



# The Character of Harms

Operational Challenges in Control

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## 2 | *A different type of work*

To do any type of work well, surely one would first have to *recognize* that type of work (perhaps distinguishing it from other types of work), then figure out how to *organize* it, how to *perform* it, and finally how to *explain* to your audience what you did. The acronym ROPE (recognize, organize, perform, explain) acts as a crude but useful starting point in diagnosing just how far any agency or institution has come in mastering the art of harm reduction. A few organizations do just fine all the way up to the end, but are stuck on “explain”: they do terrific work but have not figured out how to tell the risk-control or harm-reduction performance story in a convincing manner. Others have not come so far, and – even though they recognize the form of work – have little idea how to organize it and conduct it on an ongoing basis. I find that these are the agencies that tend to ask for help, or send their executives on courses; they sense the significant opportunities that might result from mastering this art, even while they lack any formal systems to support it. These agencies, by the way, tend to be the pioneers, at least by comparison with the rest of the field. It seems many agencies and institutions have not even made it to the *recognition* stage yet. I certainly hope this book will help them get at least that far.

A host of institutions from the public, private, and not-for-profit sectors engage in or contribute towards harm reduction work. Where such tasks constitute an important piece of their work, one might expect them to be able to give a rather precise account of how that work was going. How many specific knots (concentrations of harm) have they identified? How many have they taken on? What progress have they made on each one? How many harm-reduction projects have they actually finished, and what exactly do they mean by “finished”? What systems have they established for monitoring the environment for new or emerging problems, and what forms of data gathering and analysis help with that task?

Having had the chance to look inside scores of regulatory agencies, whose core missions involve social harm control of one kind or another, it is stunning to find how little formality or structure there is, if any, around this task. Certainly these organizations are organized, but for the most part, not around *this*. It appears to be easier by far to organize around other types of work.

## Functions

The most familiar mode of organization is *functional*, which is skills-based, and produces enclaves of specialists. Organizations group the lawyers together in the General Counsel's office; investigators in a centralized investigative unit; auditors in the audit department; educators in an education programs unit, media specialists in the public relations department, and so on. This organizational form serves some important purposes. We value functional expertise, and functional units act as incubators to help preserve and develop it. If the microbiologists (in environmental protection) or the industrial hygienists (in occupational safety) are co-located, they will encourage and challenge one another to be state-of-the-art. The magazines around the coffee machine reflect their disciplines. As a group they know what schools to draw recruits from, the nature of professional training and development, and what professional conferences to attend. Being professionals, no-one outside their discipline really has any business telling them what to do or how to do it. So they set their own agenda and schedule, and supervise and evaluate their own work. They tend to promote into management positions those who have climbed further up their own well-defined disciplinary ladders (not necessarily those with managerial skills!). The supervisors and managers who emerge through this system tend to be those well versed in the norms and mores of the discipline, and liable to protect the unit from "improper" outside interference.

Organizing around functions of course has its limitations. From the organization's perspective, functions represent tools, and tools ought to be organized around tasks. It proves unsatisfactory, ultimately, to tolerate a silo-mentality, allowing each tool to go off by itself, establishing its own agenda in isolation and without any type of coordinating framework.

## Processes

But what type of task might it be that breaks open the functional silos? Not *harms* or *risk concentrations* or *problems* for the most part; but *processes*. Agencies set up core, high-volume processes to deal with *whatever flows in*, and it is these processes that break open the functional silos. Having set up processes, agencies have no choice but to operate them efficiently, otherwise the work piles up until it becomes a visible and embarrassing failure. *Customers* or *clients* on the outside, who can testify to any lack of timeliness, accuracy or coherence in the process, form a natural constituency for high-quality process management. Taxpayers dealing with the IRS might first deal with the *returns-processing* divisions, and later with the *examination* division, or even the *collections* division. From the taxpayer perspective, the agency should appear seamless. Hence cross-functional cooperation, organized around various client-related processes, emerges as an obviously desirable form of competence. Similarly, an environmental agency will look silly to the management of an industrial complex if one day it sends water engineers, the next day air quality experts, and the next day hazardous waste inspectors, without any of them knowing what the others have been doing. In order to iron out such obvious kinks and inefficiencies from the clients' perspective, the agency will probably invent a coordinated inspection regime, or deploy cross-trained field engineers, or produce some other single-point-of-contact or client-management scheme.

Even institutions whose principal purposes revolve around harm reduction have good reason to focus on process. First of all, operational processes, once established, acquire a power of their own. If police make the promise to respond to emergency calls, then the emergency calls for sure will come, and any failure to respond in a timely manner constitutes a visible failure. Once an environmental agency establishes permitting or licensing regimes, then it must deal with all the applications that flow in, often within timeframes established by regulation. Any agency that invites members of the public to submit to them reports or complaints (of discrimination, of defective products, of professional malpractice, etc.) has to deal with the resulting stream of work, no matter how significant or insignificant each item, and no matter the extent to which these process-loads relate to the harm-reduction priorities of the day. Processes tend to capture everything. They become

all consuming. Process loads, in an era of static or dwindling resources for government agencies, can become overwhelming. It takes all day and every day, sometimes weekends and overtime too, just to keep up. Finding time to think about any *other* type of work becomes extremely difficult.

The second reason harm-reduction agencies focus on process is that much advice is available on how to improve or perfect processes, and how to utilize the perspective and insights of “customers” in so doing. For twenty years now, government agencies have been importing and incorporating process management methods originally developed within manufacturing industry. This wave of importation began in the early 1980s with *quality management*, followed during the late 1980s by *process management*, and then *continuous process improvement (CPI)*. The early 1990s brought more radical approaches to the uprooting and redesign of processes, including *process re-engineering*.<sup>1</sup> At the federal level in the United States, Clinton and Gore’s *Reinventing Government* movement pressed hard on customer-based reform of government operations, driven by the notion that government agencies should be as professional in their customer-service operations as the very best of private industry.

As a result of this focus, we have witnessed some impressive gains in recent years in terms of process efficiencies, timeliness, service-quality, and customer satisfaction. The Food and Drug Administration has significantly accelerated the drug approval process. US Customs has worked with the Immigration & Naturalization Service to completely redesign the passenger screening and admission process at international airports, reducing average wait times by more than 80 percent and using advance passenger information to focus inspection efforts more effectively. And the IRS has made significant strides in improving the accuracy and timeliness of its returns processing operations, and gives much better taxpayer advice in response to telephone queries and letters, and through its website.

Twenty years of experience with various forms of process management have driven home the basic lessons: functional organization is important but not sufficient. It leaves no-one in charge of processes that straddle multiple functions. External customers and clients experience the organization through processes, not functions. Therefore the organization must understand the client perspective and provide integrated management of complete processes. In other words,

organizations must put someone in charge of the processes. And they do. These people, in the language of CPI, are now called *process owners*.

Putting someone in charge of processes, however, is not the same as putting someone in charge of specific harms or problems. Processes are a creation of the agency, a piece of machinery to operate. The relationship between process improvements and any increased effectiveness in harm-reduction is complicated.

One might assume process-based competence to have a generally positive effect on the attitudes of clients, which might lead them to behave better and cooperate more. Giving taxpayers easier access to more accurate information should surely improve compliance – at least, for those taxpayers motivated to comply but unsure of the rules. But other forms of non-compliance – in fact all forms involving willful tax evasion – might not be touched at all by such services, no matter how professionally delivered. Willful evasion could even be facilitated by increased transparency and predictability.

The relationship between process improvements and the task of controlling non-compliance appears to bear an uncanny resemblance to the relationship between *wellness* and *disease control*. Broad positive *customer-service* programs might eliminate or mitigate some types of *non-compliance* (the tax world's equivalent of disease), but leave some types completely unaddressed. They might also produce a range of broader benefits beyond their impact on non-compliance, such as establishing a relationship of trust, giving citizens confidence in their government, and raising morale within the agency.

We should not let the mention of *non-compliance* – as if it were a real *harm*, and to be treated as such – pass without comment. Surely it is, by definition, a “*non*,” which means an absence (of compliance). Does it make any sense at all to regard *patterns of non-compliance* as analogous to real harms, with parts to be identified and untangled? I think it does, even though the term *non-compliance* itself might suggest otherwise. One can get rid of the “non-” by substituting more concrete terms, such as *tax evasion* or *tax avoidance strategies*. Clearly one can identify patterns of non-compliance, defined in terms of specific behaviors (whether deliberate or not) and concentrated within identifiable segments of the population. Clearly such patterns can be studied and measured and understood, and specific tailor-made interventions invented which might deflate or eliminate them. Many tax agencies can

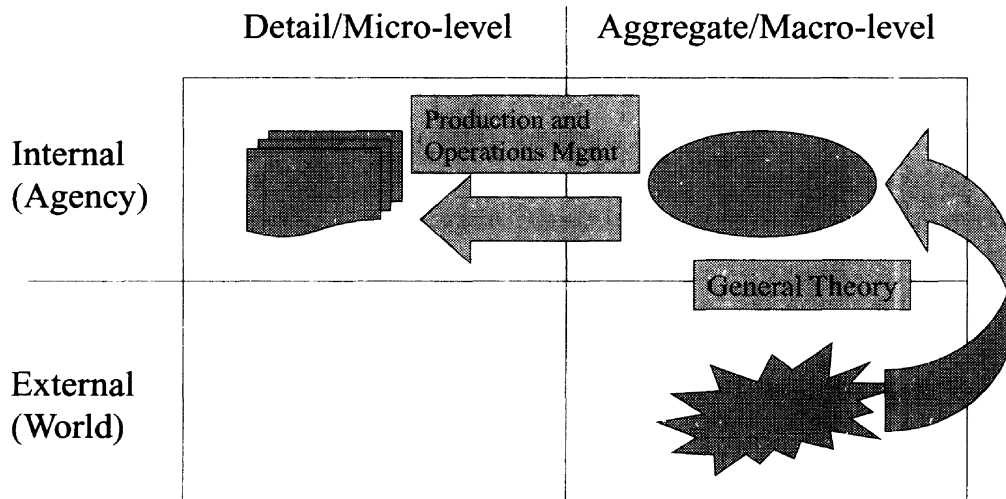


Fig. 2.1 Reliance on established methods

produce some examples of such problems which they have identified and tackled and solved. I believe it does therefore make sense to think of patterns or concentrations of non-compliance as objects for scrutiny and unpicking, even though tax agencies might also strive to develop a broad culture of compliance across the population as a whole. The overall task of *compliance-management* would surely encompass both, just as the practice of medicine involves both the promotion of wellness and the control of specific diseases.

Understanding these two forms of work, *functional* and *process-based*, goes a long way towards explaining how agencies with harm-reduction missions organize and conduct their business. Organizational charts reveal many functional enclaves. The existence of these helps determine where various functional experts hang their coat, and whose office is next door. What they spend their time working on, though, is largely determined by their process responsibilities. Once an organization has assembled the right set of functional capabilities, and organized them around its core operational processes, the bulk of its routine operational practice is determined.

Figure 2.1 presents a simple schematic that captures these ordinary forms of organizational behavior. The horizontal dividing line separates the external world (below the line) from the internal workings of the agency (above the line). The vertical divider crudely distinguishes macro-level or high scale considerations (on the right) from micro-level or detailed ones (on the left).<sup>2</sup> The ugly blob in the bottom right



hand cell represents some rather broad category of harm (such as pollution, corruption, crime, or occupational hazards), at some point in time determined by society to be insufficiently controlled. In response to concerns about this general set of harms, government creates an agency or program designed to counter them, which is represented by the more pleasant looking object in the top right cell.

The nature of the harm-control operation then depends on formulating some idea about what might be done – which I shall refer to as the *theory of operations*. To control pollution, an environmental agency might establish and monitor a system of permits for industrial facilities. To reduce occupational hazards, OSHA might choose to conduct unannounced on-site inspections followed up with heavy fines for any violations found, relying on specific and general deterrence to make this and other workplaces safer in the future. Police might depend on rapid response to calls for service, coupled with investigation of reported crimes, as major planks in their approach to crime control. Tax agencies might establish a system for receiving, selecting and auditing tax returns as their principal method for managing compliance.

Sometimes the general method of operations is prescribed by an agency's authorizing legislation – but not as often as bureaucrats tend to believe. More often the theory of operations reflects a tradition that has developed over time, eventually becoming an entrenched part of the agency's behavior. Some theories of operation, appropriate for the problems of the day when the agency was first established, outlive their relevance.

On certain occasions we can observe different theories clashing or competing with one another. Of course it is not the theories themselves that compete, but their human champions. The competition manifests itself in battles for credit, for managerial and political attention, and for resources. The most obvious clashes occur in two specific situations. The first involves organizational mergers, where constituent pieces arrive with differing traditions and self-images. Perhaps one of the merged departments comes as a traditional regulator, heavily reliant on enforcement. Another comes with a tradition of providing technical consulting to industry, and with staff who view themselves as service-providers and advisers. Two such groups may well have trouble appreciating each other; they represent different theories of operation.

The second situation involves overlapping jurisdictions, where two or more agencies share responsibility for control of certain harms, but

have sharply differing views on how best to proceed. The FBI and DEA, for example, have overlapping jurisdiction for some aspects of drug control, even though the DEA formally answers to the Director of the FBI. In the US, the task of intelligence gathering and analysis for counter-terrorism is likewise distributed across a host of different intelligence agencies – hence the various attempts post September 11, 2001 to break down cultural differences between these agencies and facilitate or enforce better collaboration.

The possibility of clashing theories at least indicates some scope for choice. For a brand new agency, the choice can be quite daunting. The transition to the new Financial Services Authority in Britain, launched in 1997, involved the eventual merger of twelve previously existing regulatory bodies, each with their own operating tradition. Each one had supervised a specific segment of the financial services industry. As the boundaries between the segments of the industry became increasingly blurred, so the need for integrated regulation increased. In the year 2000, all the precursor sector-specific regulatory statutes were replaced with a new umbrella statute which governed the new, merged agency – the FSA.<sup>3</sup> The governing statute stipulated the FSA's goals in broad terms – to identify and control risks to markets and investors – and specified some aspects of how this new mega-regulator would be held accountable. But it said very little at all about operational methods. The executives of the FSA faced quite a task . . . to invent *what to do*, and to produce some kind of operational coherence, despite the disparate sets of players, methods, and skills.

The invention of new theories of operations is rare. Most harm-reduction work is conducted under theories established years ago, with functional mixes codified in budgetary structures and allocations, and with established processes dominating both operational practice and organizational reporting.

No matter how old or new an organization's *theory of operations*, nor where it came from: management still has to determine what each of the field agents will do *tomorrow*. Such detailed prescriptions for action belong in the top left hand cell of Figure 2.1, and derive from parsing the desired agency output (top right) into smaller pieces. Organizational structures and methods for dividing the work involve both geographic and functional structures, which produce matrix-style reporting relationships. For example, a drinking water specialist in the regional office of an environmental agency answers both to the local geographic

commander, but also to the drinking water program chief at central office. The degree to which the geographic form of reporting dominates the functional, or vice versa, shifts back and forth over time, sometimes due to the assertiveness of specific managers, but also due to the natural tension between functional-coherence and geographic responsiveness. Despite these complexities, the work gets divided, handed out to the field, and performed. The net product is a collection of functional outputs, and of processes operated, which can now be aggregated and described at the level of the agency. This “performance” therefore sits in the top right hand cell – and it looks like a collection of organizational outputs. In order to claim any effect on the overall level of harms (bottom right cell), the organization asks the public to accept its theory of operations; that all this work, and efficient operation of all these processes, *ought* to have made the world a better, cleaner, healthier, or safer place. If aggregate or general levels of observed harm decline over time (measures which would belong in the bottom right hand cell), that is of course good news. But the agency’s claim to have *caused* the decline, or contributed to it in a meaningful way, still depends on the credibility and acceptance by others of its high-level and general theory of operations.

### A different type of organizational behavior

When institutions organize around specific concentrations of harm, rather than around functions or processes, they engage in a very different form of organizational behavior. When they spot the *knots*, study them, and unpick them one by one, they depart from business as usual. Figure 2.2 shows the alternate path they follow, as well as the original one. Work still needs to be allocated, eventually, to field agents – so the arrows (that represent definition and division of work) still have to lead eventually into the top left hand corner, so the individual field agents can receive their specific assignments. But the method by which the work is defined, divided, and handed out is quite different. Rather than specifying the overall agency performance, and dividing that up, the big broad and rather general harm (in the bottom right) is studied instead, and significant parts of the harm itself are identified first. The parts identified come in all kinds of different shapes and sizes, and they all belong in the previously empty cell in the bottom left hand corner. They represent specific concentrations of harm, or problems,

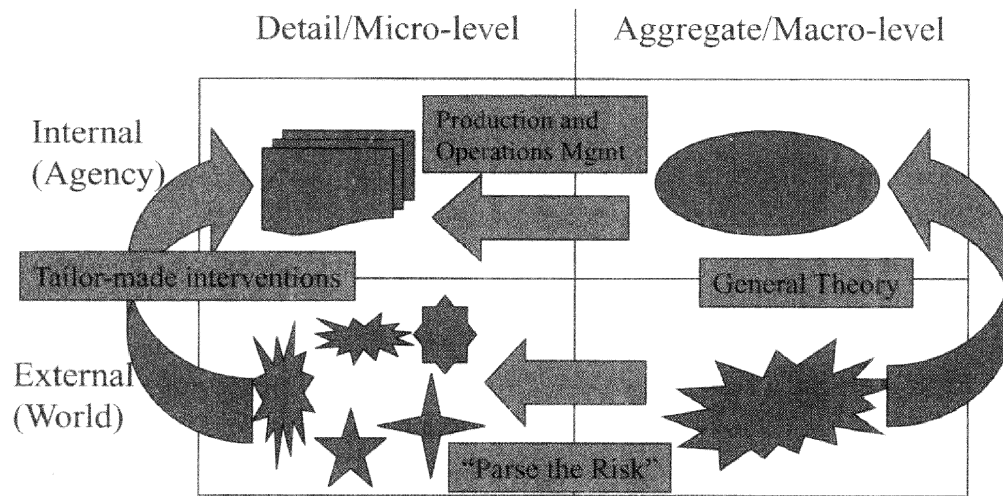


Fig. 2.2 Alternate forms of organizational behavior

or issues, or patterns. These objects exist in the outside world, and exist independently of the agency's structure, processes or traditions. Paying attention to them, one by one, quite naturally seems to result in the production of specific tailor-made responses, and those tailor-made responses are nowhere described either in legislative prescriptions or in the agency's routine policy manuals. In this sense, each *unpicking* represents a departure from normal practice.

The circumstances under which different institutions discover and engage in this new form of behavior vary considerably.

An early and unsettling experience for the IRS came in 1991, when Commissioner Fred Goldberg challenged his management team during an executive retreat to consider non-compliance issues directly, rather than focusing on existing agency processes and methods. His executive team rank-ordered the non-compliance issues of the day, and top of the list was what they referred to as the *non-filer* problem.<sup>4</sup> Various tax gap studies had estimated that roughly 11 million individuals and businesses, mostly self-employed individuals or small cash-based businesses, failed to file returns even though they were obliged to do so. Worse, these entities had *never* filed, which rendered them invisible to IRS data systems and therefore outside the normal scope of IRS analysis and operations. The managerial tools of the day (in the early 1990s) stressed process management and process re-engineering. The distressing property of the *non-filer* issue was that this problem was completely unrepresented in all of the agency's core processes.

Non-filers obviously did not show up under returns-processing. Not surprisingly, non-filers also did not write letters, or call, or initiate any other contact with the agency. Hence process-improvement, no matter how professionally done, would not have touched this problem – the agency’s leading non-compliance issue – at all. Meanwhile the agency creaked under its process loads, struggling to keep up, and executives could only find a moment to consider such a problem amid the rare luxury of an executive retreat.

The *non-filer* problem may be an extreme case, but it is an extremely instructive one. Usually, any regulatory or harm-reduction organizations might expect, or even assume, that all the major problems within their scope of responsibility are properly represented and dealt with by the processes they have established. If the reporting or submission mechanisms that feed the processes turn out to be biased or selective in some way, then the process-loads might give only biased or partial views of the problems. But at least the process loads usually provide *some* view. In the case of the non-filer problem, the process loads provided no view at all. The misalignment between major processes and leading problems was extreme.

Even the possibility of such misalignment should nag constantly at the minds of regulatory executives. At a minimum, it should drive home the fact that focusing on *processes* and focusing on *problems* produces two quite different patterns of thought and action.

The US Customs service learned a great deal about this type of work from one specific problem they just had to tackle, even before they developed any formalized apparatus or protocols for this form of work. The problem arose during the period 1994 to 1996, when drug smuggling organizations employed a particularly violent and offensive drug-running method at various Mexico/US border crossing points. Termed *port-running*, the practice involved small but powerful trucks, loaded with up to 500 pounds of contraband.<sup>5</sup> The driver of the truck would stop at the inspection booth, but would be uncooperative. If the inspector detained them with questioning, or tried to pull them over for secondary examination, the *port-runner* would simply put their foot down, smash other cars out of the way, run over any inspector foolish enough to stand in the way, and speed away. For port-running, the smugglers selected ports of entry that provided rapid escape into densely populated urban areas, making pursuit difficult or impossible.

In 1994 Customs had recorded 824 port-running incidents, with gunfire exchanged during more than a dozen of them. Many more incidents might have passed unrecorded, where inspectors felt so intimidated that they simply waved the smugglers through and said nothing.<sup>6</sup> In January of 1995 Deputy Commissioner Mike Lane, responding to public concern and congressional pressure, formed a task force to address the port-running issue directly.

Customs, like most other major regulatory bureaucracies, had a matrix-style functional and geographic organizational structure. It also operated a set of core processes. The port-running problem was a very awkward shape, and did not align neatly with any one function, or port, or region, or process. It clearly involved the inspection-at-the-land-border process...but the task of controlling it didn't look or feel like a *process improvement* task, because those normally revolved around facilitation, customer-service, and efficiency. This was more about stopping a specific bad thing from happening in the context of that broader process.

Geographically, the problem was an awkward shape and size. It was not a national problem, as it only occurred on the southwest land border of the US, yet it straddled two different federal regions (Texas and California) and several different ports (a *port* is the US Customs' lowest-level geographic unit). The task did not obviously belong with any one of Customs' three major functional divisions – Inspection, Intelligence, and Special Agents – as dealing with these smuggling organizations clearly required the involvement of all three. Hence the need for a task force, or something like it, as the shape of the task did not align with any previously existing organizational unit.<sup>7</sup> The task force the Deputy Commissioner created brought together representatives of the two regions, several ports and three functions, and their assigned task was to *eliminate port-running*. And so they did, at about the fifth attempt. First, they tried pursuit strategies, using cars. These failed to control the problem, because the smugglers would send through “clean” cars first to reconnoiter and report back on pursuit capabilities and readiness. Second, they tried pursuit strategies involving Black Hawk helicopters. These turned out to be too expensive to hold constantly in readiness, and hard to hide in the desert. Third, they tried installing pneumatic bollards in the roadway, giving the inspectors handheld remote control devices. After several months of use, and several million dollars of investment, these were eventually abandoned as

too costly, too inflexible and too dangerous. If the bollard was activated by mistake they could seriously injure innocent civilians or the inspectors themselves. And trapping port-runners right there in the middle of a crowded bustling entry port did not seem particularly safe either. Certainly not the best place to have a gun battle. Fourth, they tried closing down lanes deliberately to lengthen the waiting queues, and deploying drug sniffing dogs out among the queues, where they could identify and apprehend port runners while they still had too many cars in front of them to “run.” Unfortunately the dogs could not work for more than a few minutes at a time in the heat of the day, on the boiling tarmac, and surrounded by exhaust fumes.

The fifth idea the team had worked like a charm. Thinking like saboteurs, they exploited a particular vulnerability of the port-running method itself. Port-running depended on *rapid escape*. If the team could take away rapid escape, port-running would fail as a strategy. Eventually they invented a way, placing Jersey barriers (the heavy concrete barriers used on highway construction sites) in a zig-zag formation *behind* the inspection points. With the barriers in place, any perpetrator that did barge through had then to negotiate a chicane, and their escape could be closed off at the far end, and away from the crowds. Wherever the zig-zag configuration was placed, the port-runners stopped coming. Within six months of the formation of the team, and very soon after settling on the Jersey barrier strategy, the rate of port-running incidents dropped by more than half. The intelligence officers also reported that the prevailing price being paid to the drivers to “run a load” had suddenly risen from \$5,000 to \$7,500, suggesting that port-running, from the perspective of the smugglers, had become more difficult and dangerous.

For Customs, this early experience contributed substantially to their understanding of the need to recognize forms of work other than function and process. By the summer of 1995 the agency formally launched its *Strategic Problem Solving* program (or SPS), through which it would identify, analyze and tackle *specific drug smuggling concentrations*. It took some time to sort out staff confusion between process-improvement and problem-solving. Even though the agency had learned process-improvement first, that was still relatively new to the agency. Moreover, the terminology of *problem-solving* had already popped up as part of the process-improvement lexicon. Eventually they figured out the difference, realizing that process-improvement is

a *managerial* method for improving the agency's *processes*; whereas *problem-solving* was an *operational method* for working on external harms. The *problems* for their process improvement teams were things like glitches, bottlenecks and inefficiencies within the agency's high-volume processes. The problems for the SPS program were smugglers, their concentrations, their patterns of behavior, and specific smuggling methods. These *harms* existed in the outside world, and could be scrutinized in their own right without any reference to what Customs already had, or did, or the way it was organized. Another distinction – one the staff appreciated – was that the two methods produced quite different types of results: process improvement projects aimed to produce efficiency and public satisfaction, whereas *strategic problem solving* aimed to reduce drug smuggling.

The Occupational Safety and Health Administration (OSHA) also learned about the problem-solving approach (which they called *the problem-solving approach to hazard-mitigation in the workplace*) during the mid 1990s. In the spring of 1995 the agency was fighting for survival, under fierce assault from the newly Republican Congress led by Newt Gingrich. The Republicans targeted the EPA and the FDA also, but proposed elimination of OSHA altogether. "Replace OSHA with a brochure" was their motto; their platform "get regulators off the back of industry." Industry can be trusted, the Republican line claimed; just give them the right information so they can do the right thing.

Executives at OSHA were relieved, and to a degree surprised, when the *Washington Post* came to their defense.<sup>8</sup> Before we do away with this agency, this one article proposed, it would be prudent to consider what OSHA had accomplished. The article then listed a range of hazards that showed measurable declines after OSHA's intervention: 58% fewer deaths in grain-handling,<sup>9</sup> 35% fewer deaths in trench cave-ins in the construction industry, the rate of brown-lung disease amongst textile workers dropping from 20% of the workforce to 1% within a seven-year time period, and so on. Hazard by hazard, visible and significant reductions.

But in 1995, what managerial methods did OSHA have available in order to do better? Process improvement, of course. Consequently, like almost every other federal agency at the time, they had launched into process improvement, designing new response procedures for complaints and industrial accidents that significantly reduced response



times and, as a result of the efficiencies gained, freed up significant internal resources. If that is all OSHA had done, the chances are they would have lost any personnel and resources these new efficiencies had freed up, and their gains would mostly have been limited to timeliness, productivity, and efficiency. What counted – judging by the *Washington Post's* defense – was *effectiveness* measured in terms of lives saved and hazards mitigated. It wasn't obvious that process improvements necessarily translated into lives saved. Realizing this, and grasping the difference between process-improvement and hazard-reduction, they advanced both ideas at the same time, taking the efficiency gains that came from process improvement, and reinvesting resources and personnel to address specific hazards. Under the OSHA "Redesign Strategy" that resulted from this combination, the improved processes were rolled out Area Office by Area Office, freeing up between one third and one half of all the personnel. These staff members were immediately formed into *Strategic Intervention Teams*, trained in problem-solving methodology, and given the job of identifying specific concentrations of risk at the local level, and inventing methods to reduce the corresponding injury or illness rates.<sup>10</sup>

OSHA's Area Office in Parsippany, New Jersey, was the very first to go through this transition, and they set the tone for the rest of OSHA with two very successful early projects. One of these focused on contractors who paint New Jersey's bridges, whose workers were exposed all day long to lead-based paints. The goal of that project was to bring these painters' blood-lead concentrations down to safe levels. Progress would be monitored through the introduction of routine blood testing within the industry.

The Parsippany office's second project focused on deaths and injuries on highway construction sites, many of which were caused by inadequate separation of construction workers from traffic passing through. Noticing that all such sites already had state Highway Patrol Officers on site, the Parsippany team decided to engage the State Highway Patrol as partners in the enterprise, and provided training for police officers in how to spot occupational and construction hazards, even though these were not normally police business.

This mode of organizational behavior – focusing directly on the harms themselves, and on very specific pieces of the harms – shows up frequently in almost any discussion of regulatory innovations. The connection to *innovations* is mostly explained because this type of

behavior produces interventions which are tailor-made (being crafted around specific knots), and which therefore appear novel, or innovative. The more important innovation is surely the pattern of organizational behavior that produces such fruits, rather than the fruits themselves. Organizations that recognize this distinction are less likely to fall into the trap of celebrating and replicating individual *solutions*, and more likely to develop problem-solving as an operational approach relevant to a vast array of different harms.

In previous work, I have analyzed the different types of innovations surfacing within the regulatory (social risk control) side of government. Data regarding these innovations was available from the Ford Foundation's annual "Innovations in American Government" competition. This competition, launched in 1986, is open to federal, state and local agencies, and routinely receives more than a thousand applications per year, wherein agencies can present a summary of programs they consider innovative.<sup>11</sup> My analysis of this data put aside all the initiatives that primarily concerned the delivery of government services, and focused on those that had to do with control of some harm or another. Most of these submissions came from agencies of social regulation, or from law enforcement.

Taking thirteen years of the competition's history (1986–1998), I restricted attention to applications that were judged sufficiently noteworthy and valuable to make it to the pool of finalists. Twenty-five entries per year make it to the finals, with ten of them ultimately selected as winners. Each of the ten winners receives a good deal of publicity, as well as \$100,000 to support further replication and diffusion of the idea.

Focusing on the collection of finalists across the history of the awards program, a rather interesting picture of innovations regarded as valuable emerged.<sup>12</sup> Despite the fact that the dominant managerial tools of this period involved process improvement, and the political pressures for reform emphasized easing regulatory burdens and enhancing client service, only three of the applications within this particular pool reflected those themes. The IRS was selected as one of the ten winners in 1997 for their Telefile Program (which allowed certain taxpayers with relatively simple and straightforward tax returns to submit them via keypad entry on a telephone). The Food and Drug Administration won in 1997 for implementing an accelerated drug-approval process. Also, the City of Chicago reached the finals in 1991 for an automated system

integrating the various stages of parking ticket issuance, adjudication, and collection.

These three were classic process improvement projects, done well, each producing benefits in terms of efficiency, accuracy, and timeliness. None of them altered the underlying business models of the agencies involved.

A larger group of innovations finalists, eight in total, reflected quite a different type of work. They each involved a quite specific concentration of harm, which was demonstrably reduced through the thoughtful design and successful implementation of a tailor-made solution. Eight knots, spotted, and then unpicked.

One of these knots was an extremely disturbing pattern of juvenile homicide in the city of Boston. During the early 1990s the rate at which kids were killing kids rose to alarming levels. With grant support from the National Institute of Justice, a multi-agency task force was formed, with analytical support from some criminal justice experts at Harvard University. The intervention, since replicated to varying degrees in other cities around the US, became known as the *Boston Gun Control Project*.<sup>13</sup> The project team's incoming assumptions – that the heart of the problem involved easy gun-supply routes up the eastern seaboard to Massachusetts from southern states – were examined and then soundly rejected. Gun-trace data for guns used in past homicides showed quite the opposite: guns used were mostly fairly new, and first purchased in Massachusetts. So the knot was turned this way and that, through a sequence of analytical explorations, seeking alternate perspectives and insights into the nature of the thing. Eventually the team established that the bulk of the homicides lay along the lines of established “gang beefs” (hostilities between various pairings of Boston's sixty-one gangs). Important dynamics of the problem included the fact that most gang-involved youths carried weapons, they believed, for the purposes of self defense. Also, by committing an act of violence, gang members gained respect among their peers – for them a powerful motivation. Once the project team understood the dynamics of the problem, they developed a strategy (“Operation Ceasefire”) to reverse the effects of peer-pressure within the gangs by making any gang member who committed an act of violence the mechanism of downfall for the whole gang. Through a series of meetings which gang members were obliged to attend as a condition of probation or parole, the project team delivered a stern warning to the gangs. From that day forward, any gang

member who committed an act of violence would bring the concerted attention of federal, state and city police agencies down not just upon themselves, but upon their entire gang. The task force promised law enforcement attention so focused and intense that they said they could remove any one gang from the streets entirely. They would use outstanding arrest warrants, parole violations, whatever they had. They would bring the most severe charges possible, using federal indictments where necessary, to put the whole gang behind bars. Once the strategy was fully communicated the team did have to deliver on its promise, twice, with respect to two different gangs. At that point, the rest were apparently convinced the threat was serious, and gang violence dropped off dramatically. The homicide rate for victims under age 25 dropped by 68% in the first year after Operation Ceasefire began, and continued to decline thereafter.

Another of the specific knots unpicked involved prostitutes in San Francisco. The District Attorney's office, working with law enforcement and public health agencies, devised a plan to rescue young women from a life of prostitution. Analyzing the pressures through which women are first drawn into the trade and subsequently trapped within it, the team decided to focus on the moment of first arrest as an important opportunity for intervention. The first arrest, unlike the fifteenth one, came as a shock, and maybe represented the best opportunity to intervene before the cycle of offending and re-offending became entrenched. Hoping this was, for young prostitutes, a "teachable moment" the team devised a program including elements of counseling, life skills training, treatment, and case management. They offered an eight-hour seminar on the risks and impacts of prostitution as an alternative to prosecution. Instituted in 1995, the program reached the finals of the innovations competition in 1997, and was selected a winner the following year (the 1998 cycle). The reason for the difference, with essentially the same innovation presented two years running, was that the project had more results to show a year later: that is, more women extracted from the profession.

These two examples both exhibit four important properties typical of this whole class of innovations. First, they addressed specific, tightly defined concentrations of harm, rather than generalities or broad classes of harm. The Boston project did not target all violence, nor all "Part 1 crimes," not even all homicides. Once the analysis had identified gang-related violence as a significant and discrete component

of the overall homicide rate, the collaborating agencies then honed in on that piece of the puzzle. Similarly, the San Francisco First-Offender Prostitution program did not tackle all sex crimes in the Bay area, nor even the whole problem of prostitution and its societal impacts. Rather it picked apart the dynamics and development of a life of prostitution, searching for a point of leverage where targeted resources could make a real difference.

Second, these projects involved a prolonged period of analysis and inspection, before any new action was initiated. In the Boston project, several different hypotheses about *what the problem really was* were tested and discarded before the relationship between juvenile homicides and gang-hostilities was finally established.

Third, having understood the problem and defined it precisely, the interventions that resulted were not merely a mixture of existing functions or methods; they were qualitatively new. And the methods were not novel for the sake of being novel (entry in the competition invariably came as an afterthought); they were novel because the problems to be addressed had not responded to the standard treatments, and therefore required novel ones.

Fourth, these projects involved multiple agencies and organizations working in collaboration. Why? Not because cross-agency or multi-functional collaboration is inherently desirable for its own sake. Rather, multiple agencies were involved because the problems addressed straddled jurisdictional and programmatic boundaries, making collaboration essential.<sup>14</sup> The partnerships involved in these projects formed around the shape of the knots themselves, rather than recasting the problem to conform to existing institutional structures or trying to divide it along traditional functional or programmatic lines.

Even this group of eight innovations finalists, representing *specific problems identified and solved*, was not the most significant category. The analysis showed another, yet larger, grouping of innovations finalists. This set, comprising thirteen different projects, followed similar lines to the previous set but went beyond the identification and solution of one specific problem. These thirteen projects involved setting up analytic systems of one kind or another designed to enable an agency to spot problems – not once or twice, but on a continuing basis. The majority of these analytic systems involve pattern recognition methods (some crude, some quite sophisticated), as well as the adoption

of operational procedures to address whatever patterns the systems revealed.

This set includes New York City's Compstat program (which became a competition winner in 1996). This program established routine precinct-level analysis of reported crime data, and then held precinct commanders accountable for addressing any patterns of crime identified through the analysis. The Pension Benefit Guaranty Corporation (winner, 1995) devised an early warning system for pension plans at risk of insolvency. This set of innovations also included a range of other technical analysis and survey systems used by law-enforcement to identify patterns of crime, road accidents, and other community concerns. Florida's Department of Environmental Protection reached the finals in 1994 with a system for analyzing marine spills of oil and other contaminants, so that repeat sources and causes could be addressed.

Where do these types of innovations belong on the chart? I would suggest they belong in the middle, and at the bottom, under the label "parse the risk." These systems use various data sources, and various ways of slicing and dicing that data, to make visible any knots that might exist, with the presumption that they can then be addressed. These projects show a range of agencies moving beyond the untying of a single knot. Here they are getting into the *knot-spotting* and *knot-untying* business, and building some pieces of organizational infrastructure to sustain it as a part of ongoing operations.

### Why innovative?

At first it seems somewhat ironic that such programs should win *innovations* awards. If a police agency could not spot crime problems and successfully address them, what use would they be? Surely citizens would expect environmental agencies to be able to recognize specific environmental problems, tax agencies to spot important patterns of non-compliance, and OSHA to deal with specific patterns of death and injury in the workplace? Is that not the core of their mission? Yet when they do precisely this, they win prizes for innovation, and society celebrates both their brilliance and their courage. But why should such behavior represent a departure from business as usual? Why should it require brilliance, or courage? Should it not be utterly routine? Should it not be, in fact, the core of normal operations?

Perhaps it should. But the truth of the matter, sadly, is that functions and processes take over; and it pays to understand why. Functions are *comfortable*. They group employees together with others who share common training, celebrate a common set of skills and knowledge, share a specific professional culture, and climb a well-established disciplinary ladder.

Processes are *inescapable*. Process loads are tangible and voluminous. Related timelines are mandatory.

By contrast, the business of organizing around specific harms, and devising solutions for one piece or another, seems vague, amorphous, and entirely optional. It is never clear who's job that is, if anybody's, because job responsibilities are not framed that way. If an agency should address problems of this type, it is not clear how many, or how big, or for how long. It is certainly not obvious how this type of work – if and when an organization chooses to engage in it – fits with the other kinds of work, which still need to be done, nor what priority it might take. Absent any system for driving this type of work, and connecting it properly with everything else an agency does, whoever chooses to tackle a knot often has to invent the whole methodology for themselves, provide all the energy and all the ideas, and enlist all the necessary partners. Many of the award winners who did this work had no authority to do it, and certainly no mandate. Many of them received no support from their agency, nor recognition – until after the fact when the rest of the world took notice. From talking to staff members who have engaged in this type of work, one does begin to understand the need for courage and determination. The solutions they generate look like a slap-in-the-face for the prevailing *theories of operation*. Focusing attention on a particular harm in the first place (and therefore distracting attention from routine business) seems to carry some professional risk.

Even in institutions that have declared their commitment to a problem-solving strategy and promised managerial support for it, practitioners report a host of reasons why this type of work remains absurdly difficult: This is *extra* work, and every other kind of work has a formal structure, and deadlines, and a legal mandate; this has none of those. This type of work brings unfamiliar degrees of discretion, and involves endless subjective judgments – what to take on, how big, how small, how the problem is best defined, what partners, what methods, how much to spend. Problems straddle organizational

boundaries, and other agencies bring sharply conflicting perspectives to bear on them.<sup>15</sup> We have no established protocol for this type of work. We have no *forms* for this type of work. Half the agency does not believe this type of work is different, or needs organizing. The problems do not fit our system of job definitions, so it is not clear where they belong.

Once one hears all these complaints, time and again, across many different professions one does begin to understand why the people that actually manage to do this type of work – to focus on a harm, devise a solution, and stick with it long enough to make a real difference – deserve to be celebrated and rewarded. It takes heroism, and acts of organizational subversion, to overcome the institutional pressures stacked against them.

There is nothing particularly complicated about the basic notion of picking harms apart, identifying critical components, and unraveling them one by one. We often use quite plain and straightforward phrases to describe this practice: “Pick Important Problems & Fix Them.” “Oh, that’s just the problem-solving approach, applied to risks.” Hearing this language, one could be forgiven for assuming this approach was not new; or if it were new, that it was nevertheless straightforward. Neither of these turns out to be true. For many organizations it is new. When they do it once, everyone celebrates. When they try to do it more often, or routinely, they discover they do not know how to organize or support it. If they do manage to establish it as a part of operational practice, it often turns out subsequently to be fragile and short-lived.

When staff gather in functional units, they gather around their shared past, their shared training, their shared skills. When staff gather around processes, they gather around a visible and tangible flow of calls, files, transactions or reports. Little imagination is required, in either case, to understand the nature of the work.

But when people gather around a specific identified harm (one of those objects in the bottom left hand cell of Figure 2.2) what is it exactly that they are gathering around? Some piece of a more general harm, to be reduced? Who says which piece, and how best to define it? Who decides which component of a risk to address? Who decides if the focus should be on reducing the probability of some class of events, or changing their distribution, or limiting their consequences? When we look at a general class of harms (in the bottom right hand cell) we have



in mind a condition in the world that we would like to be different. The specific harms (bottom left) represent select pieces, subjectively chosen, of the general conditions we would like to be different. No wonder this practice seems abstract, vague and elusive; and no wonder most activity gets organized some other way.

When practitioners do recognize this form of work and determine to operate this way, they confront a host of subjective decisions: how many pieces to identify, in what dimensions, and at what scale. And that is just the work of *defining* the task. *Performing* the task brings another round of choices: what methods to use, what partners to enlist, how much of a reduction to set as the goal. On every one of these questions, all the other interested parties are free to disagree. This type of work might proceed more naturally on odd occasions when a specific harm stares everyone in the face, demanding attention, and where the shape and nature of the problem is reasonably plain to everyone. But these are the exceptions. The rest of the time practitioners need some guidance to help them navigate the endless choices involved. Without such guidance, the most attractive choice is not to do this type of work at all, and to revert to forms of work that are more familiar, comfortable, and straightforward.

## Notes

1. See: Michael Hammer & James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution*, HarperBusiness Books (New York: HarperCollins Publishers, 1993).
2. I am grateful to my colleague Mark H. Moore for this framework. He proposed it as a device for categorizing performance metrics. It is also useful as a way of understanding different organizational behaviors.
3. Transition to the new mega-regulator happened in stages between 1997 and 2000. Ultimately the Financial Services and Market Act, 2000, provided an integrated statutory umbrella, replacing all the sector specific statutes upon which the prior multi-agency supervisory system had been based.
4. For a fuller discussion of the non-filer issue, and IRS analysis of it, see Malcolm K. Sparrow, *The Regulatory Craft: Controlling Risks, Solving Problems & Managing Compliance* (Washington DC: Brookings Institution Press, 2000), pp. 73–75.
5. *Ibid.*, pp. 124–129.

6. Such failures do not result simply from laziness on the part of inspectors. The smuggling organizations are violent and ruthless. They target specific inspectors, find out where they live, and threaten their spouses and children. Systematic intimidation of inspectors is part of the smuggling strategy. They also use “spotters” overlooking the inspection areas, equipped with binoculars and radios, to direct the load-carrying vehicles to lanes manned by inspectors who are compromised, vulnerable, or inexperienced.
7. Archon Fung comments on the complexity and awkwardness of “problems that lie between the core competencies and responsibilities of several agencies...” given the fact that a bureaucracy “...develops a stock of procedures and techniques to address the canonical problems that arise in [their] arena.” This comment applies equally well across functional units *within* large bureaucracies as well as *across* agencies. Archon Fung, *Empowered Participation: Reinventing Urban Democracy* (Princeton, New Jersey: Princeton University Press, 2004), p. 21.
8. “OSHA’s Enemies Find Themselves in High Places,” *Washington Post*, July 24, 1995.
9. The most common method of death involves drowning (i.e. asphyxiation) in grain silos.
10. OSHA had eighty-six Area Offices at the time, covering the twenty-nine states in which OSHA operated. In the remaining twenty-one states, occupational safety is the responsibility of state agencies.
11. The John F. Kennedy School of Government helps to administer the program, under grant from the Ford Foundation, and is thus in an especially good position to gather and analyze data from the program.
12. For a full description of this analysis, and for a brief description of all of the regulatory and enforcement innovations which have been selected as finalists during the first thirteen years of the competition’s history, see: Sparrow, *The Regulatory Craft*, Ch. 6.
13. For a fuller account of this project, see: David M. Kennedy, “Pulling Levers: Chronic Offenders, High Crime Settings, and a Theory of Prevention,” *Valparaiso University Law Review*, 31 (1997), 1–53; Sparrow, *The Regulatory Craft*, Ch. 12.
14. Jorg Raab & H. Brinton Milward, “Dark Networks as Problems,” *Journal of Public Administration Research and Theory*, 13 (2003) 413–439 p. 414; Benny Hjern, “Illegitimate Democracy: A Case for Multi-Organizational Policy Analysis,” *Policy Currents*, 2 (1992), 1–5.
15. The Department of Environment & Labour in Nova Scotia, Canada, recently launched a project focused on the risk of *workplace violence* in the province, because data on workplace injuries pointed to

violence as a growing source of concern. The problem awkwardly straddles the jurisdictions of multiple departments, including the department of labour (accustomed to developing systems for *hazard mitigation* and *accident prevention*), and police (more accustomed to dealing with *crimes*). To complicate things further in terms of defining the problem to be addressed, significant subsets of violence-related workplace injuries occur in prisons and in health care delivery settings, involving a broader range of institutions and operating norms. One of the early challenges for this project, therefore, involves awkward decisions about how much of the overall problem to take on, and which parts; and how to frame the issues in a way which energizes rather than alienates important partners. A list of public information resources regarding the project is available on the agency's website at: [[www.gov.ns.ca/enla/healthandsafety/violenceintheworkplace.asp](http://www.gov.ns.ca/enla/healthandsafety/violenceintheworkplace.asp)]. See, particularly: *A Workplace Violence Prevention Strategy for Nova Scotia: Promoting Greater Awareness of Workplace Violence Prevention* (Halifax, Nova Scotia: Department of Environment & Labour, April 2007).