**Problem Definition Worksheet**

|  |  |  |
| --- | --- | --- |
| **Question** | **Resource** | **Example** |
| Could this problem break into smaller problems? |  | *Problem statement: “The city does not have updated data to properly plan the public transportation routes effectively...”*  Now, this problem statement might be too broad. We could break it down to target smaller groups like handicapped population data or kids and school student. |
| Is this a statement of a problem or is it a solution stated as a problem? |  | *Problem statement: “NY suffers from a lack of 15,000 policemen in its streets.”*  At a first glance it seems like an issue that should make as all worry and increase NYPD budget but that’s exactly the problem with that statement - it assumes that adding policemen is the solution. Solution for what? it is not clearly stated here. A more in-depth research needs to be done to describe the criminal activities in NY which could be resolved by many other solutions than police increased activity and manpower. |
| Does the problem statement merely describe a symptom of the problem? |  | *Problem statement: “People are afraid to walk in NY street after dark”.*  Looking at this problem might make us think of solutions such as taking Xanax. That, of course, won’t solve the issue because it has nothing to do with the problem behind the statement. I could take Xanax and relax, go out, and then get robbed. Other symptoms of this problem could be “people close their store before sunset” or “real estate value in NY is decreasing”. |
| Does this problem statement include a theory of causality (a cause and effect relationship)? |  | *Problem statement: “There’s a major decrease in civic education hours in schools all over the U.S.”*  At first this seems as a coherent and specific problem statement but an important piece is missing here: Why did the number of hours decrease? What are the possible implications of that? who is harmed by this problem? |
| Does this problem statement include a theory of change? |  | How to give an example without addressing a concrete solution? |
| Is the problem definition actionable? |  | Any ideas? |
| Does the problem include clear criteria for success? |  |  |
| Is the problem statement phrased in a professional Jargon? |  | *Problem statement: “The quantum description of reality includes elements such as the* [*superposition*](https://en.wikipedia.org/wiki/Quantum_superposition) *of states and* [*wavefunction collapse*](https://en.wikipedia.org/wiki/Wavefunction_collapse) *or* [*quantum decoherence*](https://en.wikipedia.org/wiki/Quantum_decoherence) *that cannot be reduced to physical elements”.*  Many times, the best solutions come from people who work in different fields of expertise, but for them to be able to solve the problem the problem should be stated in a manner that will not require “niche” area terminology. |
| Does the problem statement offer new information to potential solvers? |  |  |

MIT OpenCourseWare

<https://ocw.mit.edu>

CMS.362 / CMS.862 Civic Media Codesign Studio

Fall 2020

For information about citing these materials or our Terms of Use, visit: <https://ocw.mit.edu/terms>­­