REBUILDING EXCHANGE + IIT INSTITUTE OF DESIGN

Design Concepts

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Agenda

01. Introduction
02. Concepts
03. Conclusion
04. Appendix
SECTION I  Introduction
Introduction

Rx’s mission is to “connect the Chicago community through reuse.”

On the following pages are twelve concepts* for the newly formed Rx online platform. Although begun as a response to the city-wide shutdown of all “non-essential” businesses during the COVID-19 pandemic, the platform aims to increase the scale of Rx’s business and enlarge its community of like-minded people who value affordable and sustainable products.

All concepts are intended to be made and assembled in one of three ways:

1. through the **purchase** of premade, unassembled components
2. through **participation** in virtual workshops
3. through the direct **patronage** of Rx Made

*Concepts were developed in three weeks as part of a 15-week Institute of Design Product Workshop.
SECTION II  Concepts
Design Concepts

01. No-Screw Standing Desk
02. Rx IKEA Hacking
03. Folding Screen/Room Divider
04. Mobile Kit
05. Ladder Desk
06. Modular Furniture
07. Grief-related Products
08. Chicago Stayed Home
09. Explore Chicago
10. COVID-19 Memories
11. Storage for Unused Objects
12. Celebration Product
CONCEPT 01  No Screw Standing Desk

Working at home is more common especially during the COVID-19 pandemic. A combination standing and seated work is ideal to keep people healthy, focused, and active. Using traditional wood joinery techniques, this concept offers an easy way for customers to assemble a standing desk. The simple square form also provides a variety of use cases beyond a standing desk.

TOOLS  |  file, sandpaper, clamps, saw
SKILLS  |  gluing, cutting, sanding, filing
MATERIALS  |  wood boards
COSTS  |  labor, materials, and tools
DIMENSIONS  |  18 x 18 x 18
CONCEPT 02  Rx IKEA Hacking

Currently, Rx intercepts products directly en route to landfills. However, through adaptive reuse, Rx can prevent pieces from going to landfills in the first place. By leveraging the already popular trend of IKEA hacking, Rx can offer prefab add-on solutions to the most popular IKEA products, challenging the buy-and-replace cycle of furniture consumption while capitalizing on high-low aesthetic.

TOOLS | CNC, sander, planer
SKILLS | drilling, cutting, sanding, fitting
MATERIALS | lumber (old growth, new growth, etc.)
COSTS | labor
CONCEPT 03 Folding Screen/Room Divider

Working from home has become commonplace in the wake of the COVID-19 pandemic. However, many are forced to share close quarters, with little in the way of privacy. This room divider—made from reclaimed wood and repurposed coffee sacks—can provide a much-needed backdrop for Zoom calls, or adapt to effectively partition spaces.

TOOLS | file, forstner drill bit, clamps, drill, saw
SKILLS | drilling, gluing, cutting, sanding, filing
MATERIALS | coffee sacks, lumber, fabric (hinges)
COSTS | labor, supplementary materials
DIMENSIONS | 72” x 36” (per panel)
CONCEPT 04  Mobile Kit

This mobile kit provides customers with a simple structure and the impetus to seek out the richness of everyday items (through shape, texture, memory, etc.)

Every unique collection of items will require a delicate balancing act, affording customers with a meditative, slow experience to reflect on the unique characteristics of each item.

TOOLS  |  saw
SKILLS  |  low
MATERIALS  |  wood and twine
COSTS  |  low
Many of us were not prepared for the situations we find ourselves in today: home is work and work is home. Without a workspace, how can you expect to be productive when working from home? An alternative to costly desks made from composite materials, this build-your-own solution makes use of Rx’s reclaimed materials.

TOOLS | saw, drill
SKILLS | cutting, sanding, drilling,
MATERIALS | floorboard or wood, 1 ¼” screws
COSTS | $20-30 + tools
CONCEPT 06  Modular Furniture: Multi-use Forms

In a world with limited resources and increasingly limited space, the need for adaptable and space-saving solutions is real. These shelf-like modules can function independently as chairs, together as a coffee table, or whatever you want them to be.

TOOLS | file, sandpaper, clamps, drill + saw
SKILLS | rigid board formed material
MATERIALS | drilling, gluing , cutting sanding
COSTS | labor, material, tools
CONCEPT 07  Grief-related Products

The city is planning for a great number of untimely deaths due COVID-19, which the system is not prepared to handle.

By repurposing wooden doors and turning them into caskets and urns, Rx can provide affordable and sustainable alternatives to grieving families. The initiative will help draw attention to the Rx mission, while fulfilling a city-wide public good.

TOOLS | planer, table saw
SKILLS | woodworking
MATERIALS | doors
COSTS | minimal
This interactive artwork encourages customers to reflect back positively on the shelter-in-place mandate during Spring of 2020.

The blue background represents Chicago’s pollutant-free skies while the LED lights represent the many families that stayed home.

TOOLS | woodcutting equipment
SKILLS | woodworking
MATERIALS | wood, LED lights, paint
COSTS | minimal
Where did you run during quarantine? By making maps of popular neighbourhoods in Chicago (Bronzeville, Wicker Park, Lake View, Loops) and providing colorful yarn, Rx can encourage people to get out and explore the city by foot and mark their achievements everyday. The generative data set can provide a personalized map of the city.

TOOLS | CNC Router
SKILLS | woodworking, CAD
MATERIALS | wood, yarn, nails
COSTS | minimal
CONCEPT 10  COVID-19 Memories

Humans are social animals, and the travel bans have severely impacted people all over the world. The restrictions on freedom of movement will, no doubt, be remembered long after the end of the pandemic. Thoughtfully designed key holders for keys and transit cards will help people appreciate their renewed freedom, while serving as reminder of the silver-lining: an unprecedented the reduction in global emissions and pollution.

<table>
<thead>
<tr>
<th>TOOLS</th>
<th>CNC router, Laser for wood etching</th>
</tr>
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<tbody>
<tr>
<td>SKILLS</td>
<td>assembly, pattern cutouts</td>
</tr>
<tr>
<td>MATERIALS</td>
<td>wood, metal</td>
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<tr>
<td>COSTS</td>
<td>low</td>
</tr>
</tbody>
</table>
Cut wooden shapes

Make cutouts through-and-through, and attach metal pin

Create wooden etching from laser and join both the pieces together

Assemble with card and key ring
CONCEPT 11  Storage for Unused objects

There are objects we haven’t used since the quarantine happens: credit cards, wallets, and jewelry. Where will people put these stuff at home?

This organizer can be used as storage device or an exhibition space for people at home. The modular design allows for extensive customization.

TOOLS  |  nails, screw driver
SKILLS  |  Simple assembly
MATERIALS  |  wood, plastic
COSTS  |  low
If you’re looking for effortless elegance at picnic time, it’s worth spending more for the small and lightweight Celebration Box. Made from wood and featuring multi utility, the box is the perfect mix of classic style and modern convenience to celebrate post isolation. The basket includes two compartments - Food and Wine Storage.

TOOLS | File, Sandpaper, Hinges, Forstner Bit, Drill + Saw
SKILLS | Drilling, Gluing , Cutting Sanding, Filing
MATERIALS | Wood Sheets
COSTS | $150 + Tools
DIMENSIONS | 10.23” L x 9.4” W x 14.9” H
CONCEPT 12  Celebration BOX

Celebration box is easy to build within short time. It has two compartments - Wine Bar and Food Storage.

**Wine Bar:** Two bottles (750 ml) or One big bottle (1.5 ltr) with 2 long wine glasses can be stored easily. The items are stored in a shell which can be converted into a modular tray.

**Food Storage:** Compartment is divide in 2 sections. Top Section For Food Storage - Gives you enough room to store food in small containers. A mini tray is also included. Bottom Section For Cup & Plate Storage - Can store 4 dinner plates (10 inch diameter) with 2 Tea Cups and spoons.
Summary of Concepts

01. No-Screw Standing Desk | Product
02. Rx IKEA Hacking | Strategy
03. Folding Screen | Product
04. Mobile Kit | Network
05. Ladder Desk | Product
06. Modular Furniture | Strategy
07. Grief Related Products | Storytelling
08. Chicago Stayed Home | Storytelling
09. Explore Chicago | Storytelling
10. COVID-19 Memories | Storytelling
11. Storage for Unused Objects | Product
12. Celebration Box | Product
SECTION III Conclusion
Enzo Mari’s

Ten Principles of Good Design

01. Sustainable
02. Accessible
03. Functional
04. Well-made
05. Emotionally resonant
06. Enduring
07. Socially beneficial
08. Beautiful
09. Ergonomic
10. Affordable
“We need to open our eyes towards a new collective ethic. And only then, we may also have new designs. Because the first condition to create good design is passion for transformation.”

Enzo Mari
Thank you.
Long lasting, modular, and modern the N Standing desk is an easy to build and use work surface which provides the proper height (40”) for a standing home office desk surface when placed on a standard height table. It folds flat when not in use and can be assembled in an afternoon.

**TOOLS**
- file, sandpaper, clamps, forstner bit, drill + saw

**SKILLS**
- drilling, gluing, cutting sanding, filing

**MATERIALS**
- f1.5” wood square strips, broomstick

**COSTS**
- $10 + tools

**DIMENSIONS**
- 26” L x 13.5” W x 11” H
CONCEPT XX  Floorboard Broomstick Standing Desk

Working at home is a common practice, especially during the COVID-19 pandemic. A combination standing and seated work is ideal to keep people healthy, focused, and active. The Rx standing work desk is easily constructed and an enjoyable and a rewarding afternoon project.

TOOLS
| File, Sandpaper, Clamps, Forstner drill bit, drill + saw

SKILLS
| Drilling, Gluing, Cutting Sanding, Filing

MATERIALS
| floorboards, broomstick

COSTS
| $20 and Tools

DIMENSIONS
| 28” L x 11” W x 11” H
REBUILDINGEXCHANGE.ORG

MADE

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