# KAHA

# *Meet the KAHA team*

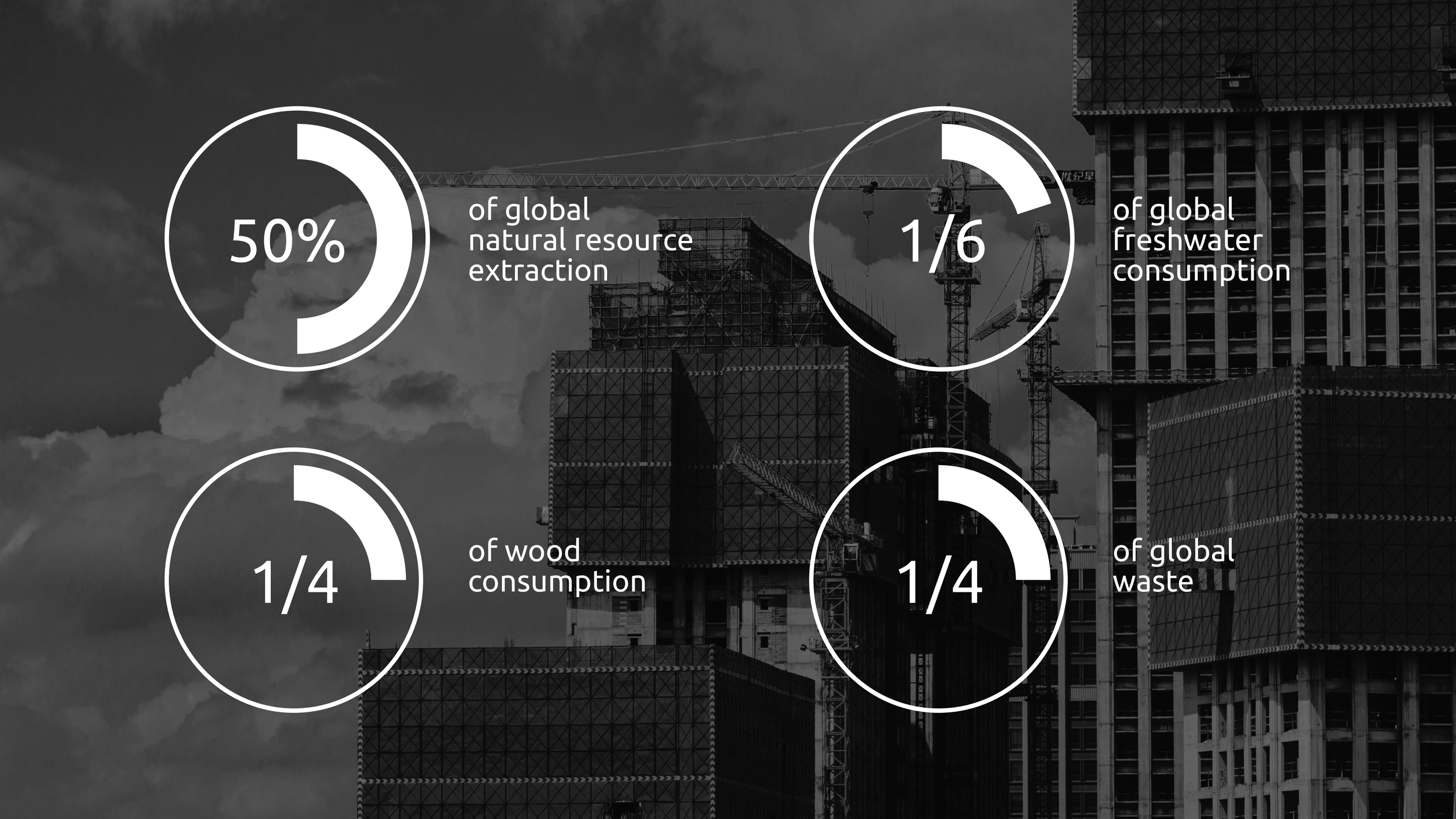
***Angel Saucedo***
*Industrial Design*

***Lara Kim***
*UX Design*

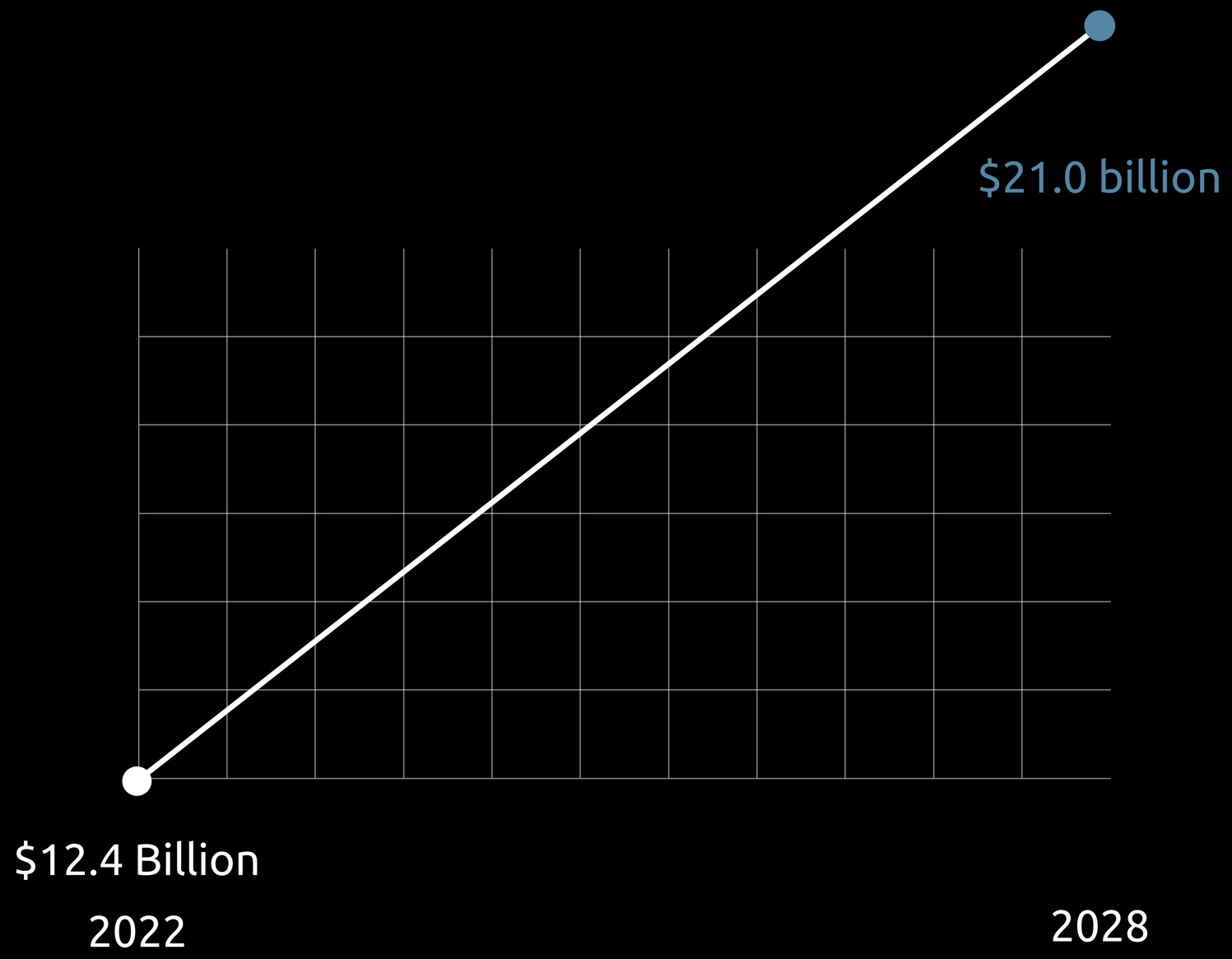
***Tiffany Tawil***
*Industrial Design*

# Construction

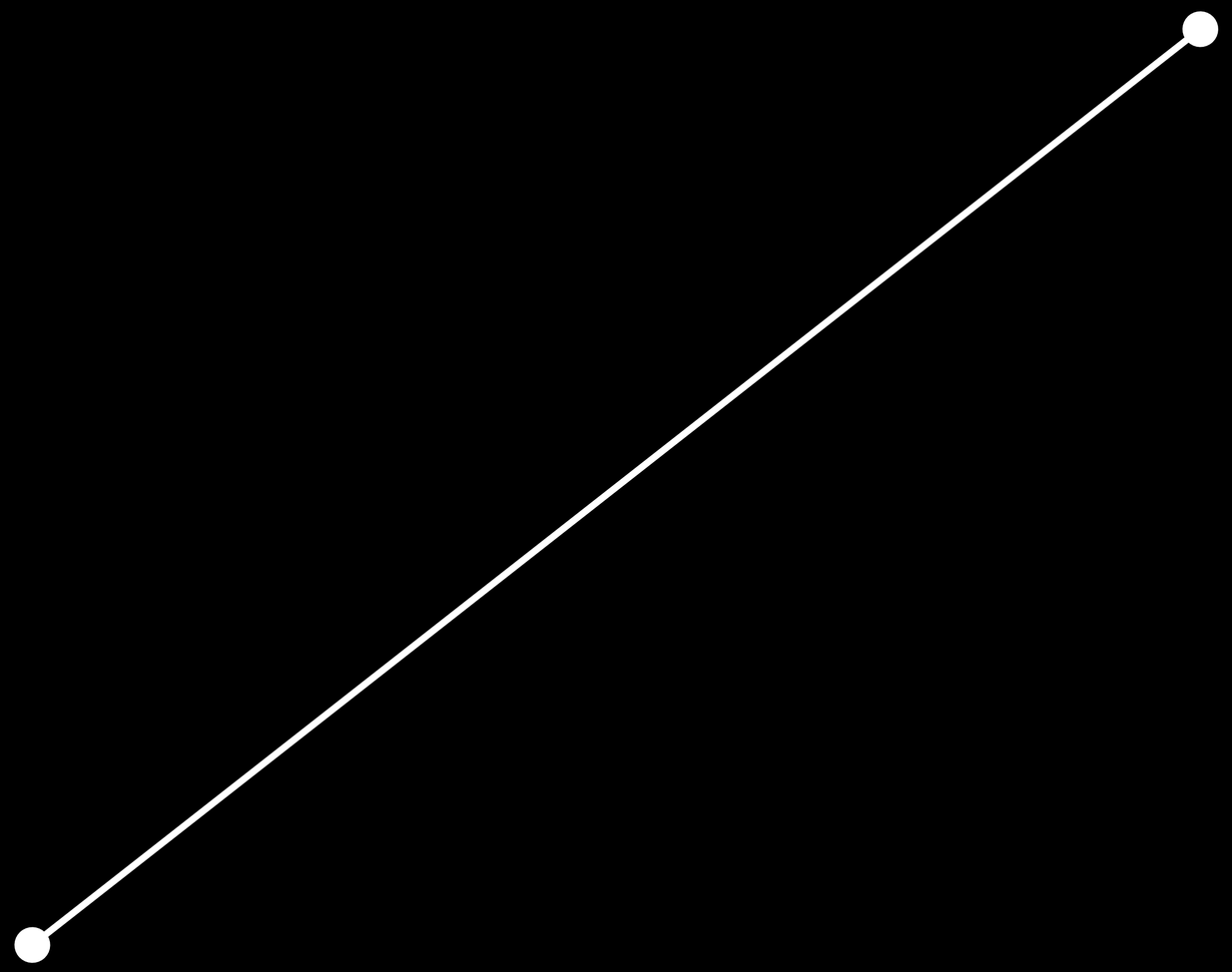
3rd most polluting industry


50%
of global natural resource extraction
1/6
of global freshwater consumption
1/4
of wood consumption
1/4
of global waste

## Market Size Value & Revenue Forecast



Market Growth



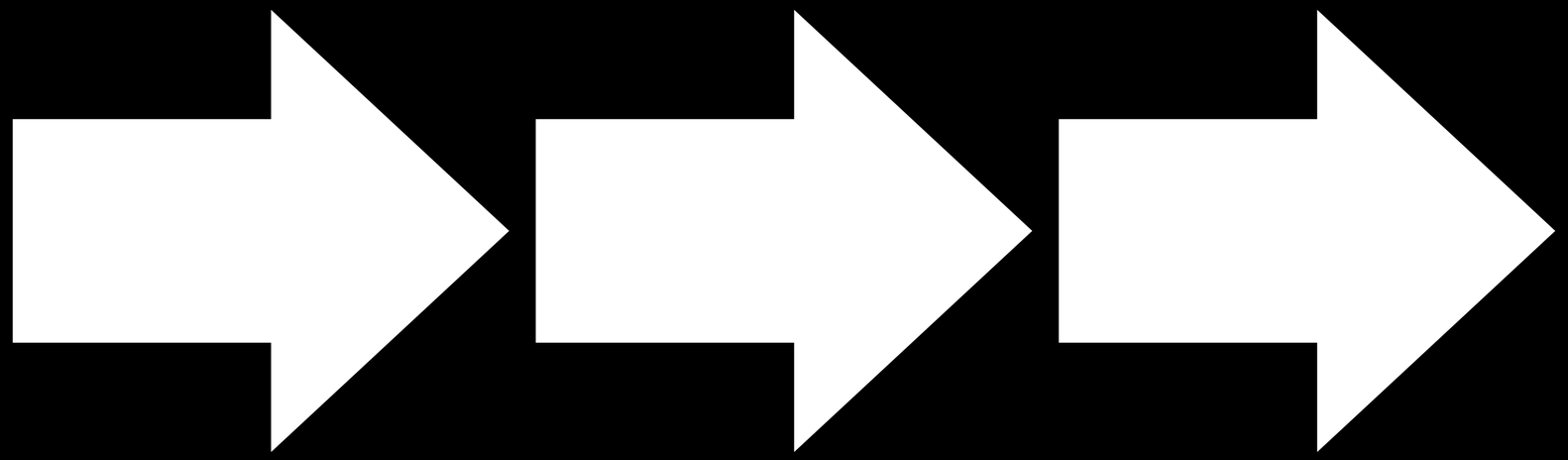
+ 9.26%

Compound Annual Growth Rate (CAGR)

# Mundane **MAN**ual process

# Errors

# Construction Economy



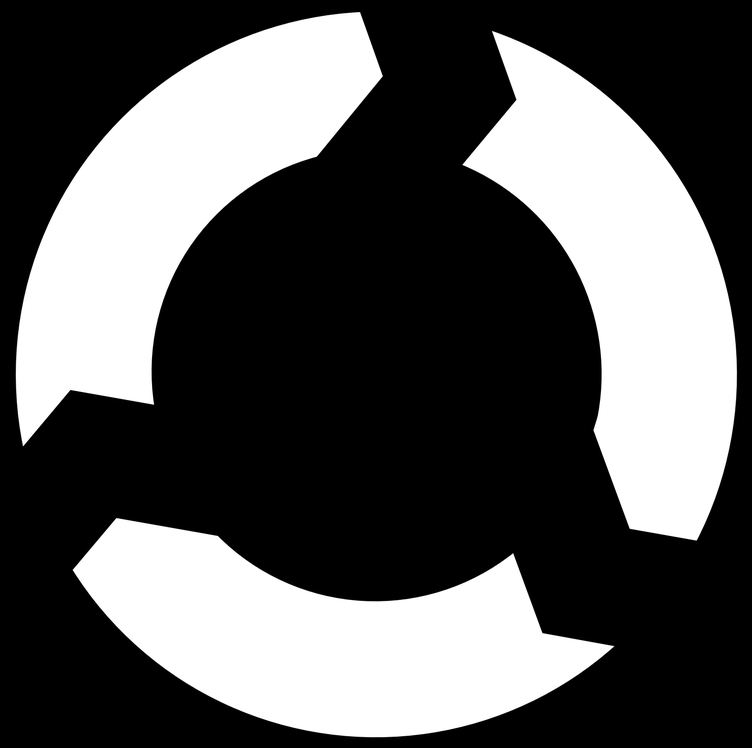
Plan, prepare materials

Refine materials, construction

Waste in landfills

# Construction Economy

Plan, Prepare,
Process materials



Construction

Waste in landfills

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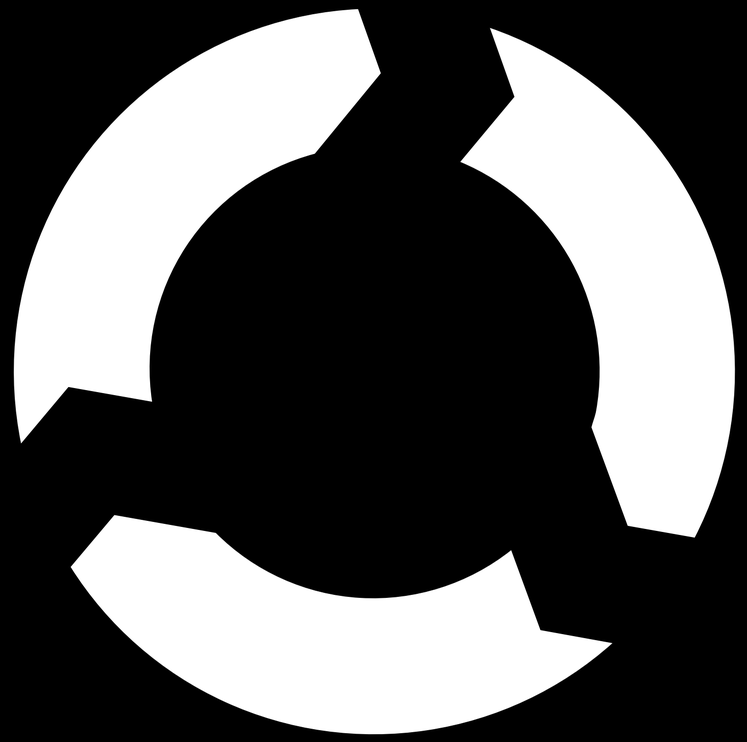
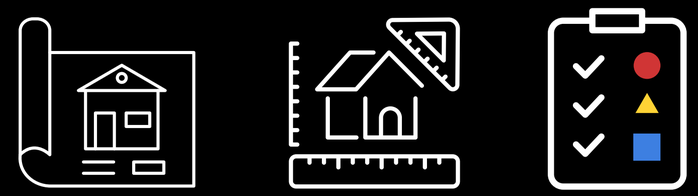


Construction

**Recycle & reuse materials**

How might we
optimize the construction process
that is sustainable for the market and the planet?

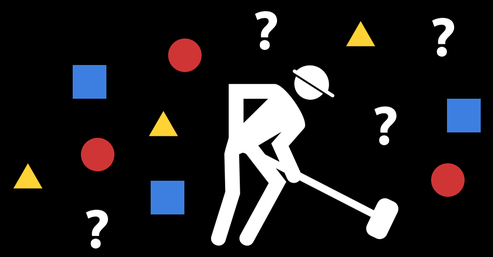


## Plan

- Process the blueprints and specs and determine list of materials (size and amount)
- Create rough plan with unspecific goals

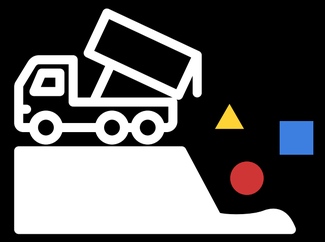
## Process

- Outsource standard pre-cut materials and raw materials in bulk (merge orders)



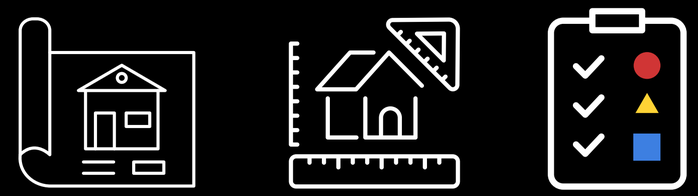
## Construction

- Refine and maintain materials



Waste Management

- Dispose waste to landfills



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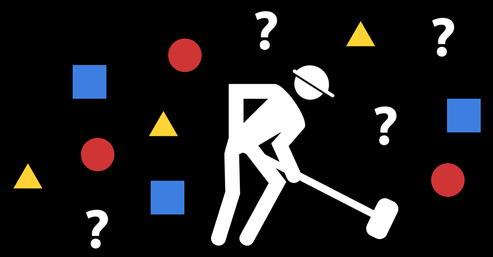
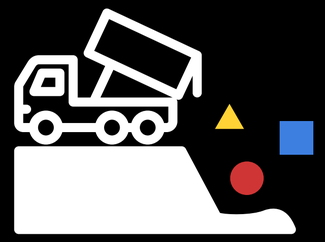


## Construction

- Refine and maintain materials

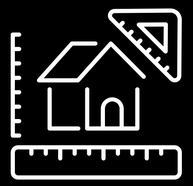
**-40%**
**of the time**



## Waste Management

- Dispose waste to landfills

**-37%**
**of the materials**



**Plan**

- Determine list of materials
- Create daily quotas

## Plan

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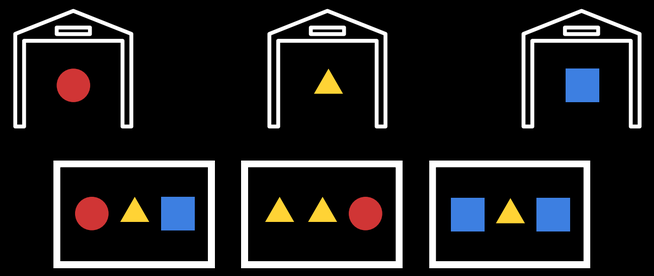
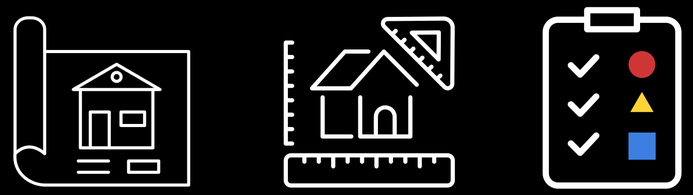


## Process

- Outsource standard and raw materials
- Refine materials and manage waste
- Transfer and store to KAHA facility
- Organize the refined materials



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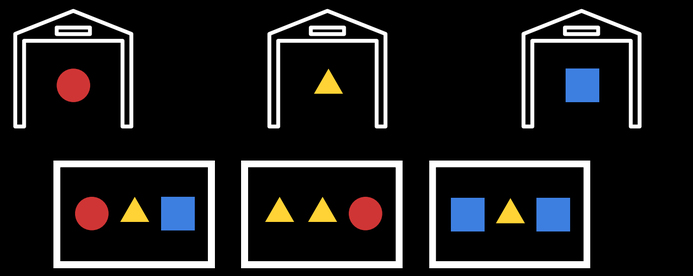

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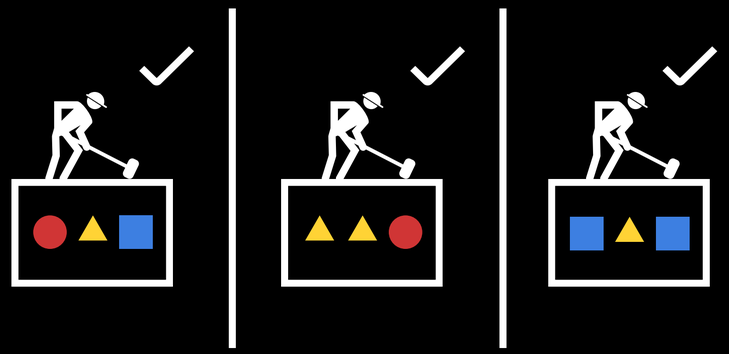
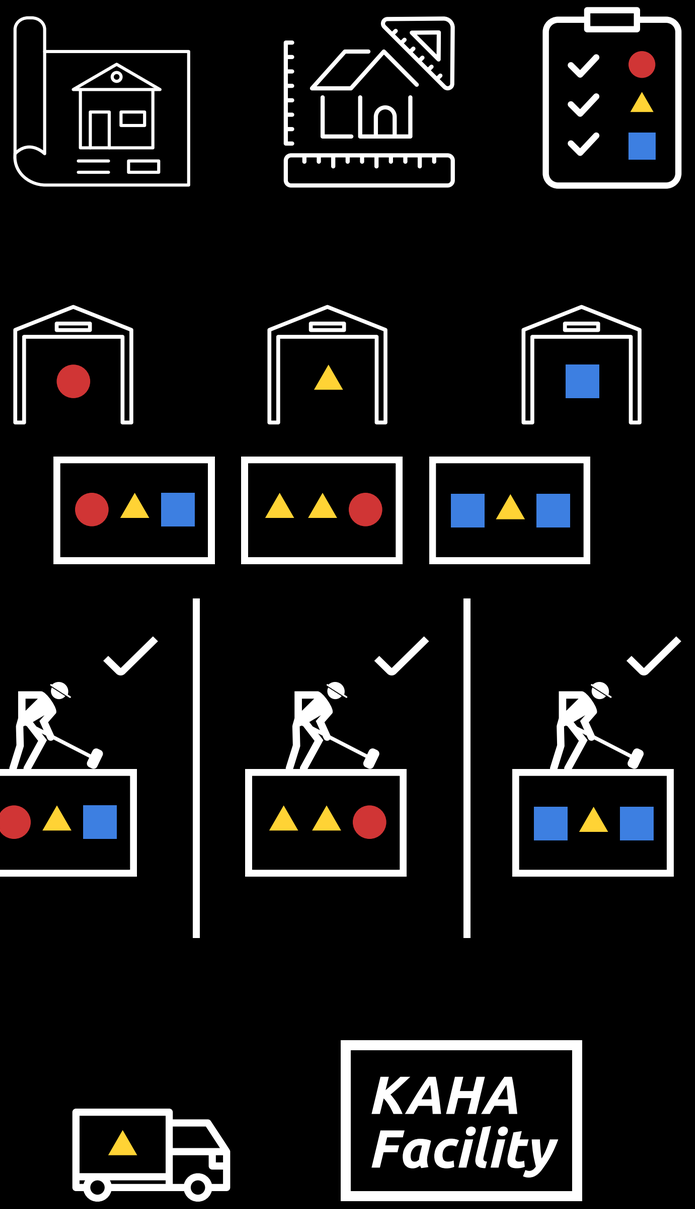


## Construction

- Transport materials
- Construct




## Plan

- Determine list of materials
- Create daily quotas

## Process

- Outsource standard and raw materials
- Refine materials and manage waste
- Transfer and store to KAHA facility
- Organize the refined materials

## Construction

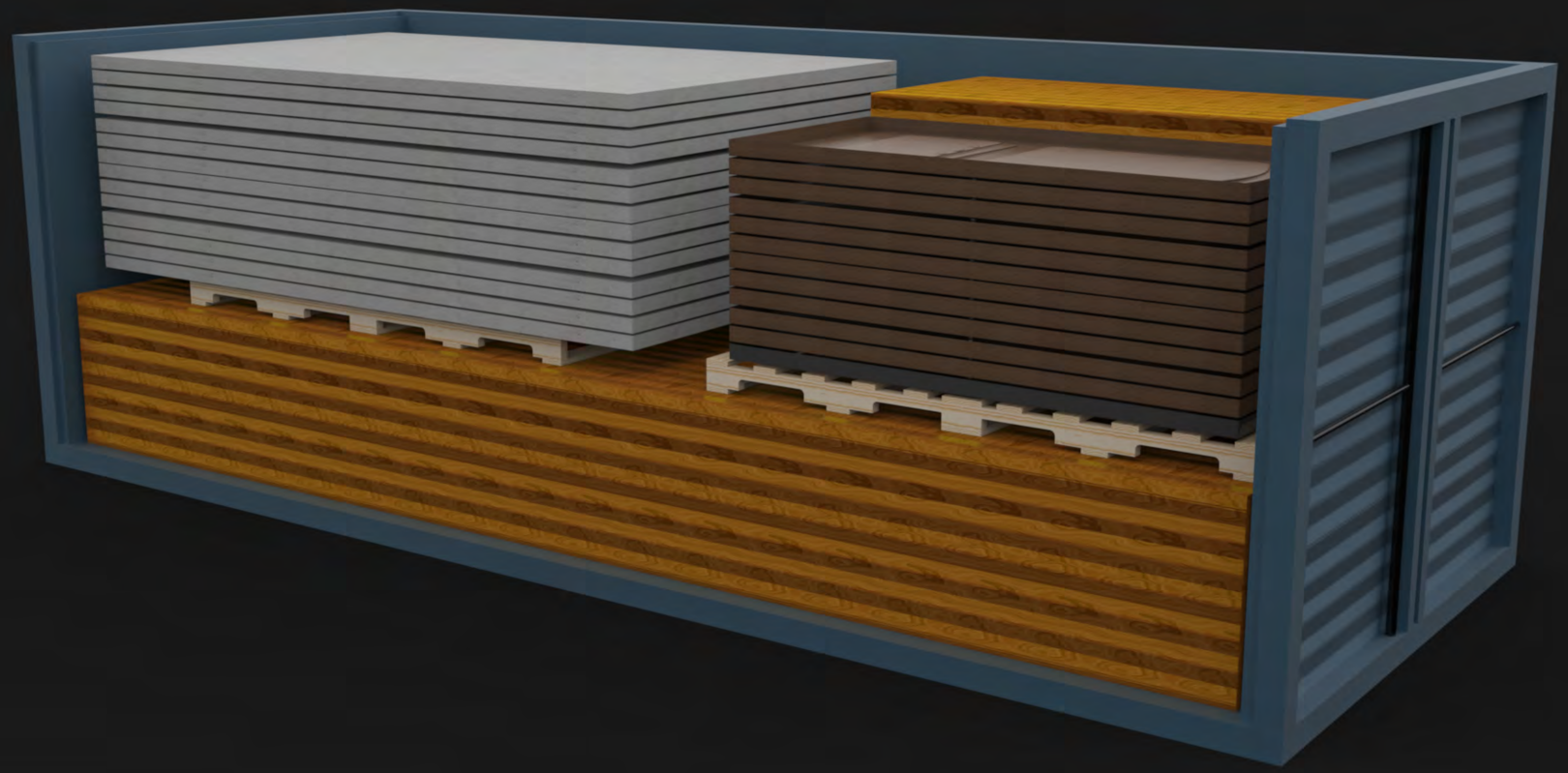
- Transport materials
- Construct

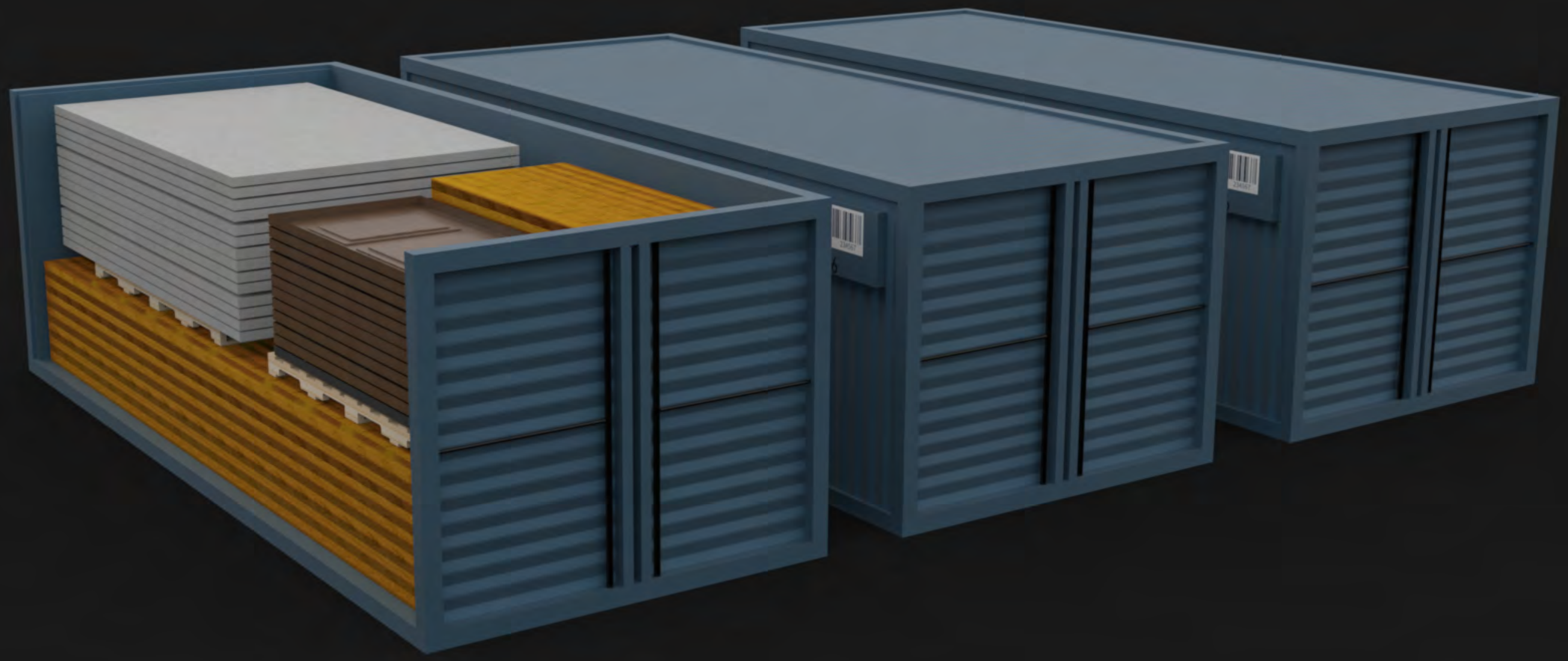
## Waste Management

- Send excessive waste to KAHA facility for recycle

# KAHA

KAHA
# 6942096





*Management*

*Organization*

***Waste***

***Time***

***Labor***

# *OPTIMIZATION*

## Business Model

### Cost Structure

- Outsoure of raw materials
- Refininement and organization , transportation and storage using electric trucks
- Waste management and recycling

### Key Metrics

- Customer acquisition
- Cost retention rate
- Spec list of materials for management
- Waste reduction
- Labor cost savings
- On-time delivery

### Problem

Manual processes and poor management in the construction industry result in wasted materials, errors, and inefficiencies, leading to increased costs and longer project timelines

### Revenue Streams

Charging construction companies for our services based on the amount of materials they require and the scope of their projects

### Consumer Segment

- Construction companies that require efficient and sustainable supply chain management and optimization
- Most optimal for individual home construction

### Unique Value Proposition

KAHA offers construction companies a more efficient and sustainable supply chain management solution that reduces waste, errors, and labor costs while providing a daily plan and quota for workers to increase productivity and motivation

### Solution

KAHA is a streamlining system of the supply chain by organizing and managing materials from multiple suppliers, creating a daily plan with a quota for workers, and delivering materials to construction sites. This reduces waste, errors, and labor costs, resulting in a more efficient and sustainable construction process

### Channels

- Online channels: website, social media, email marketing, and search engine optimization
- Offline channels: networking events, trade shows, and partnerships with construction companies

### Potential Partners

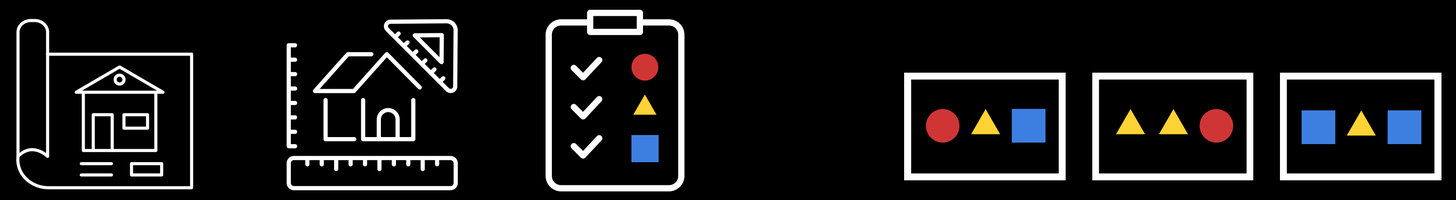
- Construction companies to integrate our system with their processes and increase our reach
- Companies in the construction industry that can provide raw materials and support our supply chain

### Unique Advantage

Use of electric trucks for transportation and recycling excess materials sets us apart from traditional construction industry practices, making us a more sustainable and environmentally friendly option

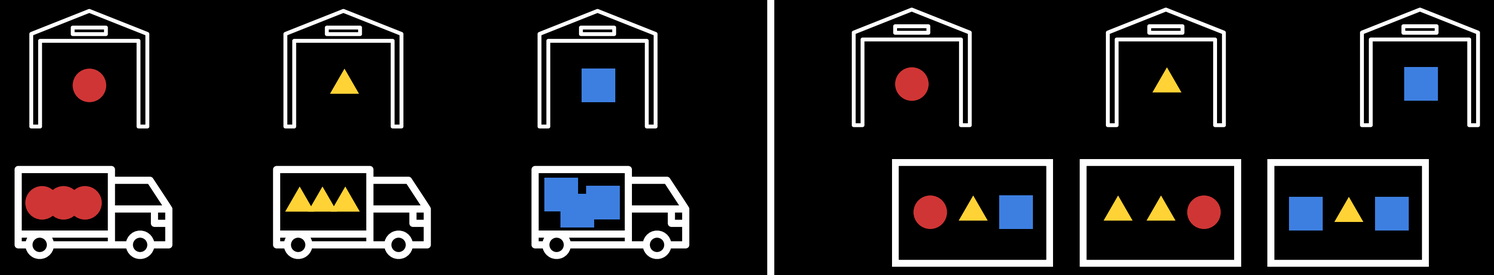
## Plan

- Process the blueprints and specs and determine list of materials (size and amount)
- Create day-to-day plan with a daily quota with necessary materials for the day



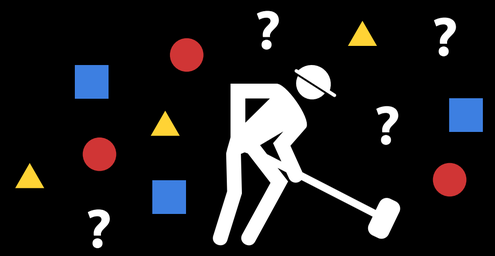
## Process

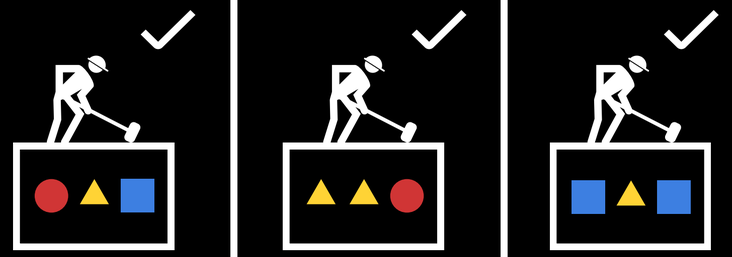
- Outsource standard pre-cut materials and raw materials in bulk (merge orders)
- Refine materials
- Transfer and store to KAHA facility
- Organize the refined materials in containers with labeling systems



## Construction

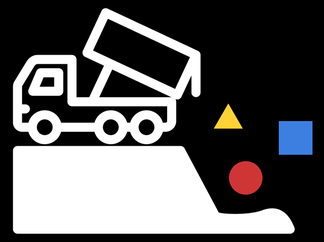
- Deliver scheduled containers with materials and goals for the day with electrical trucks





## Waste Management

- Store excess material into respective recycling bins to be reused



How do we digitalize this?

- tackle an industry that has been the same.

...ter?

...rtner up with pre-existing manufacturing companies and store the ...
...n organized way

//

...program that directs and sorts through the specs and blueprints ...
gives a list of material and it's size etc...
and merges orders to optimize production / m...

buy material in bulk to reduce cost and use a program to arran...
...onto the material in the most space-efficient way.

...e organize the waste in a way that's easy to send out to recycling

...use the most efficient cutting tools that do not create waste in comparison

→ laser cutting
→ saw
→ water jet

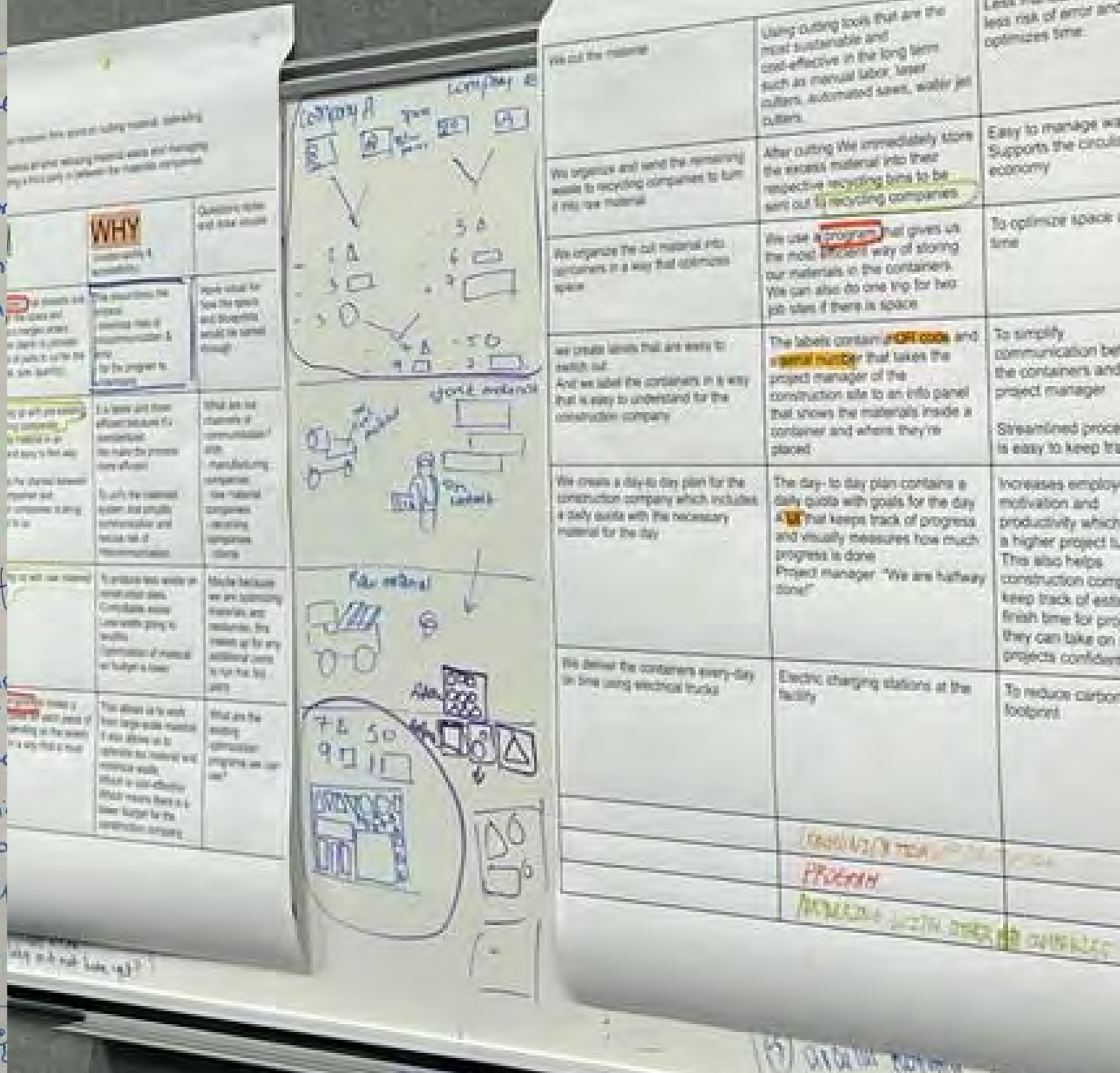
} easier to implement new t...
new establishments.

...e use a program that tells us how to optimize space in the contai...
one trip for two job sites if there is space. Use scan for
...he company sends a schedule to us and we create a day-to-day
that includes a daily quota and the necessary materi...
UI that keeps track o...
→ Project Manager ...

→ okay

...cost of laser
...mass compare to
... cutting wood
...al?

Real job example

* Electrical trucks.

(8) → e... prob...