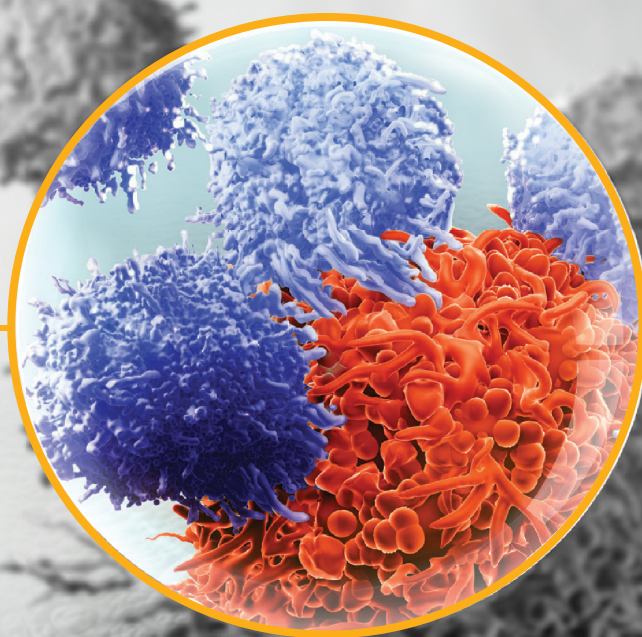


To the Lighthouse:

Overcoming strategy's imposter
syndrome in the worlds of
Immuno-oncology

By

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DIG

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Summary: To the Lighthouse

"This journey is 1% finished" is a Facebook mantra that has become a cliché in a world of ever-increasing digital transformation buzzwords. And yet it is fundamental to the story told in this paper.

This is the story of the first 1% in the life of Lighthouse - a service from AstraZeneca to support cancer patients receiving innovative new Combination Immuno-oncology (IO) therapies.

Lighthouse itself does not appear until near the end of this paper because this is the story of how Lighthouse came to be (and almost didn't).

It is a journey where we learnt that creative strategy has value even when navigating the intimidating worlds of cancer and Immuno-oncology; where we experienced how collaboration really works in the face of ethnographic-driven service design across time zones; and how we discovered that what is really useful to patients and oncologists on unfamiliar therapies isn't what *"digital-innovation-people"* first think.

Ultimately it is a story of how strategy became less about perfect insights and control, and more about shaping choices to encourage the team to find the problem worth solving. And when it turned out that we had the perfect solution to the wrong side of the problem, it becomes the story about how teams need to be brave and make use of creativity and human empathy as a force-multiplier to keep going and make things right.

This is Lighthouse's first 1%.

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0%

Pharma is a serious business

Sitting at the intersection of biology and behaviour, policy and science, Pharma is served by specialist agencies and teams of Management Consultants who navigate its evidential rigour, risk mitigation and regulations.

The Pharma ecosystem reflects a fiercely competitive market, where the average cost to develop a prescription drug exceeds \$2.5bn and takes over 10 years – but nowhere are the stakes higher and more emotive than oncology, the development of cancer treatments. AstraZeneca, Britain's second-biggest pharmaceutical firm with its mission to “*push the boundaries of science to deliver life-changing medicines*”, is at the heart of this increasingly specialised field.

Like other industries, Pharma is being disrupted by changes in technology and human expectations. In response, and to explore and spread new ways of working, AstraZeneca partnered with DigitasLBI to create DIG, the Digital Innovation Group, a joint venture staffed by AstraZeneca and digital creatives in “un-pharma-like” Brick Lane.

So DIG was excited when CEO Pascal Soriot declared Immuno-oncology “our top business priority right now”, and more than a little daunted when we were challenged to use our creative strategy approach to tackle ***The Challenge of Competitive Advantage in Combination Immuno-oncology***.

0.1%

A chronic future for cancer?

Oncologists believe Immuno-oncology could prove more revolutionary than the introduction of Chemotherapy. Immuno-oncology targets the body's immune system, not the tumor itself, enabling it to recognise and attack cancer cells. The long-lasting memory of the immune system means it can continually adapt to the cancer over time and provide a durable, long-term response. This offers the prospect – in certain patients – for types of cancer to become chronic, rather than fatal, illnesses.



But where, in the vast Immuno-oncology value-chain – from clinical and data, through payment and evidence, to brand and marketing – could DIG make a difference?

0.2%

Finding the problem in the 4 worlds of IO

Analysts estimate \$40bn annual peak-sales for Immuno-oncology within the next decade. AstraZeneca's business challenge

was that it was, in some indications of Monotherapy IO, 3rd or 4th to market. Competitors like BMS, Merck and Roche were well positioned. But by following the science in Combination IO therapy – treating patients with two drugs at the same time – AstraZeneca had two agents to enter this market: **durvalumab** and **tremelimumab**.

Strategy sought to gather the knowledge of everyone focused on accelerating **durvalumab** and **tremelimumab** to regulatory approval and launch. Stealing with unashamed pride, we toured labs in the UK and US and interviewed experts – even chasing them down for informal chats while they were on the school run.

We heard how Immuno-oncology was in flux.

Combination therapy in particular complicated who should be the patient, introduced new, unfamiliar immune-mediated Adverse Events (imAEs), and created confusion with physicians who could not see evidence of differentiation in the “cola wars” between similar therapies and their combinations.

From the flux, 4 distinct “worlds” of IO emerged: **Patient, Physician, Payer** and **Provider**.

Traditionally the scale, specialisation and regulations of “Big Pharma” meant these worlds were addressed separately, but we saw an answer in ***the connections between these worlds***.

0.3%
“We’re going to need a bigger brief”

The complexity of the science and systems involved meant we needed new ways to approach briefing and research. Detailed knowledge needed to be evenly distributed for credibility with oncologists and patients, to prevent power imbalances within the team and to overcome ever increasing “*imposter syndrome*”. Strategy chose to “*go large*”, distilling all we had seen and heard plus hundreds of pages of analysis and medical science into giant *landscape maps*.

Looking at the IO worlds from a system point-of-view, the maps showed us that cancer treatment was not a system at all. It was never designed to work as it did,

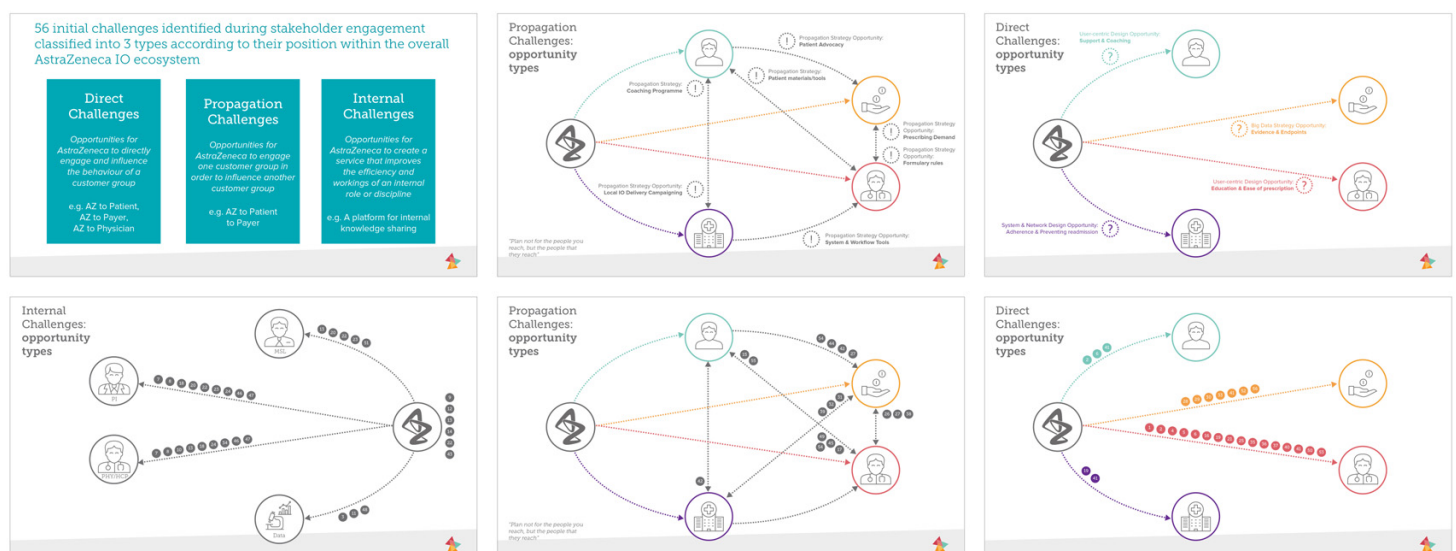


Fig 1: Initial challenge identification along the Immuno-oncology Value Chain



Fig 2: From macro “Landscape Map” briefs to micro ethnographic-driven human insights

because it was never actually designed. The system was the result of years of ad-hoc process on top of ad-hoc process, and was crying out for something to connect people, to reduce friction.

The maps were living, social objects anyone could add to, something our team and visiting experts updated as we learnt more. But more than that, the maps became our brief, a jumping-off point for ethnographic research. And they gave us the encouragement that with a spirit of “informed naivety” – blending gathered knowledge with an attitude of “what if” – we should focus on 2 worlds in particular: **Patient** and **Physicians**.

There lay DIG’s opportunity to help differentiate AstraZeneca’s Combination IO treatment.

0.4% Collaborating and co-creating across the Atlantic

Ethnographic immersion took place during the autumn-winter of 2015/16 in homes and oncologist practices across America where

clinical trials were taking place. Vitally, the whole team (yes, including developers) took part.

What we experienced was humbling, funny, inspiring, and heart-breaking.

We built relationships through halting talks and emoji-riddled WhatsApp chats. We observed hacks and workarounds that proved what people say and what they do are very different. We saw people working multiple jobs to cope with the financial “toxicity” of their Co-pays. We heard someone learnt a diagnosis by reading a small post-script on their notes. We met a patient diagnosed with melanoma while caring for their parent who had been diagnosed with the same cancer a few months before, so couldn’t bear to tell them. We saw the human biases behind science façades where the perceived “neediness” of patient or caregiver, or oncologist workload, could change the treatment prescribed.

The ethnography changed DIG’s beliefs too.

“Innovation” can be compulsively drawn to solutions. At DIG we believe in spending more time finding the “*Problem behind the Problem*”. Only then do we start designing solutions.

Process is useful, process makes you feel safe. But IO was so new, so “*half in the future*”, that people found it hard to talk about. Again, Strategy needed to do things differently and break our “*no solutionising*” mantra. DIG needed to make ideas as stimulus, to be discarded without worry.

Patient and Oncologist time is precious. To make the most of what was available, half the team returned to London to enable a continuous cycle of 3x56 hour sprints. In every sprint, Strategy analysed in-coming ethnography, defined a challenge backlog and prioritised two briefs. Each sprint generated ~100 ideas, which were refined into two concepts or working prototypes. These were then torn apart and re-built by our “collaborators”.

The ‘Skyping and Slacking’ was tiring, and at times ...tense... But from the ashes of our ideas were born 8 problems to focus on where services could support patients and physicians and differentiate the experience around **durvalumab** and **tremelimumab** therapy.

0.5%

The problem of community confidence in combination IO

To decide which problem to tackle, DIG brought together activism, optimism and diverse backgrounds with clinical and marketing experts, world famous Oncologist KOLs, MIT nurse hackers, and Patients at a “*Problem behind the Problem*” workshop.

The answer lay in two words: **community confidence**.

80% of cancer is treated in US Community Practices. 30% are stretched 1-3 physician practices, which can be less up-to-date than oncologists in trial or academic centres. Navigating new treatment choices can be a difficult burden for them.

Some thought IO was “*just another treatment*”. A few had shared IO mono-therapy experiences in a handful of patients with lower toxicity and good results – which paradoxically might have worse implications for Combination IO with its more complex side effect profile. It could create complacency. The habits of the present and anxiety of the new increased Community Practices’ incentive to stay with the “*devil they know*”: Chemo.



Fig 3: From Stimulus ideas to 8 co-created Problems

Our brief became: ***how can we connect community physicians with meaningful data and peer experiences so they feel justified to train and transform their practice?***

0.6%

Re-connecting with our original insight

Over the next month DIG prototyped *Quill* – a knowledge service to help oncologists find answers and adopt Combination IO faster. *Quill* blended Artificial Intelligence triage, discussion groups and live access to expert KOLs.

Quill met our brief.

Multiple co-creation sprints refined and validated the service until one sober scientist called it “*beautiful*”. It was perfect.

It just wasn’t right.

Quill was technically ambitious but during immersion the relationships we developed had really driven the team’s purpose. Where were the patients? In all our “Agile” enthusiasm, we had iterated too far from our first insight: *the human connections between the IO worlds*.

Had our Shoreditch imposter doubts been right? Thankfully, AstraZeneca gave us time to stop, think and re-interrogate everything we had seen and heard. Strategy’s job became to re-gather the team and choose a way forward.

0.7%

The reassurance to continue

We looked at the community confidence problem from the flip, “in-flight” side: the 99% of patient-time spent away from the practice on a “high-risk regime”.

Re-briefing was simple:

How can we give community physicians reassurance that patients on AZ combination therapies are managing between infusions, without making them feel practically or mentally overwhelmed?

Why did community oncologists need reassurance?

1. Patient selection was a problem. Age, co-morbidities, or even the rural locations they lived in, made oncologists worry.
2. Increased patient-management was challenging. IO wasn’t like Chemotherapy; Adverse Events could onset unpredictably as patients’ immune systems attacked not only the cancer but their own bodies.
3. Knowledge transfer was a problem. If a patient on Combination IO went to an ER with a Grade 3 diarrhea imAE, doctors might have “absolutely no idea what that means”, with potentially fatal consequences.
4. Underlying all this was patients’ poor communication of their side-effects and symptoms – whether through memory, capacity or fear that if they complained life-saving treatment might be withdrawn.

What if AstraZeneca could change the perception of side-effects and symptoms by improving how they are communicated

between patients and oncologists? Pertinent Data, communicated to the right people at the right time would mean better decisions. This would lead to reduced ER admissions and practice costs, with improved treatment adherence. In turn it would increase oncologist reassurance, improve patient experience, and increase the prescribing universe.

So we created **Lighthouse**.

0.9% Humanity over technology

Lighthouse provides pro-active patient monitoring, live triaged side-effect alerts, and symptom summaries, to support better experiences between infusions on AstraZeneca's combination immunotherapies. Inspired by a belief in "*Invisible Patient Management*", it reduces the burden on patients and oncologists while improving relationships.

Lighthouse has no AI or complex mobile apps. It is built around 24/7 **Lighthouse** Advocates, humans with medical AND emotional intelligence who can be reached by SMS or phone and then contact appropriate practice staff and "filter out the noise". Capturing patient data this way closes the communication loop in consultations and creates enhanced insights around patient-reported outcomes.

Importantly, **Lighthouse** is even integrated with programs to help pay for treatment.

The human-first approach respects the idiosyncrasy of community practice and led to a SERMO panel giving the service +70% top-box scores: **Lighthouse** stands out in the "cola wars" of Immuno-oncology proving the patient-centricity that differentiates AstraZeneca's therapies.

This journey is 1% finished

Lighthouse is now live with patients and physicians. As more patients enroll, the service evolves because the experiences and frameworks from its creation have spawned wider changes in AstraZeneca's innovation culture – its lessons have been transformational.

For Strategy, **Lighthouse's** journey meant creating and curating ways to democratise thinking and overcome imposter-syndrome doubts, but most of all it meant making choices: choosing the territory, choosing the problem, choosing the hard truth behind our first product, choosing to pivot and start again, choosing to learn and make the work stronger.

Ultimately in Pharma's world of complex science and systems, strategy held true to human creativity and insight's ability to differentiate and provide competitive

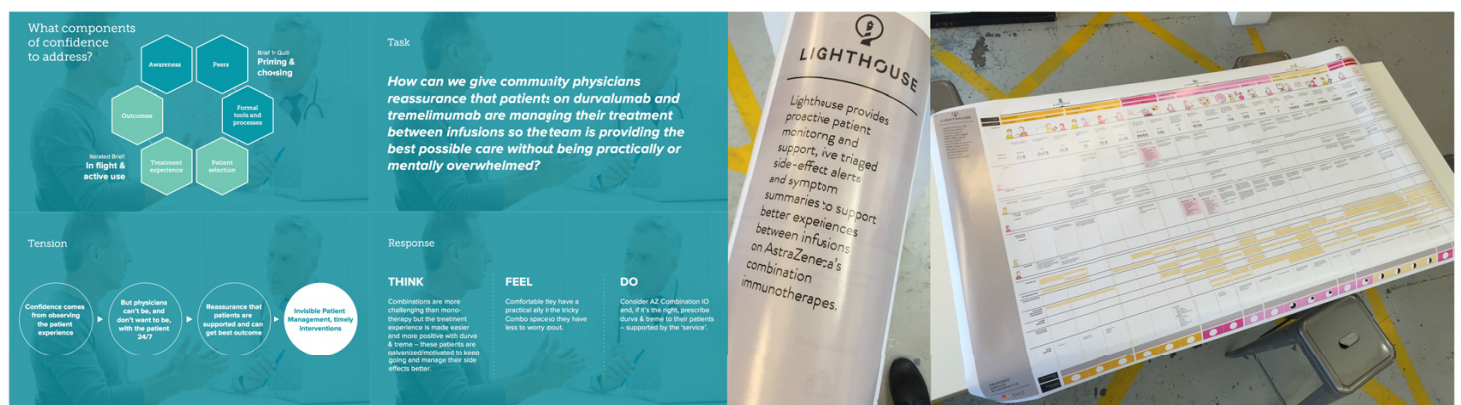


Fig 4: From Brief to Service Blueprint

advantage, and in so doing changed Astra-Zeneca, DIG and the team, for the better and for the next 99%.

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