## Case Study

Moving Fast at Highways England: Using SF to engage complex adaptive responses

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## **Abstract**

Major project investment teams in Highways England have had to respond to an urgent need to drive economic growth. This case study describes how they have responded to this challenge, with SF questions enabling complex adaptive responses to emerge that have driven them forward.

n the 2014 autumn statement the UK Chancellor of the Exchequer announced a large number of major new projects for the strategic road network (motorways and main trunk roads) in England. The timescales for preparing them for construction, however, were unprecedented. Jeremy Bloom was the director of major projects for the north of England, which saw a 200% increase in schemes with increased investment. Here is the story of how he and his team faced the future.

Jeremy said "We were trying to face up to change and deal with it, but it was a bit nebulous. I didn't want to work from top-down theories and models of organisational change, because making them real is so difficult. I was interested in the discussion we'd had about how we could use Solutions Focus (SF) to create change realistically and I was keen to take that next step."

That began a story of emergence. What emerged were a leadership team and division that, using SF questions, grew

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and manifested elements of a complex adaptive system (CAS). Sometimes they worked within the controlled space of a traditional organisation and at others they created some emergent properties of a CAS which helped the division progress. A couple of inputs helped. One was a piece of information from complexity regarding organisational behaviour: that prediction is not possible, that efficiency does not necessarily come from control and that change does not start from the top, so rather than creating extensive plans you may as well get going. That created a freedom to act and openness to difference in the leadership team. "When we talked early on about complexity. it had an impact on me. It made me realise it wasn't going to be perfect, you start somewhere and work more flexibly." The second was using a few simple SF tools that are so well aligned with the creativity of complexity and aided this readiness to flourish.

Complex adaptive systems emerge through self-organisation rather than traditional hierarchical assumptions. Research by Olson and Eoyang (2001) indicates that three factors tend to shape these self-organising patterns. The first, the container, sets the boundaries. Those boundaries might be geographical, or relate to purpose or procedures and can be changed, expanded or contracted. The second factor is the significant differences that shape the emerging patterns of an organisation. Any difference that exists in a system can potentially be the difference that will shape an emerging pattern and, in true SF style, a good thing to do is notice the differences that are useful and expand them. The third factor is the transforming exchanges which refer to the contacts and linkages between agents of the self-organising system. Like SF, this recognises that the action is in the interaction between people, but can also include financial or material exchanges that influence the system. As everything is inter-dependent, a change in one factor has ripple effects for the others.

In true SF fashion, some elements of a CAS that would be helpful already existed. The team worked to move beyond traditional approaches.

"What was refreshing about what we did and what made the

difference was that we spent time on the proper enablers instead of focusing on tasks, and I don't think this is valued enough. I wanted us to think beyond tasks, which is how we traditionally operate. Of course we need to deliver on time, to budget and to the right quality, but we realised what was important was a focus on people, developing relationships, behaviour and cultural change, and it got us away from the usual task focus." This desire to move beyond task created the pre-conditions for new ways to emerge, partly because it moved the group away from dissecting goals and tasks in mechanical ways. SF questions were then a catalyst enabling the team to work freely and creatively rather than getting bogged down in structuring.

Another factor was already present. Jeremy worked through interaction, through transforming exchanges as they would be expressed in a CAS. "If there was an issue, I would go and chat with the person and keep the manager informed, I wouldn't just go through the chain." In a self-organising system people stretch to interact with other parts of the organisation in ways that make sense in the moment. They don't necessarily act by consensus or structure. This reticence to act except through established hierarchies is one of the commonest features that limits effectiveness in the public sector. Jeremy operated differently.

Over the first two meetings Jeremy expanded the leadership team to 12 people out of a division of 80, where previously the division operated with a Senior Team of three. "I wanted to include team leaders to get broader input and get to staff more quickly. I also brought in more junior staff who normally didn't attend senior meetings. They managed a lot of people in admin so it was important to get their input." This immediately changed the nature of the division, creating a team based on need rather than grade, signalling that staff did not have to work within established boundaries. With a ratio of 12 leaders to 80 staff, this also meant that decisions could be more effectively co-created, empowering clarity of purpose while distributing control more broadly amongst the division and enabling individuals to adapt more readily to new information.

A first session was planned. Jeremy was taken with the idea of using critical success factors (CSFs) and developing a Strategy Canvas (Sharif & Abington 2010). The aim was to develop a vision of how to work together to provide the leadership to deliver the change required and develop the CSFs to enable it.

"I had assumed as a group that we were clear on where things needed to go and that we could build the Strategy Canvas in the first session. But actually this all needed flushing out. We were still in a period of getting to know each other and our changing roles. So in that session we realised we had lots of different views that hadn't been pulled together or prioritised. I thought maybe we weren't getting very far, but actually, being unsure, hearing everyone's views and valuing them, was effective." This emphasis on listening to differences used in the session would have positive ripple effects in the division.

"We were also struggling to grasp the very different questions asked in SF. We aren't usually asked to think about sparkling moments in our past around leadership, or what our different stakeholders would want to see from us and, more specifically, how they would see that in action. It took a while to get our heads around how it would help."

"By the end of the first session we did have a strategic vision: 'Driving economic growth and customer satisfaction in the North' and a strapline: 'Our strategic roads will underpin future wellbeing and prosperity'."

The development of the vision statement was analogous to asking for "best hopes" and developing an outcome-focused statement. The vision that the team described nicely fitted the distinction in SF that values outcomes over goals. It was broad enough to incorporate many paths to its achievement. The time spent discussing the language of the statement was helpful. It provided a mechanism that allowed a group of different grades and different specialisms to interact and develop shared meanings.

After that session one of the team sent everyone the KPIs for the Department of Transport's Road Investment Strategy.

They discussed whether to work with the official KPIs or flesh out their own CSFs in the next session. They decided to follow their own instincts about what was important and test them against the official KPIs to ensure that nothing glaring was missing. This was an example of how the group balanced the demands of the traditional structure with the understanding that made them best placed to respond to local realities. Without discussion they knew that what they wanted to do needed to be deeply felt, decided and owned by them if they were to be successful. It also provides a nice example of how organisational patterns emerge, when divisions respond to their local environment and are also influenced by old patterns. This tension, when appropriately balanced, creates new patterns in the organisation in an iterative cycle of influence.

The group answered two questions in the second session to develop the CSFs. Imagine you are on the road network in one year's time. On a scale of 1 to 10, describe what 10 looks like from that vantage point as you drive around the North. Second, imagine you are walking around staff in the offices and out and about in six months' time, what would you see at 10? The second question was designed to start tapping into the shift from a primarily task-focused approach to the interaction required to co-create the change process. The leadership team worked in small groups building detailed pictures.

"We found the strategy canvas very powerful; it structured our answers and we embraced it. We got to a fair consensus on the CSFs quite quickly and when we prioritised them what came out was quite practical. That we managed it in the second meeting was good. It helped us to really focus on the enablers that would make us succeed in the future. I think that what was distinctive about SF was that using it was propelling us forward 6, 9, 12 months and we were able to think in practical terms about what we needed to do."

"You tend to believe you are stopped from doing things in organisations but maybe it's a matter of where you put your focus. It's really interesting to imagine you are walking around seeing the staff in six months' time and describing

what you would see, imagining what good would look like, how the team would be. Most importantly, from these exercises, we discovered that there was a lot we thought we could do, which we hadn't expected, and we acted on it."

The way SF asks you to imagine a future, by bypassing the path that gets you there, truly enables teams to see and work differently. Had the team focused on deconstructing the work into paths and tasks, they may have lost momentum, as tasks become ends in themselves and fail to bridge the gap. But describing a picture of the future in detail is more like describing a picture in a jigsaw, and building a jigsaw is a better analogy for how the team could effectively approach their work. Except for the frame, there is no general plan you can develop for a jigsaw, for each one is different. There is no point saying you will start on the left half, one row at a time. Instead, you look at the picture and pop the easy bits into place. You might also build bits and not be quite sure where they fit into the puzzle but, somehow, the pattern eventually emerges.

The team decided on six CSFs: Resources, Leadership, Supply Chain, Behaviours, leading to and including two clear foci: Improved Delivery and Client Satisfaction. This formed their "container". They then picked one piece of the jigsaw on which to start. "We started by focusing on Resources as capacity and capability were critical to our success. To drive economic growth, improving the delivery of road projects was essential." Choosing one CSF effectively shrank the boundaries of the container to get one thing off the ground. This was effective; if an organisation focuses on too much at once the impetus to self-organise is diluted, with energy spread in too many directions to generate new structures.

In reality, though, recruiting and having sufficient and capable internal resource was proving very difficult, so the team self-organised in a new way, focusing their energies and accelerating transformation even faster. They decided on an intensive program of upskilling with staff. "This was delivered by our own experts within our teams as well as some people from outside the division. Looking back now it's amazing to

think that in ten months our 80 staff attended 450 learning sessions. We covered 20 topics from Cost Estimating, Efficiency Savings and Negotiating through to Air Quality and Traffic Modelling and Biodiversity. We ran specific training programs for new starters and provided them with mentoring and coaching." This had strong ripple effects. It respected people's expertise in their own business, recognising that the organisation held the secret to success and permitting a local solution to emerge. It shared responsibility across many more system agents, bringing people across all parts of the division together and creating a huge number of transforming exchanges. The result? Senior managers described that project managers were leading projects more confidently and that project support staff were using their initiative far more, carrying out tasks independently in areas such as project finance and management of supply chain relationships.

The third session was six weeks on. "There were four flip chart sheets on the table and we were writing silently: "what's moved forward since we last met?" Silence allowed us to write down our own thoughts and then share our views. We would often be asked to write down 25 ideas and after some initial groans in the first session we got into it; we had realised it really did enable creative thinking that was also practical. In that session together we recorded 30 things that had moved forward since we had met six weeks ago."

The group grasped very early that the exercises were enabling them to act. "Change was happening because of the little things we were doing and the little steps we were taking. We could demonstrate we were making things happen as an organisation. Simply said, our view was just do anything that moved us in the right direction." Doing that was, in itself, creating momentum. The team had avoided being bogged down in seeking a grand plan.

In this session the group were concerned to continue to improve their leadership. They had discussed the scenarios likely to hit major projects: more work without a commensurate increase in people, and growing expectations around the pace and quality of delivery. They were keenly aware of their responsibilities and also had a compelling view of the future. "We knew as a leadership team that we wanted to be better leaders and a high performing division."

They identified 18 things that were giving the wider team confidence in their leadership but thought they weren't doing them consistently enough or in a joined-up way. Many things followed. "Some of us had simply cascaded the Strategy Canvas to our teams effectively, so we decided to extend this to the whole division. We were clear that the CSFs were not an add-on but how we would improve performance and get better. The strategy canvas became currency, a part of what we were doing." That some of the team had just taken it upon themselves to cascade the Strategy Canvas was a nice example of how change can ripple. With a general sense of the direction of change, some of the team had just built on the ideas that had come from the group's interaction.

The team talked about the type of culture and behaviours they wanted. "We wanted to work in a more open, informal and joined-up way and the sessions helped us develop that. This approach became our brand. I saw a lot of growth in the group, as leaders over the year came to be even more approachable, ready to listen more and work more openly and informally with staff. Three of them have since been promoted and you can see how they have increased in confidence and are working in a more inclusive way with their teams." This style was also characteristic of Jeremy. The team had given him feedback about how much they appreciated it. By repeating these similar useful patterns, they were bringing coherence to the division that seemed to work. These patterns of self-similarity tend to emerge in complex systems. Here they were emerging and being adopted more widely as a useful difference.

Olson and Eoyang (2001) argue that in a CAS formal leaders have three jobs: to set the container, focus on the significant differences and foster transforming exchanges. To speed delivery the leadership team were not only looking for significant differences but nurturing them. They were asking staff to develop proposals of how they could deliver faster and in different ways, encouraging them to operate in a less

constrained manner. When staff were coming back with what they were going to deliver, they were pushing back, ultimately with effect, as they observed people starting to think differently. The senior team also just started using what they had learnt of SF in their one-to-ones, to encourage staff to find answers themselves and improve their capability. This would have the advantage of surfacing a wider net of solutions.

As a result, new approaches to how the teams used the organisation's Project Control Framework were developed to speed delivery in the early stages of developing projects. Usually, even early on, activities such as traffic modelling were undertaken in great detail to avoid any risks later. Instead, colleagues developed something less detailed that was nevertheless robust, mitigated risks and speeded the early stages of projects. This significant difference shaped an emerging pattern that was then adopted nationally.

While the leadership team were stretching the boundaries of the container by creating an unconstrained and open environment, in other ways they chose to shrink its boundaries. The division had a mechanism for awarding a one-off payment to people for working hard or going beyond the call of duty. The leadership team decided instead to use this reward for behaviours that were adapting the organisation to its new environment. They also decided to publish these awards, which was a departure from the traditions of the organisation. Jeremy said "I have never had so much good feedback from staff saying they really liked this. Where previously staff members would question why someone else got recognition, it was now highly related to purpose. People could see why we were doing things". It is noteworthy that staff appreciated having the shape of the container set in this way. Organisations are often prevented from coherently engaging with the demands of their environment when lax human resource boundaries are tolerated.

The leadership team further constrained the container by focusing recruitment around these behaviours. "As a team we were changing our mind-set and we were looking for people who could evidence a similar mind-set, who thought more

about outcomes than process, who were flexible, had an open questioning style and way of thinking and interacting with people. We still used the corporate competency-based interviews but the questions were more about how they changed and challenged things rather than processes."

Olson and Eoyang (2001) describe the major business of leadership as engaging with all system agents to foster their interconnectedness, but not to control these interactions. The leadership team used these transformative possibilities. They saw their project teams as too siloed and people's skill base as too narrow. As development and construction operated independently within the division, this was a particular concern. It would be difficult to accelerate delivery if these areas worked in disjointed ways. A lack of interaction would prevent a coherent system-wide pattern for delivery from emerging. "We discussed how development and construction could work together to accelerate delivery and the two leaders of each area started working closely together. In fact improving interactions would benefit all our teams, so we changed the emphasis in team meetings to sharing knowledge about the interesting things teams were doing. We passed learning across projects so we stopped reinventing the wheel, and brought teams together across the Pennines. Over time this worked, people became more agile and collaborative." A year later the north has for the first time combined development and construction under one senior manager in each northern region.

Looking back at the work with the leadership team, they seemed to work coherently and with freedom. What had emerged unstated amongst them were a few simple rules that formed their container and they then trusted each other to get on with it: deliver faster, stay within Highways England corporate rules, live within your budget, share with each other working collectively, and work in an unconstrained way. A CAS works better when a few essential elements are identified and the rest is left to the system agents. Such a pattern was prevalent.

This combination of tradition with nascent emergence produced some great results. The division took on 20 new projects in 18 months, a 200% increase, with only a 15%

increase in staff. The annual people survey's engagement score was boosted by 20%, with strong increases for management and learning and development, and greater numbers wanting to stay in Highways England for at least three years. The division received a high proportion of top appraisal scores and feedback from external partners that they were more responsive and collaborative.

Jeremy said "We've moved more in the right direction and it's noticeable. We've been able to absorb great volumes of work and people are flexible. Without that it would be impossible to adapt to our new world."

## References

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- Carey Glass is an Occupational Psychologist, Director of The Human Centre and has had the privilege of being one of the Editors of *Inter*Action. She works with public and private sector organisations using Solutions Focus to illuminate what works. She likes nothing better than starting with a blank sheet and seeing what emerges. Her original training was in neuropsychology. carey.glass@thehumancentre.co.uk
- Jeremy Bloom has over 25 years of experience in the transport industry, having held senior positions with Highways England, Network Rail and London Underground. Currently Network Planning Director with Highways England, he previously established a Regional Investment Programme responsible for the delivery of some 80 major schemes valued at more than £9 billion and comprising 250 staff. During his career, Jeremy has participated in a number of leadership development programmes and is particularly passionate about a peoplecentred approach.