 **LehighHacks 2016**

** Smart Environments**

Overview/Challenge:

Today nearly 40% of all food is wasted . In the U.S. this is about 20 pounds of food wasted per person, per month. Additionally, 97% of this wasted food ends up in landfills, that’s about 33 million tons. Food waste that goes into landfills breaks down anaerobically and produces methane; methane is 21 times more potent than C02 as a greenhouse gas (sources: EPA, Food & Ag administration).

Stepping back, it is important to think about all of the other inputs that are jeopardized along the value chain, when such a significant amount of food is wasted. All of the inputs such as water, fertilizer and other nutrients are also wasted as food gets thrown out. Not to mention the significant resource strain this creates for the overall water scarcity environment, we cannot afford to take advantage of such a precious resource. Additional losses are realized through labor, processing, packaging and transportation of the food items. Consider all of the energy resources that are used at the processing plants, the plastic that goes into the packaging, and the emissions from the transport of goods out to cities and communities. 40% loss is unacceptable for our society, we have got to find a way to mitigate and solve this problem that will help us restore our food systems, conserve precious resources, help the farming industry be more efficient and profitable and while still delivering healthy food options.

Considerations:

* Food deserts are also a critical issue facing our communities across the U.S.; where people do not have access to fresh and healthy choices, is there an efficient model to re-distribute fresh food to communities
* How can the use of modern technology and smart phone systems be leveraged to solve this problem
* Think about a model that could be scalable across regions
* Food safety is a critical issue, consider this aspect if you think about how to redistribute or transport food for other consumption
* Consider a model that is “doing good by doing well”, where there is a profitability angle to the model, new revenue streams, job creation, economic development and environmental sustainability
* Who are the key stakeholders that you will need to work with and build partnerships in order to successfully execute your solution
* Consider outreach and education as a component of the solution, raising awareness on food waste could help change consumer behaviors
* How do you incentivize the farmers, distributers, merchants and others to consider supply and demand helping us more accurately deliver food quantities that match consumption

GOOD LUCK! All ideas are good ideas, put your best foot forward!