A Background on Blueville’s Frustrating Recycling Policy

The mayor of Blueville was elected on a strong environmental message. She promised, especially, to promote recycling in the city—reducing the amount of plastic goods on city streets. There was no recycling, historically, so her administration had a lot of work to do.

Upon taking office, her staff approached a consulting firm that had advised other cities with prominent recycling strategies and asked for a ‘plan of action’. On these consultants’ advice, the mayor’s office acted to: (i) Provide recycling boxes for every constituent (individuals and businesses) to use in collecting recyclables; (ii) Set up collection points at four city buildings (the City Hall, Police Station, Registrar’s Office, and School) where citizens could deliver their recyclables. A private firm was contracted to gather the recyclables at these collection points.

A year later, the policy still did not yield the kind of results the Mayor had hoped. The amount of plastic waste on city streets did not seem to decrease, partly because few constituents collected and/or delivered recyclables to the collection points. The mayor challenged her staff to pivot: “Find out why the policy is not working and fix it!”

A team was created to address this challenge, including officials from the environmental management bureau and the mayor’s office and representatives from business and civil society. Based on the advice of a coach, the team started their work by engaging groups of actors in the community to learn more about the problem and its causes—and to better understand and appreciate why the challenge mattered. They identified over 30 different groups in this process, including businesses in the city center (the major complainants about plastic waste), commuters using city bus stops (where a lot of litter was concentrated), residents in the city center and outlying suburbs, political action groups, environmental NGOs in the city, city government organizations responsible for solid waste removal and managing city dumps, and more.

After meeting with representatives from about half of these groups, the team built a narrative about what the problem was, why it mattered, who it mattered to, what it would look like solved, and what its major causes were. Parts of this narrative are summarized in the picture on the next page (a simplified fishbone or Ishikawa diagram the team used to
communicate its findings). Although the team expected there was more to learn about the problem, they were confident in the narrative shown in this diagram and believed – together - that they could help the mayor and city achieve some version of ‘problem solved’ by addressing the causes they had identified.

**FISHBONE (ISHIKAWA) DIAGRAM WITH SUB-CAUSES**

1. **Cause 1**
   - "We do not know what goods can be recycled and what can’t be recycled."

2. **Cause 2**
   - "We do not know where the recycling points are."

3. **Cause 3**
   - "We cannot get to the recycling points."

4. **Cause 4**
   - "It is difficult - and costly - to get products to the recycling points."

5. **Cause 5**
   - "We do not have an incentive to do all the work associated with storing and then delivering recyclables to the recycling points."

   **Sub Causes**
   1. **Sub Cause 5.1**
      - "We lack a clear reason ‘why’ we should comply."
   2. **Sub Cause 5.2**
      - "The work demands collaboration and we lack a reason to collaborate."
   3. **Sub Cause 5.3**
      - "We might want to do this for a short time, but lack a reason to keep committed."

'The PROBLEM'
- 'Too much plastic is on city streets because of low levels of constituent recycling.'

A Practical Path to Solutions and Results

The team presented their problem narrative to the mayor and some other authorizers – including business and civil society leaders who expressed particular interest in the work. These authorizers were impressed with the clarity of their work and with the breadth of engagement and consultation it had involved. The mayor wanted more, however, and asked the team how they planned to go from their diagnosis of the problem to a solution. She was willing to support a work program for six months but needed to see results in that period – noting that the constituent groups that had been engaged would probably expect to see action even sooner.

Given such perspective, she asked the team to provide her with a six-month action plan focused on solving the problem they had identified quickly and effectively.

This was frustrating for the team to hear. Their diagnosis had revealed that the problem was complex—with many different actors and causes and lots of unknowns (especially about what was needed to solve the problem at scale!). They did not feel it was possible to do much about this kind of problem, particularly in the time their mayor provided.

Their coach had a different view, however, and encouraged them to adopt an ‘adaptive’ strategy to tackle the challenge. This involved working in a rapid, iterative manner to develop the fastest, smallest version of a solution as possible – in the
six months provided - and then improve and diffuse the solution. This approach, he argued, would allow the team to learn their way towards a solution while they delivered results, quickly, without significant additional resources and in a highly interactive manner (where constituents would be able to see the team actively responding to their problems and even participate in finding solutions).

The team agreed that this seemed a practical path to solutions and results and asked how to design the strategy.

**Focusing and Sequencing the Work**

The first step in designing a strategy involved identifying an ‘arena’ (or arenas) in which the team could start working – actively – to find quick solutions to the problem. In the context of the city and problem, this meant identifying constituent groups the team could collaborate with to address the five ‘causes’ shown in their fishbone diagram. These constituent groups would need to be eager and able to work on the problem (willing to try ideas out in an experimental manner, rapidly) and represent broader communities in the city (given that products of the work would then be diffused to other parts of the community).

→ The first arena chosen was a two-block part of the city center, where the team decided to work with local businesses. This was an easy choice, given that two business leaders from this block were already on the team and other business leaders from the area had been consulted about the problem (so relationships had been initiated between them and the team). The team also believed these businesses would be representative of other businesses, such that any solutions they found would be broadly useful across the city’s commercial community. The business area they focused on was also located close to one of the recycling collection points government had already created (at City Hall).

→ The team decided to work in a second arena as well, engaging the community of transient lower-income commuters at city bus stops. They argued that this group of people was more affected by the problem of plastic waste than most others (given the concentration of such at bus stops) but had traditionally been less represented in any discussion about solutions to the problem. Team members had engaged with representatives of this group in developing their problem narrative, however (by going to bus stops and asking people about their experiences), and the team’s civil society representatives had developed a strong connection with the commuters. These representatives felt it would be important – even if difficult – to build on this engagement and include the group in agile implementation. They decided, as a result, to focus on commuters at two larger bus stops. Importantly, these locations were also close to recycling collection points (outside the Police Station and Registrars Office).

The next step involved determining results the team hoped to achieve in working with these groups. They had identified various ‘problem solved’ measures in their diagnostic work, including ‘there is less plastic waste on streets’, ‘there is less plastic waste in landfills’, ‘business owners feel that there is less litter’, ‘commuters feel that bus stops are cleaner’, and ‘people are more confident in government’. The coach asked the team to identify one or two essential measures they should focus on from this list – which the mayor and other authorizers would see as indicators that the solution was really working and which the team thought could be measured relatively easily (to ensure they had real targets to achieve).

→ The first measure they chose as a reflection of ‘problem solved’ was the amount of plastic waste collected at the three recycling points closest to their focal arenas. The team had data on collections from the prior year and agreed that ‘problem solved’ would be measured by an increase in such collections. They agreed that a 50% increase in monthly collections in 6-12 months would signal real progress.

→ Their second measure captured the behavioral change they hoped to see as a result of their work. This behavioral change would manifest in a high share of people involved in recycling behavior. The team agreed that real progress would be achieved if 80% of the people in their two focus groups were actively recycling at the six-month mark. This measure could be assessed by surveying members of the groups at different points in the process, asking if these members were recycling their plastics.
The team was enthused by their progress in identifying who to work with and to what ends. The next step was determining ‘what they would work on’ in the coming six months.

In reflecting on this, the coach noted that the team’s fishbone diagram revealed five major areas where the team needed to work – addressing each of the causes they had identified as contributing to the problem. The coach suggested that the team reflect on what they hoped to achieve in addressing each of these causes – asking them what ‘capability’ was needed to address each cause (where he defined ‘capability’ as the ‘empowered and demonstrated ability existing in a system’). For example, he explained that a soccer team that loses matches because of a slow defense would need to develop a capability to ‘defend with speed.’ We don’t need to know exactly how they build this capability – by hiring a new fast defender, improving the speed of existing defenders, changing the positions of players, etc. – but are just interested in the capability that is currently missing and needs to be put in place.

The team reflected on this idea and translated all five causes into ‘needed capabilities’. Where cause 1 was listed as ‘Constituents in the focus groups do not know what goods can and can’t be recycled,’ for instance, the team defined the needed capability as, ‘Constituents in the focus groups know what is a recyclable’. Where cause 3 was listed as ‘Constituents in the focus groups cannot get to the recycling points,’ the team defined the needed capability as, ‘Constituents in the focus groups know how to access recycling points’. They did not say how these capability would be achieved or set in place, but identified criteria they would measure to determine if change had occurred, including (in respect of cause and capability need 1) ‘80% of constituents in focus groups can confidently identify recyclables in a product set.’

Such work led to the transformation of the team’s Ishikawa/fishbone diagram – from a picture of the problem and causes of the problem to a picture of problem solved and the capabilities needed to achieve problem solved. This is shown below.

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**REVISED FISHBONE (ISHIKAWA) DIAGRAM**

The simplest and smallest version of problem solved.

‘Recyclables collections have increased in the focus groups, and most people in the focus groups are recycling.’

**Capability needed 1**
Constituents in the focus groups know what is a recyclable

80% of constituents in focus groups can confidently identify recyclables in a product set

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**Capability needed 2**
Constituents in the focus groups know where the recycling points are

80% of constituents in focus groups can confidently identify recycling locations

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**Capability needed 3**
Constituents in the focus groups know how to access recycling points

80% of constituents in focus groups are confident in getting to recycling points

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**Capability needed 4**
Constituents in the focus groups can get recyclables to recycling points

80% of constituents in focus groups can get products to recycling points within 500 yards

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**Capability needed 5**
The city can incentivize constituent compliance

80% of constituents in focus groups feel motivated and incentivized to comply with policy

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This work enthused the team, as they had a clear idea of the targets they wanted to achieve and some view on the capabilities they needed to develop to achieve these targets. They wondered, however, how they would develop the capabilities.

In reflecting on this, the coach suggested that the team focus on the strategy they will follow, not the solution, and adopt a step-by-step iterative process to build the capabilities, working on a maximum of two at a time (given the limited size
and capacity of the team) and moving rapidly to ensure they addressed all five capability needs in the six months they had for the work. The question was how they should sequence such work – and most especially what they should start with – given that many policy efforts fail because they do not start or do not start well given the complexity of the challenge!

The coach offered various ideas as to how the team might think of the ‘entry points’ it could start working on. One idea was to focus on the most ‘critical’ capabilities – that posed the greatest constraints to success (what some might call the ‘binding constraints’). Another idea was to start working on the most ‘accessible’ capabilities – where the team could start working quickly, given their existing authorization, abilities (like time, ideas, and resources), and what they accepted to do (given the risk and cost of taking action). The coach noted that other ideas also existed, including choosing to work in areas where progress might inspire or inform more success (what one might call emergence) or where one might expect ‘low hanging fruit’ gains.

The team considered these ideas and agreed that they would look at the ‘criticality’ and ‘accessibility’ of each capability needed – asking about the relative importance of each capability and how possible it would be to tackle the capability quickly. This was a difficult exercise, largely because team members lacked scientific ways of determining whether a capability was higher or lower criticality or accessibility. They had to discuss and debate their views, tasked with coming to a common agreement about which two capabilities they could treat as entry points.

After a few hours of interactive debate, the team decided that two capabilities were both highly critical and highly accessible (as shown in the chart below): capability 1 (‘constituents in focus groups know what is recyclable’) and capability 5 (‘the city can incentivize constituent compliance’). They judged that both of these capabilities were highly critical (as very little was possible if constituents did not know what was and what wasn’t a recyclable and if they did not have an incentive to comply with recycling policies). They judged that both were also highly accessible (as the team was authorized to work on establishing such capabilities, had the abilities needed for the work, and accepted the challenge implied).

<table>
<thead>
<tr>
<th>CRITICALITY</th>
<th>ACCESSIBILITY</th>
</tr>
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<tbody>
<tr>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Capability 1</td>
<td>Constituents in focus groups know what is recyclable</td>
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<tr>
<td>Capability 5</td>
<td>The city can incentivize constituent compliance</td>
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<tr>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>Capability 2</td>
<td>Constituents in focus groups know where recycling points are</td>
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<tr>
<td>Capability 3</td>
<td>Constituents in focus groups know how to access recycling points</td>
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<tr>
<td>Low</td>
<td>High</td>
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<tr>
<td>Capability 4</td>
<td>Constituents in focus groups can get recyclables to recycling points</td>
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They judged that the three other needed capabilities – related to accessing and using recycling points – were of lower criticality, believing that citizens would provide their own solutions to these needs if they knew what to recycle and had incentives to recycle. They judged that one of these capabilities (capability 4, ‘Constituents in focus groups can get recyclables to recycling points’) was not even accessible to them as a team – given that it depended on transportation mechanisms in the city, which the team could not influence.

This exercise led to the team choosing needed capabilities 1 and 5 as entry points for their work – where they would start their search for solutions and focus their first two to three months of ‘discovery’- and shifting the other needed capabilities to later months (as in the work breakdown below). The breakdown reflected advice that the team provide at least two months of time to work on each capability, and never work on more than two capabilities at a time.

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### Empowered, Inspired, With Growing Momentum

The team was empowered and inspired by this progress. Identifying entry points to start working on felt like finding a key to unlock the door between policy diagnosis and action.

They shared this progress with representatives in the two chosen arenas – local businesses in the specified area of the city, and bus stop commuters – to ensure that it would be possible to start working in each place and on the specific topics implied by needed capabilities 1 and 5. The various groups’ representatives were surprised and excited, noting that they did not expect such rapid action by a city government team but were thrilled to participate as co-creators of new recycling capabilities in the city.

The team also presented their strategy in a stand-up meeting with the mayor and other authorizers, as a pathway to discovering solutions to the city’s recycling problem while also delivering rapid results. The mayor was pleased and asked for regular reports on their progress, launching the start of a new period of active work.