

Application: Describe your system

This is a team activity. Every member of your team must take part in doing this assignment. Only one member of your team needs to submit this form.

Please base your responses on the work you have done so far in Applications 10-12.

After you submit this form, please also email realavi@mit.edu your box-and-arrows model for the system architecture + function (see the 2nd image below). Your model can be digital or not, and in color or in black-in-white.

You can view the introduction to systems thinking and the SAFO framework [here](#).



* Indicates required question

Email *

Your email

Your team letter *

- A
- B
- C



SAFO framework



System*
Technological
Engineered



Architecture
Structure +
Behavior



Function
The system of interest's
interactions with boundary
systems**:
Input systems
Output systems

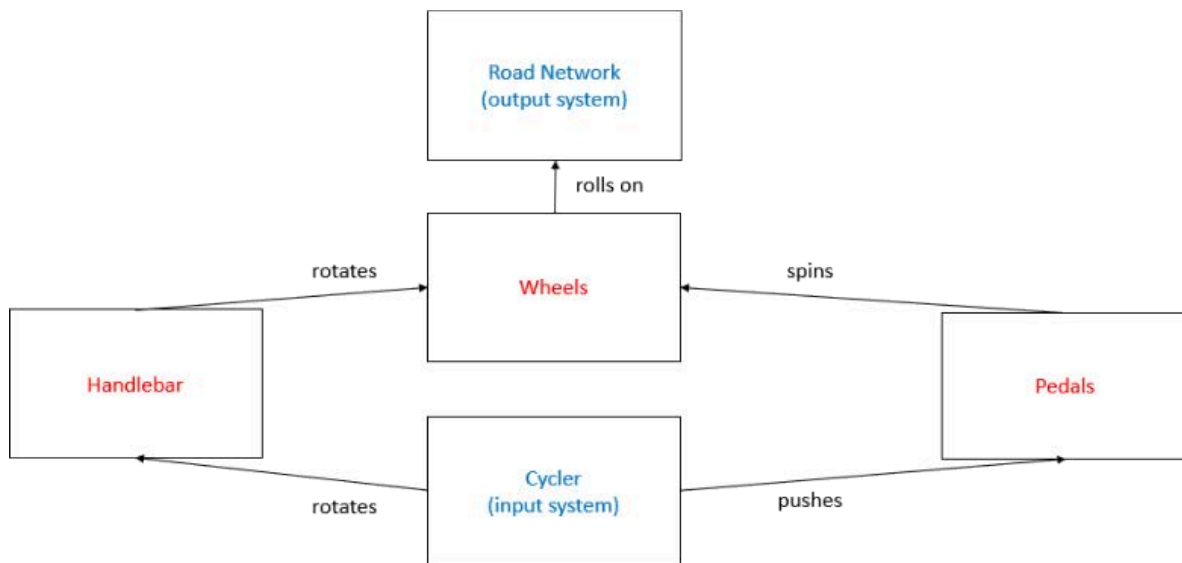


Outcome:
Problem
Stakeholders
Benefits
Detriments

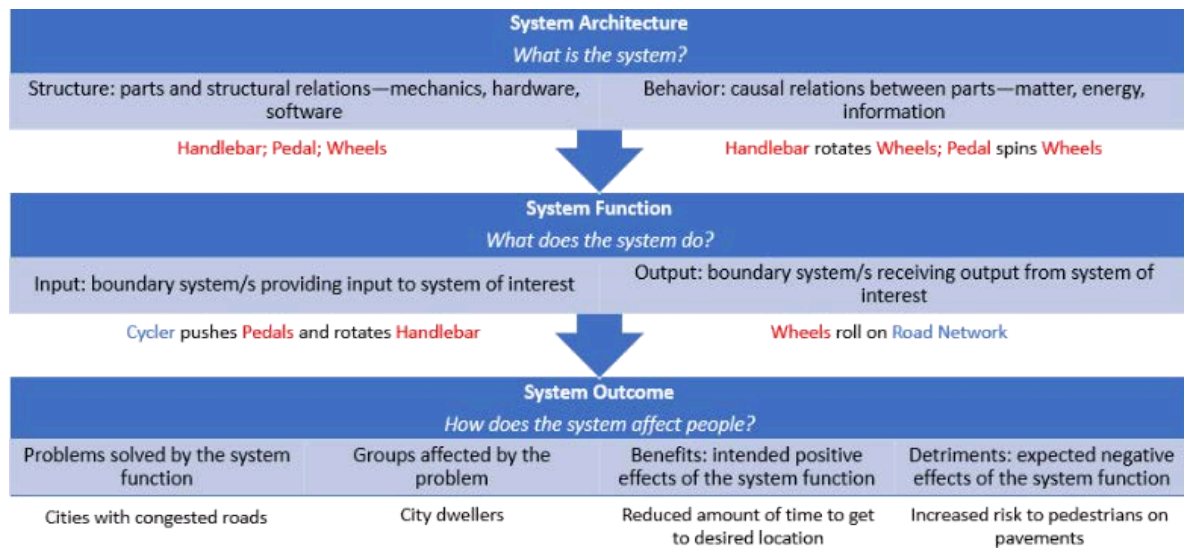
* System of interest

** Boundary systems do not have to be technological.

The System Architecture-Function-Outcome framework applied to a bicycle, showing the system's architecture and function.



The System Architecture-Function-Outcome framework template applied to a bicycle.



System Architecture - Structure: Name five, six, or seven essential parts of the system. *

Your answer

System Architecture - Behavior: Describe the major cause-and-effect interactions between the different parts of the system. Every part must be mentioned at least once. *

Your answer

System Function - Input: Name one or two essential input systems and how they interact with the architecture of the system of interest. *

Your answer

System Function - Output: Name one or two essential output systems and how they interact with the architecture of the system of interest. *

Your answer

System Outcome - Stakeholders: What group of people is majorly affected by the problem your solution/system is meant to solve? *

Your answer

System Outcome - Problem: What is the problem, lack, or need the system function is meant to solve or improve? *

Your answer

System Outcome - Benefit: What major intended positive outcome is brought about by the system function? *

Your answer

System Outcome - Detriment: What major expected negative outcome is brought about by the system function? *

Your answer



System Outcome - Detriment mitigation: suggest a practical way to reduce or even eliminate the detriment caused by the system function of your solution. *

Your answer

If you used any additional sources in filling out this form, beyond those you used for Application assignments 10-12, please list them here.

Your answer

A copy of your responses will be emailed to the address you provided.

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