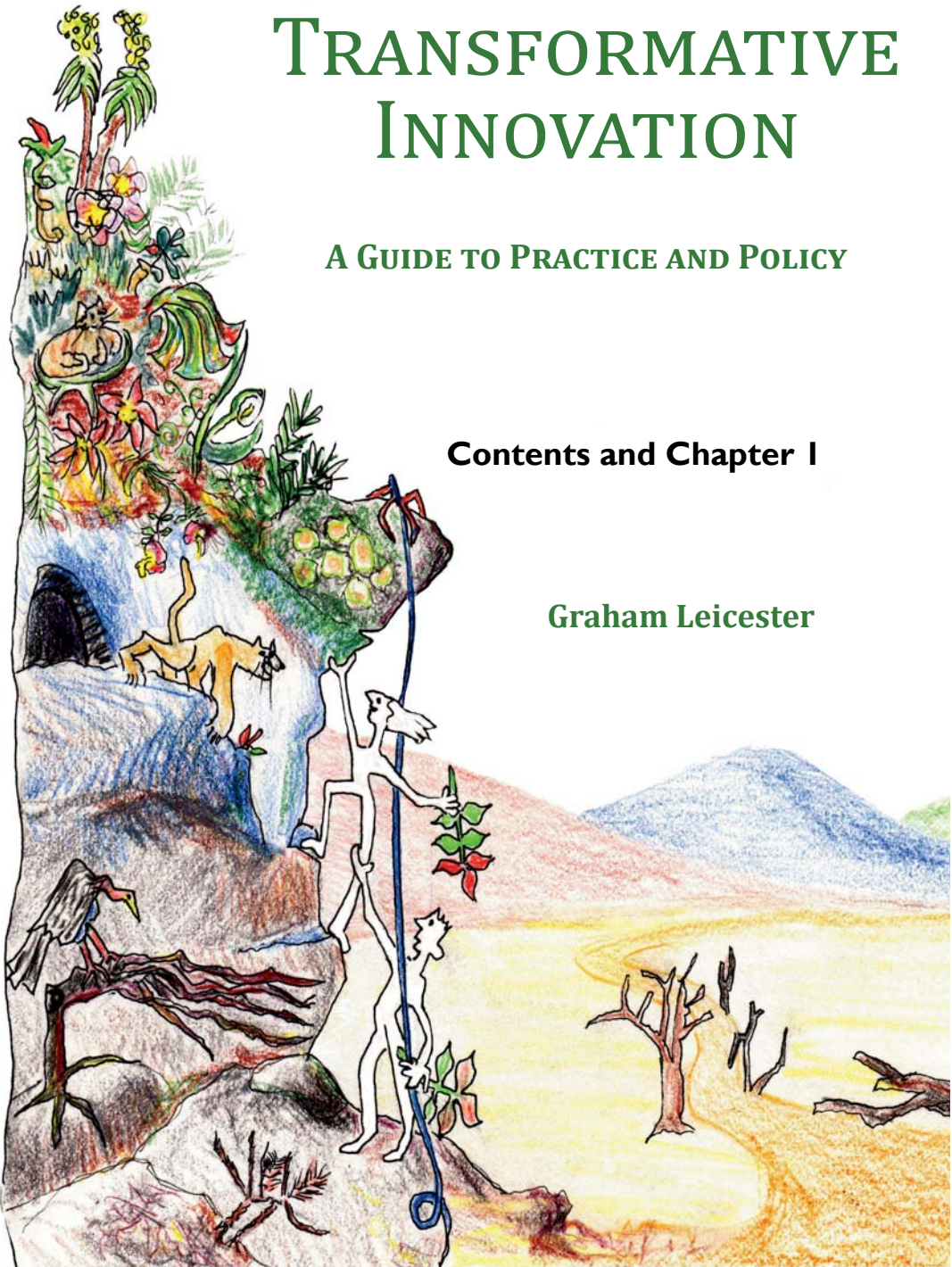# TRANSFORMATIVE INNOVATION

A GUIDE TO PRACTICE AND POLICY

Contents and Chapter 1

Graham Leicester

TRANSFORMATIVE INNOVATION

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Contents and Chapter 1

Graham Leicester

CONTENTS

The Practice of Transformative Innovation

In December 2000 an invitation was issued to around thirty leading figures from different disciplines and different parts of the world to join International Futures Forum, a two-year project to discover how to take more effective action in a complex world we don't understand and cannot control. They were invited:

> *…to explore the nature of the most significant future challenges facing society and the systemic connections between them; to examine ways in which we might successfully adapt and respond to these challenges, including by learning from existing promising practice; and to stimulate actions consonant with that inquiry by individual communities and at a systemic level, in Scotland and elsewhere.*

That two-year project has prompted a further decade and more of international inquiry. It has furnished an extensive and still growing body of new theory and critical thinking.

Yet the central mission has always been to support effectiveness in action. IFF has diligently worked in diverse settings, with government, business and in local community settings, to test and elaborate our emerging understandings in practice.

We learned early on that effective action in today's complex world requires three essential orientations:

- take the broadest possible view of the context, always thinking systemically, combining holism with focus.

- think in terms of long-term transitions: what brought today's challenges into being, and how might things develop in the future? The late California Senator John Vasconcellos told us that the task is to be hospice workers for the dying culture and midwives for the new.

- always remember that whatever else is in play we will be dealing with a human system. As the great systems theorist Sir Geoffrey Vickers observed: human systems are different.

These orientations only get us so far. There is still the question of what we should actually *do*. If at some level we feel our current actions are *ineffective*, then the answer is apparently simple. We must change. We must try something different. We must innovate.

But what kind of innovation? I well recall a conversation with the distillery manager at Lagavulin on Islay, producer of one of the finest single malt whiskies in the world. He told me he was moving on after five years in post. "I'm starting to run out of ideas for how to keep the product the same", he told me, unconsciously echoing the words of Lampedusa ("If we want things to stay the same, everything must change").

Maintaining our existing systems against the grain of a changing world requires constant innovation – making things faster, cheaper, smarter, safer or substituting for elements which have become scarce those that are more abundant.

These are necessary aims. But for those with an eye on the unfolding future they are not sufficient. If we sense that the existing system is fundamentally unsustainable in the longer term, then a different kind of innovation is needed. We must redesign the plane even whilst doing our damnedest to keep it in the air.

The redesign involves directing creative effort towards growing a viable system for the future rather than simply making the best of the one we have. It requires us to build organisation and infrastructure for the new system as it grows. And it invites us to draw on an innate human capacity to act in tune with and realise our deeper aspirations in a complex world rather than just settle for fixing what's failing. This last, it turns out, is the key to *really* effective action, not just for policy or organisations but also at a personal level.

This is the practice of 'transformative innovation'.

The Capacity to Innovate

Perhaps we can all point to some initiatives that have this quality. We may even be fortunate enough to be involved in some. But transformative innovation is rare at scale. It is usually seen as counter-cultural by dominant business-as-usual systems. They therefore tend either to suppress it or absorb it – the latter usually being called 'scaling' or 'mainstreaming'. So the fate of most promising innovations with the potential to transform is either to run out of steam and end up as shining, one-off, small-scale examples, or to be absorbed into the dominant system to improve its efficiency and prolong its life.

Neither outcome fulfils the innovation's transformative potential. Both feel like failure and disappointment to the initiators: their aspirational vision remains no nearer realisation and long-term, systemic challenges seem as intractable as ever.

Alongside the practice therefore, we clearly need to get smarter about the systems and structures that support transformative innovation and realise its potential. This is particularly true in the social and public spheres where there is no equivalent of the natural dynamics of the market to drive waves of innovation and 'creative destruction'.

Market innovation systems, after all, have become highly sophisticated. Each phase has distinct institutions and financing mechanisms. There are research funds, prize awards, 'google time' and so on for speculative idea generation at the pioneering stage. Then venture capital, alternative investment markets and business incubators for start-ups. Finally, the stock market, pension funds, the investment banks and the big chains exist to service the needs of the mass market.

Compare this with the non-commercial sectors engaged in the pursuit of civic goods and social change – the public, social, civic and philanthropic sectors for whom this book is written. There is no shortage of creative ideas and radical intent in our public and social agencies. Many develop into impressive projects, detailed in encouraging reports and conference platform presentations. Yet still these examples remain the exception, and the wider systems and culture in which they are introduced carry on their course untroubled. They are like seeds falling on stony ground: some occasionally germinate, but even they are unlikely to reach their full potential.

If we are to get better at this and allow our radical seedlings to grow into sturdy new plants that themselves configure whole new habitats, then we need to learn from the commercial world: we must

understand how patterns of renewal function in social and policy systems beyond the market and put in place the infrastructure to support them. In other words, we need *both* to nurture an intentional practice of transformative innovation *and* put dedicated systems in place to support it.

The practice therefore requires:

-   Individuals and team leaders working in the public and social sectors who can see that existing patterns of activity are unsustainable and want to discover and put into practice a better way.

-   Leaders of organisations, policy- and strategy-makers, who understand how to support and foster transformative innovation as a practice distinct from sustaining or disruptive innovation.

-   Finance specialists who can design systems to handle the resource implications of transformative innovation, both to feed initiatives at the critical points where they need support (they require very little finance to get started) and to plan for the long-term transfer of sunk costs from our failing systems into new patterns ready to support the load.

This book addresses all three features in six chapters that echo to some extent the central requirements of 'education for the 21st century' published by Jacques Delors' UNESCO Commission in 1996 – learning to know, learning to be, learning to do and learning to live together. This reference points to the fact that the practice of transformative innovation is fundamentally about a development of the capacities of the individuals, teams and institutions involved.

The six chapters are:

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- *Knowing:* the first challenge is to shift our ways of making sense of the operating environment so that we become comfortable with its complexity rather than overwhelmed by it. This is the substance of Chapter 2.

- *Imagining:* the next challenge is to respond to the question that will inevitably have arisen from our contemplation of the contemporary world – what is to be done? What is the transformative innovation that needs to be embodied and initiated? There are countless possibilities. What are the processes that will help guide us towards a 'wise initiative' – one with the best chance of success in the real world whilst also carrying the hopes and aspirations of the initiating group? This is covered in Chapter 3.

- *Being:* the next challenge is to bring a group of people together to take this step, to move outside the comfort of simply improving what is in place and to make a stand for something radically different. The group needs to be organised, led and managed to succeed. It needs to expand over time. And its members, particularly the pioneers, must not burn out. This is the subject of Chapter 4.

- *Doing:* the test is effectiveness in action, over time. Chapter 5 shows how to introduce the new in the presence of the old and gradually grow it as a process of reflective learning. It introduces specific tools for dealing with challenges likely to be encountered along the way: enrolling others, taking difficult decisions, figuring out what to do when you don't know what to do.

- *Enabling:* most of this guide is directed at the innovators, the intrepid souls ready to try to shift the system from an unsustainable business-as-usual approach towards a new

pattern of viability. But their task is made much easier if the conditions are in place to enable rather than hamper the transition. Chapter 6 considers how policy, strategy and, in particular, finance can enable more transformative innovation.

- **Supporting:** beyond policy and finance, the final chapter describes and makes the case for investing in intentionally designed *systems and structures* to support a culture of renewal in our public, civic and social systems in just the way that market-based systems and structures have evolved to support commercial innovation. IFF has begun to put in place a dedicated infrastructure to support transformative innovation – to demonstrate what is possible and to encourage others to follow suit.

Practice and Theory

The book is designed as a *practical* guide, not a theoretical treatise. It distils the generic learning from years of practice. In order to keep it short there is scant reference to specific examples in the text. Instead each chapter, including this one, concludes with suggestions for further reading – including pamphlets and resources that can be freely downloaded from the IFF Practice Centre at www.iffpraxis.com/ti.

There are no footnotes. The book draws for its theoretical underpinning principally on the work of core IFF members over many years of collaborative inquiry. It could not have been written without them. They are named throughout and there is a full list of members included as an appendix. Where other sources are cited there is always enough information in the text to allow you to track them down.

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The intention is that this guide, supplemented where necessary by the additional materials listed at the end of each chapter, will be all you need to initiate or support transformative innovation in your own sphere. If you feel the need for a concrete example as you read, then turn to the case study of the SHINE programme in Fife.

SHINE: Changing the Culture of Care tells the story of a new approach to older people's care in one region of Scotland – an initiative that IFF has supported from its early imaginings in 2009. The programme has followed the innovator's dream of a ten-fold increase in coverage every year and has begun to attract national attention – most recently as an example of best practice included in a Health Foundation and Nesta report, *At The Heart of Health: realising the value of people and communities.*

What the existing reports on SHINE miss, however, is that it has been a rare example of transformative innovation that has started to realise its potential at scale. It has been driven from within the system rather than from above or from outside, could easily have been written off as an abject failure at any time in its first two years, has been based on a change in practice by existing staff rather than the investment of significant new resource, and would not have happened without the persistent, dedicated and artful commitment of a small group of pioneers.

The full case study is published separately and referenced at the end of the chapter, but there is a brief summary of the SHINE story (starting on page 21) to whet your appetite and to serve as a point of reference in practice for the chapters that follow.

Those chapters naturally occur in a certain order. But they do not have to be read that way. Certainly they do not need to be applied in that way. In the real world, transformative innovation is a complex, messy, creative process. This is not a textbook for diligent, step-by-step study. Rather, it is a book for dipping into as a source of encouragement, reassurance, guidance, confirmation, insight,

suggestion and refreshment. My hope is that you might open it at any page and find something there that will help evoke the hidden resources to take your work forward. That's what the world needs.

Ten Characteristics of Transformative Innovation

By way of orientation for the chapters that follow, it will be helpful first to spend a little more time on the distinguishing characteristics of transformative innovation and what it looks and feels like in practice.

The concept is most easily understood with reference to the Three Horizons framework, which IFF has used extensively both to help individuals, groups and organisations understand the need to break free from the constraints of 'business as usual' and provide a framework to translate that aspiration into effective action.

The framework (which is discussed in more detail in Chapter 3) sees a mainstream 'first horizon' system losing effectiveness and therefore dominance over time (the red line); a 'second horizon' of innovations seeking to exploit opportunities emerging in the changing world (the blue line); and a 'third horizon' in tune with deeper trends and changes that eventually emerges as the new dominant pattern – perhaps a generation from now (the green line).

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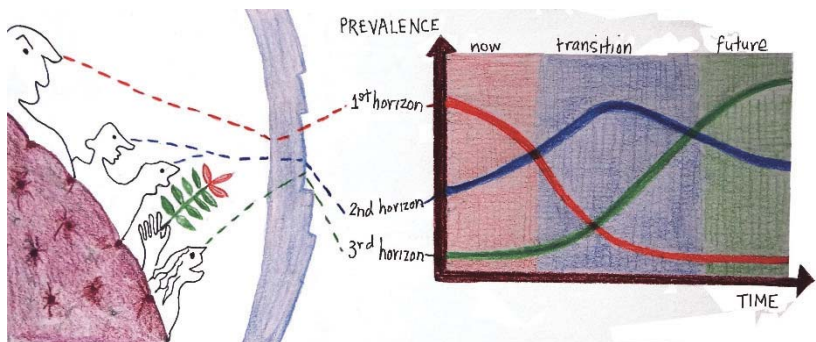
Some innovations will ease the pathway towards the third horizon. Others will be taken up by the first horizon system to extend its life a little longer. The distinction recalls Clayton Christensen's description of the difference between '***sustaining innovation***', which improves the efficiency and prolongs the life of existing systems, and '***disruptive innovation***', which disrupts or subverts those systems.

The Three Horizons model shows that if we take a longer view there is also a third form of innovation – ***transformative innovation*** – which intentionally shifts existing systems towards a new pattern of activity suited to the changed environment. Anyone can disrupt a system. But you need a third horizon to disrupt it with a purpose.

In the course of our work we have identified ten critical characteristics of such innovation. It is:

1. *Balanced: paying skilful attention to the twin requirements to be hospice workers for the dying culture and midwives for the new, consciously operating in both worlds at the same time.* This is the critical skillset, mastering the skills of tact, timing and titration (choosing the right dose, not pushing our luck) that allow us to keep the old culture on board even as we introduce radical innovation designed to transition to a new pattern.

2. *Inspiring and hopeful for the participants and for others who come to know or hear about it.* It has this quality because it effectively acknowledges the broader cultural unease with 'business as usual' and is not just another 'patch' on the system.

3. *Informed by a longer-term perspective, taking the future into account.* We cannot be midwives to better future outcomes without this perspective.

4.   *Pioneering: trying something new and counter-cultural, starting small, rooted in discovery and learning – rather than the application of tried and tested procedures.* If we are going to shift the culture then we must do something that will be seen as 'counter-cultural' in today's terms. And if so, we should start small: anything bigger can be seen as too threatening or resource-intensive and may be suppressed.

5.   *Grounded: facing up to reality, generated from a clear-sighted view of the evidence but not hidebound by it, taking knowledge gained from lived experience as seriously as abstract data.* The transformative initiative will be based on a long-term aspiration, but must take its place in the messy reality of the present. We ignore that at our peril.

6.   *Based on personal commitment 'beyond reason', with the individuals involved stepping out of their formal roles and into themselves.* This means bringing our full selves to the challenge, giving us access to capacities, resources and stories we usually keep in the background in our professional lives — our own passions and aspirations, for example. We will need all of this to carry out transformative innovation successfully.

7.   *Responsible: honouring the principle of 'first do no harm', sensitive to the pressures on people pushing the boundaries and not pushing too far too fast.* While this kind of work is invigorating and fulfilling, it will also demand a lot from us. It can start to ask too much. We must look after ourselves and each other. The catalyst will have failed if it burns up in the experiment.

8. *Revealing hidden resources – by freeing up resources locked into the existing system and by configuring new sources of abundance.* It is scarcity that is undermining the effectiveness of our present systems. The trajectory of transformative innovation needs to be towards sources of support that are abundant and away from reliance on those that are scarce. This kind of work is attractive – people will want to get involved. Hidden resources will emerge.

9. *Maintaining integrity, coherence, wholeness at all scales and from all perspectives, with words and deeds, being and doing in alignment.* Every action carries an implicit culture with it that can and will be inferred both from what is done and how it is pursued. Authenticity is vital, and attractive. It is not that the means determine the ends. The means are the ends.

10. *Maintaining a pioneering spirit even in the face of success, preferring to be followed by, rather than swallowed by, the mainstream system.* It can be very difficult to resist siren calls to 'mainstream' any innovation that does well. The overwhelming instinct of a system in decline is to search around for innovations that will save it. But propping up the old system will not hasten the arrival of the new – and may make its eventual appearance all the more costly and painful. The ultimate aim here is to transform the culture, to free up resources sunk into maintaining today's system so that they can be rechannelled towards a system that is fit for tomorrow.
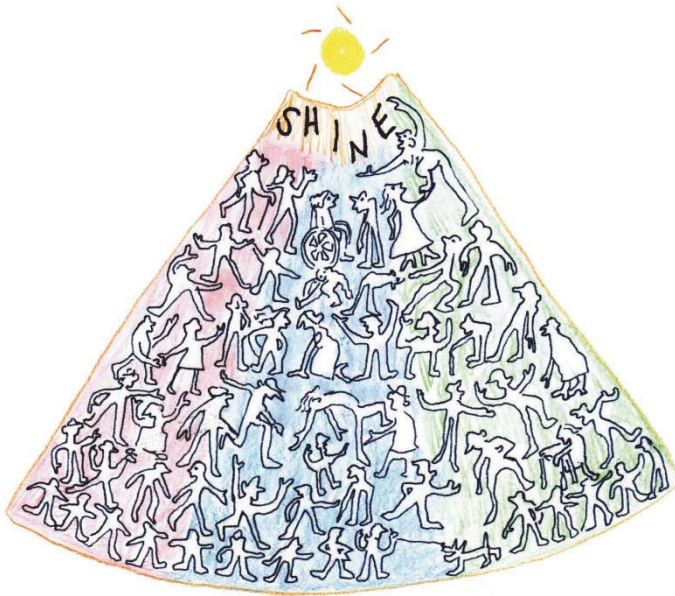
Case Study: SHINE ~ Changing the Culture of Care

Overview

The SHINE programme was initiated in spring 2011 by NHS Fife
and partners Fife Council, Community Catalysts, BRAG Enterprises
and International Futures Forum with one year's funding from a
Health Foundation 'invest to save' grant.

It introduced a new way of helping older people to 'not only survive but thrive' at home by asking not 'what is the matter with you?' and then checking for eligibility for standard services, but instead 'what matters to you?' and then configuring resources, including those of friends, family, neighbours and the local community, around the answer.

The intention was to introduce a person-centred, relational practice: to mobilise the individual's own inner resources and their motivation to restore or maintain their desired pattern of life. The programme also envisaged establishing a range of local 'microproviders' to cater to the variety of personalised and bespoke needs revealed in the process.

Imagining

The origins of the programme can be traced to a Three Horizons conversation in 2009 on winter planning for NHS Fife. Every winter the hospitals fill up, including with older people whose living circumstances then come under scrutiny and whose discharge from hospital is often delayed while suitable care at home is put in place.

The conversation revealed a third horizon vision of a very different, all-pervasive culture of care. The love and fear loops (see page 39) provided a simple graphic reminder of the shift in culture required.

The Nuka system of care in Alaska was identified as a living example of this third horizon vision. A series of exchange visits followed between Fife and Alaska which have since contributed to introducing Nuka widely in the UK.

Helping older people to thrive at home was identified as a first step on the journey to the third horizon for NHS Fife. A small group formed a committed integrity to pursue this initiative (see page 61), which was understood as a series of iterations of a social learning cycle (see page 72).

In 2010 the Health Foundation opened a grant programme called SHINE. It invited 'invest to save' proposals which could deliver significant savings in healthcare spending within a year. The Fife team successfully bid for one year's funding, but suggested that the savings from their programme would only come after two years – when they anticipated the closure of a continuing care ward in a community hospital. What became known as the SHINE programme in Fife got under way in spring 2011.

At the end of each year of the programme IFF has hosted a day of learning and reflection. The notes that follow provide the headlines from each year in a common format. Those on the 'First Horizon Context' describe changes in dominant first horizon systems and the overall operating environment.

Year One ============

Results: 6 older people experience the new approach.

First Horizon Context: SHINE fits well into existing policy frameworks: health and social care integration, reshaping care for older people, the move to 'coproduction' and 'assets-based' approaches. But in practice first horizon structures are preoccupied with the challenges of reorganisation and budget cuts.

Reflections: The project bid promised 30 patients would experience the new approach by the end of year one. There have been only six. It promised sufficient coverage to close a continuing care ward at the end of year two. The ward has been closed anyway. It is proving difficult to open up this kind of honest and personal conversation with older people. The need to record data and to get official consent to be part of the experimental programme makes it even more difficult. The programme tried to spread too far too fast: introducing this new approach successfully requires an intensity of effort. The personal

shift in practice can be painful – tears flow. But the stories told by the patients who have participated are heart-warming and humbling. This is not about the money. A little hope goes a long way.

Year Two ============

Results: 50 older people experience the new approach.

First Horizon Context: The Health Foundation offers new funding to appoint 'Clinical Champions' to help spread the new practice. The principal funder – essentially covering a part-time producer role (see page 65) – is now the Scottish Government's Joint Improvement Team with additional resources from their 'Change Fund'. This brings with it a new set of measures and accountabilities but no clear strategic coherence. The referendum on independence starts to dominate the political context. Microproviders in particular start to encounter regulations and 'red tape' in a regulatory system that never anticipated organisations operating at this small scale.

Reflections: The project bid promised 100 people involved by this point. There are only 50. But this is a slow, organic process: skyscrapers go up overnight while trees take time to grow. There is a dawning realisation that the conversation about 'personal outcomes' is an intervention in itself and boosts the capacity of the patient. BRAG – the social enterprise hub responsible for incubating the microproviders – offers tea parties for local older people and as a result starts to provide facilities for new community activities. Measurement of outcomes seems inevitably to be conducted on first horizon terms, particularly economic benefit. Yet an evaluation of the programme so far describes the change in practice as 'subtle but profound'. Peer support for staff changing their practice is found to be a critical ingredient – this is not just about picking up a new method, it is a personal shift.

SHINE: Changing the Culture of Care

First Horizon Context

Results – number of patients

Launch of SHINE programme.

Policy priorities match SHINE, but reorganisation and budget cuts command attention

Scottish Government takes over funding. Independence referendum campaign starts

Recognition – locally and in UK

H1 infrastructure starts to support aspects of SHINE

Health and Social Care integration about to go live. Elections in the spring. No significant transfer of resource H1 to H3

15,000 +

5,000

500

50

6

Initial Three Horizons conversation

Difficult to shift practice. Ward closes. This is not about the money. A little hope goes a long way.

Conversation itself is an intervention. Change in practice is 'subtle but profound'. Needs peer support.

Looks and feels remarkable. Video interview captures H3 culture in action. Proof of concept. "Integration for free".

Really working. Data now needed for improvement. Difficult to attract sustained H1 attention - too much else on their plates.

SHINE approach is scaling, embedding, and spreading to other areas of clinical practice. "This is the way we work now."

Next Phase: Need to move from producer to organisation, put in place infrastructure to support the new practice, concentrate more on the community dimension. Work to free up resources from H1, but beware that it is preoccupied with its own agenda for 'integration' and cost pressures in the system.

2009   2011   2012   2013   2014   2015   2016

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Year Three ============

Results: 500 people now experiencing the new approach.

First Horizon Context: Recognition. SHINE is beginning to attract attention in Scotland and more widely across the UK. Everyone is talking about personal outcomes; Fife is actually doing it.

Reflections: The project begins to look and feel significant. It is light on measures and evidence of economic impact – not for want of trying. It is difficult to gather data from frail older people and to measure 'results on the inside'. Patient stories are remarkable. One in particular, which has been captured on video, is powerfully moving and epitomises the new culture of care envisioned in 2009. Some first horizon support (including a little money) is materialising – with the explicit warning that it comes with a 'black belt in stifling the life out of organic initiatives'. In the overall policy context of health and social care integration, it is clear that the SHINE approach, configuring resources around the aspirations of the patient, delivers "integration for free".

Year Four ===========

Results: 5,000 people now experiencing the new approach. This is a conservative estimate based on sampling across Fife.

First Horizon Context: An existing 'Good Conversations' training package proves just right for introducing staff to the 'personal outcomes conversation' as a change of practice. Asset mapping begins in local communities as part of a wider ABCD (asset based community development) programme: the microprovider work can dovetail with this. Electronic systems in Fife are now adapted to take the notes/

records from the new practice. Still no first horizon institutional authority is ready to stand behind the 'Quality Mark' for microproviders.

Reflections: Everything is going well in the programme, except for engagement with senior managers and the quest to free up first horizon resources. The first horizon is under too much pressure. "You can set up a meeting with five senior managers months ahead of time, keep checking right up until the day, and in the event three of them will have to cry off – called away to other urgent business, off sick, dealing with family challenges, called in to see government officials and so on". In these circumstances we will just have to grow our own infrastructure. The data is now needed not to prove the new approach works but to manage and improve its performance. Social work – who have been working on the parallel introduction of 'self-directed support' – are now fully on board: "I feel like I belong".

Year Five ============

Results: Difficult to estimate. 200 people have undertaken 'Good Conversations' training and their caseload must be in excess of 15,000 people experiencing the new approach. SHINE is spreading beyond older people – to podiatry, musculoskeletal clinics, stroke units and so on. So it is more difficult than ever to keep track of coverage.

First Horizon Context: Health and Social Care Integration (marriage of local council and NHS) about to go live. Senior management preoccupied with that. Many local structures in flux or dismantled. Scottish elections in the spring. Further cost pressures anticipated. Concerns that SHINE may get caught in the

crossfire and that integration may bring in a new set of indicators that do not do justice to the SHINE programme. Still no sign of resource transfer from first to third horizons: finding the budget to keep the part-time producer on will be a challenge as in all previous years.

Reflections: Overall the story is one of *scaling* (increasing the numbers of people involved), *embedding* (making this approach 'the way things are done around here') and *spreading* (introducing the approach in other areas). Each new area adopts the approach in its own way. The embedding is subtle – there are changes in language in the workplace, and there is change in recruitment and induction processes.

Relationships are key to spreading, scaling and embedding. Joint training helps to establish relationships naturally. The quality of the personal outcomes conversations with patients is improving. They are aspiring for more – the patients' own sense of possibility is expanding, and there are now more options to work with their aspirations once expressed.

Patient stories remain inspirational. And records now on the electronic system mean real-time 'run charts' of data are available. Doggedness is identified as a key enabler for getting this new approach embedded: 'we don't give up'. There are some worries that key personnel are retiring or leaving for other roles: need to consolidate the infrastructure to support the new approach. That includes moving from a single part-time producer to a more robust organisation. But beware the danger of being 'captured' by the first horizon if we 'borrow' their infrastructure. There has still been no really robust evaluation in spite of best efforts. It needs time and money: both of these are in short supply. This really requires an external view.

Next Phase

The reflection day at the end of year five revealed that different parts of the system, and different individuals, are at different stages of the journey towards the third horizon aspiration. Some are just starting out with the new practice, others have been with it from the start – and are beginning to move on to other roles. Hence the primary concern to design a minimal working infrastructure, inside the wider system, to support the SHINE approach. Mirroring the producer competencies now supplied by an individual in an organisation would be a good next step (see page 65).

The community resource aspect of the approach has also taken a back seat to the change in practice by health professionals. It has been a tougher challenge. There has been no equivalent to the 'Good Conversations' training to support a shift in practice (only in Fife does this training include reference to community resource and microproviders). The money for BRAG Enterprises (the incubator for microproviders) ran out two years ago and now the Director involved from the start is moving on. It may be time to treat the community microprovider element of the SHINE approach as a new 'transformative innovation' in its own right in order to grow local capacity. A local currency may start a wider and richer local conversation, out of which a new creative integrity might emerge. Finally, other areas of Scotland are now interested in adopting their own version of the SHINE approach.

What Helped?

Interviews with the core team involved in the SHINE programme reveal a number of factors that have helped them succeed:

- Configure around commitment (IFF call this forming an 'integrity').

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- See the whole programme as an intentional shift in culture, including in how we think (thinking prompts, IFF challenge to expand ways of knowing, etc.).

- Conceptual coherence: it helps to have 'maps for the journey', including the Three Horizons map and the social learning cycle.

- Producer skills, not just project management.

- Support for each other – human, open and honest.

Further Reading – details at www.iffpraxis.com/ti

SHINE: Changing the Culture of Care

Appendix: The IFF Clan

IFF's international clan is a diverse group of individuals with different perspectives, disciplines, expertise, life experience and so on. They all share a commitment to IFF's work and to supporting each other as fellow members of a rich learning community. (Note: * denotes Founding Fellow)

Martin Albrow *   Fellow of the Käte Hamburger Kolleg, Bonn University; author of *The Global Age: state and society beyond modernity.*

Ruth Anderson *   Chief Executive, Barataria Foundation, Scotland.

Tony Beesley *   Conceptual artist and cartoonist.

Max Boisot *   Professor at ESADE, University of Ramon Llull in Barcelona; Associate Fellow at the Said Business School, University of Oxford. Author of *Knowledge Assets: securing competitive advantage in the information economy.* (died 2011)

Roberto Carneiro *   Former Education Minister; President of Grupo Forum, Portugal; UNESCO International Commission on Education for the 21st Century.

Napier Collyns *   Co-founder, Global Business Network (GBN), San Francisco, USA.

Thomas Corver   Corver Management Consultancy; former strategy coordinator at ING bank, The Netherlands.

Frank Crawford   Educator; former HM Chief Inspector of Schools in Scotland.

Pamela Deans *   IFF recorder; ForthRoad Limited, Scotland.

Roanne Dods   Former Director, Jerwood Charitable Foundation.

Kate Ettinger   Senior Fellow, Center for Health Professions, UCSF; Health Care Ethics Consultant-Mediator & Social Change Architect, San Francisco, USA.

Jim Ewing   Designer of practical strategies & methods for sustained transformational achievement. Author of *TransforMAP* and *Council*, conceptware and software for organisational development. Seattle, USA. (died 2014)

Brian Goodwin *   Schumacher College, Devon and Santa Fe Institute; author of *How the Leopard Changed Its Spots: the evolution of complexity.* (died 2009)

Bo Gyllenpalm   President SITSERV AB, Sweden; faculty member Fielding Graduate University, USA.

Timo Hämäläinen   Strategic Research Fellow, Finnish Innovation Fund, Sitra, Helsinki.

Mike Hambly *   Former Director, Scottish Enterprise; Chief Executive, Digital Animations Group, Glasgow.

Phil Hanlon   Professor of Public Health, University of Glasgow (retired).

Margaret Hannah   Director of Public Health, NHS Fife.

Pat Heneghan *   Director, ForthRoad Limited, Scotland.

David Hodgson   Co-founder, The Idea Hive and Connective, San Francisco, USA.

Rebecca Hodgson *   Researcher, IFF.

Tony Hodgson *	Director, Decision Integrity Ltd; World Modelling Research, IFF; Founder, H3Uni; author of *Ready for Anything*.
Robert Horn	Visiting Scholar in the Human Sciences and Technology Advanced Research Institute (H-STAR) at Stanford University and CEO, MacroVU Inc.
Kees van der Heijden *	Professor at Templeton College, Oxford; author of *Scenarios: the art of strategic conversation*.
Ken Ideus	Principal, I-Deos Consulting and Express Yourself; Chancellor & Co-founder, Mikesi University, South Sudan.
Adam Kahane	Reos Partners and University of Oxford, author of *Solving Tough Problems*, *Power and Love* and *Transformative Scenario Planning*.
Pat Kane *	Writer, theorist and musician, Glasgow; author of *The Play Ethic*.
Eamonn Kelly *	Chief Marketing Officer for Strategy and Operations, Deloitte; author of *Powerful Times: rising to the challenge of our uncertain world*.
Rajiv Kumar	Senior Fellow, Centre for Policy Research India; former Director General, Federation of Indian Chambers of Commerce and Industry.
Graham Leicester *	Director, IFF; co-author of *Dancing at the Edge: culture, competence and organisation in the 21st century*.
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About IFF

IFF (International Futures Forum) is a non-profit organisation established in 2001 to support a transformative response to complex and confounding challenges and to restore the capacity for effective action in today's powerful times.

At its heart is a deeply informed inter-disciplinary and international learning community of individuals from a range of backgrounds covering diverse perspectives, countries and disciplines. Over fifteen years this group has generated a series of powerful insights and concepts which have been progressively tested in practice with business, governments and communities.

This learning is brought together in the practice of transformative innovation. It is IFF's mission both to continue refining the practice in light of experience and to make the tools, processes, attitudes, frameworks and conceptual breakthroughs that support it as widely available as possible – fostering practical hope and wise initiative.

About the Author

Graham Leicester is a founder and Director of IFF. He previously ran Scotland's leading think tank, the Scottish Council Foundation, founded in 1997. From 1984 to1995 he served as a diplomat in HM Diplomatic Service, specialising in China (he speaks Mandarin Chinese) and the EU. Between 1995 and 1997 he was senior research fellow with the Constitution Unit at University College London.

He has also worked as a freelance professional cellist, including with the BBC Concert Orchestra. He has strong interests in governance, innovation, education and healthcare and has previously worked with OECD, the World Bank Institute and other agencies on the themes of governance in a knowledge society and the governance of the long term. He is the author, with Maureen O'Hara, of *Dancing at the Edge: competence, culture and organisation in the 21st century.*

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