

4. SYSTEM CHANGE

Managing bottom-up change is its own art.
Kevin Kelly

Plan for what will be difficult while it is easy.
Do what is great while it is small.
Sun Tzu

System change is not immediate. It takes time to switch. You do not move from the old operating system on your computer to a beta version of a new system until the latest version has been well tested and the bugs ironed out. So is it with changing our top-down urban systems.

A. PRINCIPLES

Here are a number of principles we need to have at the back of our minds as we move forward. They are not intended to limit thinking but inform:

1. Collaborate to innovate

At the level of whole cities and regions, system change necessarily happens with the public, in public. This brings challenges, but has transformative potential.

According to the Innovation Unit, an independent, not-for-profit social enterprise based in the UK, *'This means that we need to design and facilitate change processes that build coalitions for change, create shared purpose and make systems work better for everyone, converting potentially controversial policy problems into projects of collaborative innovation.'*

This consists of the following activities:

- **Citizen engagement**
Re-imagining what relationships with citizens might look like, through deep engagement with citizens whenever and wherever possible, will be crucial to success.
- **System leadership and governance**
Transformation requires strong leadership partnerships, but these are draining. Governance that supports the right behaviours can sustain change projects through tough moments.
- **Shared vision**
Successful system change is owned not only by its leaders but by the people and organisations that are affected by it. Defining a compelling collective vision is critical to generating this ownership.
- **Learning**

System leaders elevate learning, connecting it to system goals. This enables leadership to be a learning conversation rather than trench warfare, and supports those within the system to make change.

- **Roadmapping**
The management of change across complex, multi-layered systems can be extremely challenging. Making sense of this complexity requires a deep understanding of the mechanics of change.
- **Case for change**
Often innovators have an attractive future vision, but fail to convince people that the status quo is unsustainable. But if 'no change' remains an option, there will likely be no change.
- **Reinventing professions**
Radically different systems are impossible to achieve if the same people are asked to do the same things. Too often, strategies and practices are altered, but roles are left unchanged.
- **Metrics and measures**
Without changing the outcomes that a system is working towards, real change is very difficult. And by its very nature, qualitative change demands new metrics.

2. Evolution not revolution

Haste is never a good idea. It is often quoted that '*Too much change too quickly leads to a Darwinian mess*'. Move too quickly and nothing has time to sort itself out - equilibrium is hardly even approached before the equilibrium point is shifted. Doing this means that we are not consolidating our knowledge before we create another layer of disruption.

Some would argue that revolutionary change is just an extreme form of evolutionary change. Others would argue that revolution is a rapid, planned and deliberate action taken to change the order of things, for example a rebellion against an existing authority or government. Evolution could be an organic or planned progression of events. Progression is not necessarily rapid and could refer to natural development, the outcome of an idea or process. Whilst revolutionary change is often required in a system, it can be a sign of poor management that has been unable to instil a culture of evolutionary change in the first place.

Small progressive changes make a big difference. We must rediscover the art and process of urban evolution by unleashing the potential of countless bottom-up actions, all enabled by our top-down systems: balancing the roles and responsibilities of government and people, and building on their collective

strengths. We must learn by doing. Clause 4: Evolution not revolution (the Massive Small Declaration)

Research across many disciplines, including economics and the behavioural sciences, show that social systems improve most if they are allowed to evolve incrementally. In this way, actors and institutions can try things out, learn from their mistakes and improve their practice continuously over time.

3. Start by starting

The most effective way to do it, is to do it.
Amelia Earhart

In our traditional top-down world, the instinct is to 'get an expert' and 'develop a strategy'. So it starts with a long protracted brief-making exercise, follows with a long protracted commissioning strategy, continues with a long protracted study period and ends with a big comprehensive report. The report becomes the truth until the next report comes along but the likelihood is that the report is out of date the day it is completed. And so it goes.

We do not need a new big cumbersome and protracted change management strategy or more complex policies to make MASSIVE SMALL change happen - it just needs to start with our best shot and evolve it. Have faith that a small and dedicated team with experience of managing and solving complex urban problems and operating within a clear and coherent framework can be tasked with taking this shot.

"Don't think too much before you start working; and don't work too much before you stop and start to reflect." Nabeel Hamdi

The NEIGHBOURHOOD ENABLING MODEL, with its enabling CONDITIONS and its developmental TOOLBOX (outlined in the previous chapter) provide us with a structured way of breaking the full system into distinct levels and allow a process of progressive doing and learning to evolve. Remember the different levels remain largely static or may change slowly – it is the developmental tools that act as 'switches' between each of the levels that are constantly being reviewed and updated. By focusing on the 'switches' between each of these levels you can evolve the whole system over time using the 'switches' to influence its upper level and informing its lower. This makes systematic change more handleable.

So, it does not matter if the first shot is not perfect at the outset. It is probably better if its not. It needs time to mature.

4. Learn by doing

'For the things we have to learn before we can do them, we learn by doing them.'
– Aristotle, The Nicomachean Ethics

'Learning by doing', also called 'experiential learning', is an established approach in economic theory by which transformational change, such as increased productivity in the building industry for example, is achieved through practice, self-perfection and continuous minor innovations.

It is distinctly different from theory-based approaches, which pose hypotheses and seek to prove them. It's a far more simple and practical idea, but an extremely complex process that's different for every situation. To really understand how new ways will work, you need to try new things. You need rapid and continuous feedback – feedback from your environment and context. Insights from observers and onlookers. Ideas from talking things through. Basically, feedback from learning.

The cycle of doing and learning, learning and doing, acting and reflecting involves a kind of 'activist pedagogy' which is systemic to becoming skilful and wise. The purpose, given this setting, is to create their own knowledge, much in the same way as later, in practice, we would expect people to take charge of their own development.

Nabeel Hamdi

This 'learning by doing' approach needs, however, a well-structured framework in order to be really effective. For example, projects to get off the ground require a conducive enabling environment, where essential barriers are fluid. This is where the NEIGHBOURHOOD ENABLING MODEL and the approach to creating open, responsive and collaborative environments are important. They are set up as continuous learning mechanisms.

So in urban transformation, new things can be tried by people and, as they gain acceptance, be instilled as the new normal. They just need the freedom to try. Any new system must therefore allow and nurture this freedom.

5. Build a common information-sharing platform

"Democracy must be built through open societies that share information. When there is information, there is enlightenment. When there is debate, there are solutions". Atifete Jahjaga

Rational discourse depends on developing shared understanding of urban matters. This means building a common platform where learning is shared across the full spectrum of urban scales and with all actors in the system. Here, it involves ensuring that all communication and debate is structured around the enabling CONDITIONS of the NEIGHBOURHOOD ENABLING MODEL so that a common 'language' for cross-sectoral collaboration and sharing is established, overcoming the professional and cultural roadblocks that occur when individuals or groups create their own operational silos. The developmental TOOLBOX, as a shared set of gaming techniques and experimental models, plays an important

role in testing new ideas, evaluating them and sharing experience with others to help evolve the system.

Using this common understanding, we are able to promote openness, shared working, and joint ownership of ideas and solutions across all the sectors.

6. The permanent experiment

“There is no such thing as a failed experiment, only experiments with unexpected outcomes.” – Richard Buckminster Fuller

The current urban development model looks to justify change by calling it a pilot project as if this process of experimenting and learning is an aberration or is not normal. In moving away from a system that focuses on fixed endstates to one that sees trial and error, or emergent solutions, as the way forward, we must recognise that at no point is the new system static. Evolution shows how a neighbourhood as a complex adaptive system is highly responsive to changing conditions. By its very nature it is in permanent change, like a continuous experiment where we are constantly initiating, testing and accepting or rejecting outcomes as we learn about their success or failure.

‘Good reforms build on failed ones and learn from their mistakes. They are incremental and do not try to achieve ‘whole-system’ transformation all at once. They are based on existing best-practice, rather than trying to reinvent the wheel. Start small at first and then grow out across the system, allow for trial and error, do not change all of a system’s ‘tectonic plates’ at once but be clearly focused on driving through reform in those areas that need to change, and build coalitions to sustain reform over time. - Andrew Adonis

Within this context, failure is necessary to learn, so we must not be scared of it, but embrace it. The secret is not to fail ‘big’ by focusing on big single outcomes. It is best to learn from many small failures because we can unpack these easier and try other options. This is evolution at work.

7. Parallel running

“You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.” Buckminster Fuller

To implement the new system, a parallel running strategy can be applied in which the new system is run alongside the old system for a specified time. This should be long enough to ensure that all aspects of the new system are rigorously tested. Only when the new system is proved to be working correctly, the old system will be removed completely and users will depend solely on the new system.

Parallel running allows results to be compared to ensure that the new system is working without any unintended consequences. If problems are found, the user can refer to the old system to resolve the problem and make modifications to the new system thus operation can continue under the old system while the problems are sorted out. This also allows training of staff and help them to gain confidence in the new system.

Because we are not talking about a total operating system like a computer, it is possible to adopt a stepped approach to changing from one system to another when we look at our urban systems. If we adopt such an approach, it is important that we understand the shape of the new operating system we are migrating to.

So, a more effective way to change over our urban planning, design and development systems would be to put in place the organising structure of the NEIGHBOURHOOD ENABLING MODEL and start small. This can be done by limiting the focus of initial change to evolving the Toolbox- such as the universal plot, popular housing or the community toolkit – or on thematic issues such as temporary uses, suburban intensification or public space strategies. Either route can be used to initiate a parallel running strategy that seeks to:

- incentivise users to trial the new system by offering tangible benefits – speed, certainty and cost could be a few examples of doing this;
- show improved outcomes – like better community satisfaction, higher land values, better social outcomes;
- stimulate small ideas and actions through local competitions (with or without rewards) and trialling these alongside other local initiatives.

As some of these initiatives are proved to be working, there could be a phased shutdown of the old system to coincide with a phased switching on of the new system.

B. INITIATING CHANGE

People don't resist change. They resist being changed. -Peter Senge

1. Defining a simple purpose

The first thing to do is for government to define a simple purpose that will capture hearts and minds and galvanise action from the top to the bottom. Taking the concept of '*Making MASSIVE SMALL Change*' and establishing it as an overriding collective vision for development of our neighbourhoods, towns and cities could be a starting point. Here is a possible government manifesto that captures a simple purpose:

'MAKING MASSIVE SMALL CHANGE':

Our Transformational Goal for building urban neighbourhoods.

We are committed to radically transform the way we shape our town and cities to deal with the challenges of a continuously changing and increasingly complex world. Government cannot do this alone. It must work together with people to harness the collective power of many small ideas and actions to build a better urban society for all our citizens and scale these up over time. True urban society only evolves where compact urbanism meets human and social capital. If we can use the inherent creativity and goodwill that lies in people to build this compact urbanism, we will achieve even better outcomes.

We must focus on the urban neighbourhood as the vital building block of compact, socially diverse and mixed-use models of development for our metropolitan areas, cities and towns. Appropriately dense development with vibrant, connected public spaces, infrastructure and built form that are resilient, flexible and adaptable to cope with change over time are essential to deal with unpredictable future needs.

Government (at all levels) is best placed to provide the essential preconditions that will release the potential for good neighbourhoods to emerge over time. It does not have to do everything – we will facilitate putting on place the essential urban structure, grain and platforms in place to create truly open, collaborative and responsive environments. At a time when we need to do more with less, government must use the lightest touch. Given this support - and armed with effective ideas, tools and tactics - people can then help create viable urban neighbourhoods.

We believe that if we do this well then government and people, working together, will create far better social, cultural and economic outcomes that neither will ever achieve alone.

- The Secretary of State for Neighbourhoods

2. Taking it to the next level

This simple purpose can be expanded upon by adopting, adapting or recasting the '*MASSIVE SMALL DECLARATION*' as a guiding instrument and getting government, civic and local leaders to sign up to it. This is what it could look like.

This Declaration outlines the thinking, principles and behaviours needed to meet the future challenges of our towns and cities. Its 10 clauses are mutually reinforcing: none should be considered in isolation from others. They will evolve as new challenges arise.

Clause 1: A NEW COLLABORATION

We need to put democracy back into urbanism by building a new social contract between government and its citizens, based on trusting people to do the right thing. Governments can show the way by providing the protocols, conditions and behaviours to enable simple rules, emergent solutions and self-organisation to take root and flourish.

Clause 2: RADICAL INCREMENTALISM

With the future uncertain and the past spent and gone, we must stop fixating on imposed end states for our cities. Instead we must manage in the present. Focusing on catalysts and early beginnings; intervening in precisely targeted ways; and thinking in terms of the collective power of many small ideas and actions will make the big difference.

Clause 3: FREEDOM WITHIN CONSTRAINTS

We must allow for infinite possibilities by limiting choice. This means defining clear and simple boundaries within which people are free to organise, improvise and act. Structured choices promote the formation and growth of highly responsive environments, and provide a place's inhabitants with a full progression in life.

Clause 4: EVOLUTION NOT REVOLUTION

Small progressive changes make a big difference. We must rediscover the art and process of urban evolution by unleashing the potential of countless bottom-up actions, all enabled by our top-down systems: balancing the roles and responsibilities of government and people, and building on their collective strengths. We must learn by doing.

Clause 5: COLLECTIVE WISDOM

Smart citizens make smart cities. Data and technology should augment human intelligence, not seek to replace it. We must trust intuitive wisdom, avoiding the twin traps of reductionism and determinism. The city must always be seen as a constantly changing organism, not a mechanistic model capable of highly processed control.

Clause 6: ENABLING LEADERSHIP

We must challenge and reform the rigid command-and-control systems that inhibit people's ability to adapt their place to their needs. This depends on new forms of leadership that can work at the interface between top-down and bottom-up systems, promoting self-organisation and building social capital at every available opportunity.

Clause 7: A CODE OF ETHICS

True professionalism and civic leadership must be built on trust and commitment to do the right thing, and must be bound by commonly accepted behaviours. In signing up to these principles, urban professionals and civic leaders accept their responsibility to the well-being and continued success of all the inhabitants of the city they have charge over.

Clause 8: A COMMON PLATFORM

Rational discourse depends on shared understanding. We advocate a common understanding and set of values to overcome our siloed thinking and help everyone in the system share knowledge and take joint action. Using this common understanding, we must promote openness, shared working, and joint ownership of ideas and solutions across all the sectors.

Clause 9: A WHOLE-WORLD VIEW

The total human habitat exists as a dependent sub-system of the environment. It can not be isolated from the natural habitat, particularly when global issues are increasingly felt locally. We must build the foundations for viable and resilient urban life, and a responsible urban society where people influence and shape their own habitat.

Clause 10: OPEN TO CHALLENGE

We must avoid the danger of group-think and the myth of the single hero. We must foster diversity, complexity and continuous change, embracing different perspectives and evolving as needed. Our thinking must embed analysis and self-correction at its very core, always being open to challenge. The focus is praxis: where theory meets practice.

C. ENABLING MECHANISMS

Initiating system change means focussing on our three enabling mechanisms:

1. Changing IDEAS (thinking and mindsets)
2. Changing TOOLS (methods and applications)
3. Changing TACTICS (leadership and management)

To be effective, we need all of them to change.

This approach, with some obvious tweaks, should work in all countries (whether established or emerging) and in all sectors (whether formal or informal).

3.1. CHANGING IDEAS:

'People who think the system works, work for the system'.

Russell Brand

The most difficult thing to do is change thinking and, with that, changing mindsets. The default for many is the status quo, even though many believe the existing system doesn't work. Transformational change, however evolutionary, is not easy.

'The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking'. -Albert Einstein

This is how you can start:

At national scale

1. Establish *'Making MASSIVE SMALL Change'* the single national vision for forming neighbourhoods for all people in all places. Make it a rallying call to action. Give it a catchy name like *'Radical Incrementalism'* or similar.
2. Make it easy to understand, especially by civic leaders, and communicate by making it the common language of everyone so they can own and proliferate the idea.
3. Deploy it as a proven singularly super-powerful strategic instrument for accessible, broad-based and national economic opportunity and growth. Develop simple metrics to allow its success to be measured.
4. Use it as a cross-cutting theme to integrate all national government departments by concentrating impact of purpose, effort and funding to exponentially increase successful outcomes.
5. Empower all departments, officials and civic leaders to enable this vision. Integrate the departmental silos and get them to move towards strategic and coherent project delivery. Promote cross-department working and allow them to innovate.

6. Condense all levels of best practice and policy into this single collective vision. Always show by example. Tell simple stories of successes and failures.
7. Devolve responsibility for delivery of urban projects to the lowest levels of empowered urban society. Incentivise collective action at the local scale. Inspire a 'can-do' attitude. Show the sense of the possible.
8. Unpack complex policies and develop simple PROTOCOLS that could expand or be incorporated in new national policies. In other words don't lead with national policy, evolve it.
9. Develop an ENABLING LEADERSHIP support programme for all civic leaders at metropolitan, city and town levels to embed this kind of thinking in everything they do. Show how they can do it.
10. Establish an annual 'Neighbourhood' national holiday to relentlessly reinforce the 'MASSIVE SMALL' vision in the hearts and minds of all our people through celebrations and other events, awards, project announcements, citizen and government engagement and reporting and feed-back. Make it fun.

At metropolitan/city/town scale

1. Embed the 'MASSIVE SMALL' vision with its simple purpose at all levels of local government and evolve it to make it relevant to the particular qualities of the place. Call it *'The [Insert Metropolis/City/Town name] Way'* to reflect its fundamental interrelationship with the special qualities of the place.
2. Make it easy to understand by all citizens and communicate it by making it the common language of everyone so they can own, evolve and proliferate the idea.
3. Use it as a cross-cutting theme to integrate all local government departments by concentrating impact of purpose, effort and funding to radically increase successful neighbourhood outcomes. Empower all departments, officials and civic leaders to enable this vision.
4. Devolve responsibility for delivery of housing and social infrastructure to the neighbourhood level. Promote local economic benefits from local action. Build capacity amongst local builders and suppliers.
5. Condense all levels of local best practice and policy into this single vision. Make it accessible to all. Tell stories to inspire and accelerate action.
6. Develop simple PROTOCOLS that could expand or be incorporated in new metropolitan, city and town-wide policies. Don't lead with local policy, evolve it.
7. Develop an ACTIVE CITIZENSHIP programme focussing on a neighbourhoods development programme that looks to build ENABLING LEADERSHIP and collective action by communities.
8. Promote ETHICAL PROFESSIONALISM amongst all urban professionals and civic leaders. Build their capacity and change their ways of working and engaging with the public. Break down their traditional silos.

9. Develop demonstration projects that actively show how the enabling conditions are applied and development tools can evolve. Show by doing. Learn by doing.
10. Promote neighbourhood events and exhibitions on a regular basis, showing results of action and progress to include 'Meet the Leaders', drop-in workshops, showhomes, NGO liaison.

At neighbourhood scale

1. Tailor the 'MASSIVE SMALL' vision with its simple purpose for each neighbourhood and communicate the vision to all citizens as the 'sense of the possible'. Harness the collective power of civic action to bring about change.
2. Show how its benefits are quickly clear to everyone, and everyone can get behind it. Ensure that it is owned by all. Allow it to evolve.
3. Show how it works for the individual, the collective and the institutional. Promote a neighbourhood-based framework for action by all.
4. Develop a set of 'open' standards that establish the clear boundary conditions within which people can challenge these ideas, evolve them and instil even further innovation into the system. Make the boundaries permeable in order to not restrict creativity.
5. Promote an understanding of co-creative approaches where top down systems provide the responsive environments within which people can respond from the bottom up. Show examples and possible responses.
6. Identify clear rules of engagement to promote collaborative working between local governments, urban professionals and people. Show the roles and responsibilities of all parties.
7. Use active citizen engagement to evolve current complex urban policies into simple PROTOCOLS that generate action and are clearly understood by all. Create an easily accessible platform that people easily grasp. Always keep them open to challenge and don't tie it up in a web of complex policies.
8. Promote an adaptive and collaborative leadership style with an agreed ethos at all levels of community. Make this style and ethos publicly known.
9. Use rapid and continuous feedback to evolve these ideas and actions. Communicate these to a wider audience. Promote citizen engagement tools and/or social media as possible mechanisms for doing this.
10. Show how it is relevant to all by telling simple stories of how people have done this before and invite people to write their own. Share these.

3.2. CHANGING TOOLS:

“Monkeys play by their sizes. Smaller tasks mostly come with smaller challenges. If you are willing to take step-by-step methods to solve bigger tasks, you will easily overcome challenges that attempt to stop you! Go, give a try!”

— Israelmore Ayivor

Communicating how change could be implemented in an organised and acceptable way is the stumbling block to most forms of system change. No politician likes giving away power.

The NEIGHBOURHOOD ENABLING MODEL provides a starting point for changing top-down methods and applications through its five ‘enabling conditions’ (or levels) as well as its ‘development toolbox’ (or switches) that enable each level to inform and influence the other. These conditions can be used at all scales of government to guide this change as a prompt to develop your own way of doing things.

At national scale

1. Fix the five enabling conditions (levels) as the organizing mechanism for all forms of policy and protocols at all levels of government in order to structure settlements, direct funding and galvanise this vision as a common way forward.
2. Start with reforming the limiting convention of using tree-like road hierarchies for roads planning to become open, adaptive NETWORKS with hierarchical structures of main streets, boulevards, avenues and local streets (standard, shared and service). Produce the structure for a Neighbourhood Street Design Manual that can be adapted at local government scale.
3. Develop the Toolbox at the interface of NETWORKS and BLOCKS - something like CANVAS as a simple grid-based model for laying out neighbourhoods and allow this to be added to and evolved as lessons are learnt.
4. Show, by example, various types of urban BLOCKS and their arrangements to act as possible templates to be adopted or adapted at local scale. Produce a Block Layout Manual with different ‘tissues’ that can be easily used to layout urban neighbourhoods.
5. Develop a simple, standard and regular way of parceling land to allow further subdivision, opening up opportunities for all and providing structured choices. Develop something like THE UNIVERSAL LOT as a simple land-parcelling principle for subdividing urban blocks and allow this evolve as lessons are learnt.
6. Show examples of types of PLATFORMS based on open building systems that will help and initiate the transition from site development to built form. Develop and distribute a Generic Building Code as a simple instruction manual for adoption by local government.

7. Work with the building industry to develop something like DABS as a developmental tool that will act as springboard for building innovation and allow this evolve as lessons are learnt.
8. Structure a starter set of housing DEFAULTS as parameters for a range of popular typological housing solutions for different urban conditions and allow these to evolve at the local scales.
9. Start working with a few metropolitan, city and towns to test and evolve the NEIGHBOURHOOD ENABLING MODEL. Develop a sharing platform that enables local governments to learn from best practice.

At metropolitan/city/town scale

10. Adopt the NEIGHBOURHOOD ENABLING MODEL with its five levels as the organizing mechanism for all forms of policy and protocols at all levels of local government in order to structure neighbourhoods, direct funding and delivery. Give your best shot at developing a local neighbourhood-based framework for action and let it evolve. Give it six months.
 1. Develop and disseminate the development tools and train urban professionals and local civic leaders in their use in preparing neighbourhood plans. In addition to those below, these include the following or similar:
 - a. CANVAS as a local network development model.
 - b. UNIVERSAL LOT as a site subdivision technique.
 2. Ensure that all the local agencies concentrate on early intervention and not being obsessed with fixed end states that never arrive. Rather establish the preconditions for a new urban vernacular to emerge.
 3. Focus public sector effort on the first three enabling conditions that make up the Invisible Chassis – NETWORKS, BLOCKS and PLATFORMS - to help and initiate the transition from site development to built form at neighbourhood scale.
 4. Work with the local building industry to evolve DABS as a generic open building code with a simple instruction manual to maximize the effectiveness of the industry and reduce costs. Create a new breed of enabling developer to deliver parceled land and offer part-build solutions – accelerator sites, party walls, basic structure, shell-and-core, etc.
 5. Evolve the standard DEFAULTS to produce a range of popular typological housing solutions for a range of urban conditions and allow people to evolve these over time.
 6. Develop a POPULAR HOME Parameter Book as a simple manual to help return housing to a distributed system done by many - like it used to be. Let housing be incremental to make it even more affordable to many. Show how individuals have responded and share successes.
 7. Establish the principle of building social capital at every opportunity by developing a range of generic CATALYSTS that trigger social and collective action by local citizens.

8. Develop something like the COMMUNITY TOOLKIT that show how by example how these catalysts can work and allow this to evolve as lessons are learnt.
9. Create simple instructional manuals to guide municipal officials and support emerging property and construction related businesses need easily accessible, and directly understandable and useful information to enable them to act:
 - a. Neighbourhood Street Design Manual
 - b. Neighbourhood Block Layout Manual
 - c. Generic Building Code

At neighbourhood scale

1. Embed an understanding of the NEIGHBOURHOOD ENABLING MODEL within the community as the organising mechanism for all forms of collective community action. Use the integrated neighbourhood-based framework for action as the single driver for change.
2. Establish the use of standard DEFAULTS as a way of scaling up housing delivery at neighbourhood scale and define fast-track approaches to achieve planning approvals. Establish the rules to break the rules and show alternative pathways.
3. Work with people to evolve a local version the POPULAR HOME parameter book as a local urban vernacular response that produces the best outcomes within local constraints.
4. Develop and deploy the use of CATALYSTS to promote collective action through examples such as building groups (baugruppen), sharing economy, co-housing and civic action strategies.
5. Train up and build capacity in the local community in potentials that arise from use of the COMMUNITY TOOLKIT. Trial projects and programmes that harness community assets, build local social capital and foster sense of belonging in neighbourhoods.
6. Create a Neighbourhood Challenge Fund to harness people's inherent creative abilities to solve their own urban problems. Small-scale funds can be directed to co-creative projects by making the process exciting and competitive. This will get communities to self-organise around the problem and with this, social capital will be built and valuable relationships will form.
7. Build catalytic projects to benchmark development, provide exemplars and accelerate change. Use temporary uses to test new ideas. Build collective community action through every aspect of urban infrastructure and housing development.
8. Promote the concept of scale free institutions so schools can start and evolve, spaces can be shared and all the assets in a neighbourhood can be deployed.
9. Evolve the TOOLBOX through rapid and continuous feedback from the local community. Use community engagement applications, social media

and local press channels to achieve this.

10. Engage community in producing neighbourhood plans that will ensure open, responsive and collaborative environments. Allow these to evolve.

3.3. CHANGING TACTICS:

Transforming top-down leadership and management from a command and control model to an enabling leadership ethos requires a bold and brave move by governments – but it is the only way to organise complexity. It starts with a fundamental belief that most people can be trusted and the majority conform. It also recognises we must put aside our obsession with certainty and embrace unpredictable outcomes. It also recognises that we need dedicated agencies and committed agents to accelerate and deliver this change. This requires different actions at different scales:

At national scale

1. Create a senior government post for Neighbourhoods with responsibility for all planning, housing, community development and local economic development functions. Make this department responsible for single budgets that can be deployed directly to the neighbourhood level.
2. Establish a small, dedicated transformation unit (TUNIT) as a permanent structure, answering directly to the relevant Neighbourhoods government leader, to support and accelerate this kind of transformational change.
3. Get the TUNIT to set simple targets and realistic trajectories and ensure they are met. Provide the metrics to evaluate success and recalibrate targets and trajectories if necessary. Establish simple routines.
4. Establish a Neighbourhood Enabling Agency (NEA) as a delivery-focused national agency with branches in all local and metropolitan authorities as the primary vehicles to coherently deliver the vision in areas of change. Direct all public sector for neighbourhoods through this agency.
5. Demand an obsession with and capacity to deliver. The NEA must be like a hit squad that is only focused on achieving many results. Get some talent and experience in there. Appoint wisely. Put NEA offices and their Heads on staged 5 year contracts to ensure they deliver positive change.
6. Consider establishing a State-owned Citizens Bank to by-pass commercial bank inner city 'red-lining' and high-risk aversion to certain areas. Removing this barrier by creating a focused no-security lending institution would immediately bring those currently excluded from it into the Inner City property market.
7. Put all available government land into a central portfolio and make it available to local government for use in developing new neighbourhoods and urban extensions. Make it a proviso that government land is only

released in smaller parcels. Use the enabling conditions outlined in the Invisible Chassis or similar to ensure this happens.

8. Dramatically reduce and substitute public sector funded and/or approved mega-projects with new form of 'radical incrementalism' by people on the ground. Direct all funding to achieving new and evolved urban NETWORKS, BLOCKS and PLATFORMS, focusing on initial intervention rather than providing the full spectrum.
9. Government must think creatively about how established parastatal and charitable housing associations can play a bigger role in building neighbourhoods and not just in building social and affordable housing. This could include a greater role in enabling development - loan guarantee funding, short term accommodation during the construction process, provision of community infrastructure and shared ownership, amongst others.
10. Promote local economic development through promoting hyperlocal benefits - local procurement practices; development of local enterprise hubs; indirect investment in local supply chains; approaches to maintain capital in the local economy. Allow risks to be taken.

At metropolitan/city/town scale

1. Dedicate a small transformation unit (TUNIT) as a local agent of the government's TUNIT as a permanent structure, answering directly to the civic leader, to support and accelerate this kind of transformational change at this scale.
2. Get 12-20 people around a table to define the simple rules for a start in places facing change. Have a draft out in a month. Tweak it and evolve it within six months. Foster urgency. Have first successes in one year.
3. Protect and incentivise the small. Focus on the small guys. Make many developers, many small builders and many community makers. A multitude of small physically concentrated projects provides mega-scale broad-based economic access and opportunity
4. Embed NEA's at local government scale in all areas of urban change. Give them a clear role in facilitating change - assembling land and parceling it; coordinating infrastructure; opening up new access to land; demonstrating possibilities and disseminating best practice. Release the potential of housing for all to help deliver.
5. Focus the greatest efforts and investment exclusively on areas where the greatest potential of broad-based rapid economic access and growth can occur, where infrastructure already exists and where zones of change can be well connected - areas adjacent to urban cores, former industrial land, low-rise suburbs and along radial spines. Focus on walking and public transportation as the primary measures of urban accessibility
6. Maximise the potential for immediate visible change in these areas by focusing on replicable, scaleable and high impact projects that inspire action by others.

7. Identify priority zones, routes and public spaces where concentrated action and funding can be channeled. This could include a series of urban blocks, a main street, an urban park, amongst others.
8. Allow the suburbs to intensify incrementally. They are doing it anyway, despite government. Show a creative way of dealing with the backyards challenge.
9. Enable and direct private sector responses through clearly targeted grants and by demonstrating fast track ways of getting planning consents for proposals that will achieve the desired outcomes.
10. Authorities must act as enabling leaders, using their funds and resources to make things happen. Develop a metro/city/town-wide housing association-type structure that offers 'staircasing' (shared equity) for people starting up or scaling back. They could act in a loan guarantee role to derisk projects for commercial lenders. This will unlock much more finance.

At neighbourhood scale

1. Promote self-organisation at every level – from special interest groups through to street committees, community organisations and neighbourhood forums. Make them proactive - 'doers' not 'stoppers'
2. Actively collaborate with citizens, groups and NGO's to help define and deliver urban renewal projects by working alongside them.
3. Seed projects. Let things evolve. Manage in the present. Be nimble and agile. Develop simple rules to harness collective and spontaneous action.
4. Promote small beginnings and scale these ideas and actions up to create big impacts. Start with a single action in each neighbourhood with visibly and experientially radical impact on everyone.
5. Mobilise all community assets – physical and human. Start by starting. Learn by doing. Then share, share, share!
6. Show how government and people can work together more effectively. Incentivise and reward collective action and recognize enabling community leadership. Offer prizes for innovation.
7. Identify stumbling blocks and find ways to ease complicated processes. Promote automatic approvals. Shift effort to making things happen. Make urban planning relevant again.
8. Establish citizen advisory groups providing critical feedback to TUNIT's and NEA's. Publicise their findings. Be open and transparent.
9. Engage citizens and neighbourhood groups in participatory budgeting to show how best to provide public facilities and services. Link this to crowdfunding initiatives, 'services-in-kind' and community action to jointly deliver urban projects.
10. Develop a new social contract between local government and citizens, clearly spelling out roles and responsibility and codes of behaviour. Use local community charters – 'We will if you will' - to formalise this process.

D. CHANGE AGENCY

Delivering a government's transformational goal for building urban neighbourhoods, based on the *'Making Massive Small Change'* manifesto – as can be seen from the previous chapter – requires government's systems to change. To do this, we suggest that government establishes two distinctive but closely interrelated change agents, each working towards system change and accelerated delivery and both bound by a simple common purpose. They are deliberately kept separate for clear reasons. They require different mindsets; different rules of engagement; different hierarchies of responsibility and accountability; and, different relationships within their national and local government leadership and their relevant departments.

In an ideal world, these change agents should include:

1. **a TRANSFORMATIONAL UNIT**, whose purpose is to change the urban planning, design and development system into an integrated neighbourhood-based framework for action and imbed the targets, trajectories and routines associated with this framework in national, metropolitan, city and town-wide leadership.
2. **a NEIGHBOURHOOD ENABLING AGENCY**, which is a hands-on delivery agency whose sole purpose is to initiate and accelerate the development of urban neighbourhoods by delivering on the targets, trajectories and routines set out by the TUNIT in their integrated neighbourhood-based framework for action.

As stated above, this approach, with some obvious tailoring to specific contexts, should work in all countries (whether established or emerging) and in all sectors (whether formal or informal) – global north and global south.

1. CREATING A TRANSFORMATIONAL UNIT

Sir Michael Barber, the author of *Deliverology*, makes a telling point. *'Don't depend on generic civil service reform because you don't have the time.'* In other words turning around the massive container ship of state, loaded with government's bloated policies is incredibly difficult. The system is just too big to be agile. Turn too sharp and it all topples over with disastrous consequences. More importantly, take on the whole system and you are doomed to failure and besides, most politicians, schooled in their short term thinking, will steer way from total revolution.

His solution is to create a small, dedicated unit, whose role is to constantly challenge performance and ask difficult questions, constantly pushing for faster progress knowing full well that the tendency of any system is towards inertia. It is like a 'Nudge' Unit making progressive changes and 'fine-tuning the system'. It is not a delivery agency or project management group, which is short-term in

nature, but a permanent structure – operating as an extension of national and civic leadership. We have called it our Transformational Unit – a TUNIT for short.

In our world, the TUNIT is tasked with delivering on the government’s transformational goals. At the outset, it must embrace and embed the structure of the NEIGHBOURHOOD ENABLING MODEL with its five enabling CONDITIONS and its development TOOLBOX - in every aspect of top-down system change. This is to build a common language and platform for cross-sectoral collaboration that can be shared with all other agencies, including the Neighbourhood Enabling Agency. Once the structure is embedded in a clear framework for action, the new system can evolve as it learns by doing.

The TUNIT must operate at two levels:

1. At national where it has a direct relationship to the top level of government leadership, and
2. At metropolitan, city or town level where it has a direct relationship with civic leadership.

Barber points to three actions that we have adapted to the focus on transformation of national and local policy on urban neighbourhoods:

1. Assemble an agile independent team with the best minds

The team should share the following key organisational and design attributes:

- **Enabling leadership** with a respected full-time delivery leader who reports directly to the leader of the public sector organization what system. Rather than exerting its own authority the delivery unit act as an amplifier of the system leaders authority, providing a careful balance of support and challenge to those responsible for implementation.
- **Limited size** which insures that the team is small enough to preserve flexibility, activate team working or and promote group dynamics with a cohesive culture.
- **Top talent with five core competencies:** problem-solving, analytical thinking, relationship management, responsiveness to feedback and a delivery mindset (a ‘can do’ attitude).
- **Operating outside their system’s line management hierarchy.** This independence will allow the unit to be a ‘critical friend’ that delivers difficult messages but also sustains trust and credibility with all the actors in the system.

2. Set a framework for action

Effective public-sector system change means focusing on the most critical outcomes and avoiding ‘firefighting’ and involves the following tools:

- a. **Simple Targets**, which are a prioritised set of measurable, ambitious and time-bound goals. This means setting targets, brokering negotiations with relevant public-sector agencies and ensuring prominence of these targets for the entire public-sector system.
- b. **Realisable Trajectories**, which are a projected progression towards these goals that creates a tight link between planned interventions and

expected outcomes. Trajectories serve as a tool for understanding a system's progress towards its target and allow for meaningful debate as to whether a target is both ambitious and realistic.

According to Barber, two approaches can be used to help ground targets and trajectories to be measured:

- a. **Benchmarks** through historical comparisons, internal and external peer comparisons; and
- b. **Interventions** which requires having some evidence of the impact of particular interventions and extrapolating these to the whole system.

3. Develop simple routines

One of the most important functions of the unit is to establish and maintain routines – regularly scheduled and structured opportunities for the system leader and implementation agencies to review performance and make decisions. Routines work because they create deadlines, which in turn creates a sense of urgency.

Barber recommends three distinct routines they vary in frequency, audience, format and type and depth of information they provide:

- a. **Monthly updates**, which allow for agencies to engage in timely problem-solving and course correction.
- b. **Quarterly stocktakes** which are used to demonstrate the civic leader's commitment to the delivery agenda allow the system leader to hold individuals accountable for progress on targets, discuss options and gain agreement on action needed. It also allows for best practice to be shared, success to be celebrated and new protocols to be developed.
- c. **Annual Reviews**, which are in depth assessments on the status of all system's priority areas. These allow civic leaders to compare progress across priorities; identify actions for relevant departments; and reassess the allocation of resources and attention based on each priority areas need and distance to targets.

4. Post-implementation review

After implementing system change, comes the post-implementation review phase to:

- determine whether the targets and trajectories of the new system have been met; if the new system is running differently from the proposed objectives, the problems need to be determined and further modifications to the new system should be carried out. This is to make sure that the new system is capable of doing the tasks it is designed for.
- ensure that the users are using the system correctly and routines are being adhered to; the reports should fulfil their purposes.
- make sure the system is maintainable and flexible; further improvement and additional features to the new system can be done.
- determine the flaws in the development process so that future systems can be improved; avoid the same mistakes from happening again.

2. CREATING A NEIGHBOURHOOD ENABLING AGENCY

The concept of a neighbourhood enabling agency is one of a highly-focused, committed and agile organisation empowered by national and local government to make things happen. Its purpose is to deliver on the government's transformational goals for neighbourhoods within the framework for action set out at the national scale by the TUNIT and evolved locally to work best.

In terms of its activities:

- It acts at the interface between government and people at every scale of neighbourhood formation.
- It facilitates the formation of open, responsive and collaborative urban environments that build compact urbanism with high degrees of social capital.
- It cuts away red tape and shows pathways to progress - promoting action, showing by example and sharing this experience.
- It creates the essential enabling conditions for individual and collective response by active citizens.
- It ensures that those that follow have the tools, resources and authority to implement.
- It is 'can do' and 'will do'.

Rowing, steering and cheering

The NEA does not do everything (and nor should it). It plays different roles in differing aspects of the enabling CONDITIONS outlined in the NEIGHBOURHOOD ENABLING MODEL, where the different levels move progressively between the role of government to those of people. These roles can be seen as 'rowing' (actively implementing); 'steering' (directing and coordinating action by others) and 'cheering' (encouraging others to take responsibility).

Government's primary role lies in intervening early to ensure the first three enabling CONDITIONS – what we call the INVISIBLE CHASSIS is effected. As the government progresses through the different levels of the NEIGHBOURHOOD ENABLING MODEL its role diminishes, but this is counteracted by an increasing role of people in the later levels of the model.

This is how the respective roles could work to complement each other:

1. On NETWORKS [Rowing]

Government is best placed to plan, design and develop all aspects relating to this condition although they could work with major landowners who are interested in providing an enabling developer role. This could include providing or procuring the street networks, infrastructure systems and integration of services at neighbourhood scale. Here the actions of the NEA are to act in an area-based role coordinating national and local government service functions to achieve an integrated approach to urban structure and infrastructure development.

2. On BLOCKS [Rowing/steering]

Government is best placed to coordinate the delivery of development land and parcel it up to the local market. This could include acquisition of land and release of public-owned land to achieve an integrated and coherent urban fabric. Clearly government could also work in partnership with private land developers to achieve this integration and coherence. It could also include working with existing homeowners in opening up new backland to intensify suburbs.

3. On PLATFORMS [Steering]

Government provides a leadership role in steering the building industry and supply chains towards open building approaches. This could include the design, specification and procurement of building structure from larger contractors best equipped to deliver major structural solutions. It could also involve working with the local 'shack-building' industry in informal settlements or in developing starter packs such as accelerator sites, basic service cores and corner buildings.

4. On DEFAULTS [Steering/cheering]

Government plays a 'seeding' role in setting up the framework of structured choices through development of a starter parameter book. This is further developed by people in response to their experience. Government helps to share this innovation and evolution with the wider community.

5. On CATALYSTS [Cheering]

Government can provide a starter catalogue of potential catalysts to trigger community action but is not best placed to take a major role in developing these further. Here people are best suited to experiment, innovate and learn by doing. Government can however assist in communicating these to a wider audience.

Operating at different scales

The NEA must not be an arms length government agency operating at the regional scale. They will be much more effective embedded in local government where they can take on a full area-based integrated role that currently lies in the domain of the traditionally-siloed service departments. Ideally, the NEA should operate at three scales but in only in two levels of governance:

1. At national scale

Here it acts as the top-level of national government providing:

- an umbrella organisation for agents working at metropolitan, city or town wide scale, assisting in the embedding, application and evolution of the elements of the NEIGHBOURHOOD ENABLING MODEL.
- a central coordinating role for budgets, allocation of resources and national level infrastructure projects.

- a critical role in coordinating the assembly and release of publicly-owned land for purposes identified for neighbourhood development
- a common platform that collects experience from others, initiates action-based research, works closely with building industry, monitors and reviews successes and failures, develops best practice and shares this with others.
- An essential role in developing urban policy and protocols to scale up and improve neighbourhood development at all levels.
- the interface between the national TUNIT and local governments to review targets, trajectories and routines and take remedial action.

2. At metropolitan, city or town scale

Here the NEA operates under the delegated authority of local government as the second hierarchical level, providing:

- an umbrella organisation for agents acting in the field that assists in the embedding, application and evolution of the elements of the NEIGHBOURHOOD ENABLING MODEL.
- a coordinating role for budgets, allocation of resources and local level infrastructure projects, and providing the local support network of other local government departments.
- an area-based project role on thematic issues - such as new neighbourhood extensions, suburban intensification, housing estate regeneration - by directing agents towards projects and places where there is an identifiable and accepted need.
- an active role, working with other local government agencies, in planning, procuring and delivering NETWORKS as the precursor to viable neighbourhood development.
- a critical role in coordinating the assembly and release of publicly-owned land for purposes identified for neighbourhood development at the local level. This includes planning, designing and delivering urban BLOCKS ready for release to individual, collective or institutional developers.
- an enabling development role to ensure implementation or procurement of the necessary services infrastructure.
- An interface with local building industry and supply chains to provide and develop PLATFORMS for open building systems that work for all.

3. At neighbourhood scale

Here the NEA acts as a local agent of the metropolitan, city or town authorities working on the ground in local neighbourhood offices, providing:

- A direct interface between local government, civic leadership and active citizens providing the essential citizen engagement role. This means being the first point of contact with local residents engaged in urban regeneration programmes or neighbourhood

intensification projects or with incoming settlers to a new neighbourhood extension.

- A close working relationship with urban professionals, building industry bodies, local government service departments, NGO's and active citizen groups on the application and development of the TOOLBOX.
- An active role in releasing and parceling new development land using the Universal Lot concept. This could also include working with street committees on opening up access to rear of properties to facilitate backland development or, working with housing estate communities on restructuring an area to deliver effective transformation.
- A direct and early role in building flexible-use corner buildings that benchmark development in the area. These could act as local community hubs and accommodate such uses as meeting spaces, local enterprise space, secure storage, short term accommodation, starter schools or crèches. These could evolve into a range of uses including local shopping, workspace, community infrastructure or affordable housing as the neighbourhood matures..
- A facilitation role in helping people in the early stages of building or procuring their own housing by providing short term accommodation during the construction process; easy access to cheap (or recycled) building materials through bulk-buying deals; project management assistance
- A technical assistance role in providing advice to prospective homebuilders; liaison with local building industry; lists of suppliers; assistance in plan-drawing and permissions; development of parameter book housing types; and, help in trouble-shooting.
- An initiation role for new area-based projects providing a range of demonstrator or starter projects to generate urban change. This could include the procurement of serviced land, building structure (such as accelerator sites) and showhomes.
- An interim role, in the case of unserviced lots, in providing essential water supply and waste removal prior to second phase infrastructure development. Here there role is to work with local people and suppliers and installing basic services, using this process to build local social capital and capacity.
- An essential role in communicating, developing and using CATALYSTS to facilitate local community interaction in every form. This includes promoting self-organisation and collective action.
- An enabling role in neighbourhood management, participatory budgeting and fostering local democracy during the transformation process that could evolve into a more permanent structure as the neighbourhood matures.
- A direct role in managing budgets; reviewing targets and trajectories; recalibrating routines; monitoring local feedback on projects and sharing best practice and innovation.

The principles outlined above could be applied to any place and modified to suit local circumstances. It provides a template that can be adopted, adapted or restructured.

E. A FINAL WORD

These are 10 don'ts we always need to keep in mind and we move forward

01

Don't try to command and control every outcome.

- Sometimes unpredictable outcomes are better than we could ever imagine.
- Don't continue with current deterministic practice of urban planning as the driver of our spatial imagination, design and implementation. It is a discipline invented in the Modernist/Garden City period to serve the premise that functionally separated zoning has superior benefits, oversimplifying the realities within which economic, social and cultural exchange thrive.
- Focus on creating the simple, fundamental constraints within which creativity, innovation and responsive action will flourish. Don't overconstrain.
- Let people discover their own solutions. Don't impose with restrictive rules and deterministic tools that stifle response.
- Focus on the early conditions that give rise to successful neighbourhoods.
- Manage in the present. Use rapid and continuous feedback to assess effectiveness of outcomes and make small changes as needed.
- Focus on enabling civic leadership that cuts red tape and makes things happen.

02

Don't use reductionist practices.

- We must focus on the whole place not its parts. It is easy to see things in isolation and treat them accordingly.
- We must not be held to ransom by the car. Stop the dominant influence of roads engineering in municipal and metropolitan authorities. Many of their actions prevent good urbanism at the outset.
- Don't see 'good design' as the single conquering solution. It matters but only as part of system that promotes evolutionary design within clear constraints. It is not just about design from first principles.
- We need to move away from the lure of "mega-projects" as a cure all and recognize their inevitable failure to solve the needs of the economy, citizens and municipalities. They will definitely undermine social integration, fiscal sustainability and the capacity of the growth engine of the economy; our cities towns and neighbourhoods.

03

Don't allow exclusiveness. Build community

- Stop, or severely tax, the construction of gated residential, office, retail, educational, health and recreation 'developments'
- The gated response to real security concerns are more damaging and less successful than other more viable alternatives. Gated communities are very seldom 'communities' in any meaning of the word.
- In the best traditions of urbanity we must foster inclusivity and build community in all its forms.
- Constrain the urban edges of settlements - pushing inhabited land use into the remote urban periphery removes the land potential from peri-urban agriculture and/or natural habitat retention and further excludes the poor from economic opportunity.

04

Don't continue the promise of housing as an entitlement.

- Authorities think they can solve the problem by only building their own housing. It never worked and it only made the poor poorer.
- Let them focus on building catalytic projects that stimulate action and provide models for development.
- Everything they do must be directed to helping people realise their dreams. Give them every support in this process.
- Promote long-life, loose fit solutions for housing for everyone, in all places at any stage of their life.
- Provide a set of structured choices that will evolve within defined constraints and get better as we learn more.

05

Don't get caught in the headlights of housing numbers.

- Housing must move from a problem to be solved to a potential to be realised.
- Just focus on the many small actions and see how quickly they add up to the big numbers.

- Widen the spectrum of housing players to include the individual, the collective and the institutional. Open up many fronts and don't dwell on the big guys alone.
-

06

Don't allow any more new towns.

- New towns are symptomatic of big thinking.
 - They focus on exclusivity and promise an antidote to urban problems, but in many ways creating just a new set of problems.
 - Idealised new towns have never provided us with the quality of life we expect from our settlements and by their very nature, are unsustainable.
 - They deflect us from our true goals of solving the problems in established urban places where they will make a big difference.
 - Eco-towns and Garden Cities are not what they profess to be. They are just suburbia with fancy names.
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07

Don't be obsessed with risk

- We have created systems of procurement and processes of auditing outcomes that can only be gamed by the big guys.
 - The best way of derisking is to focus on many small players and provide simple rules for engagement, recognising that if a few fail we can rapidly learn from our experience and make suitable changes.
 - Failure must be recognised as an important component of learning. It is essential to fostering a climate of innovation.
 - People can be trusted. Civilisation rests on the fact that most people do the right thing most of the time.
-

08

Don't see 'bigness' as a solution

- 'Big and bold and effective' need to be decoupled as ideas. A 'mega-project' is not a synonym for a 'catalytic project' and they have the inherent capacity to become 'mega-catastrophes'.
- Many extended public works programs, and other mega or major infrastructure projects, only provide short-term jobs and have low level broad-based catalytic impact.
- Emerging and aspirant property developers, builders and building suppliers, civil engineering contractors, building managers, built environment professionals, property agents and so on can't succeed in

either an environment dominated by the 'big players', nor where suitable scale projects tend to be remote and therefore expensive to run and benefit from management guidance and support.

09

Don't call it a pilot project. It is always a start

- We are in a state of permanent experimentation and learning.
 - We are managing in the present and are getting rapid and continuous feedback.
 - Don't be afraid to experiment, fail and try again. Many small experiments, by many actors is more likely to find us many viable solutions.
-

10

Don't give up too early.

- This call is for paradigm shift. It is not easy but there is no alternative.
- Things take time to bed down. Sometimes time is the best tool we have.
- Working like this requires resolve.
- Don't be swayed by the big guys. They will always convince you that that they can solve the problem. They never have.
- Remember, watchful anticipation is an important factor for managing complex adaptive systems