**THRED Startup Game**

1. **Game Overview**
   1. Purpose/Intended use: Determine how startup company founders allocate financial and time resources in a simulated startup.
   2. Justification: Startups operate in a resource scarce environment, but we have limited knowledge about how they use resources and make decisions about resources. We intend to study how the financial and time budgets are used and what decisions are made in the game.
   3. Target audience: Startup company founders from the National Science Foundation’s I-Corps program.
   4. Type: choose your own adventure.
2. **Gameplay**
   1. Objectives: Spend an allotted amount of time and money on different categories to design a product for a startup.
   2. Choose your own adventure/a series of decisions.

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**Beginning State:** You have x amount of money and x amount of time to design a device from prototype to launch.

**Survey:** We have a few survey questions that we would like answered along with the simulation. It would be nice to have that built into the beginning of the game. These include information about their startup as well as individual trait questionaries.

**Data to collect:**

1. Number of actions
   1. Total number of decisions
   2. Time between decisions
2. Budget
   1. Amount of budget used
   2. How the budget was spent
3. Time
   1. Amount of time used
   2. How the time was allocated
4. Cost of the final device based on what specifications are chosen
5. Device Utility
6. What decisions were made/what was the final outcome
   1. For example – who did they hire, what funding did they apply for, etc.

Choices:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Option** | | **Cost** | | **Effect** |
| Build your team | Engineering Graduate Student | | $ | | Improves Utility |
| Engineering Contractor | | $$ | | Improves Utility (more than graduate student) |
| Business Graduate Student | | $ | | Improves funding hit rates. Ex. \*1.25 |
| Business Advisor | | $$ | | Improves funding hit rates (more than graduate student). Ex. \*1.50 |
| Network? | Yes | | Time | | Unlocks Grant 3 |
| No | | None | | No effect |
|  |  |  | **Cost** | **Hit Rate** |  |
| Apply for funding\* | Investors | Angel | T3 | 0.75 | $$ |
| Family | T1 | 0.90 | $ |
| VC | T4 | 0.65 | $$$ |
| Bank | Loan 1 | T1 | 0.99 | $ |
| Loan 2 | T2 | 0.8 | $$ |
| Grants | Grant 1 | T2 | 0.6 | $ |
| Grant 2 | T4 | 0.7 | $$ |
| Grant 3 | T3 | 0.8 | $$ |
| Startup Competition | T5 | 0.50 | $$$ |
| Customer Discovery | Yes | Choose on a slider from T1 to T5 how much time to spend on customer discovery. | | | The more time they spend, the more information they get about customer preferences. |
| No | | None | | No effect |
| Design Device | Display | High Tech & Color | $$$ | | Final Utility Value – determined later from customer preference modeling |
| High Tech & BW | $$ | |
| Simple BW | $ | |
| Alarm | Vibration | $$$ | |
| Beep | $ | |
| Music | $$ | |
| Energy Source | Solar | $$ | |
| Hydro | $$$ | |
| Existing Infrastructure | $ | |

\*Exact amount of time required to apply for each of these has not yet been set. So here I use T1-T5 to represent levels of time. T1 is the least amount of time, T5 is the most amount of time. Hit rates are also not finalized but give an idea of what we’re thinking.