

Crossing the chasm

**OVO's technology-driven
transformation**

September 2023

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Executive summary

In early 2020, OVO completed the acquisition of all retail customers from SSE Plc, propelling the business from leading challenger to the UK's third-largest energy retailer overnight. This case study reflects on OVO's technological and operational transformation in integrating the vast legacy retail business while maintaining its core identity and status as a net zero leader.

OVO and Kaluza's founder, Stephen Fitzpatrick, shares his insight on the strategic imperative for the acquisition, and OVO's Chief Product and Technology Officer, Christina Scott, provides her view on how a migration can ensure low risk and high reward for other retailers considering embarking upon a similar programme.

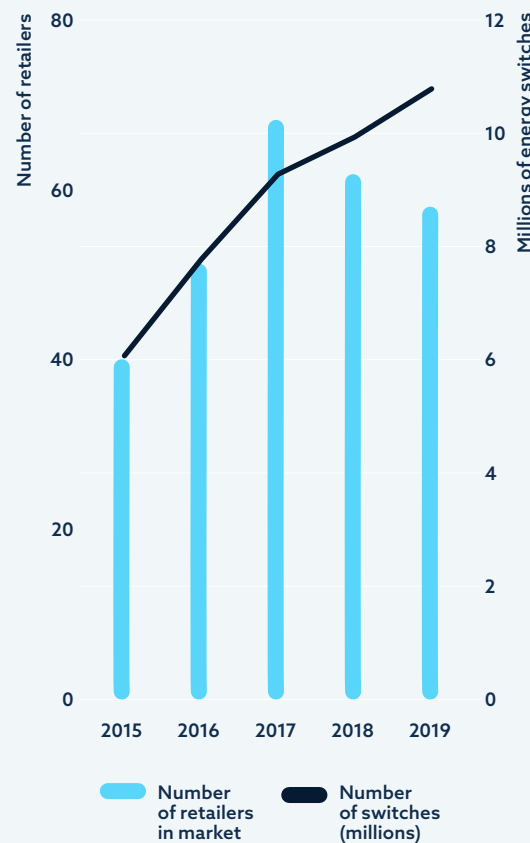
Facing multiple headwinds

In 2009, there were 12 active energy retailers in the UK market - fast forward ten years, and there were 58¹. Switching rates had also risen dramatically with the proliferation of price comparison websites, challenging customer loyalty and diminishing customer lifetime value.

So much so that the 2019 USwitch Energy Awards - one of the largest independent industry reports on customer satisfaction - awarded four of its top five spots to 'challengers'² (retailers who had been operating for less than ten years).

The "Big Six" incumbent retailers were subsequently losing market share, a trend then compounded by the most significant government intervention since the privatisation of the sector in 1986³. In 2019, Ofgem introduced a market-wide price cap for residential customers. This action was taken after the cost of a dual-fuel energy bill for an average UK household had increased in 12 out of the previous 15 years⁴.

The number of retailers and switching rates in the UK retail energy market



New entrants boasted more agile, digital-first operating models and were able to attract swathes of high-value customers with superior products and experiences. Such customers would typically be acquired through online channels and expected a highly digital experience from their retailer. Many challengers also took inspiration for their contact centres from the world of software product management, creating 'squads' rather than following the traditional front-line generalist/back-line specialist model. Meanwhile, a combination of deep-rooted technological and cultural challenges impeded established retailers from easily imitating these changes.

To compete, the challenge for incumbents was two-fold: they had to transform their existing infrastructure to meet new norms of cost-to-serve and customer service, while also embedding a culture of agility that would allow them to reduce time-to-market and respond better to ever-evolving external conditions. The post-Covid energy crisis has only reinforced the importance of this transition.

1 [Ofgem: Retail market indicators](#)

2 [USwitch: USwitch Energy Awards 2019](#)

3 [University of Cambridge: Judge Business School](#)

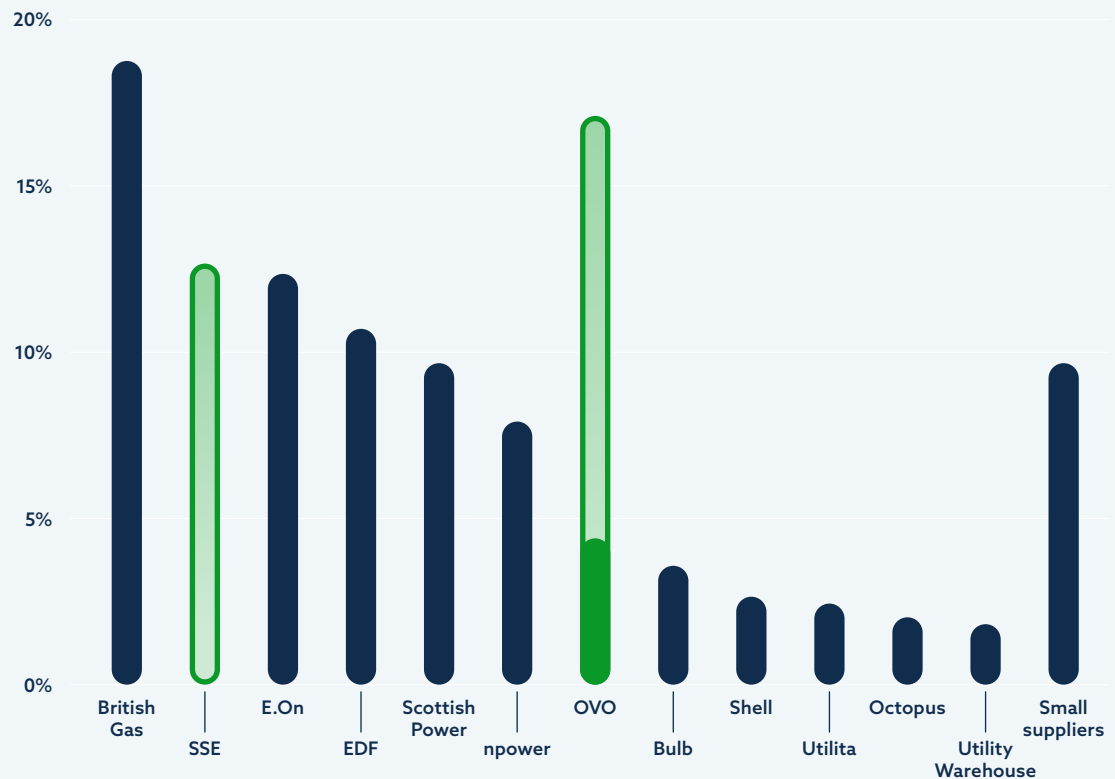
4 [BBC: What has happened to energy since privatisation?](#)

Challenger acquires legacy behemoth: a landmark deal

OVO Energy launched in 2009 and by the end of the 2010s had established itself as the frontrunner of a wave of new entrants. OVO had achieved impressive organic growth, completed some smaller acquisitions and launched Kaluza, its energy technology platform. The acquisition of this legacy base from SSE PLC however, was of an altogether different magnitude, taking the business from 1.5 million to 5 million customers - making OVO the third-largest retailer⁵ in the UK in a single swoop.

Whilst OVO's transformation story is one of a greenfield challenger acquiring the retail arm of an incumbent, the journey offers relevant insights to many retailers approaching a major transformation project, including those spinning up a new business unit on a different tech stack as a precursor to fully re-platforming the legacy cohort.

OVO's legacy base acquisition in January 2020 would make it one of the largest energy retailers in the UK



⁵ [Ofgem: Retail market indicators](#)

The case for acquisition

In 2018, the legacy base, pre-acquisition, had witnessed 6% decline in customer numbers and 5% decline in adjusted operating profit⁶. So what was OVO's investment case for the £500m acquisition of a much larger, complex rival in a price-regulated environment?

For OVO's leadership, the key driver was the need to grow at a time when price-based growth was only possible with negative margins. Scale was central to advancing Plan Zero - OVO's recently-announced strategic plan to help transition millions of customers to zero carbon living. However, the business case for the acquisition only stacked up if the scale would bring fixed cost leverage - OVO needed to believe that it could absorb this legacy customer base and move the customers to a lower cost operation, whilst increasing lifetime value.

Built in-house at OVO, Kaluza is the cloud-native, fully managed platform for utilities that automates 'meter-to-cash' operations and optimises behind-the-meter energy consumption for modern energy retailers. It had already been powering OVO's existing base of 1.5 million customers and had supported its early moves to becoming a net zero leader in the UK market.

⁶ [SSE plc Annual Report 2018](#)



Kaluza was built to ensure OVO had agility to scale in a fast-changing market while keeping a laser focus on making green energy simpler and cheaper for customers. The platform has streamlined and automated complex processes to give customers a more personalised and engaging energy experience, while also lowering OVO's cost to serve. By acquiring the legacy base of a struggling UK retailer and replatforming the business to Kaluza, OVO has been able to deliver these benefits to millions more customers.

With resilient and flexible technology foundations in place, OVO's key focus today is on innovating the products and services that enable our customers to decarbonise their homes and save money in the process.



Stephen Fitzpatrick
Founder, OVO and Kaluza

The customer lifetime value equation

$$\left(\begin{array}{|c|} \hline \text{Gross margin} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Cost to serve} \\ \hline \end{array} \right) \times \begin{array}{|c|} \hline \text{Customer} \\ \hline \text{lifetime} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Cost of} \\ \hline \text{acquisition} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Customer} \\ \hline \text{lifetime value} \\ \hline \end{array}$$



**>50%
sign-up rate**

amongst targeted
customers for OVO
Charge Anytime

**£125m/pa
reduction**
in total technology spend

**-41%
complaints**

vs OVO's legacy
base platform

1:4,300
agent to customer
ratio achieved



Can 1 + 1 = 3?

OVO therefore had a clear vision for the combined business and empirical proof that Kaluza could be a key component in achieving the transformation.

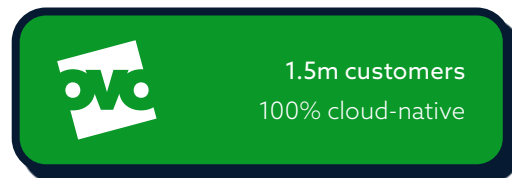
A deal of this scale, however, was not just a case of re-platforming customer accounts - it was the convergence of the retail arm of an eighty-year old energy giant⁷ with a ten-year old, tech-first retailer who had a quarter of the number of staff. Success of this project, therefore, would result in a single, cohesive organisation which could benefit from economies of scale in becoming the third-largest retailer in the market, whilst retaining the agility, efficiency and pace of a challenger.

As well as software, this project would comprise reformed processes, operating models and culture - a truly holistic endeavour.

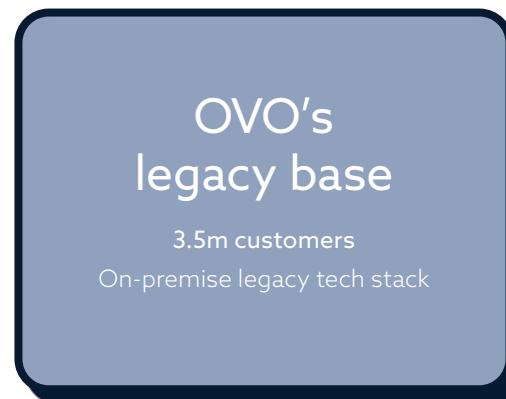
The two foremost challenges for OVO were:

- Migration of the customer base from the legacy tech stack to Kaluza, without any drop in performance or triggering excessive customer churn
- The transformation of OVO's legacy base from a fundamentally siloed organisational structure into one centred around the customer, using agile methods to develop and launch propositions at pace

So, how did OVO approach these challenges and what made it successful? We now take a look at each of these challenges in more detail.



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Retaining a 'challenger' mindset
at the scale of a top-tier retailer

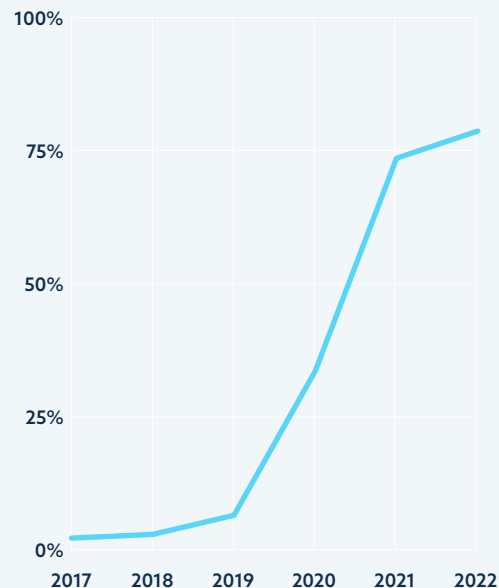


7 [SSE: Our heritage](#)

Technological transformation with Kaluza

We have already seen that the regulator's price cap, coupled with the rise of digital challengers, was eroding large retailers' market share. This was leading many organisations to consider re-platforming their core business, however by early 2020, few had yet 'made the leap'.

Percentage of UK customers licensed to a challenger core energy platform



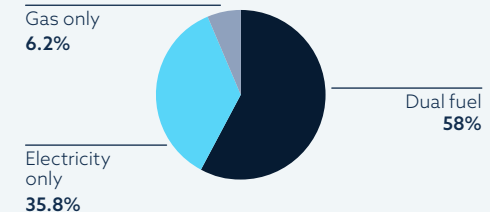
OVO was a true pioneer in this space, having built one of the energy industry's leading proprietary SaaS platforms to accelerate their own growth. It had already demonstrated Kaluza's high performance across the full meter-to-cash process, and in supporting its pioneering low-carbon tech programmes, notably using its natively-integrated virtual power plant software to run the world's largest vehicle-to-grid (V2G) project.

By contrast, the legacy base, was being run on a decades-old IBM mainframe and Oracle billing solution resulting in large maintenance costs and often lengthy delivery programmes for the launch of new features or regulatory requirements. Consequently, the business' ability to innovate was severely impeded as slow change cycles and mounting costs hampered customer research and product development.

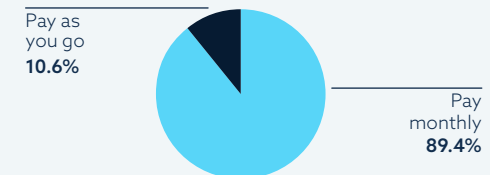
Put simply - legacy software was a millstone round the business' neck. Effectively serving a multi-million customer base with a range of product holdings, payment methods and billing cycles was onerous given the time and effort required for changes. To then also stay on top of regulatory and competitive pressures was another matter altogether.

Across its portfolio of 3.5m customers, OVO's legacy base comprised a range of customers, meters and billing schedules

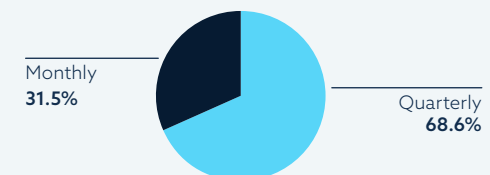
Fuel type



Payment methods



Billing schedules



//

OVO's acquired legacy base was a huge, complex customer portfolio to migrate to Kaluza.

Migrations of this scale have a reputation for being painful for the business and customers. Key to de-risking this was taking a data-driven approach, with a focus on only migrating cohorts that were 'ready' and at the optimal time in their lifecycle.

Working closely with Kaluza, we used this approach to continually test, learn and iterate to quickly get to scale with minimal customer impact. At the height of our programme, we were delivering more than 425,000 migrations a month.



Christina Scott
Chief Product and Technology Officer, OVO

OVO looked for every opportunity to reduce complexity of the portfolio and create a simplified core offering. The team knew that consistency would ultimately yield better outcomes for customers and the business, as opposed to a multitude of permutations which were too complex to deliver well.

By re-platforming the acquired legacy base customers to Kaluza, OVO could increase innovation and bolster lifetime value. However, fully unlocking the value of OVO's legacy base would necessitate a full scale transformation of its organisational model.

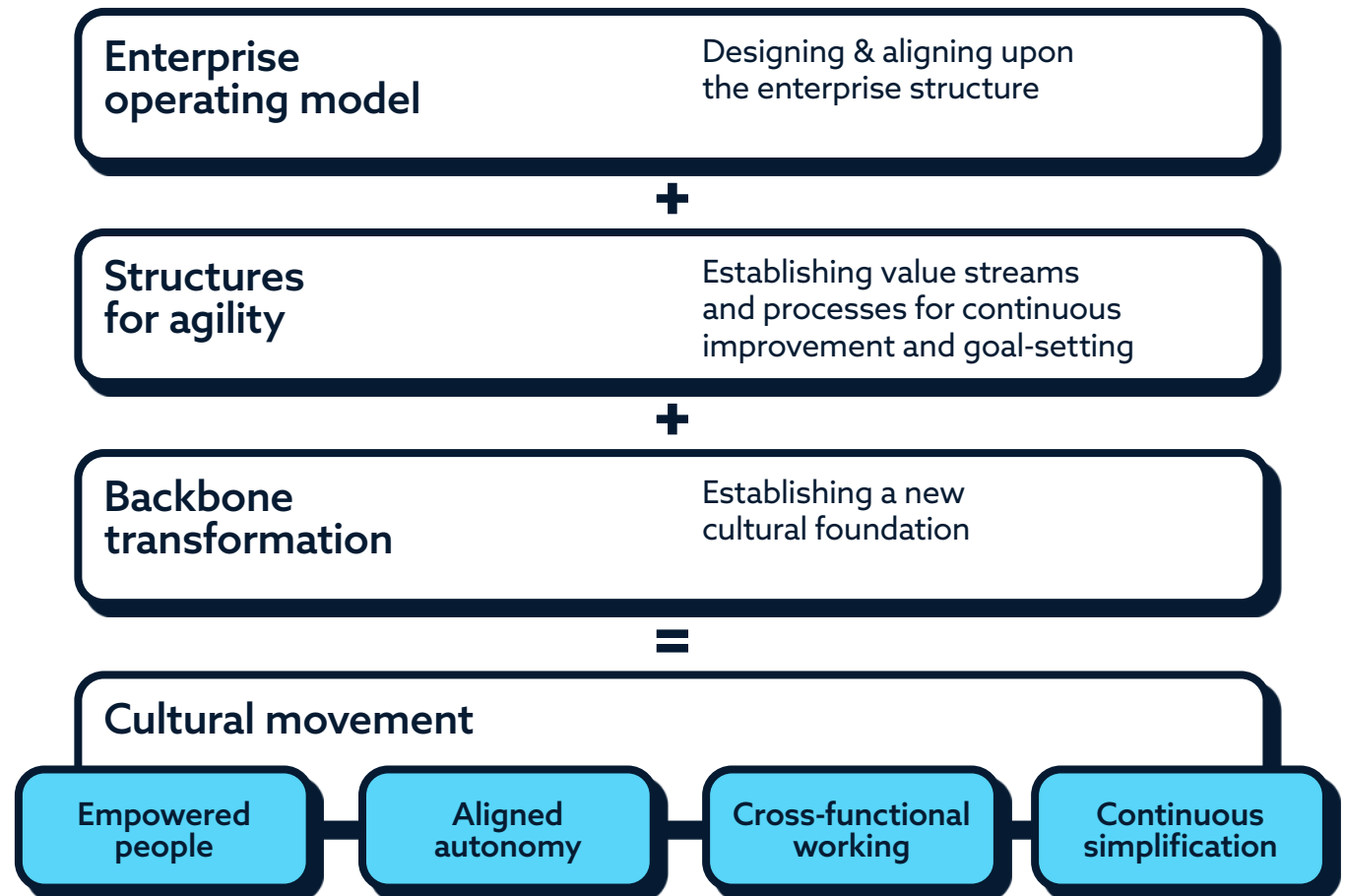
Organisational transformation

The greatest organisational risk of bringing together OVO and its acquired legacy base, an organisation with four times the number of staff, was that the resulting business would trend towards the latter's ways of working rather than OVO's. It was imperative that OVO's speed to market and challenger mindset was preserved in a new organisation which was three times larger.

OVO needed an actionable blueprint for how the merged businesses would work as a single, entrepreneurial entity at scale to deliver on its Plan Zero strategy - following detailed co-design, they arrived at an organisational plan called 'The OVO Way', which comprised four design principles for the organisation:

- Empowered people
- Aligned autonomy
- Cross-functional working
- Continuous simplification

In order to deliver on these principles, there were three concurrent pillars for transformation.



The resulting business, underpinned by a Kaluza tech stack, was able to thrive in a complex market where the pace of change has only continued to accelerate. 'The OVO Way' implemented cross-functional delivery in a truly agile organisation, with a culture focused on collective responsibility for performance.

Kaluza Agent Experience improves agent efficiency by 50%

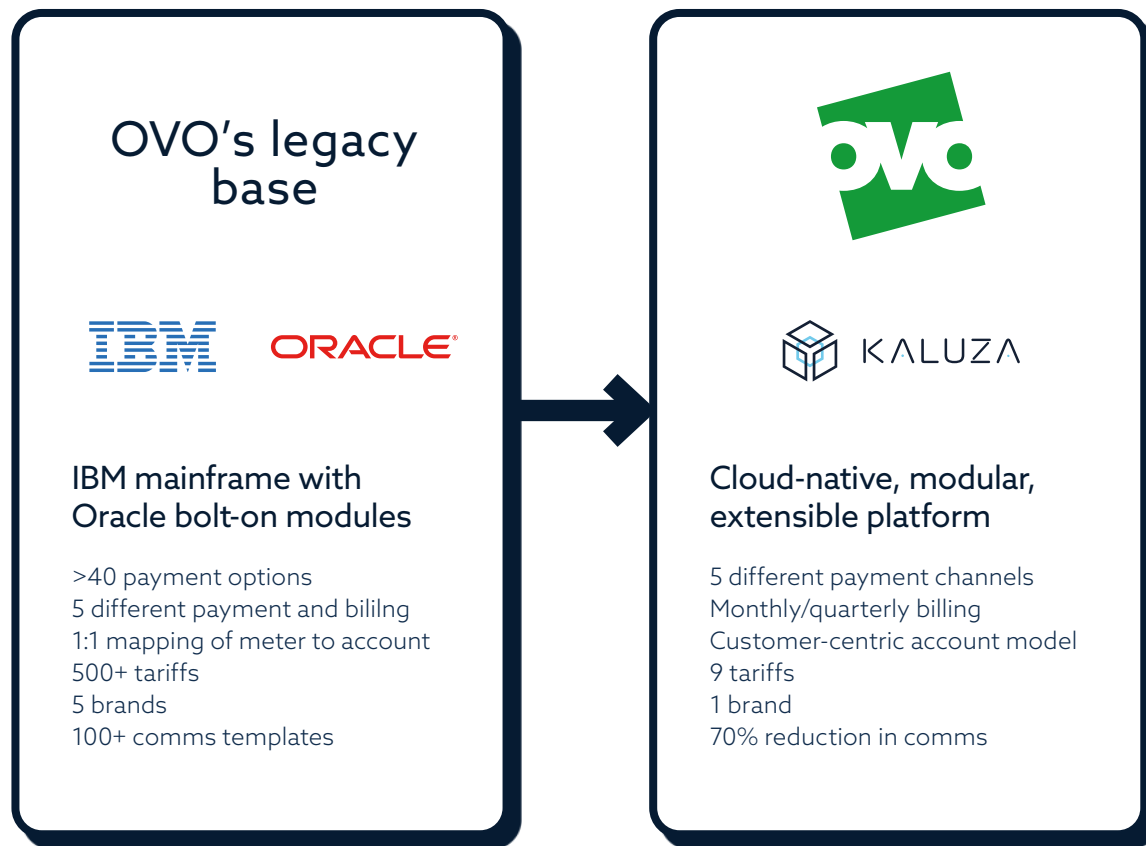
The screenshot displays the Kaluza Agent Experience interface. The top header includes the Kaluza logo and a search bar. The main content area is divided into several sections:

- Account Overview:** Displays primary customer name (Ali Andersson), account number (30343113), current balance (-£454.14 in debit), meter type (SMETS1), meter mode (Smart), smart meter booking (No), and account health (2/3 tasks complete).
- Status and Details:** Includes status (Active), sign-up channel (Not available), managed exception (Yes), contracts (Variable), and property ID (Not available).
- Billing Info:** Shows billing status (Sending bills), billing period (Monthly), last actual read (9 days ago), and direct debit (£138.20 Active). A warning indicates "DD is less than the recommended amount".
- Account Health Tasks:** Lists tasks such as "Set up direct debit" (Resolved), "Meter read submitted in the last 6 months" (Resolved), and "End of contract balance £50 or below" (Not Started).
- Exceptions:** Shows a managed exception for "Market Interactions - Reads not received" created on 09:38 | 24 Aug 2023.
- Customer Details:** Includes email (ali.andersson@gmail.com), contact address (3100 Main St, Glasgow, GB, G31 2HY), and date of birth (01/03/1970).

The results: Unleashing OVO's potential

There were two parts to OVO's transformation - technology and operating model - though it was the power of these coming together which made the legacy base acquisition a success and unleashed the true potential of OVO. This major endeavour has delivered transformational impacts spanning the entire enterprise.

Within these results, it is worth diving into a couple of specific examples where the migration to Kaluza has delivered dramatic improvements on the top-line and bottom-line of the P&L.



THE TOP-LINE

OVO Charge Anytime

Charge Anytime is OVO's industry-first 'type of use' tariff, providing a reduced, fixed rate for home EV charging, separate from the household rate.

It combines Kaluza's virtual power plant and meter-to-cash capabilities in a difficult-to-replicate net zero proposition.

The proposition was made possible by Kaluza's tech as well as cultural transformation into an agile organisation which deployed a rapid, iterative 'test & learn' approach.

>£1.5m

total customer savings
in the first 8 months

10p/kWh

including through the
21/22 energy crisis

up to £350

savings per customer

1k sign-ups

in the first 20 days

The screenshot displays the OVO website's 'Charge Anytime' page and a corresponding mobile app interface. The website features the OVO logo, navigation links (Energy, Electric Vehicles, Home & Heating, About Us, Help), and a search bar. The main heading is 'Charge Anytime', followed by the subheading 'Simply plug in, schedule your charge and start saving'. Below this, text explains that the service is added to any OVO plan for free, allowing users to start driving from just 3p a mile when smart charging from home. A note mentions that non-OVO users can still check compatibility. Two buttons are present: 'OVO customer' (highlighted in green) and 'Not with OVO'. A photograph of a man and a woman is shown. At the bottom, a section titled 'Next generation EV charging' states, 'Unlike others, we let you smart charge your EV at a lower rate of 10p per kWh'. The mobile app, shown on the right, displays a Tesla Model S with 82% battery (183 miles) and a 'Smart' charging mode. It shows a circular progress indicator for charging, with a 'Ready by 7am' target. A message indicates the car is ready by 07:00 tomorrow and is currently smart charging. A 'Start urgent charge' button is visible. The app's bottom navigation bar includes icons for Dashboard, Schedule, Savings, and Account.

THE BOTTOM-LINE

Evolution of the contact centre model

Phase 1

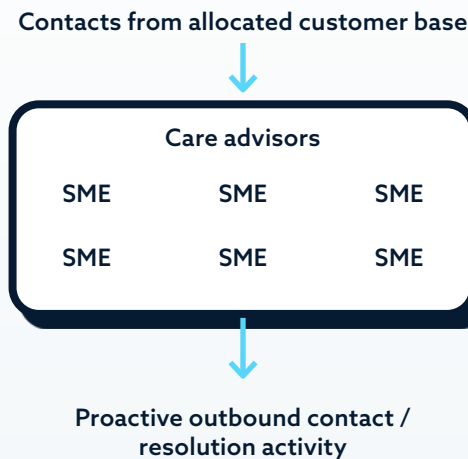
OVO'S LEGACY BASE TRADITIONAL CONTACT CENTRE MODEL



Traditional contact centre model creating siloes, multiple handoffs and high OpEx.

Phase 2

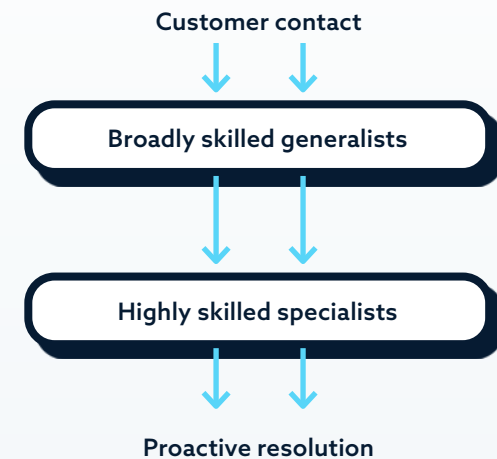
SQUAD MODEL LAUNCHED AS PART OF THE MIGRATION TO KALUZA



Squads contained all subject matter experts (SMEs) in one team. This reduced hand-offs and average handling time.

Phase 3

CONFIGURATION OF THE KALUZA PLATFORM TO DEPLOY A HYBRID MODEL



Kaluza later configured workflows and exception handling to support a hybrid model, optimising CX and improving agent utilisation.

The hallmarks of a Kaluza centred-transformation

The implementation of Kaluza across the larger OVO business had an empirical impact on its ability to deliver on its strategy. These impacts were seen and felt in the way the company functioned on a day-to-day basis:

Leaner teams, fewer siloes

Reducing resource requirements across Ops, Tech and Commercial teams. Increase x-functional working and alleviating bottlenecks.

Faster delivery

Improved tooling across Ops, Tech & Commercial means lower cost to serve and much quicker time to market with new propositions or regulatory updates.

Devolved decision-making

Portable, granular and real-time data allows for empirical decision-making, closer to the point of impact. Greater insight enables proactive solutions.

Continuous evolution

Applying Agile practices to continually improve processes and the operating model, enabled through the flexibility of the Kaluza platform.

Lessons on transformation for top-tier energy retailers

Enterprise-wide change is difficult and requires genuine commitment from the CEO and board of directors. It is imperative that there is a vision from leadership on the need for change and what it is seeking to achieve. Phasing, vendors and scope may change but the ultimate vision should be unwavering. OVO's mission to create a best-in-class retailer with the culture of a challenger and drive to become the UK's leader for net zero products and services served as a north star throughout the transformation.

OVO prioritised selecting the right partners and vendors, as well as hiring top internal talent to maximise the chances of success. For C-suite executives considering the need for enterprise transformation in their own organisations, OVO share their most pertinent and practical learnings from their own successful programme:

- **Anticipate the market tipping points** - these may not be obvious until they hit - they could be driven by competitive, regulatory or consumer factors. Understand intimately what the driving factors for change are in your

market, using this to create a compelling case for internal change before it is too late. Bear in mind that the lead time for discovery, decision-making and implementation spans years.

- **Start your transformation directive from the top, but then empower your teams and devolve decision making as much as possible** - choose the right senior sponsor, usually the CEO, and external advisors. This top-down vision on the urgent case for change is set at the top and does not falter throughout - it is a statement of "who we want to be".
- **Choose technology that fits your organisational needs, but ensure solution flexibility so you are not 'locked in'** - if there's a mandate for how your business should run with a new underlying system, that's likely to expire or go out of fashion sooner or later. Choose technology that complements your organisational design and strategic objectives now, and has room to evolve. Even with a smooth implementation, you won't want to be doing it all over again in five years.

Change is absolutely inevitable as the transition towards net zero gathers pace. Large retailers throughout Europe and the world face profound strategic decisions on whether to reorganise themselves as net zero leaders now, while the transition is still in relative nascency, or risk being left behind by agile and ambitious challengers.

About Kaluza

Kaluza is a leading software platform powering the future of energy. From revolutionising billing to smart electric vehicle charging, Kaluza's SaaS technology is empowering some of the biggest energy suppliers to better serve millions of customers. Its live data platform transforms supplier operations, reducing cost to serve and boosting customer engagement. Powered by Kaluza, suppliers can invest in innovating for tomorrow's customers and drive decarbonisation with smart, low carbon technologies that not only reduce energy bills, but lay the foundations for a more flexible energy system.

www.kaluza.com

