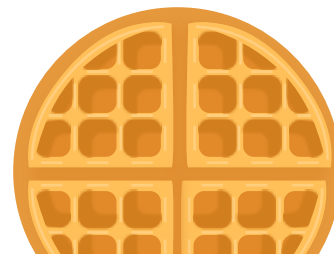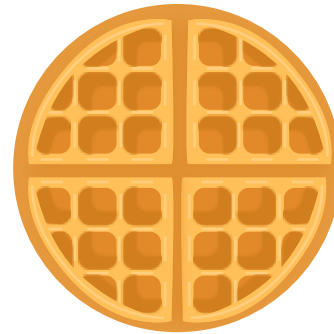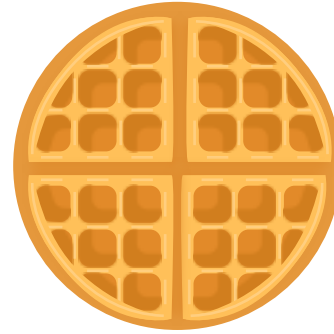# Price Optimization; Why It's Okay to Fail
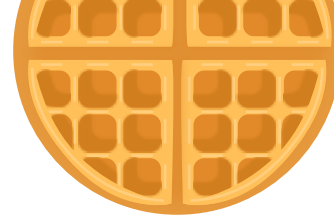
Ryan Donegan • Fall 2017

The Project

Client
A large fast food chain: Waffleonia

Task
Build an app that recommends price changes based on sales history in specific geographies

Constraints
The app should integrate with the existing APT web platform

Team
1 UX designer, 1 project manager, 1 QA, and 5 SE's

My Role
UX designer

Waffleonia

Process

Connect top level strategy

Research   Personas   Concepts   User test   Hi-Fi   MVP
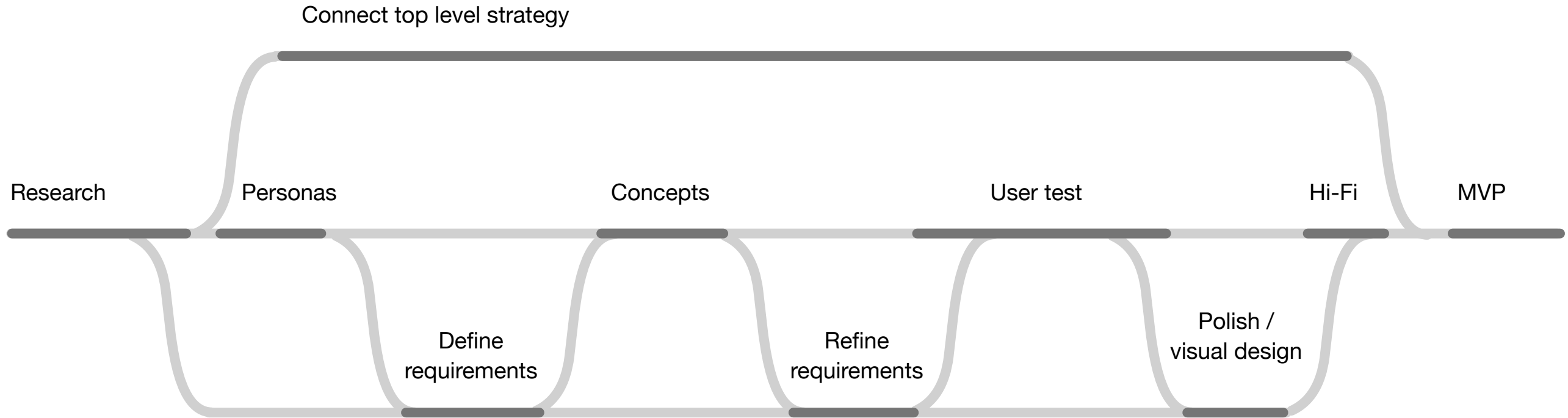
Define
requirements

Refine
requirements

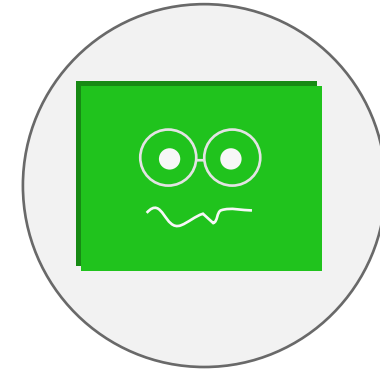Polish /
visual design
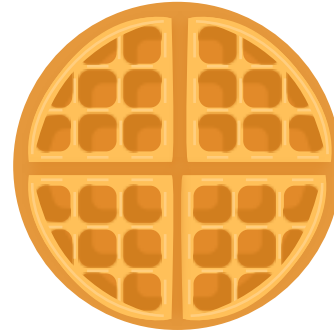
Stakeholders

Corporate Waffleonia

Franchise Owners

Store Managers

Defining Requirements

Waffleonia can't set the prices; can **only influence** franchisees

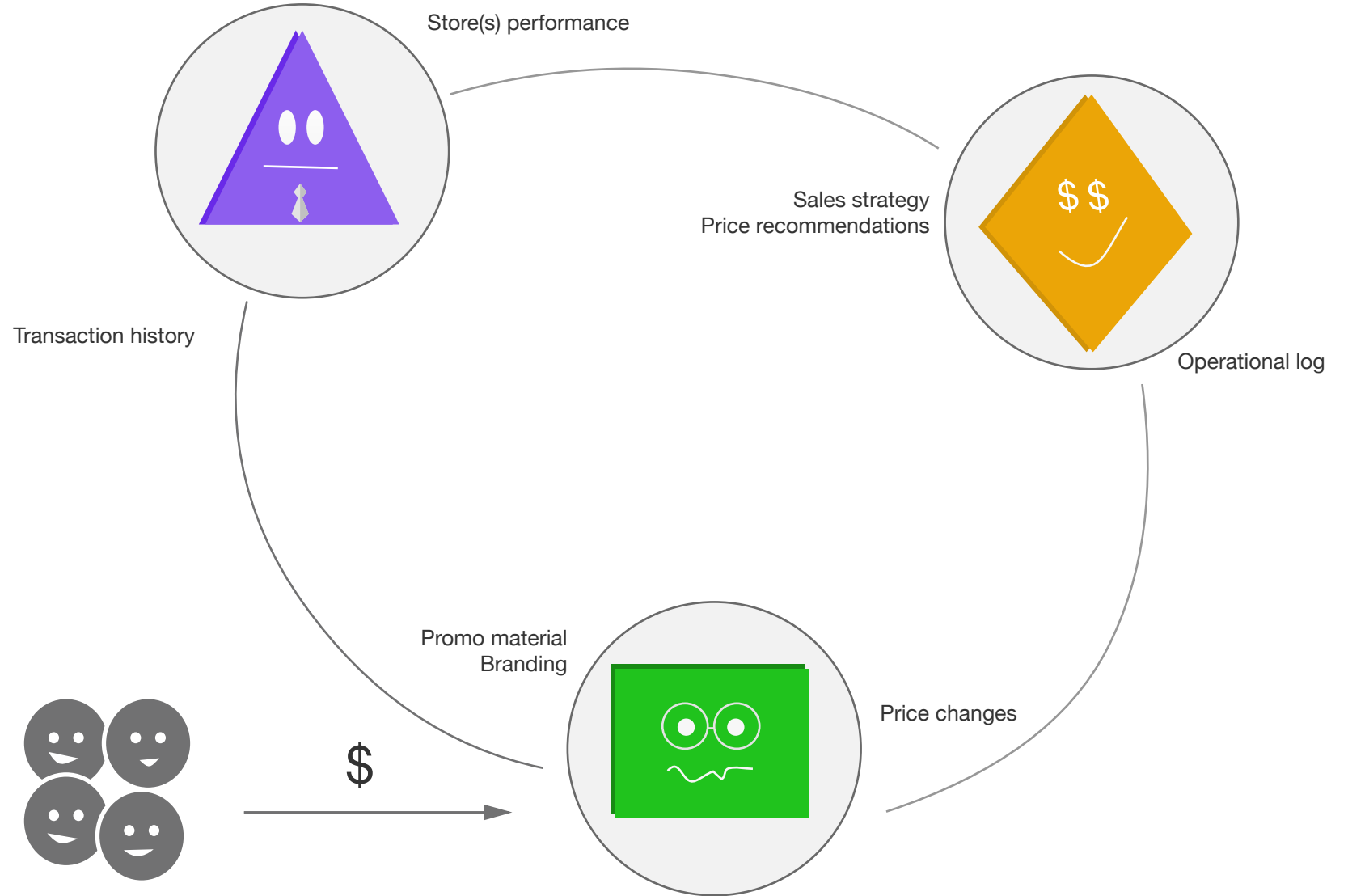Waffleonia only recommends price **increases**

Business constraints exist that restrict how prices can change

Price recommendations need to be **granular**

Price recommendations need to be **shareable**

Total number of menu items hovers between **40 - 50**

Store(s) performance

Sales strategy
Price recommendations

Operational log

Transaction history

Promo material
Branding

Price changes

$$
$
$$

Steerco Concepts

Settings

Report name

Q1 Manhattan DMA

Report type

Strategy ▼

Region

All US locations ▼

Time frame

1/1/17 - 3/31/17 📅

Results Dashboard

DMA: Manhattan ▼

540.98   26.5   0.14   0.03

ITEM	CURRENT	RECOMMENDED	DELTA
Sugar waffle	$2.59	$2.61	0.02
Nutella waffle	$3.99	$3.99	0.00
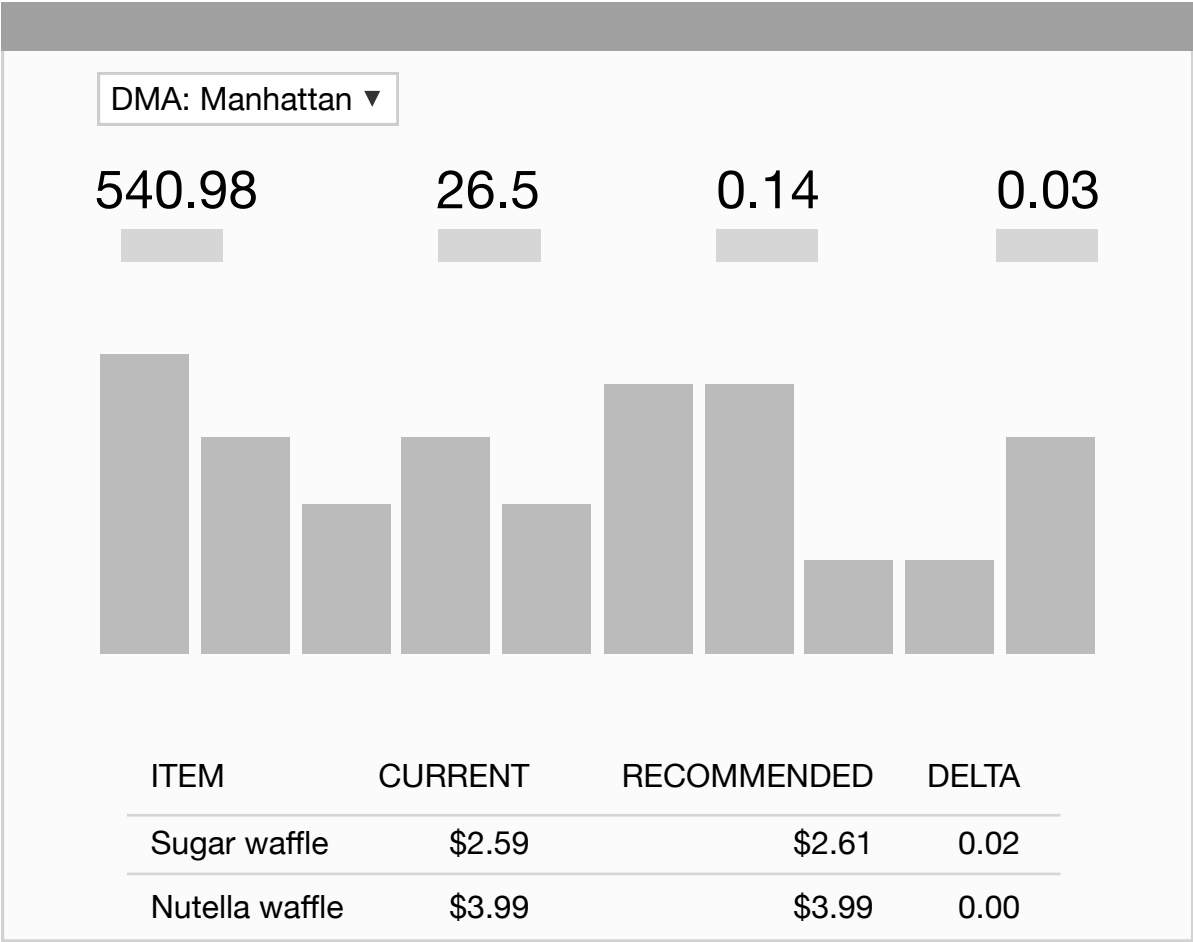
Refining Requirements

Users need a way to input **price constraints**

Waffleonia users may want to **modify price recs**

Modifying constraints using Excel

Settings > Pick the Menu > Constraints > Results

All   Constraint X   Constraint Y   Upload constraints

CONSTRAINT	MENU ITEM	LOW	HIGH
Constraint X	Plain maple waffle	$2.40	$3.00
Constraint X	Plain maple waffle	$2.40	$3.00
Constraint X	Plain maple waffle	$2.40	$3.00
Constraint X	Plain maple waffle	$2.40	$3.00
Constraint X	Plain maple waffle	$2.40	$3.00
Constraint X	Plain maple waffle	$2.40	$3.00

Refining Requirements: Modifying Recs

DMA: Manhattan ▼

540.98   26.5   0.14   0.03

Modify prices

ITEM	CURRENT	RECOMMENDED	DELTA
Sugar waffle	$2.59	$2.61	0.02
Nutella waffle	$3.99	$3.99	0.00
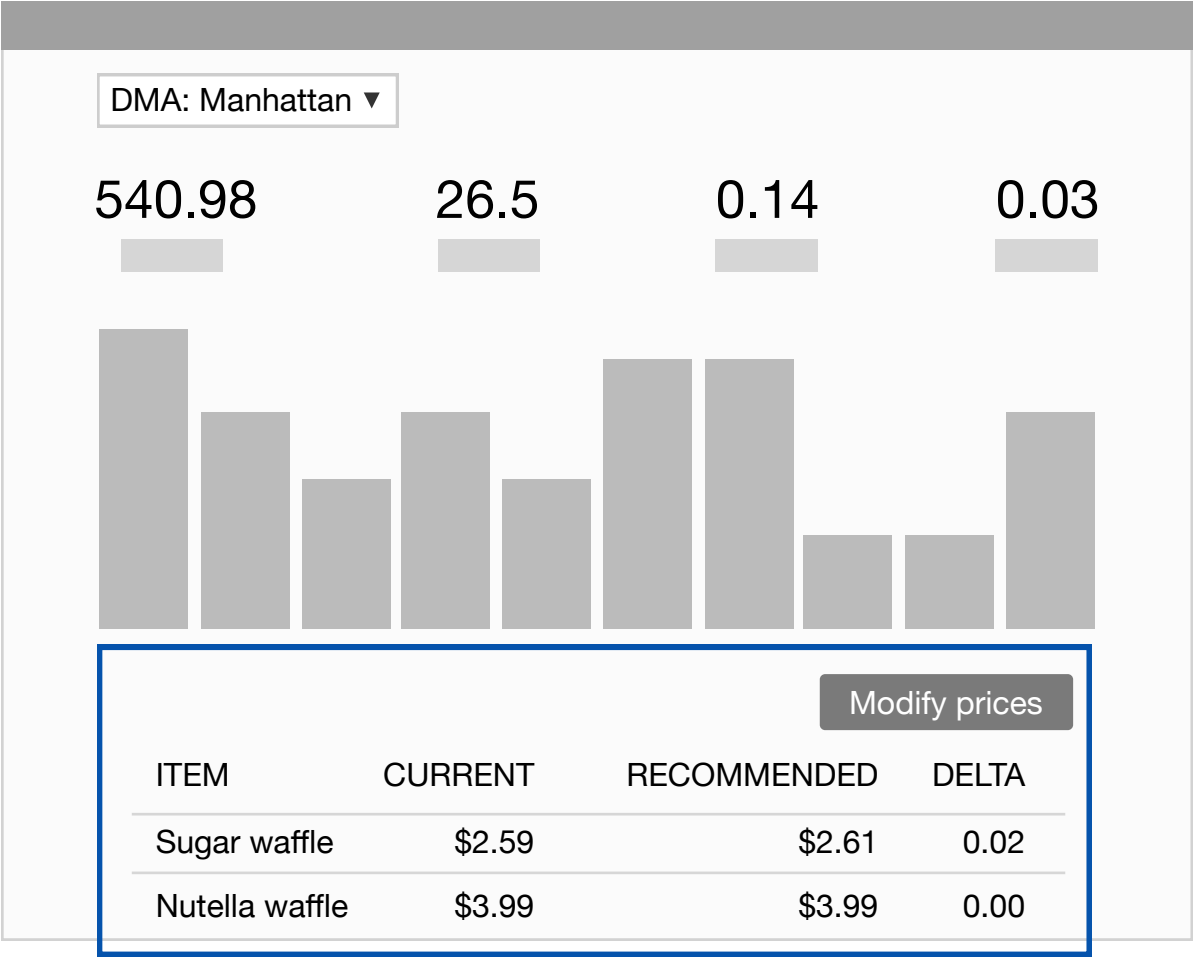
Save changes   Cancel

ITEM	CURRENT	RECOMMENDED	DELTA
Sugar waffle	$2.59	$2.61	0.02
Nutella waffle	$3.99	$3.99	0.00

	$2.63 ~~$2.61~~	0.04
	$3.99	0.00

User Testing

The Waffleonia users identified some key areas for development:

Saving modification versions

Dynamically editing constraints

DMA: Manhattan ▾			Version 2 ▾
540.98	26.5	0.14	0.03

Modify prices

ITEM	CURRENT	RECOMMENDED	DELTA
Sugar waffle	$2.59	$2.61	0.02
Nutella waffle	$3.99	$3.99	0.00
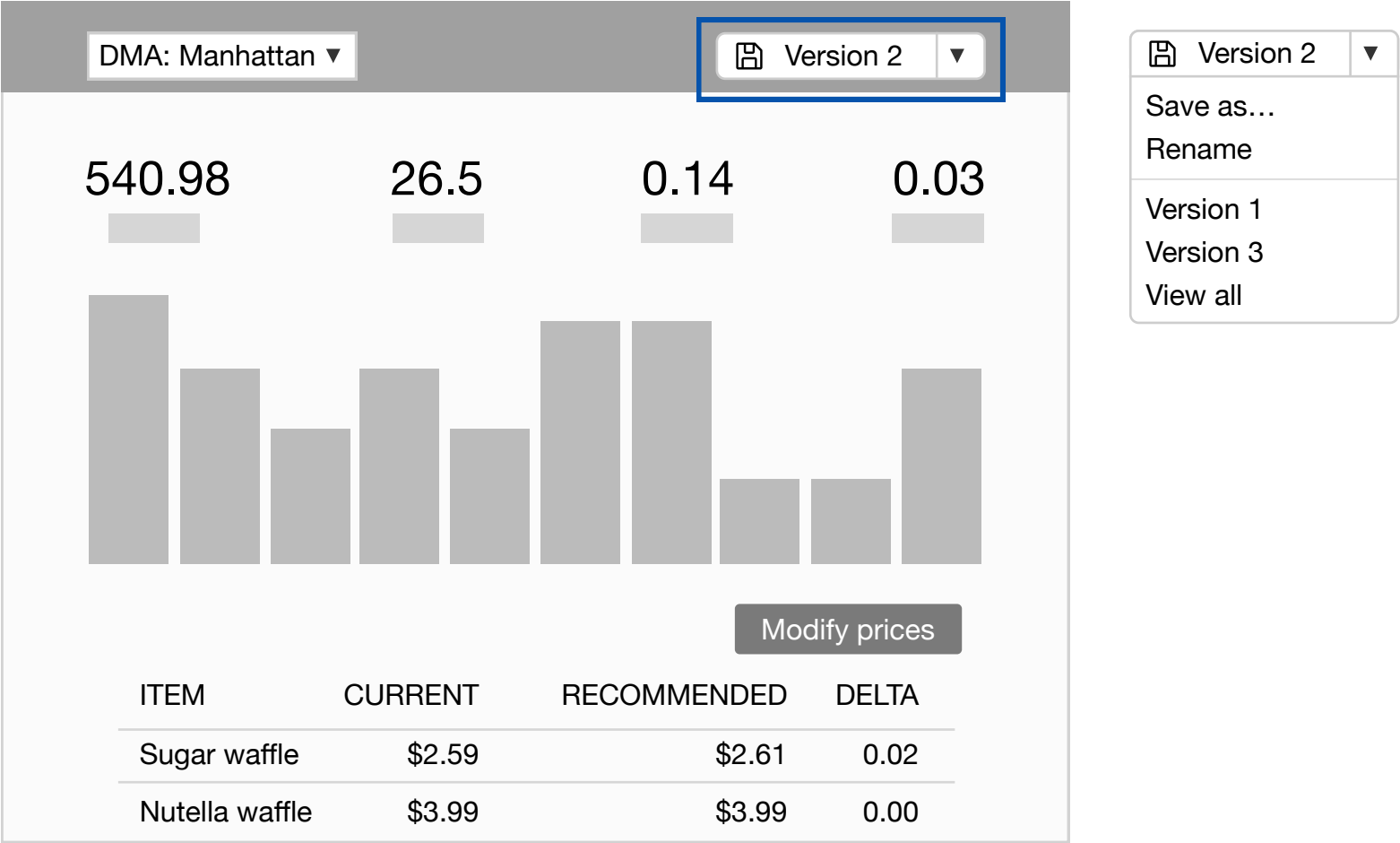
Version 2 ▾
Save as…
Rename
Version 1
Version 3
View all

User Testing:
Dynamic Constraints

Settings > Pick the Menu > Constraints > Results
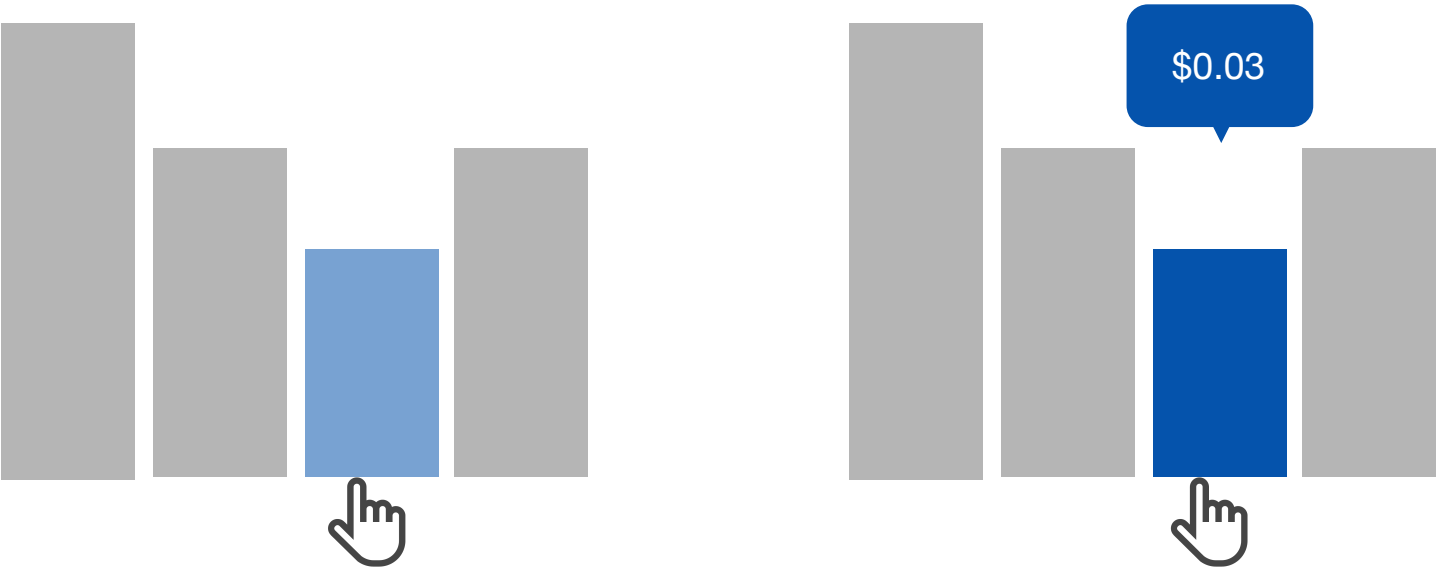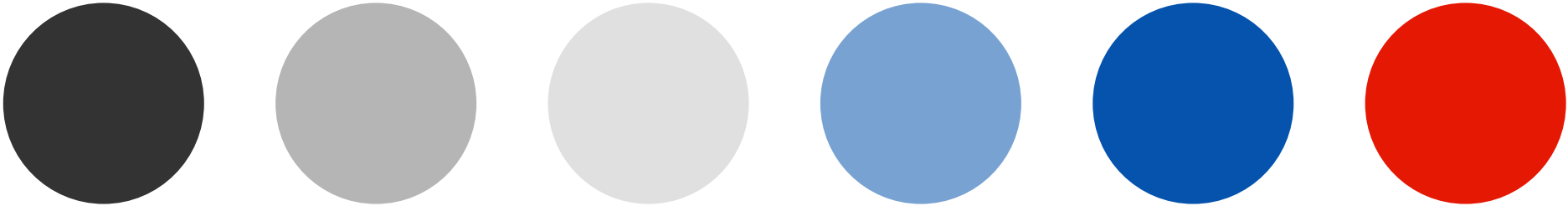
All	Constraint X	Constraint Y	Upload

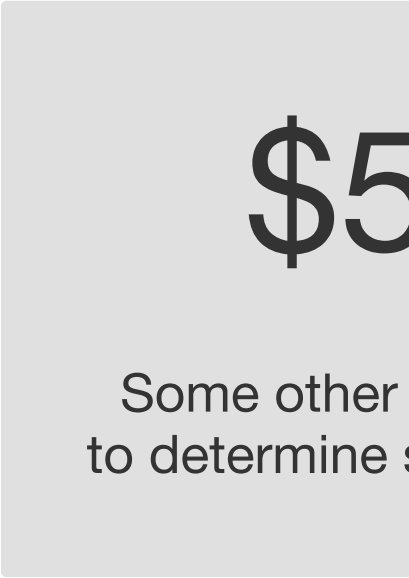| CONSTRAINT	MENU ITEM	LOW	HIGH
Constraint X	Maple waffle with strawberry	$2.40	$3.00
Constraint X ▼	Select a menu item ▼		

Visual Enhancements

Color was used to enhance moments of interactivity within the app.

$0.03

Visual Enhancements

Summary metrics at the top of
the dash filtered results.

213	13	$5
Stores with recommended increase	Stores with no recommended increase	Some other to determine

The Rise…

We rolled out!

…and the fall

The project was retired.

+ Waffleonia was extremely pleased by the release

- Client-specific features were way too specific

+ Many similar potential clients exist

- Many chains already have a system in place

- Our competition had a head start

- Porting our backend to a new client was expensive

…

On the Bright Side

It's okay to fail.

Waffleonia is still going strong with our product. They love it!

Some of the components from the project were reused in other projects.

I received first-hand experience in scope creep and negotiation.