Name: Cushing, Bradley
Date: 10/26/24
NYU ID: N10695516
Course Section Number: CSCI-GA-2433-001
Project #1 6W proposal

Who

Bradley Cushing, I will be working on the project by myself. There will be a toy company called "Circuit Blocks" that will manufacture and sell products to adults and children. The company that makes this single toy is called Circuit Blocks, Inc.

What

The project will be about a physical toy and associated company. The simple idea is that the toy is made up of any number of blocks that kids or adults can build things with. The blocks connect and form a circuit in which electricity passes causing each individual block to light up. They can be configured in any way the user chooses to make cool and creative things.

The business that will be the company that manufactures and sells the toy. In short, the company will have a method for designing, manufacturing, keeping inventory, updating, marketing, and selling the toy using physical as well as online means. They should also have a means for interacting with their customers after a purchase is made.

Where

The product will be manufactured by a third-party outside of the company. Design happens within the company but manufacturing is coordinated with and outsourced to someone else. All inventory is kept in-house and marketing is done in-house as well. Circuit Blocks, Inc. also creates, runs, and maintains the sale of its single product through its website, the sole platform of execution. The main interaction between customers and the company are facilitated through this website including product registration and customer reviews. We will also sell the product with some third-party vendors like Amazon, Inc.

When

In terms of starting this project everything should be ready and I can come up with needed details during each assignment as I go. (eg. entities for ER model creation) In regards to the market opportunity for this type of product I believe there's always room for new and interesting products like this so there is no better time than now to start creating it.

Why

People of all ages enjoy toys so there is always a market for things like this. Toys that encourage using your mind and being creative also help in development. For this particular project, the single product Circuit Blocks is a good choice because it's simple conceptually but there are many components to manufacturing and selling hardware to consumers and everything that's required in between to make such a business work. Given this simple idea, there is enough complexity to allow for the creation of an Enterprise Data Architecture to be interesting and facilitate the first step of creating a robust ER model.

I selected this project topic because I've had the idea for such a toy in the back of my mind for some time. I thought this would be a cool time to use that idea as the basis for a project which will force me to think about the business and data perspective. Since it's a toy that will be manufactured and sold online it will also be something complex enough to work with.

How

According to the specification of each project step, including Project #1, the assignment will be done for the Circuit Blocks product and in the context of the Circuit Blocks, Inc. company. We plan to include enough information to model such a product sold by this company for each assignment and make rational choices for how such a company would likely operate. Where content is needed for the assignment we'll be creative enough to make sure that we have enough to work with to build what we need at each step.

As I stated above, there will be a method for designing, manufacturing, keeping inventory, updating, marketing, and selling the toy using physical as well as online means. I'll be mapping out the entities and relationships needed to facilitate these different parts of the business and how they will work together and inform each other. I'm starting my work using the E-R model as requested, building it in a tool called pgModeler which allows for designing E-R models, exporting the SQL in this case postgreSQL, and setting up the database locally to run what's been specified by the E-R model.