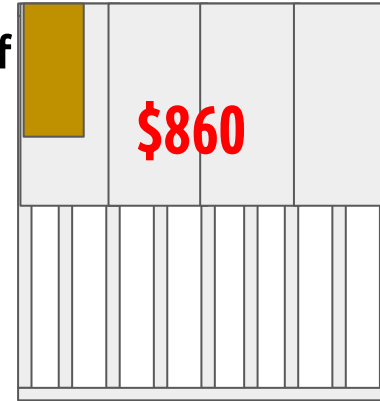


# Cost Baseline 256 Sq Ft - Total \$6k Including Foundation

Scales favorably for 2nd story - no foundation or roof

## Floor:

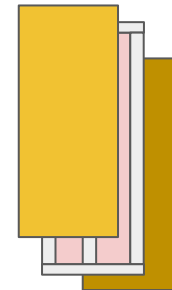
- [11] Floor - \$39 2x12x16 treated 2' centers - \$440
- [8] OSB, 3/4" - 4x8 - \$19 - \$160
- Flooring - \$1/sf - \$260



or [2] \$860 +  
512 insul +  
512 EPDM  
=  
**\$2744**

## Wall:

- [3] \$6 2x6 - \$18
- [1] Outdoor sheathing treated T1-11 - \$50; \$30  
untreated \$33 - \$50
- [1] interior panel, rustic pine - \$23
- [1] insulation - \$32
- [44] 1625 screws \$50 - \$1.35



\$125 x 16 =  
**\$2000**

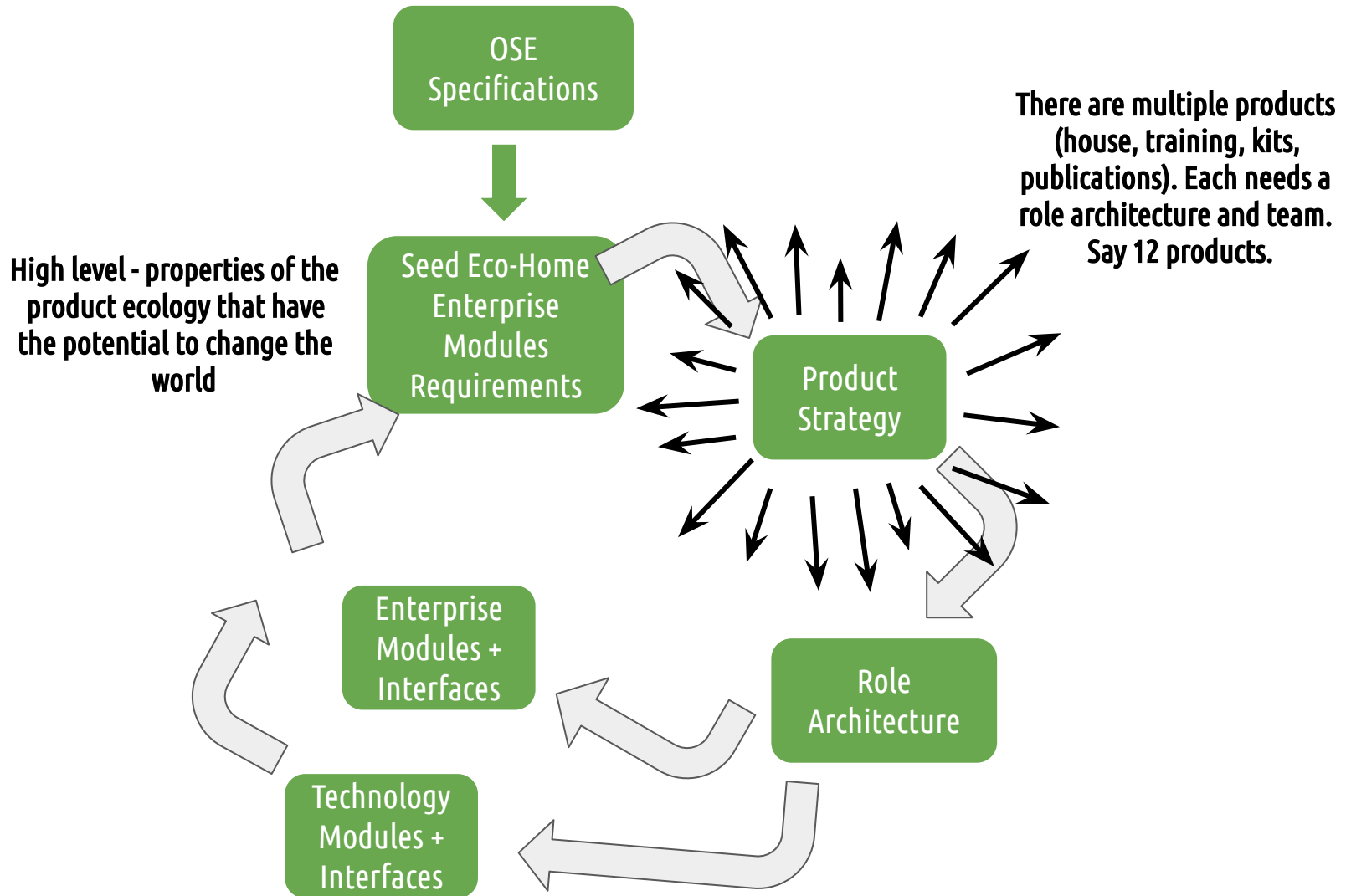
**Foundation:**  
[9] \$100 = \$1000

**Foundation = \$1000**

**Total Per Module is Under  
\$6000**



# Extreme Enterprise - Design Overview



# Enterprise Role Architecture 1

Enterprise is seeded in agile waterfall style: we propose initial version. Contributors make improvements.

## Governance

Design, purpose, ethics, distributive enterprise leadership.

## Product Strategy

Generic types of products to be included to make holistic sense.

## Human Factors

Does it serve the human or special needs?

## Distribution Strategy

Sales Website, referrals, word of mouth, other. How does product find way to a consumer?

## Sales

Sales Website. Product webpage.

## Product Design Team

This is the [Template:Dev](#) proper.

## Product

Designs, features. UVP. Pricing structure.

## Environmental and Energy Impact

Calculation of lifetime and cost. Recycling. Embodied energy

## Technical Documentation

User Manual

## Publishing

Printed book and e-book

## Quality Control

Procedures, tests.

## Video

Instructionals

## Animation, Infographics, Copy Brochures, Diagrams etc.

Product assets for product catalog.

## Production Engineering

lifetime design, design for manufacturing, other Design

## Tooling

Tools required in production.

## Lifetime Design

Calculation of lifetime and cost. Recycling.

## Marketing

Outreach to different channels

## Financial Analysis

Revenue and expenses

## Business Plan

Revenue and expenses

## Supply Chain Optimization and Mapping

Global map of suppliers across the continents.

## Legal

License of contributions, website terms, data collection on website. What Contracts do we need in place?

## Certification

OSE Certified for DE, Certification of Producers. External certifications: create a plan during XE event.

## Supply Chain Creation

Combined with open source agroecology - planting trees, building equipment (lumber, CEB, 3D printer) for the circular economy.

## Production Management

Staffing, schedule, management.

## Open Source Franchise

Terms of use for independents and OSE Chapters

## Brand

Logo, trademark, terms of using brand

## Marketing Strategy

Brand Promise, character stand. What marketing channels we select.

## Admissible Vendors List

Establishing new contacts with distributed producers or suppliers. Adding ratings to them. Editable map with ratings?



# Enterprise Role Architecture 2

## Training

Curriculum for independent producers.

## OSE Chapters

Curriculum for people producing as OSE chapters

## Sweet Home 3D Manager

Makes attractive renderings

## Warranty Service

How do we implement a lifetime warranty, and use it to add value to the enterprise?

## Customer Support

How is support provided after the sale? Refers to Chapters, Independents, and end consumers

## Shipping

How is the product shipped or otherwise delivered?

## Packaging

How is a product packaged?

## Inventory

How is inventory controlled and documented? Tools and procedures.

## Open Source Everything Store

Entry at the OSES website

## XM Workshop

Details of event workflow - steps, roles, tools, timing.

## Facility Design

Design of facility where components/product is made

## Data Collection

Marketing and sales data - how is it tracked?

## Customer Feedback

How do we encourage customer feedback and improvement suggestions?  
How do we involve customers in development?

## Continuing Improvement

How do we incentivize, fund, and execute continuing improvement?

## Sweet Home Training

Curriculum and Videos

## Future Work

Product improvement, product diversification.

## Wiki Templates

HTML/CSS for wiki-based book, to make it easier to produce new versions/updates. From wiki to publication, or even export directly for printing. Adding publishing functionality to wiki. There are other platforms, but why use them if wiki suffices?

## FreeCAD Training

Curriculum and Videos



# General Team

## Book Editor

Requires 200MB connection.  
Professional experience.

## Graphics Standardizer

Combines all module  
workbenches into one  
workbench

## Community Manager

Does outreach, PR, across all  
of OSE-Related Marketing  
channels.

## Builder Ergonomics

Detailed analysis of time  
required to build 1 house  
from inquiry to move-in.

## Legal

Figures out contracts and  
strategies for passing  
through zoning and  
compliance

## FreeCAD Synthesis

Combines all module  
workbenches into one  
workbench

## Web Designer

Integrates website  
contributions from each  
wordpress contributor

## BOM Integrator

Compiles BOMs across the  
globe, indexed on a map

## Sweet Home Design Manager

Creates Assets for Sweet  
Home

## Product Strategy Team

Composes a whole product  
line of goods.

Full Service - \$100k.  
BYOL.

Kit House Package -  
\$35k/15k

PV Package with  
Storage

Minimal House  
(useful shed/homeless shelter)

Modeling Kit

Hands-on Course  
Only

Consulting

Enterprise  
Training

Kit House Only,  
DIY, \$35k

## FreeCAD Workbench Manager

Creates FreeCAD design  
workbench



# Module Teams for each of 100 Technical Modules

## Topical SME

Translates and fills in any missing info to the team

## CAD Team

These are the details, brunt of the work.

## Animation

Functional Animations in Blender

## Publisher

Composes work into Google Docs

## Icons

Contributes to Pattern Language Icons used throughout the manual, and to other organizing icons (warmings, compoent, process, info architecture icons)

## Wiki Editor -

Maintains and updates Dev Template

## Copywriter

Writes attractive copy for the module - explaining big picture and making content compelling

## Technical Writer

Writes build procedures.

## Graphics

System Infographic

## Wordpress

Website page for each of the modules

## BOM Synthesizer

Works with all BOM Managers to coordinate global sourcing database, both a general one and also SKUs from specific store

## FreeCAD Workbench

Design Workbench creator - puts all part libraries into the workbench for each module

## Scale Model Prototyper

Website page for each of the modules

## FreeCAD Part Explosions

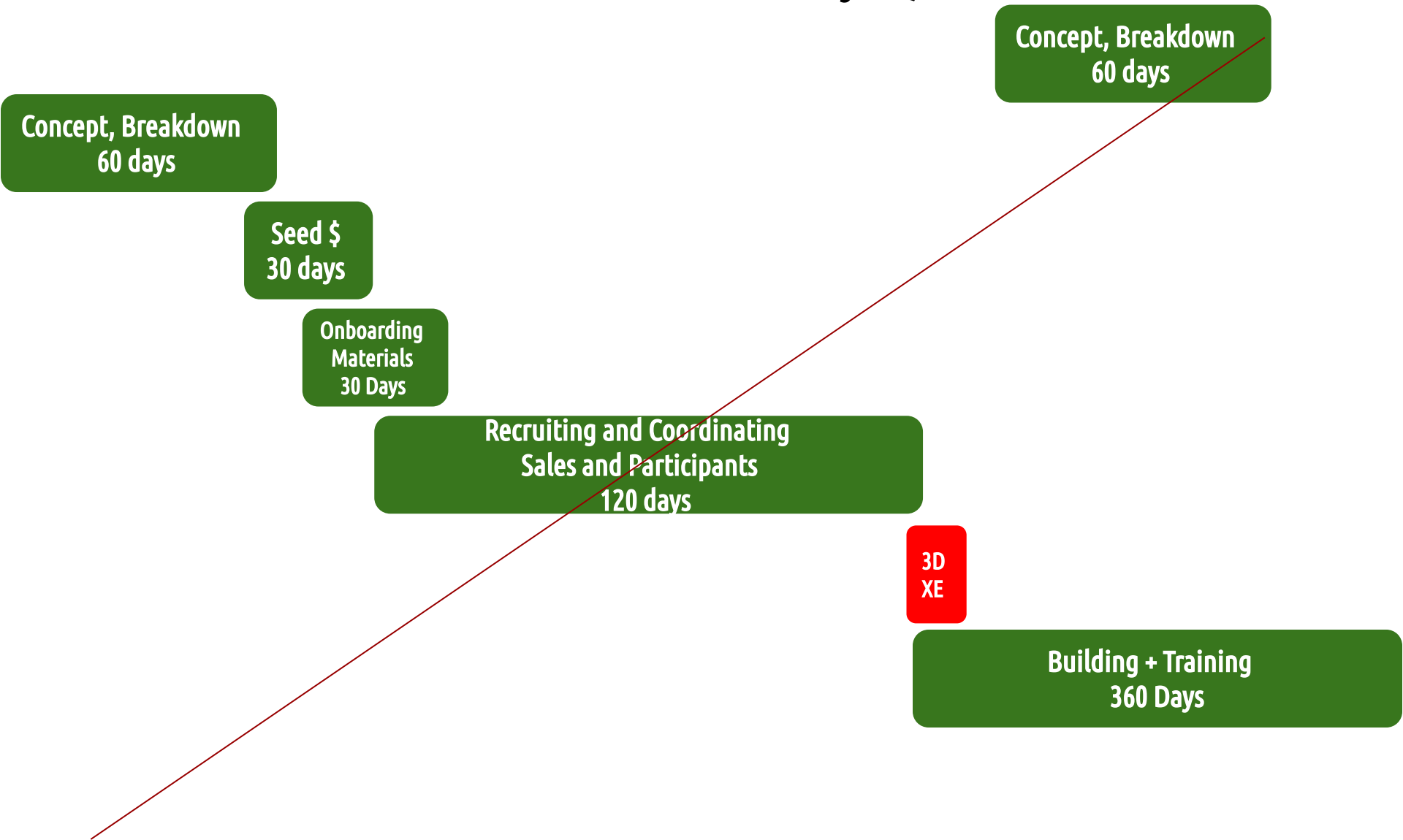
Does technical CAD and tech drawings in FreeCAD

## FreeCAD Tech Drawings

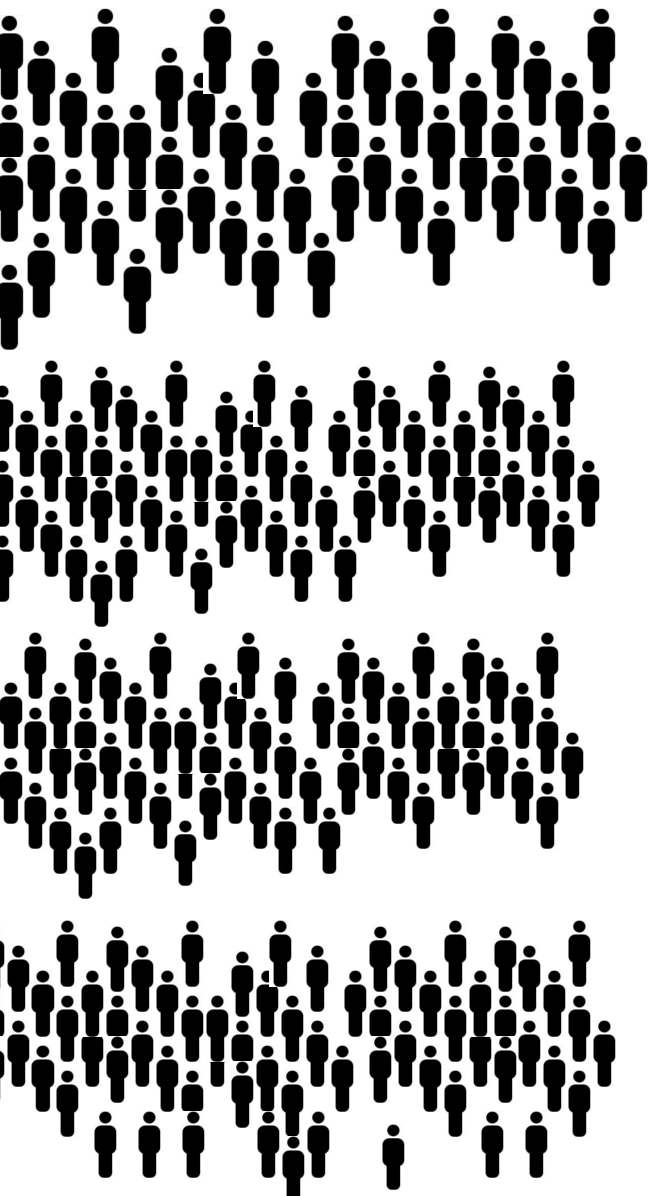
Does tech drawings in FreeCAD for the given module.



# Timeline - Drafted before July 23, 2020



# Budget - 3 Iterations of 100 Seed Eco-Home Modules at \$500 Each



## Prototyping Team

\$150k for materials

- 100 modules
- 100 prototypes
- \$500 budget each
- 3 iterations each

## Documentor + Data Collection

Writes a script for the video for each module. Collects ergonomics and



## Video Producer

Takes video during the session, using OSE assets. Per module.

## Wiki Editor

Uses [Collaborative Video Protocol](#) with Kdenlive. For each module.

## Organizing

2 hours

- 2 hours coor. total / contributor
- \$50/hr
- 1000-2000 contributors
- 2000-4000 hours needed
- Team of 4-8 organizers
- 4 month duration full time
- \$100k-200k budget





**Solution:** conditional presale is a zero-risk route, with the stakeholders themselves!

We sell **data/information** here: in the form of collaborators who (1) have the skills, and (2) want a house. Skills must not be an extreme requirement. Of 2000 participants, 50% of them get the house. (Coupon-clipping). Enterprise Track: additional funding, additional participants.

## Presale 2000

500 for America

500 Europe

500 Asia/Oceania

250 Africa

250 S America

- **Zero Risk** - escrow and returned if we don't deliver product (end of campaign) and house (year after campaign)
- ~~Information business:~~ We help you find land
- 1 week with 2 people to build a 750 sf house for \$50k (\$35k materials)
- \$15k revenue per seat
- 25% of the participant get their own house, ideally 100%
- \$30M net total

## Revenue Model

**Challenge:** enterprise case

**Solution:** zero-risk strategy of presales.

## During: Enterprise Track

\$50k per seat revenue for collaborator trainees. We offer them distribution from pre-orders.

- Responsible for building the houses in their region
- Up to 24 builders
- Distributive Enterprise Compliant
- DE and XE spec is created
- Risk mitigation: money back
- \$1.2M revenue + 12% for up to

## After: OSE Chapters Track

\$50k revenue for collaborator trainees

- 24 Student Cohort
- Get it funded by local enterprise circles or fundraiser
  - Should be easy sell after the campaign succeeds
- 1 house per month
- \$1.2M revenue from aftersales.

**Challenge:** enterprise case



# Extreme Enterprise - Module Team - Motor

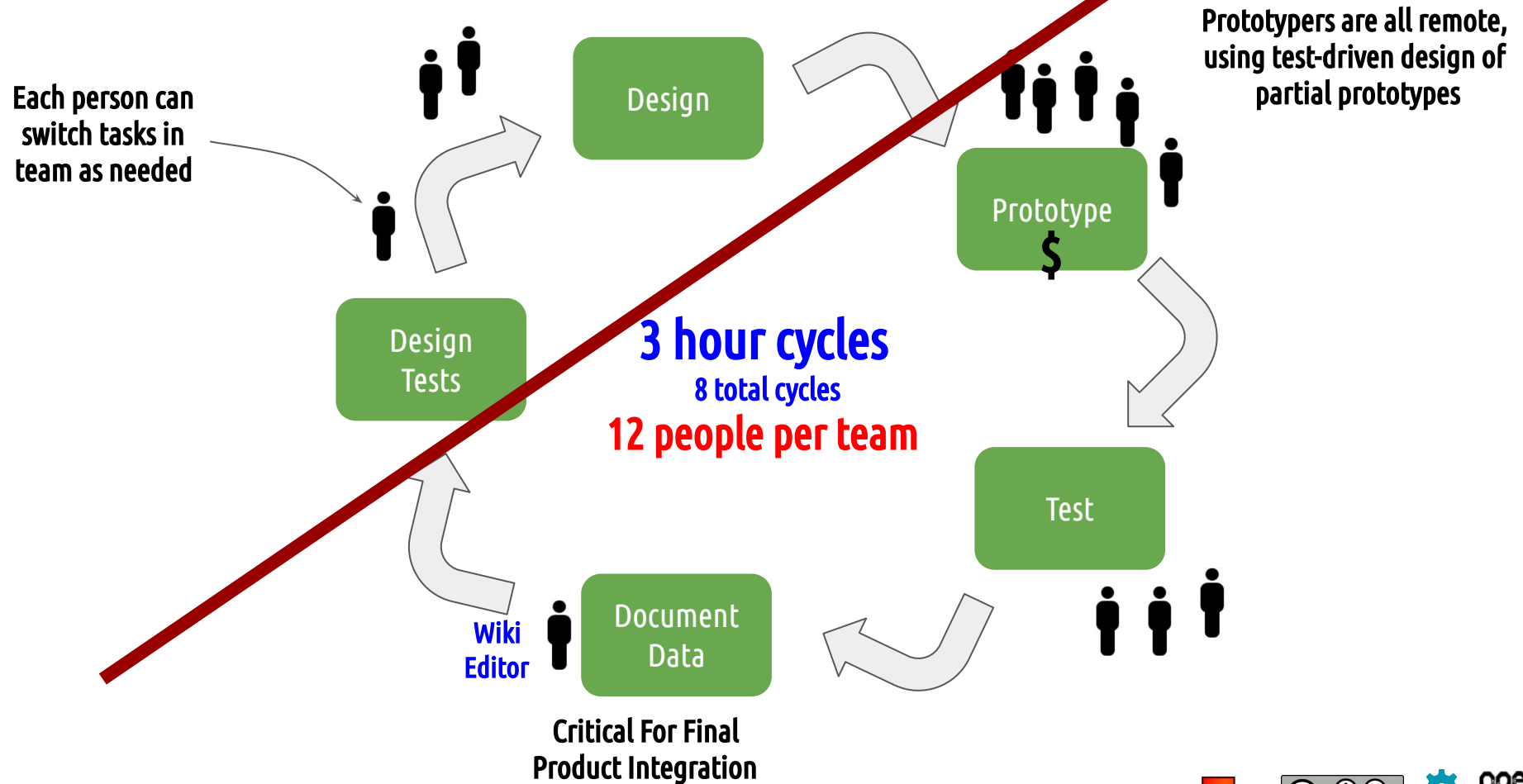
(10 modules) x 21 steps on Product + 1 module x 20 steps on Enterprise)

41 people per module -> 410 people so far. BASE PACKAGE.

1 product + 4 production tools (printer, PNP, circuit mill, coil winder)

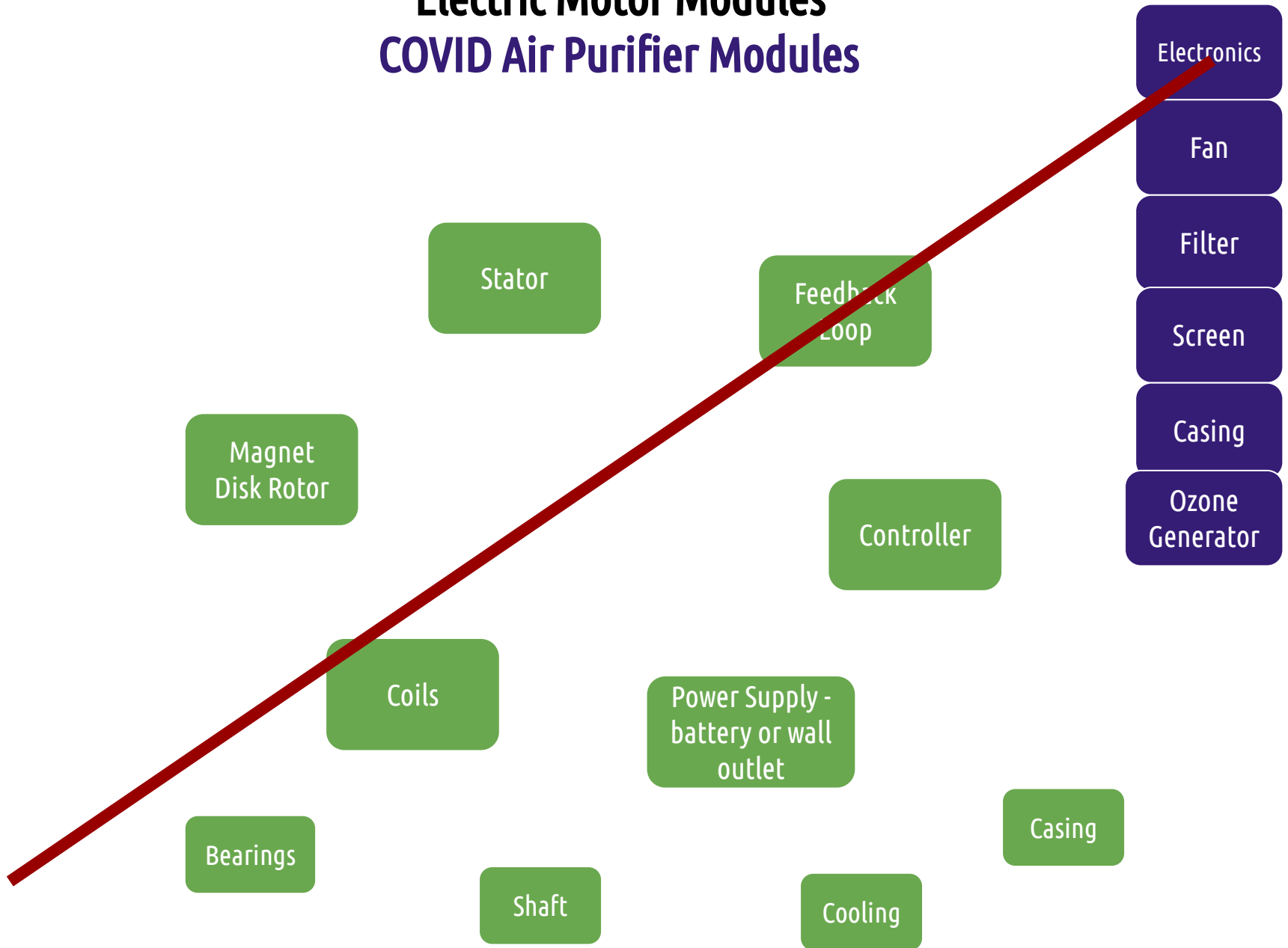
For 5 items total, we thus need 2600 people.

Required budget - \$25k-\$125k for coordination time.



# Electric Motor Modules

## COVID Air Purifier Modules



open  
source  
ecology