*FIRSTBUILT, GE, LOUISVILLE KY USA*



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| *Picture source https://firstbuild.com/*  ***GENERAL INFORMATION*** | |  |
| **Project name** | FirstBuilt | |
| **DE type** | Production (DP)  Design (DD) | |
| **Producer/provider** | GE Appliances | |
| **Designer** |  | |
| **Start (year)** | 2014 | |
| **State** | On-going | |
| **Project location** | Louisville, Kentucky, USA | |
| **Source of information** |  | |
| **Link to videos** | https://www.youtube.com/watch?v=OksUZc87HHo  https://www.youtube.com/watch?v=tDfXCQayiaI | |
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| **Website** | https://firstbuild.com/ | |

***SYSTEM CHARACTERISTICS***

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| **SYSTEM CONFIGURATION:** |  |
| **Provider/s (role)** | GE provides Lab for Prototyping and Shop for Fabrication. They manufacture the products. |
| **Customer/s (type)** | Designers, engineers, makers and any users who want to contribute |
| **S.PSS CHARACTERISTICS:** |  |
| **Unit of satisfaction** | Valorization of design/engineering/business contributions. |
| **Type of S.PSS** | Type III: Result-oriented PSS: providing final result |
| **Offered product/s (related producer/s)** | The manufacturing and prototyping tools and facilities in the microfactory are partly produced by GE. |
| **Offered service/s** | GE provides the online platform for co-creating, manages contributions/compensation and makes the production. |
| **Ownership of the offered product/s** | GE owns manufacturing facilities and the produced products. Contributions from the community members are protected under a Creative Commons License. |
| **DE access payment** | It is free to use the online platform and the microfactory. GE compensates the contributors of the produced and sold products. |
| **DE system configuration** | Distributed Design, Decentralized Production |

***DESCRIPTION***

FirstBuild is a project where on-line and local community members can design products and help solve engineering challenges for GE. There is an online platform in which the community can share their ideas and co-create home appliances (Distributed Design). The platform is open to anyone. There are professional designers and engineers who contribute the development of the products as well as consumers who can contribute just with their ideas.

There is also a microfactory that provides advanced manufacturing techniques and rapid prototyping tools (Decentralized Production). Products can be made on a very small scale up to the thousands in this space which is open to public. “The FirstBuild Microfactory is divided into four sections: an interactive space for brainstorming and product demonstration, a lab for prototyping, a shop to fabricate components, and a build floor where products are assembled.” (firstbuild.com)

“This coupling of community co-creation with micro-manufacturing is a unique model as is the partnership between GE and Local Motors. Local Motors, a start-up that has seven years of experience in combining co-creation and micro-manufacturing in the automotive space, paired with GE’s strong manufacturing expertise and appliances engineering expertise, has led to the creation of this fundamentally new approach to design and manufacturing.” (Alex Tepper, Global Director of Innovation at GE)

The users who contributes with an idea and gets it into the process, they own their idea, thoughts and contributions. If GE take an idea to production, they pay a royalty to the contributors.

***SUSTAINABLE BENEFITS***

**Environmental Benefits**

*System life optimization: GE manages (and produce some of) the prototyping and production facilities and the tools in the microfactories optimizing their lives.*

*Resource reduction: In the microfactory, the scale of the production is small which can help resource reduction.*

**Socio-ethical Benefits**

*Favor/integrate the weaker and marginalized: The service helps to integrate the weaker and marginalized to the development of the products letting them get compensations.*

*Improve social cohesion: The service creates a community where the consumers and professional develop products and ideas together.*

*Empower/enhance local resources.: The microfactory can be more oriented to use the local resources in compression to the production in the large more centralized factories.*

**Economic Benefits**

*FirstBuilt helps GE to connect better with the consumers, making them more user oriented. It increases the reputation and the visibility of the company. It also helps the company develop and produce product that the users need with a community originated innovation.*

*Added value for customers: The service helps the company to cooperate with the customers; and helps the customers to have a voice in the development and the production of the products making it possible for them to get produced products that they need. It also compensates the customers for their contributions.*

*Long term business/development risks: Since the scale of the production is small in the microfactories, this is a way for GE to test the products in the market without risk.*