6012 INNOVATION ASSIGNMENT – WEEK 3

Kowsik Penamakuru, M13955754

1. Take the product or service you selected in Week 1 and apply the Task Unification Technique. The product I have chosen from Week 1 is **Lawn Mower.**

Step 1:

The internal components of the **Lawn Mower** are:

- Mower Pan
- Handlebar
- Combustion Engine
- Blades
- Power Cord

Step 2:

The component I chose to apply the Task Unification technique to is the **Blades. Seed & Fertilizer Spreader** is the additional task I would like to unify to the existing component: Mowing using the blades. Seed Sowing component will locate the bald spots in the lawn and sow grass seeds while the Fertilizer spreading component will spread the fertilizer.

Step 3: Visualizing the virtual product:



Step 4:

The potential need for user: This additional feature enables user to sow seeds and spread fertilizer without involving a lot of physical effort. Also saves significant amount of time.

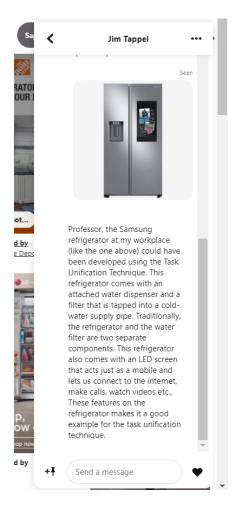
Step 5:

Potential Challenges faced by users-

- A good spreader that efficiently sows and fertilizes the lawn can be costly.
- The addition of a spreader would need more power or fuel thereby increasing the overall costs.
- Mower + Spreader setup can become complex and may require some expertise to be used.

- **Step 6:** The product formed by unification looks more suitable for a commercial purpose. We can modify this to be usable in every household not limiting to commercial purposes. This can be achieved by designing simpler spreaders.
- 2. Look around your home or at work and find products or services that could have been developed using the Task Unification Technique.

The Samsung refrigerator at my workplace (like the one above) could have been developed using the Task Unification Technique. This refrigerator comes with an attached water dispenser and a filter that is tapped into a cold-water supply pipe. Traditionally, the refrigerator and the water filter are two separate components. This refrigerator also comes with an LED screen that acts just as a mobile and lets us connect to the internet, make calls, watch videos etc., These features on the refrigerator makes it a good example for the task unification technique.



- 3. Using your understanding of the Fixedness Principle from this week's lecture, where do you think people have fixedness regarding your product, service, or process?
 - People may have functional fixedness with my product because lawn mowing and seed sowing have been two different functions and they may have difficulties adapting to the notion of mowing, sowing, and fertilizing together.
 - The option of sowing and fertilizing via lawn mowers in the presence of equipment specifically designed for sowing and fertilizing leads to functional fixedness.