogenous and is an important differentiator, as is the emerging trend towards loyalty schemes and cross-commodity offerings.

Against this backdrop, the often-cited mantra of “switch and save” – while frequently true – is opposed by the reality of the sector and the desire (or lack thereof) of customers to engage. Regulatory interventions aimed at improving competition and customer engagement will only go so far, while there is also the argument that regulation is an imperfect surrogate for competition – particularly when faced with a core of disengaged customers.

Recent entrants have sought to place themselves as an alternative to the large suppliers and with a specific focus on the customer. This is either through locally-based initiatives (e.g. Breeze
Energy, a geographic limit on their target customers (e.g. Future Energy) or a target sector (e.g. GnERGY).

Challenger brands are also looking to do more, but some are experiencing the same problems as their larger counterparts as they grow. For example, despite using its co-operative values as its main selling point (i.e. it is owned by its members, profits are shared amongst customers, and members can claim points on their energy bills), Co-operative Energy struggled with customer service issues after the implementation of its new billing system in early 2015 – although it has since improved, notably in terms of the times it has taken to answer its customer service lines.

At the same time, new entrants and established suppliers alike are seeking alternative routes and partnerships to market. There are a number of supplemental angles to this, with certain suppliers having a ready-made base into which to cross-sell, e.g. M&S Energy and Sainsbury’s Energy, both of which have the ability to provide access to financial services. Here, the ability to leverage off an existing brand awareness could be crucial to expansion and new marketing opportunities.

The combined issues of trust and targeted offerings are best epitomised by municipal supplier offerings and Robin Hood Energy in particular. This was the country’s first fully licenced municipal supplier, launched by Nottingham City Council in September 2015. As a not-for-profit company, Robin Hood looks to provide low cost energy to help challenge fuel poverty, highlighting that it is different from other energy companies with no private shareholders or bonuses paid to directors.

Building upon the interest expressed by other local authorities (LAs) in establishing their own energy companies, Robin Hood Energy has since positioned itself as a “white label” supplier with White Rose Energy (Leeds), Brighter World Energy (Manchester) and LECCy (Liverpool). However, as indicated by the tariff increases announced by Robin Hood Energy in March 2017, the company is not immune to the same market developments that have affected their larger counterparts.

In the current financial climate, both LA and locally-based provision of services are important and a key source of revenue - not least given the trust that residents have in their authorities. This integrates not only with the day-to-day activities of LAs, but also the role that they have in shaping the local environment and infrastructure.

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Energy supplier cross-sector partnerships: Some examples

- British Gas’ new loyalty scheme, called British Gas Rewards, which will launch in April 2017. The rewards include a collaboration with Sky to offer discounted packages, loyalty energy deals for existing customers (with larger discounts for customers who have been with British Gas the longest), and various tariff bundles with additional services or products;

- SSE’s partnership with Dixons Carphone to offer connected home products and services, with their combined customer base of around 10mn households set to benefit from “a range of exclusive deals”;

- First Utility partnering with Bizzby to offer home services, through which customers can access a wide range of services including smart thermostat installation, boiler servicing and repair;

- Ovo Energy’s acquisition of US energy technology company, VCharge, as a result of which it will be able to offer electric storage heaters to manage usage and provide grid balancing services; and

- Octopus Energy partnering with Arsenal FC to offer a specific-branded tariff and to gain access to branding at the Emirates Stadium on match days.

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For example, how investment in electric vehicles and battery technology alike could be accommodated by LAs, including car parks and park and ride schemes as sites for solar PV and battery stations, and the way that LAs could further supplement this through municipal vehicles, e.g. buses. Furthermore, given the government’s home building targets, the possibility of employing renewable technology at the heart of new properties is also a possibility, implying a potential role for LAs as a full-service energy provider.
4 What Does the Customer Want?

4.1 Recent Studies and Surveys

Recent research from the Institute of Customer Service highlights six key areas that customers in the energy sector want to see their supplier focus upon. These were efficiency (making experiences easier and more straightforward for customers), speed, proactivity, consistency of communication, flexibility (both in terms of procedures and the manner of their engagement) and the need for a holistic approach to service by improving staff engagement.

In short, customers want speed, proactivity, consistency of communication, flexibility and – most of all – simplicity. This requirement will intensify amid the advent of the digitally-enabled customer that will want its supplier to make things as easy as possible.

Citizens Advice customer service analysis focuses on a star-based metric using five weighted parameters, namely the absolute number of complaints against a supplier, the ease with which a supplier can be contacted, the transparency of bills, the ability of customers to switch suppliers within 21 days, and whether or not the supplier is a signatory of the Switch Guarantee.

The most recent set of data, collected during December 2016 shows that the average score of the Large suppliers is approximately 3.45 (out of 5.00) against an overall average of 3.55, implying a below average service by these larger companies.

Which? also apply a range of metrics to determine customer satisfaction, namely customer service and complaints handling, value for money (not cost), bill accuracy and clarity, and the ability of suppliers to save their customers money. As with the Citizens Advice information, smaller services are higher ranked than their larger counterparts in the latest survey.

Data released jointly by Ofgem and the Energy Ombudsman at the start of March 2017 shows that the total number of complaints made to energy suppliers fell to a three-year low in 2016, with 3.5mn customers logging complaints. Of those made to medium and large suppliers, 90% of these were resolved within the eight-week timescale that serves as the referral point to the Energy Ombudsman.

This may in part be due to the toughening of penalties by the Energy Ombudsman, which were introduced in May 2015, and which saw increased fines levied against those suppliers which did not implement remedies within 28 days. There is no comparable data for smaller suppliers however, although these do form part of the data collected by Ofgem.

4.2 Looking Ahead

What a customer wants from their energy supplier is highly fluid, changing with the age and income of the customer, the evolution of technology and their ability to interact with it, their general lifestyle outlook and choices, and the underlying political and environmental agenda. Technology represents an ever-present, innovative influence on the existing structures, and companies must be able to integrate these developments seamlessly while also a means by which to make the experience as easy as possible for the consumer.

However, technology remains a means to an end, and must be complemented by – not be a
replacement for – the human touch, which remains an essential component in the customer relationship with an increased focus on highly-complex and/or emotional interactions. People, process and culture all have major roles to play in the delivery of the customer experience, as the value that is created by any smart device is in the service that it provides to customers rather than the intrinsic value of the device itself.

In the same way as the electricity generation sector has evolved from one based around a small number of large generation assets to one with a large and growing number of small generation assets, so customer interactions with their supplier will evolve. Ultimately, there will be greater consumer interaction and a growing call for a more personalised and flexible service.

The survey results mentioned above note that there are key demographic factors that influence the extent to which an individual engages with the energy market. As there is no common approach from customers, there should not be a common approach from suppliers looking to attract them given the difference between active and passive end user participation.

This necessitates a tailored stance when marketing to customers, e.g. baby boomers may have a greater focus on cost and comfort while millennials may be more interested in the technological and environmental aspects of their energy consumption. Although it is the latter, web-enabled and social-media savvy generation that may well be the engine of change, the needs of the former must not be overlooked.

Likewise, there must be an acceptance that some customers will never willingly engage with the energy market. Improved information and communication may mitigate this, but individual behavioural patterns or underlying socio-economic factors may make this detachment inevitable. Again, the needs of these customers cannot be overlooked.

With millennials providing the direction of customer expectations for the sector, the issue of communication is crucial, with a recent study noting that 41% of millennials interact with their energy supplier via social media channels. This represents a fundamental shift in engagement for most suppliers. Some of the other key findings from this survey are that members of this group are more likely to be “early adopters”, i.e. more likely sign up for new energy products and services, and are twice as likely as people over 55 to sign up for solar panels.

Although the purchase of electricity and gas is an essential service, it is not the energy itself that is of import, but rather what it provides – a comfortable lifestyle. This is an important point to remember, as it is the general expectations of customer lifestyle that will drive what suppliers are called upon to provide.

The new generation of energy consumer expects a rapid and high quality service experience from their supplier. Digitally connected and smart-meter enabled, being able to choose more than just their supplier is key to this customer. Today’s energy customer wants autonomy in terms of how and when to use their energy, personalised products and services, multiple payment options and an ability to interact with their service provider when, where and how they choose.

The importance of understanding a customer’s individual behaviour and requirements allows for contextualised and personalised customer experience – this being enabled by the effective use of data.

12 “The New Energy Consumer: Architecting For The Future”. Accenture 2014. This was a survey of 10,000 participants across 17 countries.
In line with other technology-led sectors such as banking, the ability to self-serve is crucial to this customer, reflecting the integration of technology into every aspect of their life. This will necessitate instant access to information, the ability to manage it, and also the energy usage that underpins it.

The data-intensive nature of this relationship means that confidentiality and sensitivity of each customer’s information must be preserved through robust cybersecurity – this being increasingly seen as a board-level issue. However, understanding this data will be an important factor in the provision of a more personalised customer experience, and in turn improve connection and trust with that customer.

The role of such technological advances will be crucial, as they will in part determine the future of the energy system. The potential implications for distribution-connected (i.e. small scale) generation as a force for change are already apparent, and this will grow exponentially with the increased deployment of battery technology, electric vehicles, and the Holy Grail of the smart home.

This includes the ability to generate and export electricity back into the network, or to the electric vehicle (or import from the vehicle), allowing for an effective holistic management of energy usage. This reflects the advent of the “prosumer”, i.e. the integrated producer and consumer on the domestic level.

Crucially, this customer will demand and expect a high-quality service and experience from its supplier. Choice and the extent of flexibility will mean that possessing the consumer’s trust and their loyalty will be crucial. Central to this is the ability to provide your customers with authentic, personalised service experiences. This can help turn your customers into advocates for your brand with their positive experiences being shared via digital channels and peer interactions in a virtuous circle.

Ultimately, this service must be a personal one, reflecting the ability to meet each customer’s needs on an individual basis within the context of the overall supply framework. This in turn will be fed by, and feeds into, the perception as to how easy these tools are to use and how cost effective they are.

In the context of this relationship between the smart home, electric vehicle and energy supplier, this opens the door to the aggregation of home services and the need for a suitably robust online framework to manage the interconnection between the different elements of the home.

Of course, this must be an affordable option for all consumers, and be a source of added value, such as:

- **Transparency**
  - Visibility of how and when money is being spent, and where it is going.
  - Smart meter technology has the potential to be a key game-changer on this front, provided the roll-out of the technology is handled appropriately.
• Control
  \(\circ\) Extending out from the traditional focus on tariffs and choice of supplier, customers want to be able to control their energy use and know that this is making a difference to how much they pay, as well as potentially making a difference from a broader social and environmental perspective.

  \(\circ\) Again, smart meter technology can be a major source of change in this regard, provided that tariff structures evolve accordingly, e.g. targeted ToU tariffs that incentivise customers to shift their demand, which will require greater flexibility from supplier systems to allow these.

• Ability for visible social media interaction with peers
  \(\circ\) In line with the strong online presence of the next generation consumer, the ability to demonstrate usage and interactions in the energy sphere is likely to be essential. The 2017 Edelman Trust Barometer\(^{13}\) notes that global public trust in the institutions of business, government, non-governmental organisations (NGOs) and the media – is in decline.

  \(\circ\) While this report functions on a global and multi-sector scale, one of the most notable conclusions is that “peer-driven media” remains in the ascendancy, i.e. recommendations from peers are the overriding factor in decision-making on such issues as products and services.

  \(\circ\) It is worth noting that a recent survey\(^{14}\) noted that 76% of those surveyed were motivated by incentives to recruit their friends and family to energy service providers.

In the long-run, customers will expect that their service keeps pace with technological innovation, and that their products evolve as well – rather than having suppliers find ways to sell them the same product in different ways.

An example of this is Blockchain technology. Although limited so far in its application in the energy sector, it is also an important enabler to greater customer interaction. A small-scale trial in Brooklyn\(^{15}\) is already giving consumers the ability to buy and sell renewable energy directly to each other, with homes producing their own energy through solar power selling to their neighbours – the process being managed by smart meters and decentralised smart contracts.

In much the same way that large non-domestic customers no longer have energy suppliers but rather energy partners, a similar approach could be employed in the domestic sector.

4.2.1 Branding and Partnerships

A pertinent comparator for the energy supply sector is the market for electric vehicles, led by the growth in the US company Tesla. This too is a market that has been the subject of considerable change since the start of the decade, reflecting larger scale production, falling costs and – crucially – technological change and customer engagement.

In addition, companies from outside of the sector have sought to deploy their technology and skills to the market, such as Google’s self-driving cars, Apple’s discussions with Formula 1 team McLaren and Ford’s integration of the voice-activated Alexa software into their vehicles. In approaching the

\(^{13}\) www.edelman.com/trust2017/

\(^{14}\) "The New Energy Consumer: Architecting For The Future". Accenture 2014. This was a survey of 10,000 participants across 17 countries.

\(^{15}\) Transactive (http://transactivegrid.net/)
electric vehicle market, the two tech companies are seeking to leverage their existing brand awareness and customer base as the automotive industry transforms into one where apps and gadgets are increasingly used. Here, technology is again an enabler of the core service provision, this being transport.

As more non-traditional companies enter the market place, this not only opens the door for a much wider product offering, but also one which engenders greater perception of these companies and their brands as part of a broader customer experience.

Consider the case of Mercedes, which has not only announced an accelerated programme of development for its electric vehicle programme, but has also agreed a partnership with technical and engineering company Bosch to develop driverless vehicles – the latter company providing software and algorithms. This follows on from a similar partnership between BMW, tech group Mobileye and chip maker Intel.

In the case of companies like Mercedes, Tesla, Apple and Bosch the nature of these companies’ products as aspirational goods with a strong brand presence allows customers to “buy in” to the brand and what it stands for. This potential for cross-sector integration and branding is therefore apparent, underpinned by suitable data and communication as a means by which to provide a personalised service and customer experience.

These companies are able to promote their products as part of a lifestyle to a degree that – beyond the choices of low carbon or social tariffs – energy companies are not. However, the customer-centric nature of the experience that is expected from companies such as vehicle and household goods manufacturers is mirrored across energy companies. As these aggregated offerings become the norm, it will be trust, the customer experience and the nature of a brand that “means something” to customers that will be of key importance.

Faced with the possibility of non-traditional companies entering the market, combined with customers’ expectations of service sharpened by their experiences with non-utility companies, energy suppliers may have to adapt to an ongoing cycle of reinvention – starting with the deployment of smart meters and evolving as technology advances.

4.2.2 The Internet of Things (and People)

In this context, the Internet of Things (IoT) has a key role to play in the evolution of the energy sector, i.e. the wireless connectivity of any device with internet access to one another as broadband access becomes more widespread and the costs of technology decrease. This is not restricted solely to machines, but includes sensors that have the ability to interact with machines and respond accordingly.

The fact that IoT is already in existence means that for energy suppliers the issue is about being able to evolve their offerings in such a manner that they are future-proof. The analyst firm Gartner has released estimates that, by 2020, there will be over 26bn connected devices globally⁶, while other estimates show that 1 trillion devices could be in place by 2025, raising considerable potential in terms of new products and the personalised experience that customers will expect.

However, although IoT is a data-centric, hardware and software driven phenomenon, it remains a means by which to deliver services and in which customer experience will be crucial. Energy suppliers must ensure that people remain at the core of their service offerings, not just in terms of their customers but also their employees.

The myriad of devices that could be connected through IoT highlights a further dynamic for energy suppliers, that of cooperation with companies and service providers outside the traditional utility sector. The pace of technology and innovation are such that energy suppliers operating on their own may struggle to keep pace, necessitating strategic relationships that move them outside of their core service provision. The choice of partners will be crucial, as new relationships need to be able to add to the understanding of customer behaviour, add value, and lead to the creation of new products and services that benefit all parties in the customer experience.

Figure 6: The Internet of Things (IoT)

The concept of IoT has particular relevance to the energy sector as far as smart homes and smart cities are concerned. Perhaps the most common usage of IoT as far as energy is concerned relates to smart meters and apps that allow remote control of domestic heating. However, this approach is easily scalable as technology and customer requirements grow.

Consider a smart home that detects a gas leak or a water leak. The relevant supplies could be disconnected to prevent damage to the home and the homeowner advised accordingly. The gas or water supplier could be notified as well, with an appointment made for repairs and the insurance company notified. Alternatively, consider a driverless electric vehicle that is advised of potential traffic problems and alters its route accordingly, thereby helping to manage congestion and traffic flows.

The nature of IoT is that data security will be paramount. For example, in the household example above, the smart meter and app will contain information as to whether the homeowner is in fact at home, what devices are connected, what their energy use is, and so on. As the number of connected devices increase, the amount of data related to them will increase exponentially – in turn raising challenges relating to the storage, analysis and application of this data.

Here, although the information is of crucial importance, it is the availability of products and services through which that information can be deployed to add value to consumers (both individually and collectively) that is the ultimate goal – which will in turn fuel innovation in customer offerings. The ability to successfully analyse and interpret this information will help to generate the personalised experience (and potentially products) that digitally-connected customers would expect.
4.3 How Do You Deliver This?

As such, the following are possible questions that a supplier should be able to answer:

- How much do you know about your customer base, can you engage with them collectively, and - crucially – as individuals?
- What you can deliver as a business and where may you need to seek partners to offer a broader service package to your customers?
- Are your processes easy for your customers to follow? How do you expect your processes to evolve over time to keep pace with your customers’ needs?
- Cybersecurity is key. Are you able to manage the data-intensive nature of the future energy system in an integrated and secure manner?
- How can you maintain and build the trust that your consumers have in your company, and how can you utilise that to enhance your service offering?
5 Conclusions

The pace of change in the energy space is unprecedented with the simultaneous emergence of A.I., Automation, IoT and Blockchain representing a “perfect storm” of disruption across the broader energy landscape. However, the human touch will remain critical in delivering great Customer Experience (CX) with a focus on the more complex, emotional interactions with customers.

The organizations which will emerge from this disruption will be those who adapt the quickest to heightened customer expectations.

Consumers have significantly higher service expectations today. The benchmark in terms of CX is no longer other energy companies, the bar has and will continue to be set by the consumers’ best customer experience - regardless of sector, size or geography. This becomes a real threat to incumbents as “non-traditional” players enter the energy space with a laser focus on CX. Ultimately, the winners will be highly-trusted organisations with an unwavering focus on CX and a keen understanding of the power of data to deliver authentic, personalised service experiences which delight their customers.

The historic approach to energy supplier engagement with customers is based around a model of paper bills sent on a quarterly basis, this limited interaction reflecting the one-way nature of the relationship. Technological innovation has the potential to transform this model, and the initial steps towards this two-way, flexible interaction are already well underway.

However, in line with broader changes in society and lifestyle choices, the energy consumer of the future is likely to seek the type of experience that it expects from other sectors and products from its energy provider. Customer expectations in general are therefore considerably higher than in the past, and those for the energy sector are no different.

The energy supply sector has – in the post-privatisation era – been dominated by the Large suppliers, but these companies have found their position in the market increasingly tested by new and smaller suppliers. These new entrants may be perceived to be more flexible in terms of systems and processes than their more established counterparts, although established companies may in fact be no less innovative than their newer peers. All face the challenge of communicating and engaging with a customer base in which the majority of households have never switched supplier.

Here, technological innovation has the potential to be a major catalyst to customer engagement, evolving from the current deployment of smart meters and devices through to such aspects as personalised advice on how to reduce energy bills based upon each customer’s unique usage patterns and devices, automated and remote control of energy and appliances and the potential to automatically adjust usage based upon changes to time of use tariff structure.

At the core of this is data about each customer, and managing and interpreting this information will add value to the customer experience provided that the analysis of this data can be used to help generate the personalised experience (and potentially products) that digitally-connected customers would expect. Communication and engagement channels will evolve as a result, not just in terms of how suppliers and their customers interact, but also how customers interact with one another and how each customer’s devices may communicate with one another through the Internet of Things (IoT).

Although energy has historically been seen as a homogenous product, one of the challenges that energy suppliers will face is the promotion of their product as a service and awareness of their brand. Here, strategic partnerships can be an important engine for growth, as perhaps best epitomised by collaborations in the electric vehicle market.
between traditional original equipment manufacturers (OEMs), software and computer hardware companies. The nature of these companies’ products as aspirational goods with a strong brand presence allows customers to “buy in” to the brand and what it stands for.

This potential for cross-sector integration and branding is therefore apparent, with energy suppliers being able to place themselves firmly within this technological revolution. In this environment, technology is the enabler to the provision of a flexible and personalised experience in which the traditional human interaction is at the centre.
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About Cornwall

Getting to grips with the intricacies embedded in energy and water markets can be a daunting task. There is a wealth of information online to help you keep up-to-date with the latest developments, but finding what you are looking for and understanding the impact for your business can be tough. That’s where Cornwall comes in, providing independent and objective expertise.

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About Abtran

Abtran is a leading provider of Customer and Business Process Management services.

In a switching economy, Smart Utilities need to stand out on service to succeed. They will build trust by empowering customers to take charge of their own energy usage. They will win loyalty through relentless, customer-led innovation.

Abtran is a trusted provider of end-to-end services in the Utilities space. We design and deliver end-to-end service solutions which are flexible, scalable, compliant and deliver a great experience to our clients’ customers. Our deep sectoral knowledge and experience helps both new and established Utility players to stand out on service, grow market share and scale in a flexible and compliant way while delivering a great customer experience.

We support our Utilities clients to ensure they are ‘Customer Ready’ and well-positioned to benefit from the ongoing disruption in the marketplace.

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