

REBUILDING EXCHANGE + IIT INSTITUTE OF DESIGN

Design Concepts

TEAM

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Agenda

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



SECTION I **Introduction**

CONNECTION THROUGH REUSE

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

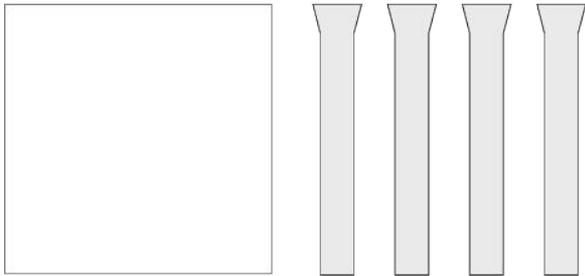
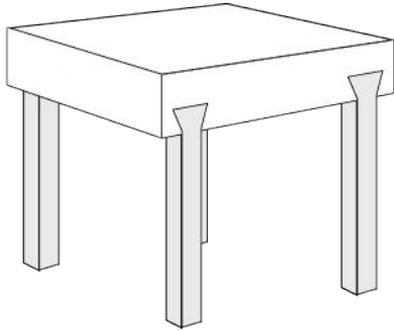
*Concepts were developed in three weeks as part of a 15-week Institute of Design Product Workshop.

A close-up photograph of a mechanical assembly, likely a part of a machine or a large-scale experiment. The image shows several parallel threaded rods or bolts, each secured with a wing nut. The components are made of dark, possibly steel, metal. The background is a textured, light-colored surface, possibly a wall or a large piece of machinery. The lighting is dramatic, with strong highlights and deep shadows, creating a sense of depth and texture. A small red square is visible on the left edge of the image.

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

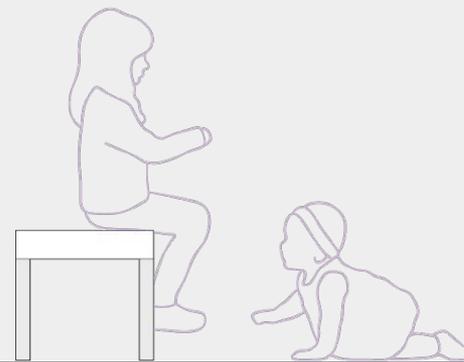
Standing Desk

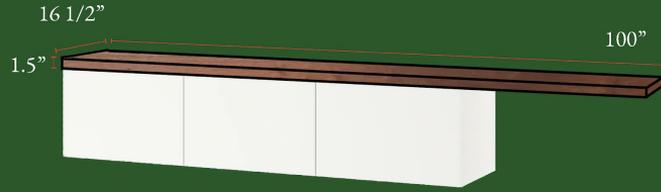


Side table



Stool



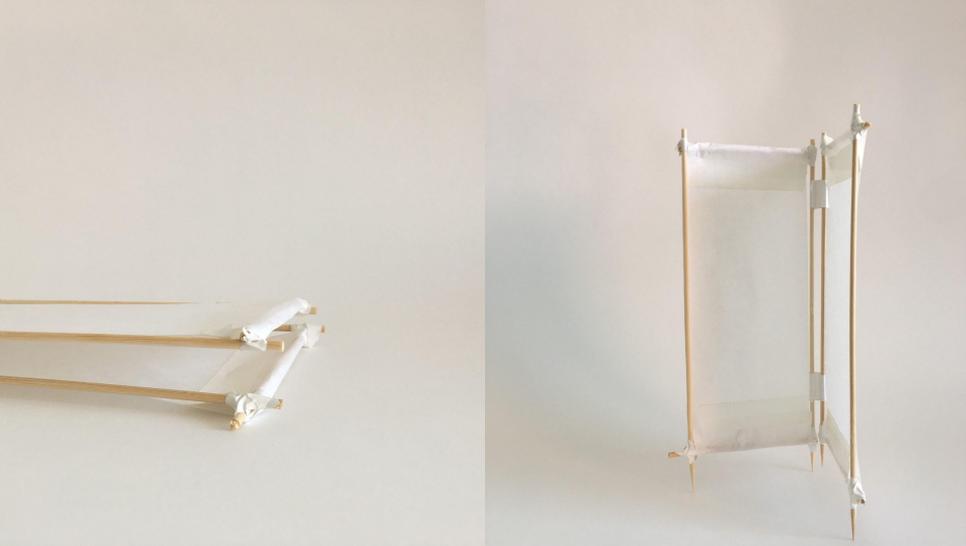


CONCEPT 02 Rx IKEA Hacking

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.

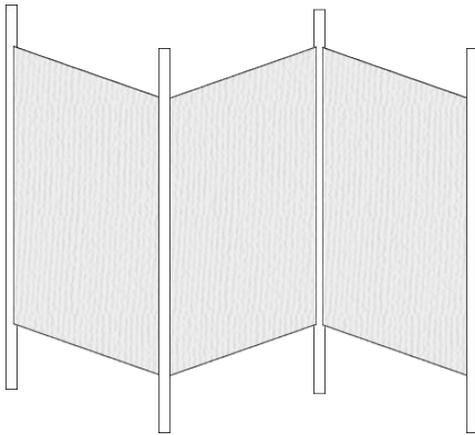


TOOLS	CNC, sander, planer
SKILLS	drilling, cutting, sanding, fitting
MATERIALS	lumber (old growth, new growth, etc.)
COSTS	labor



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.



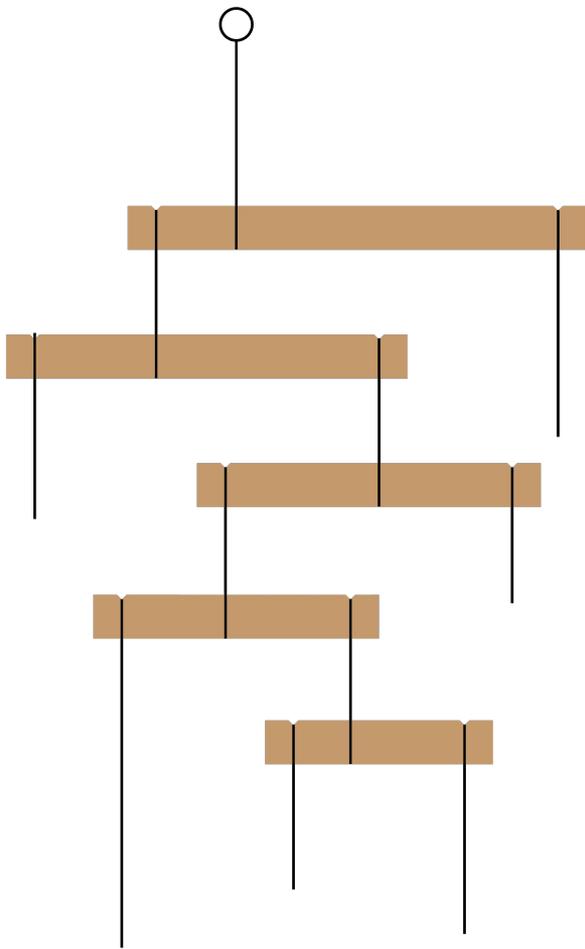
TOOLS | file, forstner drill bit, clamps, drill, saw

SKILLS | drilling, gluing, cutting, sanding, filing

MATERIALS | coffee sacks, lumber, fabric (hinges)

COSTS | labor, supplementary materials

DIMENSIONS | 72" x 36" (per panel)

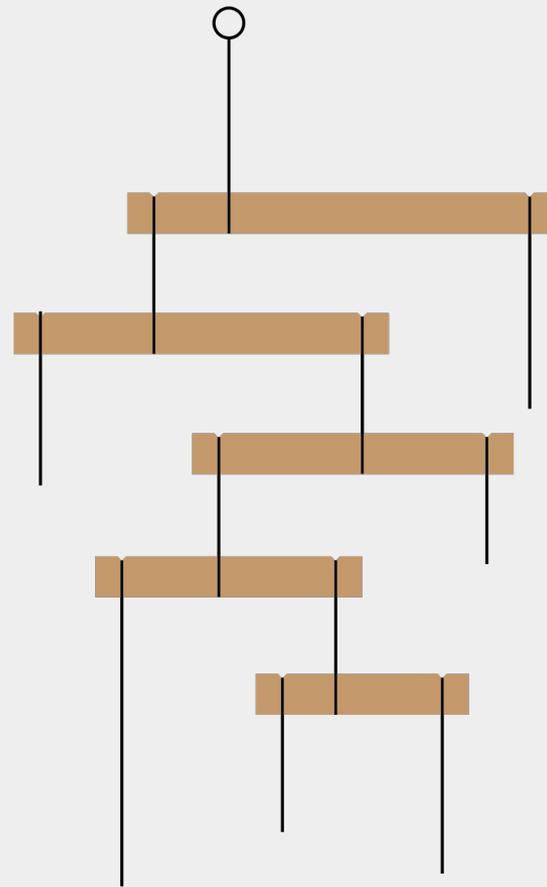
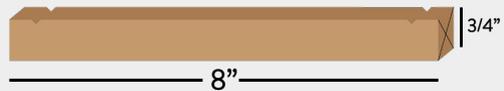


CONCEPT 04 Mobile Kit

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

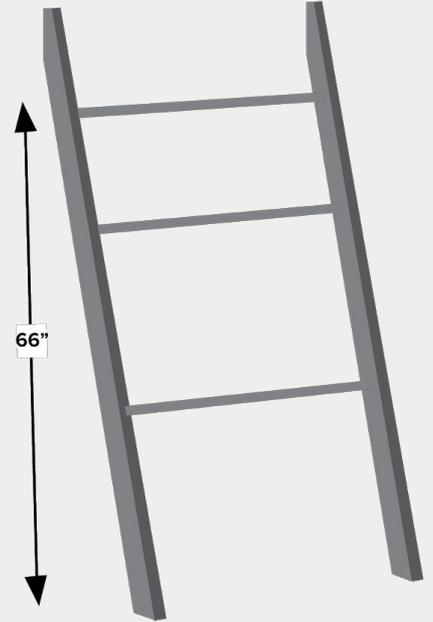
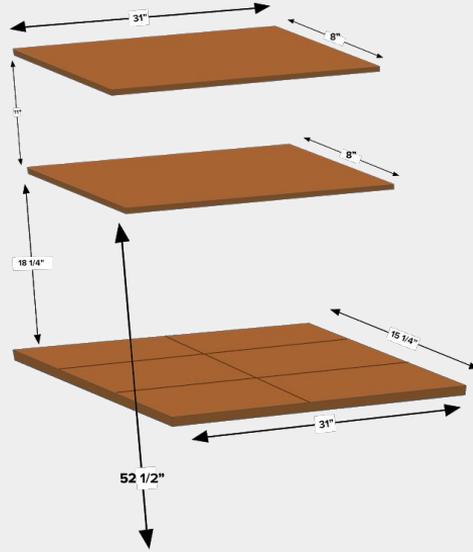




CONCEPT 05 Ladder Desk

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 shelve-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



CONCEPT 08 Chicago Stayed Home

This interactive artwork encourages customers to reflect back positively on the shelter-in-place mandate during Spring of 2020.

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

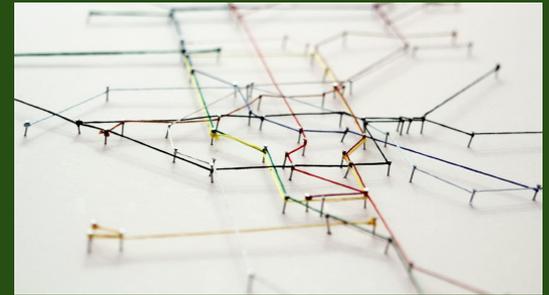
TOOLS	woodcutting equipment
SKILLS	woodworking
MATERIALS	wood, LED lights, paint
COSTS	minimal



CONCEPT 09 Explore Chicago

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.

TOOLS	CNC router, Laser for wood etching
SKILLS	assembly, pattern cutouts
MATERIALS	wood, metal
COSTS	low





Cut wooden shapes



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



Create wooden etching from laser and join both the pieces together



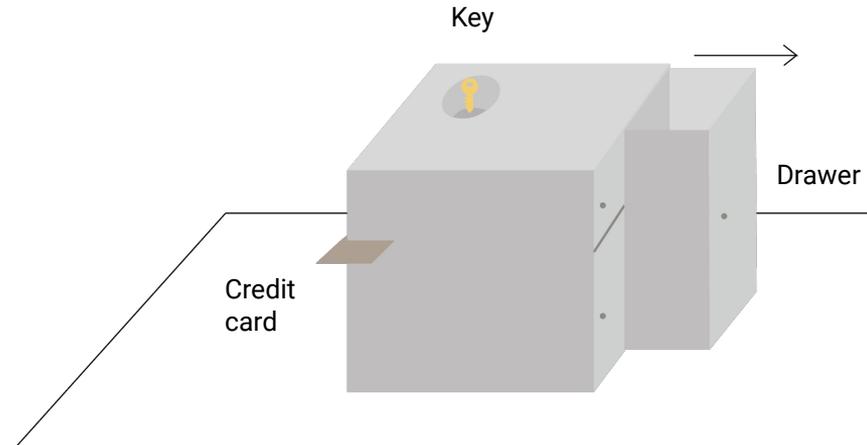
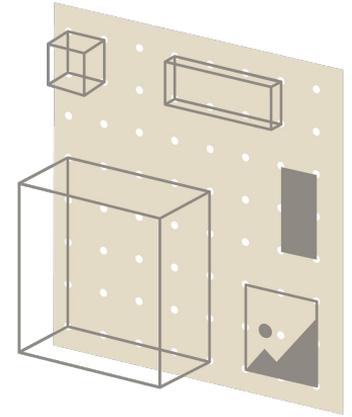
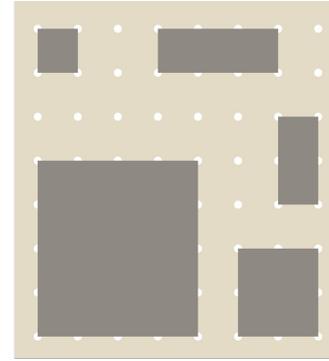
Assemble with card and key ring

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





CONCEPT 12 Celebration BOX

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**.”*

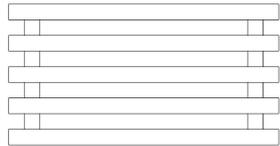
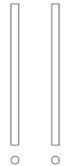
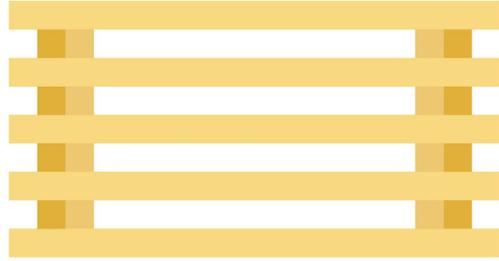
Enzo Mari



Thank you.



SECTION IV **X** Appendix



CONCEPT XX N Standing Desk

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



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