



MEGACHANGE

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Introduction

Federal agencies increasingly must manage and coordinate “megachange” initiatives: complex multibillion dollar change initiatives that require interagency, intergovernmental, public-private, and/or international cooperation. This Guide presents and describes how to use the Megachange Profiler, a tool to enable megachange leaders to adopt appropriate strategies for managing their complex megachange initiatives. The Megachange Profiler enables megachange leaders to (1) systematically assess the key critical factors associated with most megachange initiatives and (2) analyze the applicability of various strategic approaches for encouraging and shaping the megachange initiative among multiple stakeholders and constituencies.

A Working Model

This Guide is our best attempt – based on three years of research and work with two government agencies – to provide a useful tool to megachange leaders in helping them formulate and build consensus around joint strategies among the multiple stakeholder organizations typically involved in megachange initiatives. However, we fully recognize that this is still a “working model” that will almost certainly need to be revised and customized based on actual further use. This includes the quantity and definition of the variables, the look of the Profiler, and the methodology we are proposing in this Guide for its use. We invite the reader to join us in our research partnership to continue to refine and improve this model.

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Background

Why is “Megachange” Important?

As society becomes more networked and interconnected, many of the goals shared by the public, government bodies, corporations, and other organizations can be met only through the concerted action of numerous organizational entities. Some “megachange” initiatives, such as reforming education and health care delivery, are inherently complex because they entail functions performed every day by myriad public and private enterprises. Other initiatives, such as homeland security and emergency planning and response, must cope with threats that can exploit the seams between organizations unless these organizations work together carefully.

The need for concerted action on a large scale is not new. There are a host of collective activities for which society has coined names, including alliances, coalitions, cooperatives, virtual enterprises, federations, interagency working groups, coordinating councils, cartels, syndicates, marketplaces, and networks.

What is new is the urgent need to manage large-scale megachange across organizations rapidly and successfully. Western civilization is ill-prepared to meet the threats of chemical, nuclear, and biological terrorism based on classic bureaucratic structures and traditional ways of doing business. We must learn from the successes and failures of past and present change initiatives involving multiple organizations.

Megachange Case Studies

The Megachange Profiler was initially tested with senior managers who were leading two

megachange initiatives led by a Government agency charged with certain aspects of emergency preparedness and response. Later the MITRE research team led a third application to a megachange initiative led by the management team of a different agency focused on transforming participation in clinical research. All three of these studies are documented in papers published internally by MITRE.

The Brookings Institute study how state-level health information exchanges (HIEs) are implemented, where there are opportunities for action and who drives policy change. This paper, authored by Darrell West and Allan Friedman, looks at the current climate for organizational change and study the challenges faced by HIEs and how new technology is moving forward to overcome them; the scholars argue that for these megachange efforts to be effective, policymakers must present a clear vision, achieve consensus on key objectives, overcome organizational and market fragmentation, and work effectively with a range of different constituencies. In particular, this paper addresses the effectiveness and viability of HIEs in Indiana, Massachusetts, New York, Tennessee, and California and explores why Massachusetts and Indiana are most successful across a number of metrics. CTI also hosted a forum on HIEs to discuss the paper. The paper can be found at <http://www.brookings.edu/research/papers/2012/02/08-health-info-exchange-friedman-west>

This is a methodology “in progress” and we fully expect to continue refining both the model and its methodology as we gain experience in its actual use.

Megachange Profiler Overview¹

The Profiler identifies eight key variables agencies can use to determine the best strategies for managing individual changes that must be made to accomplish overall megachange initiatives. Each variable falls into one of four quadrants, each

representing a particular change context. This Section describes the variables in each context and some suggested starting points for strategy formulation based on the level of risk specified for each variable.

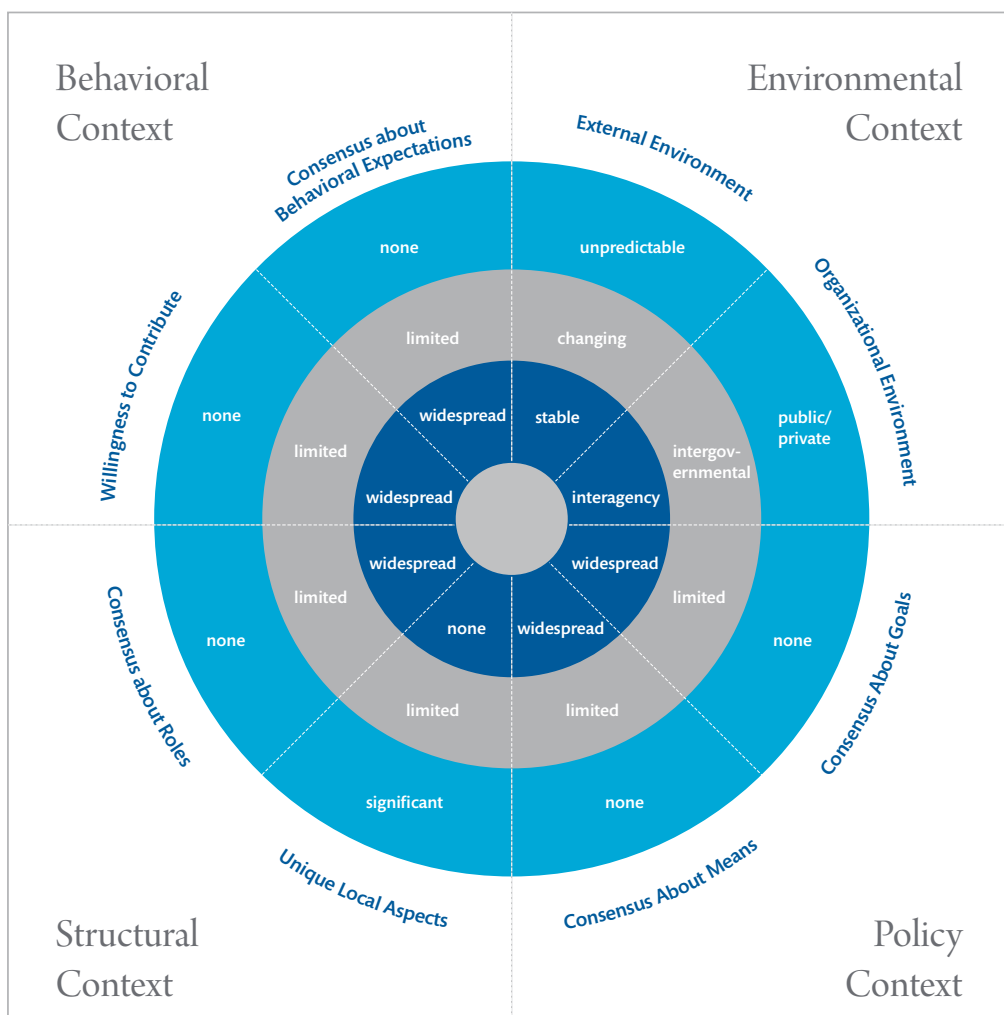


Figure 2. Megachange Profiler, Version 2

¹Adapted from Megachange Profiler: Preliminary Version, December 2007 by John Piescik

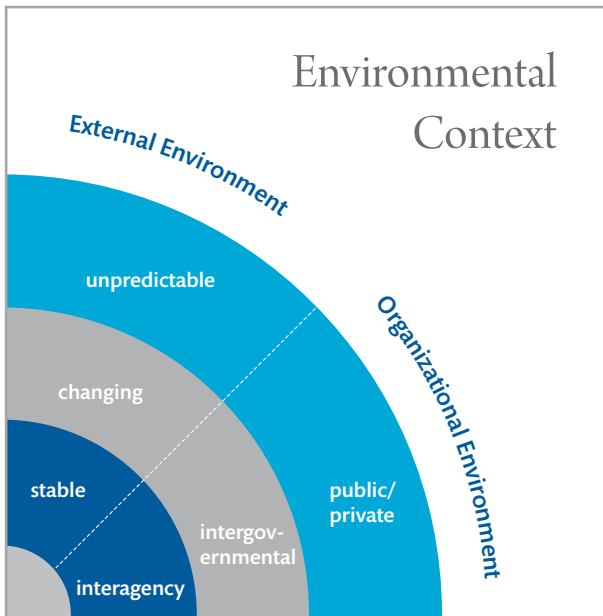


Figure 3. Environmental Context

Environmental Context

The environmental context represents the complexity of the **external environment** and **organizational environment** in which the change initiative is being implemented:

- The **external environment** may be stable, changing, or unpredictable. The nature of information gathering, information sharing, and communications required among stakeholders is largely driven by the stability of the environment.
- The **organizational environment** may include interagency, intergovernmental, and/or public-private cooperation. The more levels of cooperation required, the more difficult the change initiative is to lead.

In an unpredictable external environment, more **intellectual leadership** is required to develop predictability and communicate developments and responses. These activities **include intelligence gathering/sharing; command, control, and communications; and research and development** laboratories, think tanks, and skunk works. In a changing external environment, ongoing **information technology sharing** is required to understand and exploit advances.

Approaches for information and technology sharing include expert commissions, blue ribbon panels, centers of excellence, advisory groups, and the like. Information may be shared in the form of **reports, models, standards, and statistical information** distributed by clearinghouses.

As the organizational environment becomes more complex, **interorganizational communications and coordination** become a major focus. When many government agencies or and/or private-sector organizations must interact, **focal points** must be created to keep the number of communication channels manageable. In addition, depending on the level of interaction required, **interoperable communications and information systems and information sharing capabilities** may become necessary.

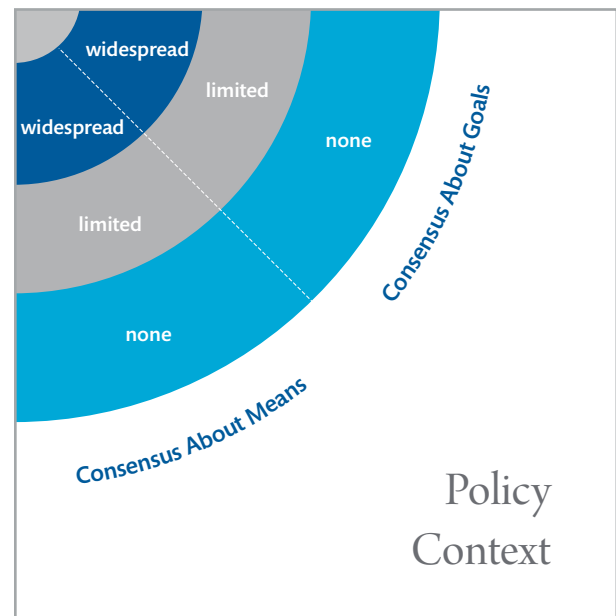


Figure 4. Policy Context

Policy Context

The policy context (see Figure 4) represents the degree of stakeholder **consensus about goals** and **consensus about means**:

- **Consensus About Goals** describes the degree of agreement among stakeholders about the intended results of the change initiative. Consensus about goals is a prerequisite for successful interorganizational cooperation.

- **Consensus About Means** describes the level of agreement among stakeholders on the appropriate methods to use to meet change initiative goals. The most controversial initiatives tend to suffer from a lack of consensus about means, such as the use of diplomacy versus military power, overt operations versus covert operations, birth control promotion versus abstinence promotion, and competition versus regulation, to meet initiative goals.

When there is widespread consensus about goals and means, change initiatives can harness **moral authority**. Transparency, visibility, and recognition (or opprobrium) are useful tools for implementing such initiatives. In addition, government agencies can use disclosure and reporting requirements, information dissemination, performance reporting and comparison, accreditation, certification, awards, inspections, audits, and credentialing to implement such initiatives.

When there is limited or no consensus about goals and means, change initiatives must rely on **incentives** or **power** to motivate stakeholders to implement desired changes. Those tools are discussed further in the behavioral context section.

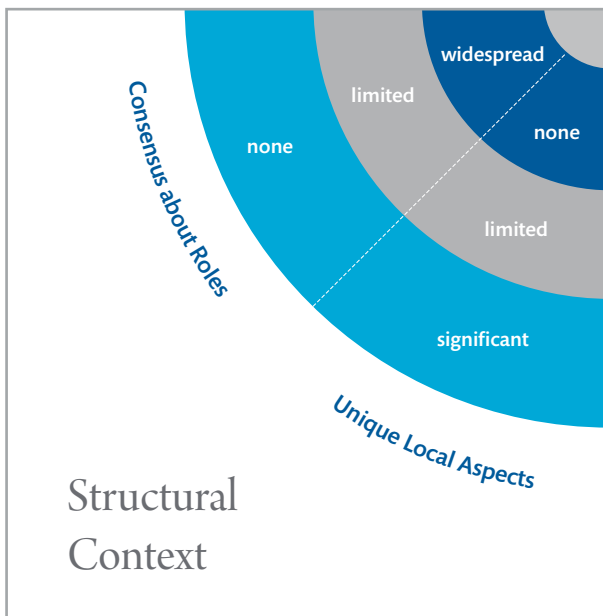


Figure 5. Structural Context

Structural Context

The structural context represents the degree of **consensus about roles** of stakeholder organizations in the change initiative and the presence or absence of **unique local aspects** that affect the approach taken to implement the initiative:

- **Consensus about Roles** describes the extent of agreement among stakeholders about the roles of stakeholder organizations with respect to the initiative. Some degree of consensus about roles is a prerequisite for successful interorganizational cooperation. If this consensus does not exist, high level policy-making to define roles is essential.
- **Unique Local Aspects** characterizes the extent to which implementing a change initiative requires different approaches in different localities. This variable drives the degree to which the initiative can be centralized or decentralized.

When there is widespread consensus about roles, far less political capital is required to drive change. When there is limited consensus about roles, significant attention must be paid to **negotiating roles** among stakeholder organizations. When there is little or no consensus about roles, **forging political consensus** is crucial, using tools such as hearings, investigations, studies, panels, and commissions and often legislation and/or judicial interpretation.

When no unique local aspects affect an initiative, **direct federal programs** may be successful for implementing the initiative. Agencies may provide services directly, provide direct aid to individuals, or contract directly with private entities to provide services. When there are limited unique local aspects, the federal government must encourage **local adaptation**. This often is accomplished through model programs, demonstrations, templates, standard systems, or hybrid federal-state programs (such as Medicaid). When there are significant unique local aspects, empowering **local control** is appropriate. Pure state and local programs are controlled locally

but may be supported by federal loans or assistance. Where incentives are necessary, these local programs may be supported by federal block grants, innovation grants, and data sharing programs..

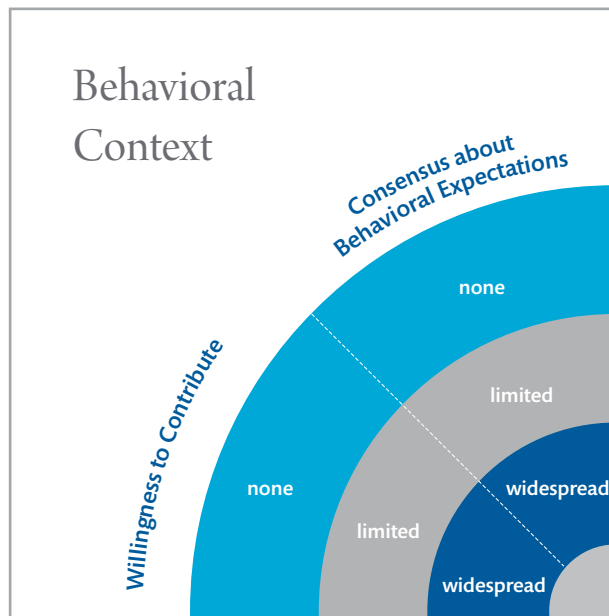


Figure 6. Behavioral Context

Behavioral Context

The behavioral context (see Figure 6) represents the degree of **consensus about behavioral expectations** of the initiative and stakeholders' **willingness (or ability) to contribute** to the initiative:

- **Consensus About Behavioral Expectations** describes the level of agreement among stakeholders about the behavior expected of them to support the change initiative. Change initiatives are much easier to implement when they respect or reinforce behavioral norms.
- **Willingness to Contribute** describes the ability and inclination of stakeholders to voluntarily contribute resources or take actions to move the change initiative forward. Willingness to contribute includes both the degree to which stakeholders want to contribute as well as their actual ability to contribute.

If a stakeholder has a strong desire to contribute but is restrained by other priorities, the stakeholder is rated as having limited or no willingness to contribute.

The greater the consensus about behavioral expectations and the greater the willingness to contribute, the more the change initiative can rely on **voluntary contributions or incentives**. Voluntary contributions may be elicited through volunteer clearinghouses, voluntary programs, or recognition programs. Incentives are needed when voluntary contributions are insufficient. Incentives include formal programs to support volunteer enrollment and mobilization (such as reserve corps), cash incentives, tax incentives, matching grants, in-kind support, grants, contracts, loans/loan guarantees, liability assumption, insurance, revenue sharing, cost/risk sharing, safety nets, reimbursements, and rewards/bounties.

The lower the degree of consensus and willingness, the more the change initiative must rely on **power tools**. Power tools include direct hiring, conscription, contracting, regulation, inspection, criminalization, military power, liability/damages, quotas, penalties/fines, auditing, investigation, and police power.

Detailed Process

In this section we describe a detailed generic process for setting up and guiding megachange leaders through a Megachange Profiler session, based on the three case studies conducted to date with two government agencies as well as internal discussions with MITRE colleagues².

When to Use the Megachange Profiler

- **Early Stages of a Megachange Initiative** – The early stages of a megachange initiative often involve identifying and engaging the

most important stakeholders that need to come together to define the initiative and the initial strategies. Often there is some kind of initiating Government agency that has been charged with undertaking the megachange. We have found the Megachange Profiler to be particularly useful in these early stages of a megachange initiative to help the initiating agency to:

- Clarify the nature and scope of the megachange initiative

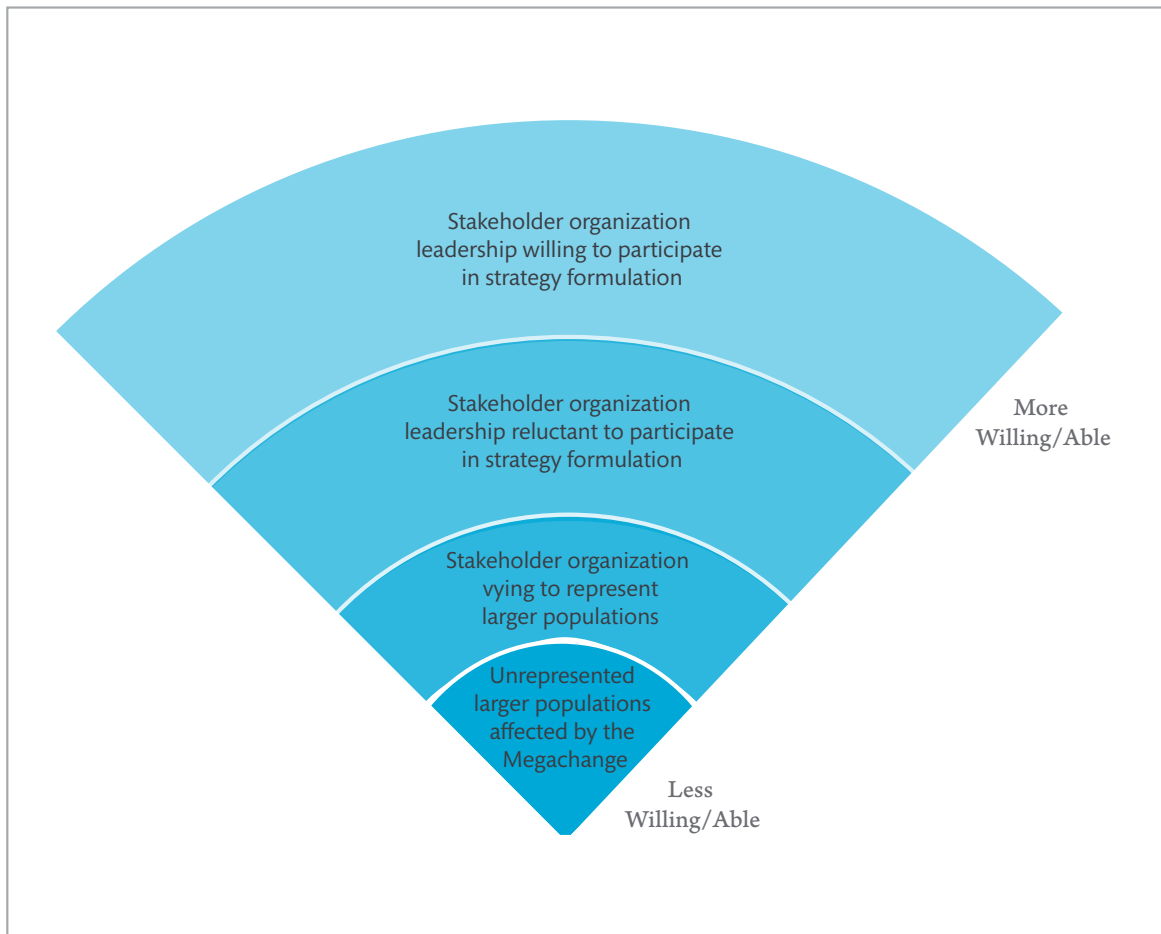


Figure 7. Range of Megachange Stakeholders

²We recommend that Megachange Profiler sessions be conducted by skilled facilitators who are expert at strategic planning. Adapted from Megachange Profiler: Preliminary Version, December 2007 by John Piescik

- Clarify who the stakeholders are and who can effectively represent their interests in joint strategy formulation.
- Develop a process for engaging those stakeholders in joint strategy development
- **Once a Megachange Initiative is Well Underway** – Once a megachange is well underway, there are often points where the initiative will reach an impasse of some kind, usually over disagreements among stakeholder organizations that are strategic in nature and that involve one or more of the eight megachange variables. The Profiler can then be used to:
 - Holistically assess where the lack of consensus resides among the multiple stakeholder organizations
 - Become the starting point to revise existing strategies or devise new ones to address this lack of consensus.

Overall Process

The Megachange Profiler is used in a two step process:

Diagnosis - To work with the leadership of a megachange initiative – often leadership from multiple stakeholder organizations – to gain collective insights into the key variables and risks that typically plague megachange initiatives, i.e., the eight variables shown on the Profiler.

Strategy Formulation – To help megachange leadership to build on these insights to develop strategies that will guide the individual efforts of the stakeholder organizations. The three levels of risk shown in the Profiler offer different starting points for developing overall strategies relevant to each variable (as already summarized in Section Three). In some cases the goal of the resulting strategy will be to move the level of risk from “red” towards “green” on the Profiler. In other cases this may not be possible (e.g., when there are significant Unique Local Aspects of the megachange), so the goal of the strategy is to

simply address the reality based on that degree of risk.

As discussed in more detail below, once these two steps are completed for all eight variables in the Profiler, a larger iterative process can ensue where the joint strategies that have been initially formulated are then implemented/tested and the leadership/strategists from the stakeholder organizations come back together periodically to refine the Profiler and the resulting strategies.

Step One: Diagnosis

Use of the Profiler typically begins with an informal conversation with a key executive – and/or their management team and/or strategy experts – who is charged with initiating the megachange.

For each variable:

- *Assess the shared sense of the level of risk/difficulty*
 - *Clarify assumptions among participants about the nature and/or status of the variable*
-

For example, two of our case studies involved working with a Government agency charged with coordinating certain kinds of emergency preparedness nationwide in multiple levels and sectors. In all cases thus far we have first met with the lead executives from the key/initiating agency. The Profiler was displayed on the wall in a large enough rendition to allow sticky notes to be placed and moved as the executives were walked around the Profiler through each of the eight variables to determine the level of risk for each variable (green, yellow, or red). See Figure 9. In this example (using the earlier version of the Profiler), we used three different colored sticky notes to represent the points of view of three different sets of stakeholders.

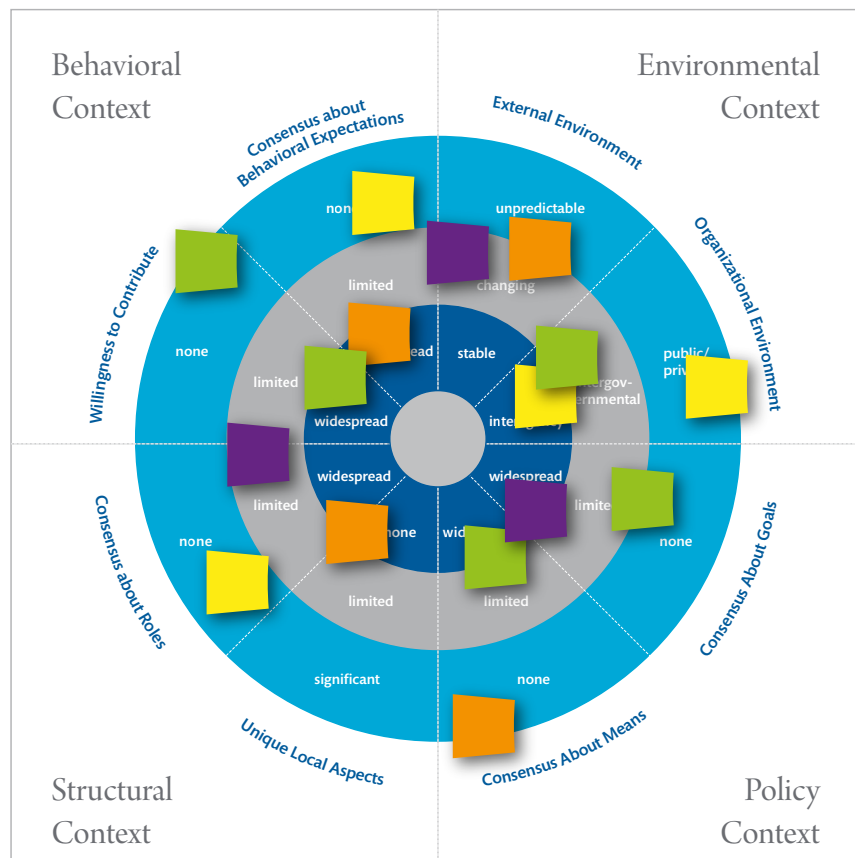


Figure 9. Use of Sticky Notes to Capture Levels of Risk

We found it useful to begin with the External Environment variable near the top and continue clockwise around the Profiler through each of the eight variables in turn, although sometimes the conversation naturally evolves so that the variables need to be addressed in a different order. In Appendix A we provide typical questions that can be asked in this first diagnostic step when determining the level and nature of risk for each variable.

There are three primary outcomes intended with this first step – the diagnosis step:

1. Assess the shared sense of the level of risk/difficulty for each variable
2. Clarify any assumptions among the participants about the nature and/or status of that variable. For example, with regard to the External Environment around the need to create an effective infrastructure around emergency preparedness and response, do

the stakeholders agree that the environment is well known and stable? Or is it a relatively new unexplored frontier? Or is it perhaps moving from one to the other and, if so, how? Could the placement of risk be different for different aspects of the External Environment? If so, different colored sticky notes can also be used to depict this on the Profiler. It is crucial to capture the conversations and examples underlying the placement of risk, as this leads naturally into strategy formulation that can address the variable at hand.

3. Based on the agreed to level/type of risk, this first step then leads naturally (sometimes immediately) into the second step – strategy formulation – determining what sorts of strategies make sense at that level.

It is not necessary to have complete agreement among the participants regarding the level of risk for each variable in order to move into the next step, Strategy Formulation. Sometimes it is

enough simply to have explored the diagnostic step in enough depth so that the strategy discussion can begin.

Step Two: Strategy Formulation

The second step of using the Megachange Profiler – strategy formulation – usually arises as a natural outcome of exploring the assumptions and risks and developing a shared understanding of a particular variable. But to further assist in this step we have formulated questions and typical strategic approaches or starting points based on the other megachange initiatives that were studied in the early stages of our research.

For each variable:

- *Explore potential strategic approaches suggested by the level of risk*
- *Formulate specific strategies*

So, for example, with regard to the External Environment variable (as noted in Section Three), if the participants feel it is an unpredictable External Environment, the facilitators can suggest that more intellectual leadership is typically required to develop predictability and communicate developments and responses. This might involve, for example, intelligence gathering/sharing, command, control, and communications, and/or research and development laboratories, think tanks, and skunk works. In a changing external environment, ongoing information and technology sharing is a more likely strategic approach so stakeholders can understand and exploit advances as the external environment around the megachange evolves. Approaches for information and technology sharing might include, for example, expert commissions, blue ribbon panels, centers of excellence, advisory groups, information clearinghouses, and the like.

As with the diagnosis step, in Appendix A we provide typical questions and suggestions that

can be asked in this strategy formulation step for each variable.

It is not necessary to first move through the assessment step for all eight (or even more than one of the) variables before moving into the strategy formulation step. Our experience is that both steps often happen together, variable by variable, the second step as a natural immediate outcome of the first step. In essence, the Profiler allows for up to eight separate discussions about assessment and strategy, although this can happen in any order and sometime with two or more variables addressed simultaneously. At the same time, the Profiler is a way for the participants to simultaneously see the whole picture of megachange strategy development and coordination in its multiple dimensions.

Using the Megachange Profiler with Multiple Stakeholders

As already discussed, the Megachange Profiler can be helpful to megachange leaders at any point in the lifecycle of a megachange initiative. It seems best used as a strategy formulation tool when multiple – usually competing – strategic partners need to formulate common strategic approaches. However, given the likely unfamiliarity of the megachange leaders with the Profiler and its methodology, the first step is usually the kind of informal meeting described above where the key initiating leader and their team walk through the diagnosis and strategy steps of using the Profiler to define potential strategies around which to engage the larger stakeholder community. Although we have not yet been able to test it in this way, we suspect that, ultimately, the Profiler – and the overall strategy formulation process – is most effective when all the major stakeholders with a stake in formulating joint strategic approaches to bringing about the megachange can come together in a workshop setting and work through the Profiler together, preferably collocated where the participants can clearly see and help move the sticky notes that mark the levels of risk.

	Stakeholder 1	Stakeholder 2	Stakeholder 3	Stakeholder 4
External Environment	Inter-governmental	Unpredictable	Unpredictable	Unpredictable
Organizational Environment	Inter-governmental	Inter-governmental	Inter-governmental	Public/Private
Unique Local Aspects	Limited	Limited	None	Limited
Consensus about Roles	Widespread	Limited	Widespread	Limited
Consensus about Goals	Widespread	Widespread	Widespread	Widespread
Willingness to Contribute	Widespread	Widespread	Widespread	Limited
Consensus about Behavioral Expectations	Widespread	Widespread	Widespread	Disputed
Consensus about Means	Widespread	Limited	Widespread	Limited

Figure 10. Comparison of Multiple Stakeholder Risk Assessments

Prior to such a workshop, the representatives from the different participating stakeholder organizations could conduct their own initial Megachange Profiler sessions or survey their constituents, as appropriate, to determine their sense of the risk levels for each variable. Although we have not constructed a survey instrument to support this, the detailed questions we suggest in Appendix A would be a good starting point for constructing such a survey. The results of these queries can be compiled as shown in Figure 10 and then used as input for the workshop, which can then be synthesized into an overall Profile representing the stakeholder community as a whole based on dialogue among the stakeholders in the initial stages of the workshop.

As noted in Section Five, the Megachange Profiler could be an excellent first step in initiating more traditional single-organization focused

approaches to strategic planning, involving the stakeholder organizations together or separately, using SWOT, scenario-based, or other approaches.

Ongoing Engagement with Stakeholders Using the Profiler

Although we have not yet been able to work with the Profiler in this way, the work of organization change experts such as John Kotter suggests that the Profiler could be used iteratively, over the megachange lifecycle, to maintain, adjust, and build momentum around the strategic approaches agreed to by the stakeholder organizations, as shown in Figure 11. The shared view of the key challenges and strategies initially adopted by the stakeholder organizations would be “tested” over time as the detailed strategies for each organization are formulated and

¹John Kotter, *Leading Change*, Harvard Business Press, 1996.

executed. If the relationships among the stakeholder organizations' leadership are maintained and managed over time, the same cycle we have just described can be continued over time in an iterative fashion, i.e., comparing stakeholder perceptions of the Profiler variables, reinforcing or revising the shared view of the megachange variables and resulting strategies, and then further testing their effectiveness. The Profiler thus

has the potential to become a constant visual marker or "touchstone" for the stakeholder community to maintain its sense over time of being a coherent larger strategic community around the megachange. Perhaps an online version of the Profiler could be developed (as has been done with the Megasystems Profiler) that could serve as an ongoing point of reference for a megachange strategic planning community⁴.

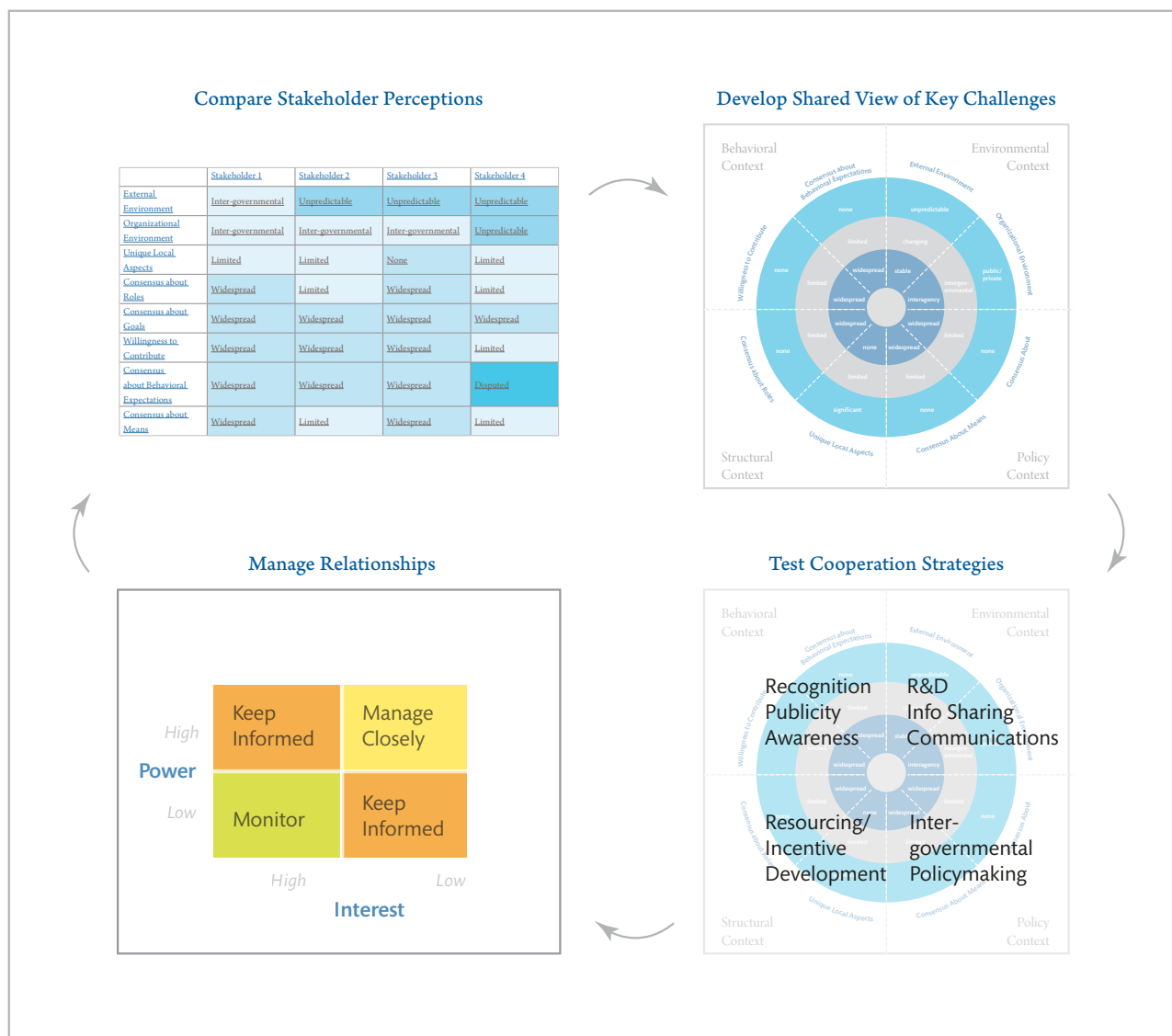


Figure 11. Iterative Development/Reinforcement of Strategies Derived from the Profiler

⁴ Another way of maintaining the relationships among the stakeholders is through high performance teambuilding techniques. Such a team is not unlike an integrated project team (IPT), where multiple diverse disciplines and perspectives are brought together to ensure a holistic perspective throughout the project life cycle and that the end result meets the needs of the stakeholder communities represented on the team. MITRE has developed both an IPT Startup Guide (http://www.mitre.org/work/tech_papers/tech_papers_09/08_1645/) and a Key Success Indicator Model that can assist with setting up, managing, and evaluating such a team. Such tools – along with the Megachange Profiler – might assist in building and maintaining the megachange stakeholder strategic planners as an ongoing team. Stakeholder management and assessment methods are also helpful.

Questions/Suggestions to Use in Conducting a Megachange Profiler Session

As a result of using the Megachange Profiler, our research team developed a detailed guide for leading participants through a series of assessment questions and suggested strategic approaches for each of the eight Profiler variables. These questions and approaches are merely a starting point and should of course be adapted depending on the particular megachange under evaluation.

In Appendix A is a series of tables. Each table represents one of the eight Megachange Profiler variables but is colored in the same way as the other variable within its context. For example, both the External Environment and Organizational Environment tables are colored brown because they are both under the Environmental Context. In the left most column of each table is a series of generic questions that can be used in the diagnostic step to define that

variable and the risk/difficulty level particular to that variable. A diagnostic statement relevant to each risk level is shown in the “Diagnosis” columns with the corresponding suggested strategic approaches under the “Strategies” columns next to them. This allows the facilitator to quickly see at a glance how to diagnose and strategize around each variable. For more detailed descriptions of the suggested strategic approaches for each variable and level of risk see Section Three.

Alternative Tabular Version of the Megachange Profiler

Over the course of using and refining the Megachange Profiler, we developed a tabular version of the Profiler (see Figure 12). With this version of the Profiler it is easier to add to or subtract from the eight variables or modify their description. It is also easier to portray the diagnostic results for different stakeholders or multiple issues by color coding the stakeholders or issues, as portrayed by the small blue and orange colored boxes.

Behavioral Context	Consensus about Behavioral Expectations	Wide-spread	Limited	None
	Willingness to Contribute	Wide-spread	Limited	None
Structural Context	Consensus about Role	Wide-spread	Limited	None
	Unique Local Aspects	None	Limited	None
Policy Context	Consensus about Means	Wide-spread	Limited	None
	Consensus about Goals	Wide-spread	Limited	None
Environmental Context	Organizational Environment	Interagency	Inter-governmental	Public/Private
	External Environment	Stable	Changing	Unpredictable

Figure 12. Tabular Version of the Megachange Profiler

Use with Other Methodologies

During this research we have explored other models and methodologies that MITRE is using or on which we are conducting research that might support or be supported by the Megachange Profiler. In this section we briefly discuss some of these other methodologies and how the Megachange Profiler might work with or complement them.

Strategic Planning

The Megachange Profiler, while not a replacement for traditional strategic planning approaches focused on single organizations, can complement these approaches. Naturally, the strategic approaches derived from the Megachange Profiler process by the megachange strategic leadership of the various stakeholder organizations should feed into the individual strategic planning processes followed by those organizations.

Conversely, traditional strategic planning can also complement the Megachange Profiler process during the strategy formulation step. Typically, strategic planning begins with defining, refining, or reaffirming the organization’s vision and mission followed by – or in parallel with – data gathering and analysis of “strengths, weaknesses,



Figure 13. SWOT Analysis

opportunities, and threats” (SWOT) as shown in Figure 13.

As the participants work through each Megachange Profiler variable and begin considering the various strategic approaches suggested by the Profiler, the SWOT framework could be used to further flesh out the strategies being proposed and the pros and cons. To return to our previous example, if the External Environment is deemed unpredictable, the facilitators would begin (per the Profiler) by suggesting that more intellectual leadership be employed to develop predictability and communicate developments and responses. This might involve, for example, intelligence gathering/sharing, command, control, and communications, and/or research and

	Strengths	Weaknesses	Opportunities
Research Funding Organization			
Laboratory			
Combination Funding and Laboratory			

Figure 14. Example SWOT Analysis of Profiler Strategic Approaches

	Scenario 1	Scenario 2	Scenario 3
Research Funding Organization			
Laboratory			
Combination Funding and Laboratory			

Figure 15. Example SWOT Analysis of Profiler Strategic Approaches

development laboratories, think tanks, and skunk works. The participants could then explore several of these approaches, such as creating a research funding organization versus an actual laboratory versus some combination of both, as shown in Figure 14, and consider the strengths, weaknesses, opportunities, and threats of each alternative.

Another common strategic planning approach is to define alternative possible future scenarios, define alternative strategies matching the

scenarios, and then create some kind of blended strategy that will allow the organization to adapt depending on which scenarios (or combination) actually occur. In using the Megachange Profiler, similar to (or in addition to) the use of a SWOT analysis, the participants could first develop alternative future scenarios around how, say, the External Environment around the megachange might evolve and then examine the alternative strategic approaches through the lens of each scenario, as shown in Figure 15.

Political	Operational
<ul style="list-style-type: none"> • Visibility/interest • Stakeholder relationships • Leadership/organizational issues • Policy • Governance • Bargaining entities • Expectation management • Acquisition approach 	<ul style="list-style-type: none"> • Need dates • Requirements uncertainty • Operational utility • Operational constraints • Infrastructure • Interoperability • Supportability
Economic	Technical
<ul style="list-style-type: none"> • Funding • Budget • Cost • Personnel resources 	<ul style="list-style-type: none"> • Scope/scale • Technical maturity/obsolescence • Policy/standards implementation • Technical performance/risk factors • Technical approach (architecture, infrastructure, info assurance, integration)

Figure 16. POET Model⁵

⁵From MITRE presentation: How to Do a POET Analysis, Marie Francesca, 2/18/10. Soon to be publicly released.

POET Framework (Political, Operational, Economic, and Technical)

MITRE is currently sponsoring research into further developing the POET model to enable improved acquisition of complex systems (see Figure 16). The hypothesis is that if we can understand, recognize, and quantify how political, operational, economic, and technical (POET) dimensions of the stakeholder and warfighter environment influence the employment of a system, then we can correct and mitigate exploitable gaps and non-optimal, non-agile system engineering choices. The POET model and methodology is somewhat similar to the Megachange Profiler in that the four POET dimensions – like the eight Megachange variables – can be used to holistically diagnose underlying issues, risks, and challenges (in this case around system acquisition) and initiate actions to mitigate those issues and risks (analogous to the strategic approaches proposed by the Megachange Profiler).

The Megachange Profiler can itself support interventions using the POET methodology, especially during the analysis of the Political dimension. By first completing a Megachange Profiler analysis with relevant stakeholders, many of the following questions typically explored during the POET Political analysis might be addressed:

- What legislation, policy, guidance, high-level studies might impact my project?
- Who has a stake in my project and why?
- What is the nature of the stakeholder relationships?
- What are the leadership characteristics in the program?
- What is the nature of the environment?

The most obvious Profiler dimensions that apply here are the External Environment and Organizational Environment. However, as we have seen, the “consensus” variables – Consensus around Goals, Means, Roles, and Behavioral Expectations, as well as Willingness to Contribute

– are also helpful in identifying key stakeholders and understanding and addressing their relationships, leadership characteristics, and other stakeholder aspects.

The Megachange Profiler has less utility here when it comes to its suggested strategic approaches relevant to the level of risk for each variable. POET is more focused on resolving issues around specific system acquisitions, whereas the strategic approaches proposed by the Megachange Profiler are focused more broadly on initiation and coordination of multiple large scale change efforts among multiple organizations and sectors.

Questions/Suggestions to Use in Conducting a Megachange Profiler Session

Each table below represents one of the eight Megachange Profiler variables colored according to context. For example, both the External Environment and Organizational Environment tables are colored brown because they are both under the Environmental Context. In the left most column of each table is a series of generic questions that can be used in the diagnostic step to define that variable and the risk/difficulty level particular to that variable. A diagnostic statement relevant to each risk level is shown in the “Diagnosis” columns with the corresponding suggested strategic approaches under the “Strategies” columns next to them. This allows the facilitator to quickly see at a glance how to diagnose and strategize around each variable.

For more detailed descriptions of the suggested strategic approaches see Section Three.

Prep/Scoping

- What is the “presenting problem?” What are the “opportunities and threats?” What’s keeping you up at night? What are the pain points?
- Triggering events (internal or external) or the story of what happened that led you to wanting to address this issue?
- To what extent have these issues been addressed before and by whom? Who else do I need to talk to?

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Environmental	Stable		Changing		Unpredictable	
External Environment • Describe the external environment. • How stable is our understanding of the problem? • Stability of stakeholders involved – are the players and how they are involved changing? • Who are the thought leaders? Inspirational leaders? Who has the greatest influence? • How stable is the technology involved? • Public opinion • Media attention • Legislation • Oversight • Funding • Regulatory environment	• The information gathering, sharing, and communications among stakeholders around this initiative is occurring within a stable environment	• Little program change/ strategy required due to stable environment.	• The information gathering, sharing, and communications among stakeholders around this initiative is occurring within a changing environment. • The environment is changing in a predictable manner	Information & Technology Sharing • Understand & exploit advances • Expert commissions • Blue ribbon panels • Centers of excellence • Advisory groups • Reports • Models • Standards • Statistics from clearinghouses • Education and training around predictable scenarios	• The information gathering, sharing, and communications among stakeholders around this initiative is occurring within an unpredictable environment. • The environment is changing in an unpredictable manner.	Intellectual Leadership • Develop predictability • Communicate developments & responses • Surveillance • Intelligence gathering/ sharing • Command, Control, and Communications (C3) • R&D, think tanks, skunk works • Education and training around flexible response

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Environmental	Inter-Agency		Inter-Governmental		Public-Private	
Organizational Environment <ul style="list-style-type: none"> Who are the stakeholders that need to work together to accomplish the megachange? Does there need to be joint decision-making as opposed to a single decision authority? How is statutory authority and funding currently allocated? What are the overt and covert rules, values, customs and principles that guide organizational behavior? How are functions and people arranged in specific areas and levels of responsibility? What are the key decision-making, communication, and control relationships? 	<ul style="list-style-type: none"> The change initiative only involves the Federal Government. 	Typical Inter-agency Approaches <ul style="list-style-type: none"> Inter-agencies committees or coordinating/working groups Joint program office/commands Interoperable communications & information systems 	<ul style="list-style-type: none"> The change initiative is inter-governmental. 	Inter-organizational Communications and Coordination <ul style="list-style-type: none"> Focal points to keep number of communication channels manageable Interoperable communications & information systems Information sharing capabilities 	<ul style="list-style-type: none"> The change initiative requires cooperation across the public and private domains 	Inter-organizational Communications and Coordination <ul style="list-style-type: none"> [see “Inter-Governmental” strategies to the left.] Increased reliance on focal points Increased automation of notification and communications

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Policy	Widespread		Limited		None	
Consensus about Goals <ul style="list-style-type: none"> Are there clearly articulated goal(s)? What led to the formulation of the goals? Do all stakeholders accept these goals? How much? Are any resistant or opposed to the goal(s)? How stable are the goals? Are any stakeholders trying to change them? Are there some goals around which there is complete consensus and others that are controversial? Is there agreement around the prioritization of the goals? 	<ul style="list-style-type: none"> There is widespread agreement among stakeholders about the intended results of the change initiative. 	Little program change/strategy regarding goals is required due to widespread agreement.	<ul style="list-style-type: none"> There is limited agreement among stakeholders about the intended results of the change initiative. 	Consensus Building <ul style="list-style-type: none"> Compromise and negotiation Quid pro quo Dialogue – exploration of similar values, assumptions, and stories Work-arounds Coalition building Advocacy Communications campaign Legislative processes Policy studies Judicial processes “Smart Power” 	<ul style="list-style-type: none"> There is no agreement among stakeholders about the intended results of the change initiative. 	Political Processes <ul style="list-style-type: none"> Legislation Regulation Adjudication Compulsion <ul style="list-style-type: none"> Police Powers Regulatory Powers Military Power Civil Liability

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Policy	Widespread		Limited		None	
<p>Consensus about Means [Use same questions as for goals.]</p> <ul style="list-style-type: none"> • Are there cultural assumptions or behaviors that might limit means that certain stakeholders are willing to try? • Is there agreement that the means are based on evidence/data? • What ethical, moral, economic, political issues are affecting stakeholder agreement about means? 	<ul style="list-style-type: none"> • There is widespread agreement among stakeholders on the appropriate methods to use to meet change initiative goals 	<p>Little program change/strategy regarding means is required due to widespread agreement.</p>	<ul style="list-style-type: none"> • There is limited agreement among stakeholders on the appropriate methods to use to meet change initiative goals 	<p>Exploration/evaluation of Means</p> <ul style="list-style-type: none"> • Pilots • Experimentation • Iterative development • Prototyping • R&D – scientific studies • Knowledge harvesting and lessons learned analysis • Dialogue – exploration of similar values, assumptions, and stories 	<ul style="list-style-type: none"> • There is no agreement among stakeholders on the appropriate methods to use to meet change initiative goals 	<p>Incentives/Power</p> <ul style="list-style-type: none"> • [same as for “Consensus about Goals” above]

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Governance	None		Limited		Significant	
<p>Unique Local Aspects</p> <ul style="list-style-type: none"> • Are there unique local aspects based on • Geography • Ethnicity • Local governance/ leadership • Other ways of segmenting individual differences? • What are any legal limits to federal authority in this area? 	<ul style="list-style-type: none"> • The change initiative does not require different approaches in different localities. 	<p>Direct Federal Programs</p> <ul style="list-style-type: none"> • Direct services • Contracted services 	<ul style="list-style-type: none"> • The change initiative requires a limited amount of different approaches in different localities. 	<p>Local Adaptation</p> <ul style="list-style-type: none"> • Model programs • Demonstrations • Templates • Standard systems • Hybrid federal-state programs (e.g., Medicaid) 	<ul style="list-style-type: none"> • The change initiative requires a significant amount of different approaches in different localities. 	<ul style="list-style-type: none"> • Local Control • Federal loans • Federal block grants • Innovation grants • Data sharing programs • Revenue sharing

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Governance	Widespread		Limited		None	
<p>Consensus about Roles</p> <ul style="list-style-type: none"> • What roles have been defined? • How are functions and people arranged in specific areas and levels of responsibility? • What are the key decision-making, communication, and control relationships? • Is there agreement about how the roles are defined - both the process of definition and the result? • Are there turf issues? Is there ambiguity around how authority is defined? • Is there agreement about leadership roles? 	<p>Widespread</p> <ul style="list-style-type: none"> • There is widespread consensus about the roles of stakeholder organizations in the change initiative. 	<p>Little program change/strategy regarding roles is required due to widespread agreement.</p>	<p>Limited</p> <ul style="list-style-type: none"> • There is limited consensus about the roles of stakeholder organizations in the change initiative. 	<p>Negotiating Roles</p> <ul style="list-style-type: none"> • Co/Joint leadership • Integrated Project Teams across organizations (collaborative decision-making) • Rotating leadership • Parallel development or experiments led by different organizations (competition between pilots with differing approaches) 	<p>None</p> <ul style="list-style-type: none"> • There is no consensus about the roles of stakeholder organizations in the change initiative. 	<p>Forging Political Consensus</p> <ul style="list-style-type: none"> • High level policy-making to define the roles. • Hearings • Investigations • Studies • Panels • Commissions • Legislative and/or judicial interpretation

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
Behavioral	Widespread		Limited		None	
<p>Willingness and Ability to Contribute</p> <ul style="list-style-type: none"> • Are there stakeholders that are not willing to contribute? • Of those that are willing are there stakeholders that are not able to? • What factors that are contributing to the lack of willingness and/or ability? • Funding • Staffing • Competing priorities • Cultural or political assumptions or other de-motivators 	<p>The stakeholders are inclined and are able to voluntarily contribute resources or take actions to move the change initiative forward.</p>	<p>Encourage Voluntary Contributions</p> <ul style="list-style-type: none"> • Voluntary clearinghouses • Voluntary programs • Recognition programs • Volunteer enrollment & mobilization 	<p>Limited</p> <ul style="list-style-type: none"> • The stakeholders have limited ability to voluntarily contribute resources or take actions to move the change initiative forward. 	<p>Enablement</p> <ul style="list-style-type: none"> • Cash incentives • Tax incentives • Matching grants • In-kind support • Grants • Contracts • Loans • Insurance • Rewards or bounties • Liability assumption • Revenue sharing • Cost/risk sharing • Safety nets • Reimbursements 	<p>None</p> <ul style="list-style-type: none"> • The stakeholders will not voluntarily contribute resources or take actions to move the change initiative forward. 	<p>Power Tools</p> <ul style="list-style-type: none"> • Direct hiring • Conscriptation • Contracting regulation • Inspection • Criminalization • Military power • Liability/damages • Quotas • Penalties/fees • Auditing • Investigation • Police power

	Diagnosis	Strategies	Diagnosis	Strategies	Diagnosis	Strategies
<i>Behavioral</i>	<i>Widespread</i>		<i>Limited</i>		<i>None</i>	
<p>Consensus about Behavioral Expectations</p> <ul style="list-style-type: none"> • To what extent is behavioral change a result of the megachange? • What are the behaviors that need to change? • Who needs to change what behavior? • How much consensus is there among stakeholders about these behavioral changes? • Is there already popular agreement about the behavioral changes? 	<ul style="list-style-type: none"> • There is widespread agreement among stakeholders about the behavior expected of them to support the change initiative • The change initiative respects or reinforces common behavioral norms among stakeholders. 	<p>Encourage Harness Moral Authority</p> <ul style="list-style-type: none"> • Transparency • Visibility • Recognition • Disclosure & reporting rqmts • Information dissemination • Performance reporting & comparison • Accreditation • Certification • Awards • Inspections • Audits • Credentialing 	<ul style="list-style-type: none"> • There is limited agreement among stakeholders about the behavior expected of them to support the change initiative • There is limited respect or reinforcement of common behavioral norms among stakeholders of this change initiative. 	<p>Behavioral Incentives Experiments</p> <ul style="list-style-type: none"> • experimentation around the results of different changes in behavior (e.g., as was done with experimentation by different states with Welfare Reform prior to reform at the Federal level) • see also "Exploration/valuation of Means" under "Consensus about Means" • explore different potential behavior changes by different population segments • Explore social networking among positive deviants 	<ul style="list-style-type: none"> • There is no agreement among stakeholders about the behavior expected of them to support the change initiative • The change initiative does not respect or reinforce common behavioral norms across stakeholders. 	<p>Incentives/ PowerDirect hiring</p>



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