

Entering the Energy Supply Market

This post describes an *arc of execution* model for new entrants into the Energy Supply Market in Great Britain.

It is a high level view which outlines the how and the what of the first few years for a new electricity and gas supply company. This should interest those who are planning a new business and/or starting out on implementing systems. Familiarity with the energy market is assumed, so the post is light on definition of terms.

The viewpoint has developed over several years and is based on experience of consulting work and interim assignments with Ovo, Good Energy, Our Power, OneSelect, Smart DCC and Ofgem. Therefore, it embodies an understanding of the supply chain and market from a number of perspectives.

The focus is on the how and the what, from a very high level. The post touches on the motivations for entering the market and its composition. However, these are in depth topics in their own right. In short, there is a huge need and great potential for game changing innovation in energy supply. It is likely that the number of suppliers will continue to grow.

Background

In the UK, both electricity and gas are provided to customers by private companies. The nationalised British Gas was floated on the stock market in 1986, accompanied by the famous 'Tell Sid' advertising campaign. Soon after, the UK's regional electricity boards (publicly owned electricity companies) and the electricity grid were also sold.

Both British Gas and the newly privatised electricity companies were initially not allowed to switch customers, and prices were regulated by the energy watchdog Ofgem. These controls were eventually removed and from 2001 all energy prices were set by the market.

A number of mergers took place after 2001, such that now the energy market is dominated by the 'Big Six'.



Big 6

These firms supply the majority of UK households. They are predominantly owned by foreign corporations, with the exception of SSE and British Gas.

Electricity transmission and distribution was sold off as National Grid and fourteen Distribution Network Operators (DNOs). The DNOs have seen some M&A activity and are now owned by six different companies. Currently Ofgem, BEIS and these firms are working out what this market will look like going forward. National Grid in particular is seeing major structural changes. The DNOs are also in the processing of developing new operating models to better cope with grid flexibility.

Although largely outside the public gaze, the Big 6 have had lots of competition in the business to business (aka B2B)

segment. Players here include other large corporates (e.g. Dong, Drax, Engie, Gazprom and Total) and a growing number of smaller challengers (e.g. Corona, Dual Energy, Hudson Energy, Opus and Smartest Energy).

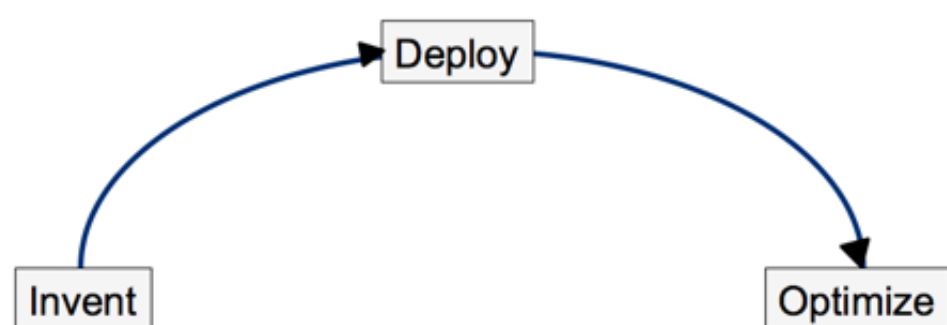
The domestic segment is more visible thanks to media attention and price comparison services. Here we now have around 50 licensed suppliers. Several of these (e.g. First Utility, Ovo and Ecotricity) are bone-fide "challenger brands". In the last year or an increasing number of new entrants have joined the GB energy supply market. Some of the key drivers have been:

- Growing consumer dissatisfaction with the big six.
- Good press and PR for successful challengers like Ovo & First Utility.
- Interventions from Ofgem & DECC to promote competition.
- Smart technology opening up disruptive business models.
- Improved access to generation through more distributed generation and more open wholesale markets.

Although new entrants are posting impressive growth figures and the Big 6 appear to be easy targets, it is not all plain sailing. In November 2016 we had [the first failure of a domestic energy supplier in the GB market in more than nine years](#). Furthermore, now that [Smart DCC is operationally live](#) the industry is almost ready to [cross the smart metering chasm](#).

The Arc of Execution

Over their first 5 years, new entrants typically follow the three phase lifecycle illustrated below. The arc of execution model was devised by the well known silicon valley VC Geoffrey Moore.



The Arc of Execution

The size and shape of the Invent Phase varies widely depending on the availability of finance and the level of due diligence required by investors. The expected duration for fully licensed businesses is 1–2 years. However, [Licence Lite](#) and [white-label](#) can provide faster routes to market.

For full gas & electricity licensees, the Deploy Phase will typically cost £1M–£4M and will take 6–18 months.

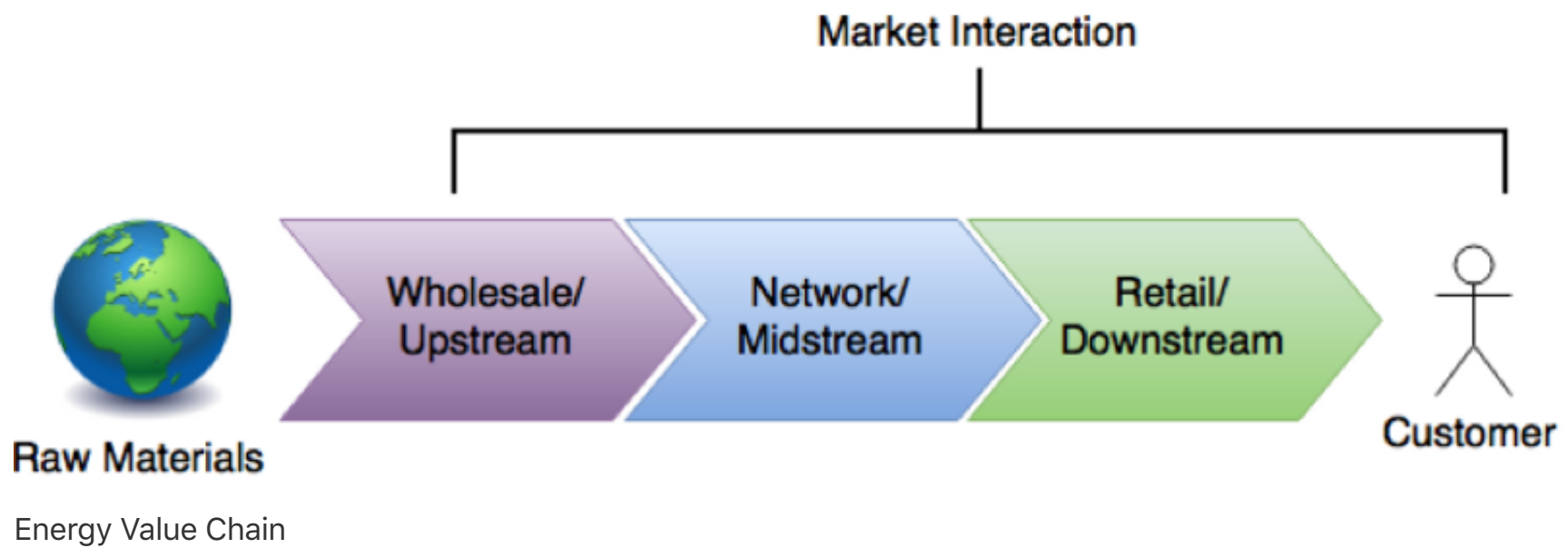
The Optimise Phase is the major part of the five-year cycle. It is dependent on a wider range of factors than in the previous phases and is quite hard to generalise. Challenges here could be in trading, customer service, technology or compliance.

Invent

The main objectives of the Invent Phase are:

- Secure sufficient finance.
- Devise the proposition.
- Plan setting up the business.
- Design the [Enterprise Architecture](#).

Inventing a supply business requires a good understanding of the whole value chain:



Taking a broad view of the market is recommended during the invent stage. Many nuts and bolts details can be left until transitioning to the deploy phase. Over and above the core competencies of innovation and marketing, topics to major on during the Invent Phase are:

- [Licence Conditions](#) for [Gas & Electricity](#)
- Origination (including wholesale agreements, PPAs, trading, hedging)
- Transmission, Distribution & Shipping
- Balancing & Settlement
- Metering and
- Customer Service (including billing & CIS).
- Industry data flows

Deploy

In the Deploy Phase, the primary objective is to put the Enterprise Architecture into action.

As well as getting appropriate people, technology, processes and partners into place, new entrants have to sign up to a number of licences and industry codes from Ofgem and other industry bodies.

For a small supplier, the key resource areas are finance, industry operations and customer service. Resourcing levels are highly dependent on sourcing strategy, size of target customer base and the level of automation provided by systems of record (like billing) and systems of engagement (like mobile apps).

Given balancing and settlement cycles, a natural duration for the deploy phase is 14 months from the supply start date of the first electricity customer. Typical targets in this period are ten to twenty thousand customers. However, stretch targets can be much more ambitious. That said, small and local can be profitable. Therefore, rapid customer growth is not always a priority.

During the deploy phase, detailed views of the market are needed. Nuts and bolts details should be handled by specialists in areas such as:

- Regulation & Compliance
- Billing
- CRM
- Call Centre
- Digital
- Market Messaging
- Metering (including MOP, MAM and MAP)
- Smart Metering Implementation Programme (SMIP)

Optimise

The Optimise Phase is where a new entrant becomes full grown and settles into business as usual. For many the Optimise Phase delivers accelerated growth, whilst some will see hyper-growth (the hockey stick beloved by venture capital).

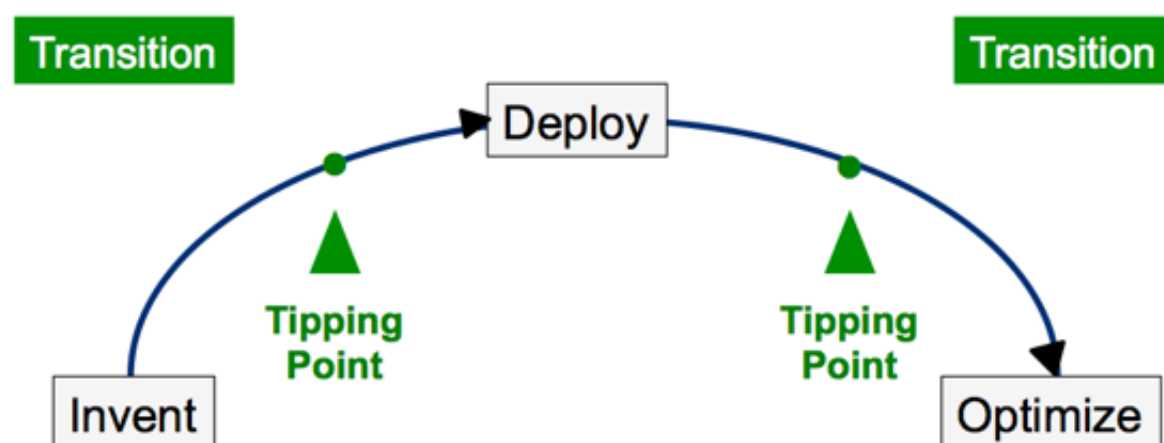
Having won an initial market share, the focus of the business will be on delivering against performance targets in the following areas:

- Churn
- Cost to Serve
- Margin
- Debt
- Liquidity
- Trading Risk

It is not uncommon at this stage to have to pay back on technical debt incurred in earlier phases. For example, short cuts taken with technology may require major programmes of change, or mistakes in trading may come home to roost.

Tipping Points

In practice, the transition between phases of execution are organizational tipping points:



Tipping Points on the Arc of Execution

A key to successfully navigating the arc of execution is to understand that each requires different leadership styles, as summarised below:

Invention – visionary leadership, spontaneous creativity based largely on intuition.

Deployment – pragmatic but tough-minded leadership. Competitiveness & experimentation will come to the fore.

Optimization – conservative leadership with a deliberate decision making style. Being prepared and maintaining control are at the core.

Transitions – leaders are orchestrators who nurture collaboration. The approach requires empathy as a core attribute and a consensus based decision style.

For a new entrant to the GB energy market, the transition from Invent to Deploy is best treated as a [Change Programme](#) with some of the associated formalities. However, this can be a bitter pill to swallow. Many new entrants are start-ups who view corporate governance and discipline as unnecessary overhead.

Other Milestones

Many of the practicalities, rules and regulations of operating in the GB Energy market are dependent on the size of the

customer base.

It is important to pay attention to which metric is used to measure the size of a customer base. This is particularly relevant with software and operational service charges. Some parties count the number of contracts and others count the number of meters.

Some noteworthy thresholds are:

- **10,000 Customers:** It is generally accepted that below this threshold trading electricity is no better economically than simply balancing & settling.
- **50,000 Customers:** Ofgem uses this threshold at its discretion. For example they have created a template plan for the SMIP roll out for suppliers below this threshold.
- **100,000 Customers:** Ofgem have a mandatory common format to present complaints information. This includes the metric of complaints per 100,000 customers. This data is provided by most suppliers but the figures are not audited by Ofgem.
- **250,000 Customers:** Licence conditions define "small domestic suppliers" as having no more than 250,00 domestic customers. For example, this is the threshold at which suppliers are required to comply with certain environmental schemes and SMIP obligations.

Smart Meters

Smart metering is particularly relevant at the moment. First, because new entrants can use smart meter capabilities to differentiate. Second, they are a distraction for incumbents who already have their hands full.

A significant part of the licence conditions concern smart metering. However, given these rules and regulations are based more on theory than custom or practice, the practical implications are not yet fully understood.

Unfortunately, the Smart Metering Implementation Programme (SMIP) is having a rough ride and confidence is shaky. However, the [DCC is operationally live](#) as per 28 November 2016. NB in early 2015 the target date was December 2015!

Now that DCC is live, the industry has entered a period of discovery and are busy starting or planning their smart meter roll out. Initially, DCC Users will do a wide range of integration testing. Over above this, it will take significant time and effort for suppliers to enhance their back office systems and processes. Suppliers will also have to figure out:

- Which devices to procure.
- How to contract with MAPs and meter manufacturers.
- Devise roll out plans and contract with MOPs.

Useful Links

There is a vast array of information available on the Internet. The following links give a flavour of some of the most easily accessible advice from government, trade bodies and market research organisations.

Energy UK sets out the contribution the energy industry makes to the UK economy with [Energy in the UK](#) and [The energy market explained](#)

In [guidance for independent energy suppliers](#). BEIS provides contact details for relevant policy leads plus links to key documents and events that impact on independent suppliers.

Ellexon provide valuable guidance on [Market Entry](#).

Cornwall Energy provides [training, events and forums](#) targeted at the UK energy and water sectors.

Quindi Research provides [custom research and analyst services](#) for organisations throughout the utilities sectors.