Sustainable Systems: Smart Cities

About Report 1
The course schedule

- **Tuesday Oct 6:**
  - Teams A 1,3,5,7,9
  - Teams B 1,3,5,7,9

- **Tuesday Oct 13:**
  - Teams A 2,4,6,8,10
  - Teams B 2,4,6,8,10
Core elements of a “smart city”

- Smart energy
- Smart infrastructure
- Smart mobility
- Smart security
- Smart building
- Smart healthcare
- Smart technology
- Smart citizens
- Smart governance and education
How can we make our city “smarter”? 

SWOT analysis 

- Strengths 
- Weaknesses 
- Opportunities 
- Threats
A SWOT analysis (alternatively SWOT matrix) is a structured planning method used to evaluate the strengths, weaknesses, opportunities and threats involved in a project or in a business venture.

https://en.wikipedia.org/wiki/SWOT_analysis
Example of SWOT analysis for small business

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent quality: We consistently produce</td>
<td>Lack of funding: We will need to borrow $100,000 in funds for the first</td>
</tr>
<tr>
<td>plants with high active botanical percentages.</td>
<td>year.</td>
</tr>
<tr>
<td>Saleable plants: We produce a high ratio of</td>
<td>No reputation yet: We haven’t established ourselves as reputable grower</td>
</tr>
<tr>
<td>healthy (saleable) plants.</td>
<td>in the botanicals market yet.</td>
</tr>
<tr>
<td>Experience: Co-owners have a strong combination of business development and horticulture experience.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer loyalty: Customers are looking for an ongoing relationship with one botanicals vendor.</td>
<td>Weather: A poor growing season due to the changes in weather can seriously affect production.</td>
</tr>
<tr>
<td>Growing market: The market for supplements is huge and growing.</td>
<td>Pests: Pests are a threat to our ability to provide healthy plants.</td>
</tr>
<tr>
<td></td>
<td>Similar-sized farms: Some similar sized farms have been in business longer.</td>
</tr>
</tbody>
</table>
Report targets

- Report 1
  Focus: *Strengths and weaknesses*
  Time: *8 minutes*

- Report 2
  Focus: *Opportunities and threats*

- Report 3
  Focus: *The proposal*
Report turn in

• Team Leader submits detailed PowerPoint to the AES disk space

• Drive name is
  – `\\cifs.egr.msu.edu\dfs\courses\AESC\310`
  – Once drive is mapped place in
    • `310>sections>students>(your msunet ID)`

• Directions for mapping a drive
  – `http://www.egr.msu.edu/decs/how-to/map-network-drive-windowsxp`