



# The power of Email Design Systems



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**Software engineer**, Customer.io

**Admin**, Email Markup Consortium



QUESTION

# How long does it take to create one email?



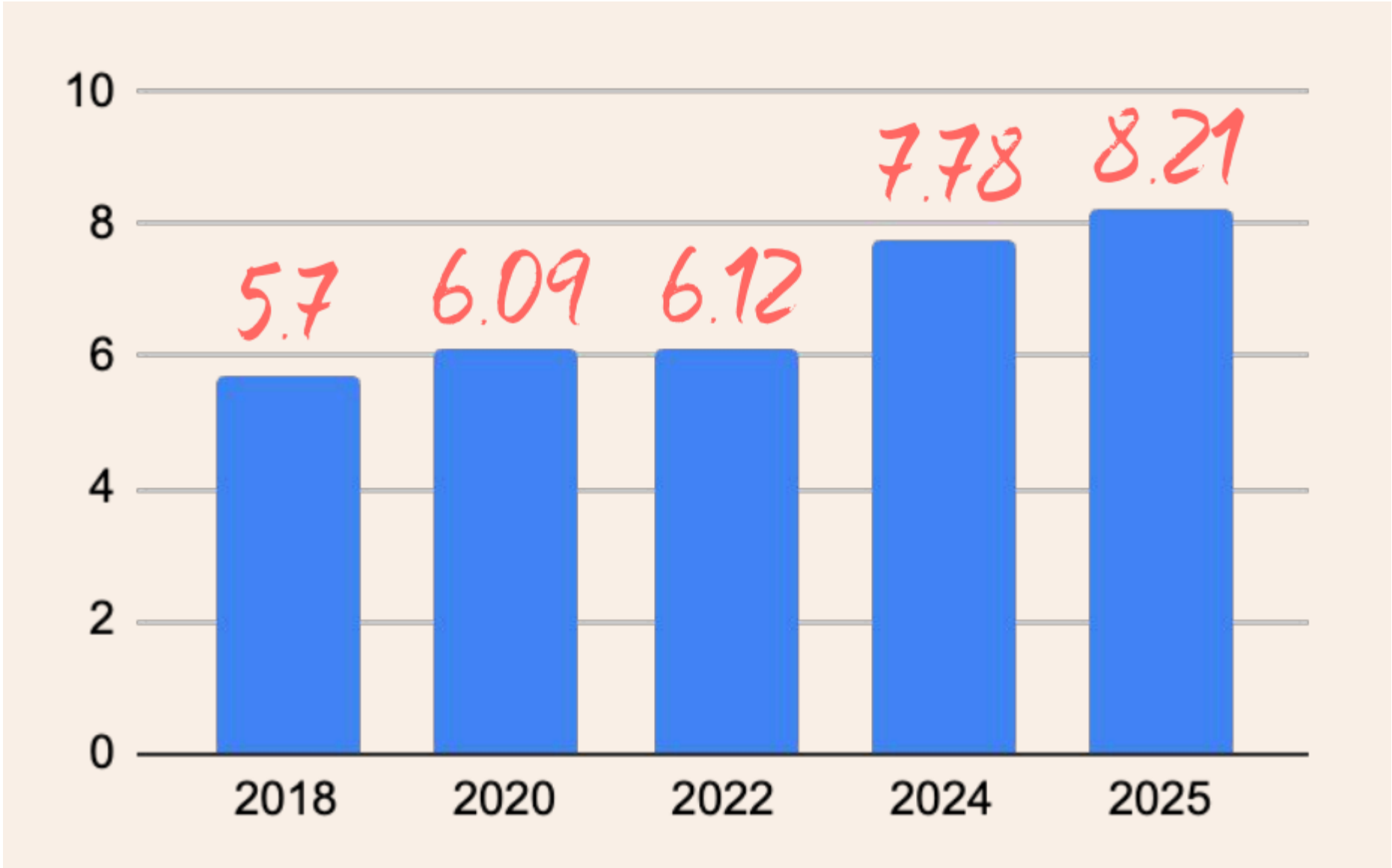
2025 INDUSTRY REPORT

8.21 Days

- Simple emails - 3.9 days
- Very complex emails - 13.5 days
- Solo creators - 3.9 days
- 6-7 person team - 16.8 days



Really Good Emails



Email has got  
more complicated



# Email has got more complicated

- 2012 - Start of responsive emails
  - 2014 - Interactive emails gaining popularity
  - 2015 - Increasing focus on accessibility
  - 2016 - Frameworks starting to take off
  - 2019 - AMP4email
  - 2019 - Dark mode *issues*
- Email client updates
  - New laws, regulation
  - Technology trends and new tools





# Design systems

- 1960's - Advertising brand books
- 1990's - Design systems on web
- 2013 - Brad Frost Atomic Design



EMAIL DESIGN SYSTEMS

**Pulling together  
Branding concepts of the 60's  
+  
Electronic messaging  
technology of the 70's**





# What is an Email Design System (EDS)

A reusable, scalable system for creating branded, consistent, accessible emails.

- Flexible enough to create a wide range of designs.
- Restrictive enough to keep everything consistent and on brand.



# Planning an EDS



Who will be  
using the  
EDS?  
How will they  
be using it?



**Developer**

Working in code



**Marketer**

Working in visual editor



# How many brands will it cover?



## Single brand

One brand per design system



## Multiple brands

That align on basic styles and layout



# Code structure



## Custom HTML

Full control over the  
output code



## Framework

Outsourcing email  
rendering concerns





# Naming conventions



## Atomic design

- Atoms
- Molecules
- Organisms



## Descriptive

- Blocks
- Layouts
- Sections



# Atomic Design concepts



# Tokens

## Colors



**bg-body-lt**  
#ffffff



**bg-body-dk**  
#08272b



**bg-email**  
#f0edeb



**bg-highlight**  
#eff2e9



**txt-h1-lt**  
#0e464d



**txt-h1-dk**  
#e4ffce

## Fonts

Primary

**Helvetica**

Fall-back  
sans-serif

Saans

**\_\_saansFont\_832af5**

Fall-back  
Arial, sans-serif

## Spacing

**small** 8px

**medium** 16px

**large** 24px



# Atoms

Your cheeky H1 goes here

Your charming H2 goes here

**Your cute H3 goes here**

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Primary CtA

+≧λ(●⊖●)∕≦÷



# Molecules



Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

[Tertiary CtA →](#)



Use this for one short paragraph and no more than one CtA. If you need to share more links please use another component.

[Tertiary CtA →](#)



**Jason Lyman**

Chief Marketing Officer,  
Customer.io

Your charming H2 goes here

"We're no strangers to love. You know the rules and so do I. A full commitment's what I'm thinkin' of. You wouldn't get this from any other guy"

**Secondary CtA**





# Organisms



Log in



[LinkedIn](#) | [X](#) | [YouTube](#) | [Instagram](#)

[View in your browser](#)

Built with [Design Studio](#), sent with Customer.io  
© {{ "now" | date: "%Y" }} {{ snippets.cio\_address }}

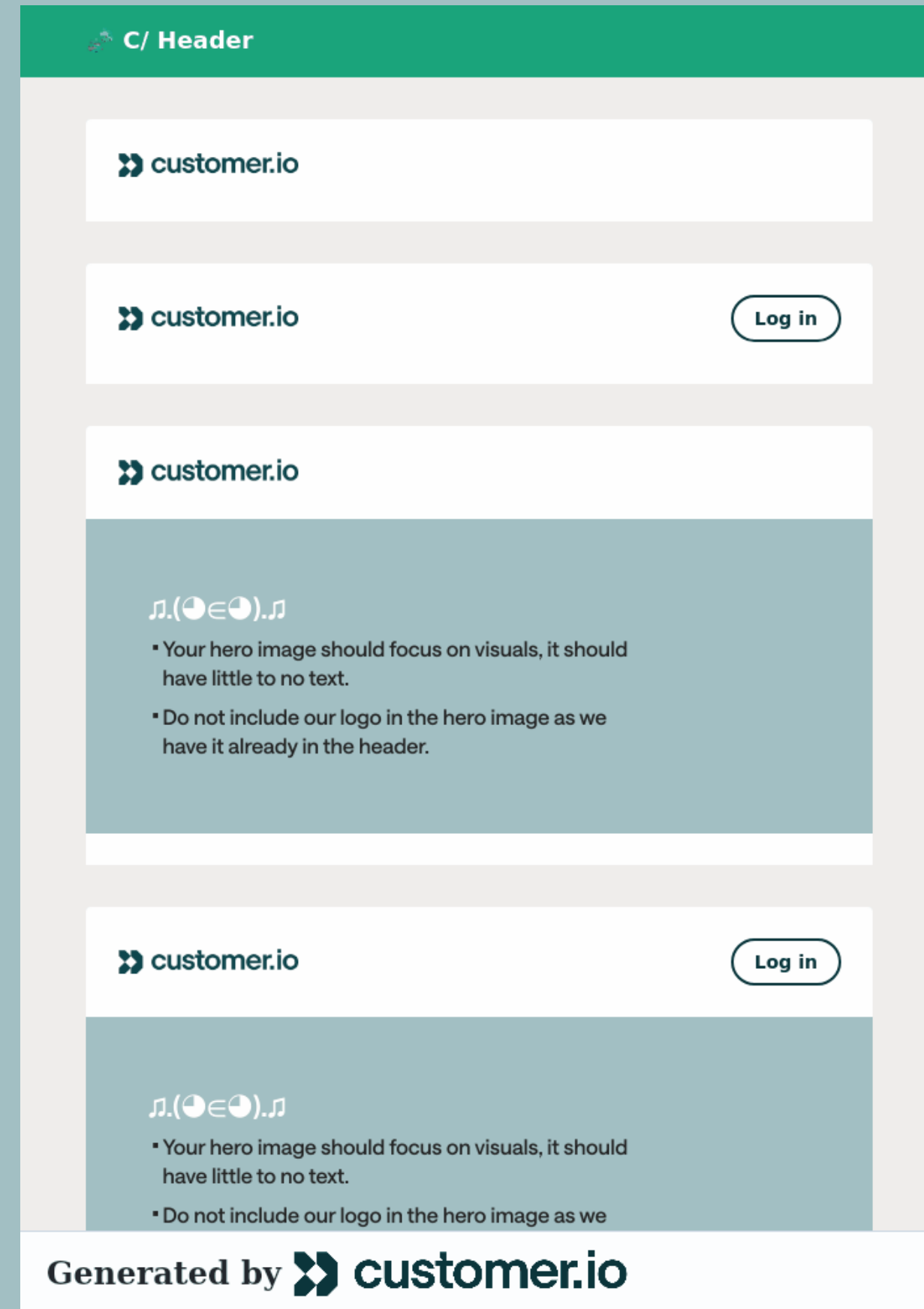


# Implementing an EDS



# Design file

- All components
- Built in an email specific tool



# Variants

Grouping variants

Primary CtA

Secondary CtA

Tertiary CtA →

Multiple choice →

Primary CtA



# Code

```

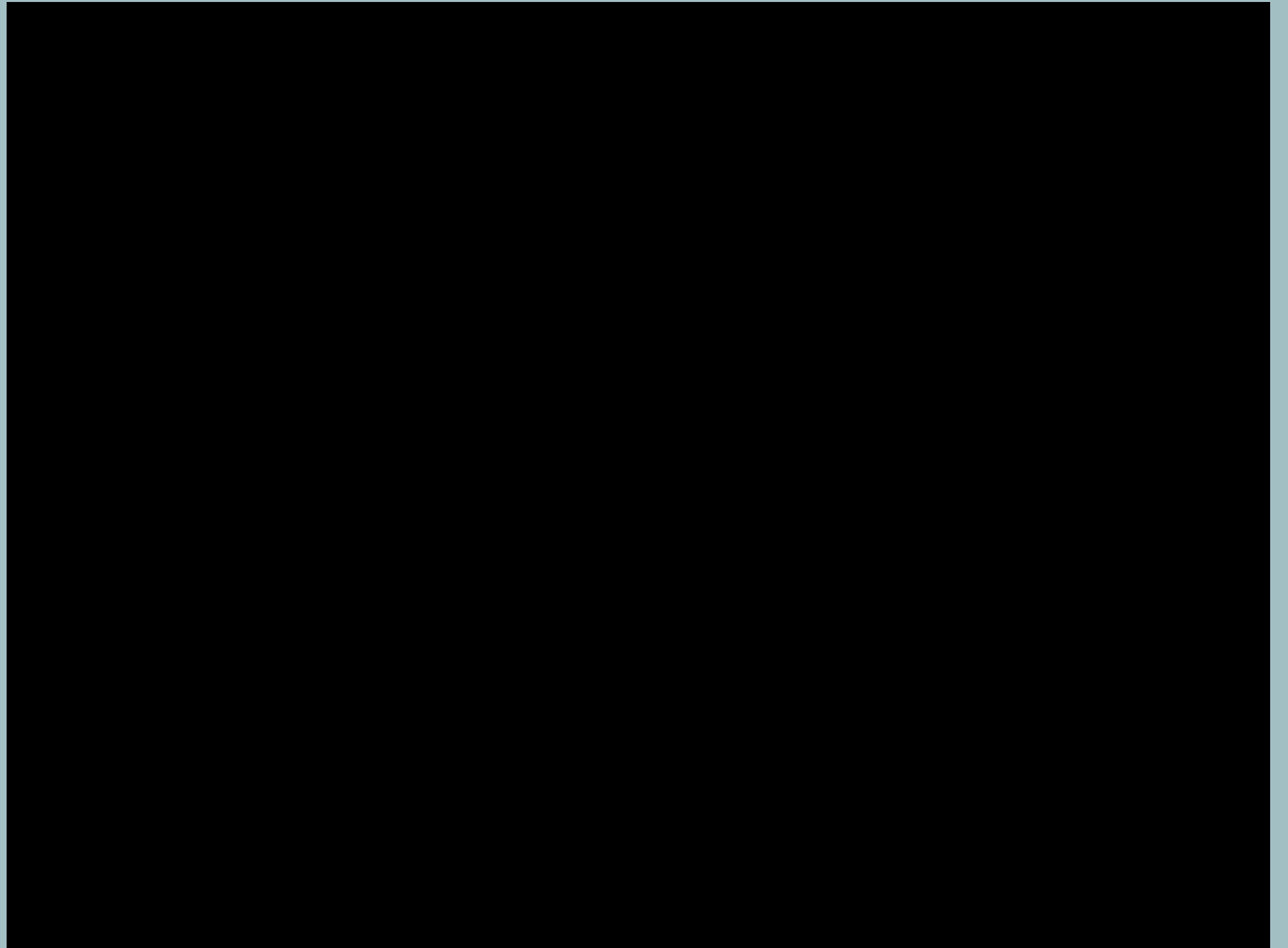
17 export const config = [
18   label: "CID button",
19   presets: [
20     icon: "web-traffic",
21     label: "Button",
22     section: "BS - Basic light",
23     context: "cid-button/cid-button"
24   ]
25 }
26
27 export const alerts = Component.defineAlert({
28   default: {
29     schema: Component.alert.test(),
30   },
31 });
32
33 export const props = Component.defineProps({
34   href: {
35     label: "Link",
36     schema: Component.props.string().optional().default("https://customer.io"),
37   },
38   variant: {
39     label: "Variant",
40     schema: Component.props
41       .enum([
42         'primary', 'primary_BC', 'secondary', 'secondary_BC', 'tertiary', 'multiple'
43       ])
44       .default('primary'),
45     options: [
46       label: "Primary",
47       value: 'primary',
48     ],
49     {
50       label: "Primary Dark",
51       value: 'primary_BC',
52     },
53     {
54       label: "Secondary",
55       value: 'secondary',
56     },
57     {
58       label: "Tertiary",
59       value: 'tertiary',
60     },
61     {
62       label: "Multiple choice",
63       value: 'multiple',
64     },
65   ],
66   align: {
67     schema: Component.props.enum(['left', 'center', 'right']).default('left'),
68     type: 'hidden',
69   },
70   margin: {
71     schema: Component.props.string().optional().default(''),
72     type: 'hidden',
73   },
74 });
75
76 const forceMargin = props.margin ? props.margin : Component.utils.spacing(0px, 0px, globalStyles.spacing.large_xxxd5t6RrZl);
77
78 //script
79 //template
80
81 <fragment if={props.variant === 'primary'}>
82   <a-sta show-background={Component.utils.background('', globalStyles.colors.staHwerrit_ujfwmhBw)} padding={Component.utils.spacing(10px, globalStyles.spacing.large_xxxd5t6RrZl)}
83     background={Component.utils.background('', globalStyles.colors.staFillibz_hfufydkmRD)} border-radius={Component.utils.radius(globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd)} font-size=16 font-weight=600 line-height=1
84     background-color=#000000 href={props.href} align=props.align margin=forceMargin><slotPrimary Cta/></a-sta>
85 </fragment>
86
87 <fragment if={props.variant === 'secondary'}>
88   <a-sta show-background={Component.utils.background('', globalStyles.colors.staHwerrit_ykshvAqpp)} padding={Component.utils.spacing(10px, globalStyles.spacing.large_xxxd5t6RrZl)}
89     background={Component.utils.background('', globalStyles.colors.staFillibz_hfufydkmRD)} border-radius={Component.utils.radius(globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd)} font-size=16 font-weight=600 line-height=1
90     background-color=#000000 href={props.href} align=props.align margin=forceMargin><slotSecondary Cta/></a-sta>
91 </fragment>
92
93 <fragment if={props.variant === 'tertiary'}>
94   <a-sta show-background={Component.utils.background('', globalStyles.colors.staHwerrit_3n7NdrfQes)} border-color=globalStyles.colors.staHwerrit_3n7NdrfQes padding={Component.utils.spacing(globalStyles.spacing.xsmall_xbqgqgMde, 0px)} border-radius=Component.utils.radius(globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd) font-size=16 font-weight=600 line-height=1
95     background-color=#000000 href={props.href} align=props.align margin=forceMargin><slotTertiary Cta/></a-sta>
96 </fragment>
97
98 <fragment if={props.variant === 'multiple'}>
99   <a-sta show-color=globalStyles.colors.ctaHwerrit_ujfwmhBw padding={Component.utils.spacing(globalStyles.spacing.xsmall_xbqgqgMde, 0px)} border-radius=Component.utils.radius(globalStyles.radius.cta_v8llcollqWd, globalStyles.radius.cta_v8llcollqWd) font-size=16 font-weight=600 line-height=1
100     background-color=#000000 href={props.href} align=props.align margin=forceMargin><slotMultiple choice/></a-sta>
101 </fragment>

```



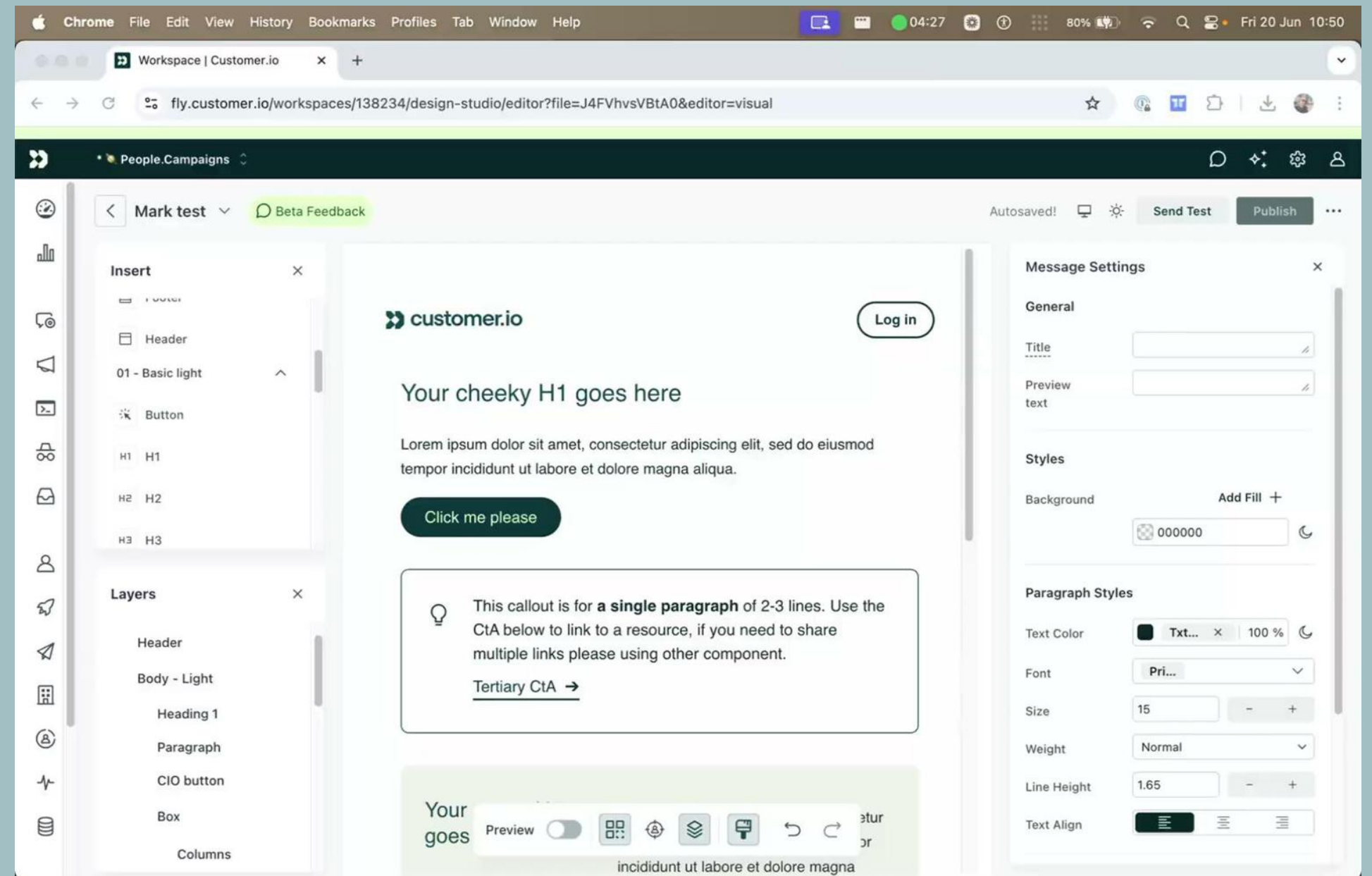
# In the editor

- Custom CTA's in the editor
- Drop down variants

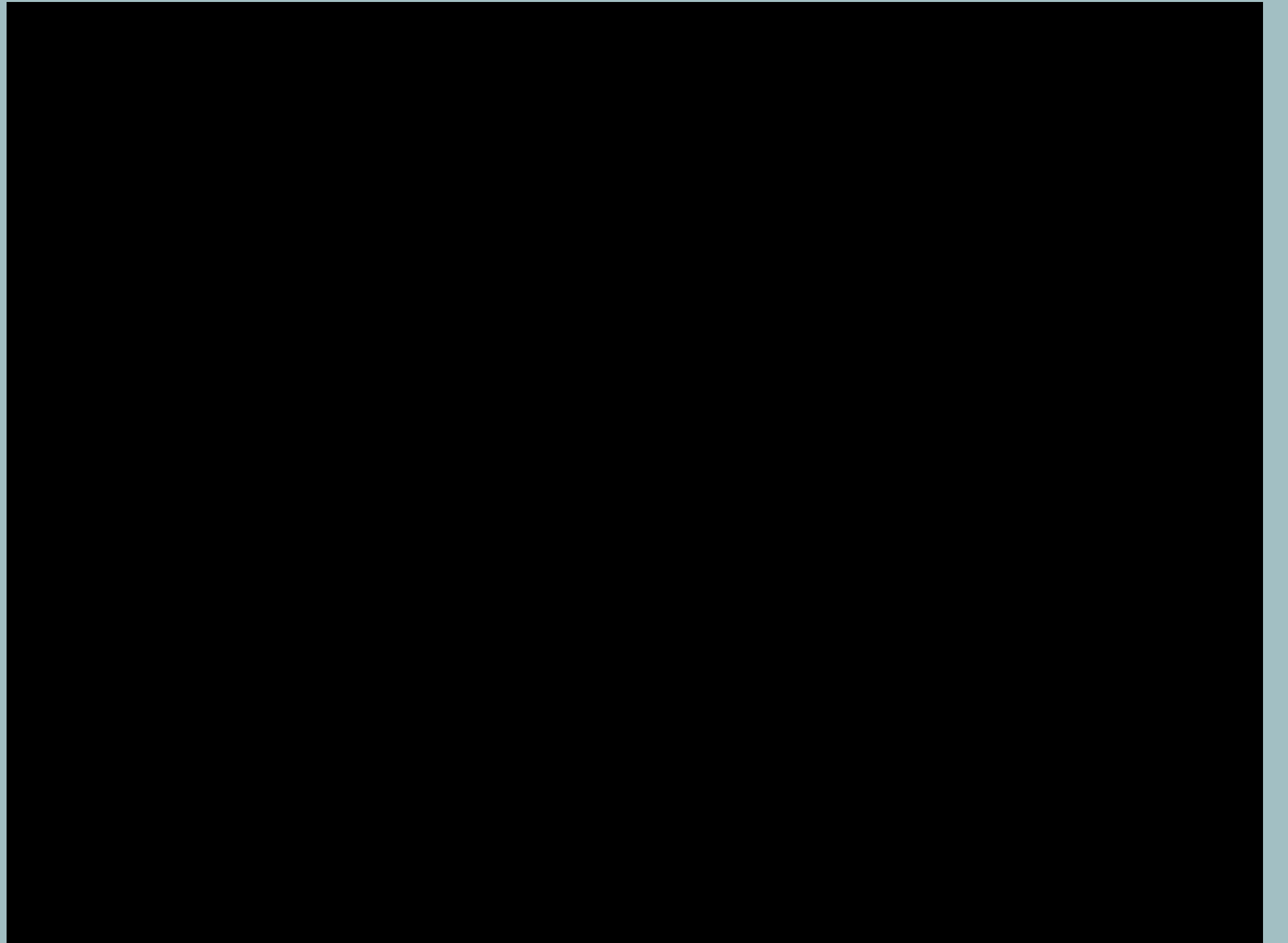


# Header

More complex example in the editor with multiple options



# Restricted placement & conditional rendering



Improvements  
we've seen



## IMPROVEMENTS

# Performance

- Huge improvement on email creation time
- Huge improvement on QA time
- Better accessibility
- Better rendering across email clients
- ~50% smaller file size





# User feedback

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“The Design Studio helped me cut email QA and approval time by 70%, even without a design background—because I’m building on what our design team already set up.”

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"Think of EDS as Canva for creating beautiful, on-brand emails with templates at hand. Whatever I can dream up, EDS is sure to deliver!"

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“Love the EDS! It takes the guesswork out of creating professional, on-brand emails.”

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"It's been much easier to use our brand's templates in the EDS!"

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"From concept to finalization, using EDS has been a game-changer. It has really sped up my email creation process, helping me stay on brand easily!"

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# What is next



WHAT IS NEXT

# Constant iteration and improvements



WHAT IS NEXT

# Documentation



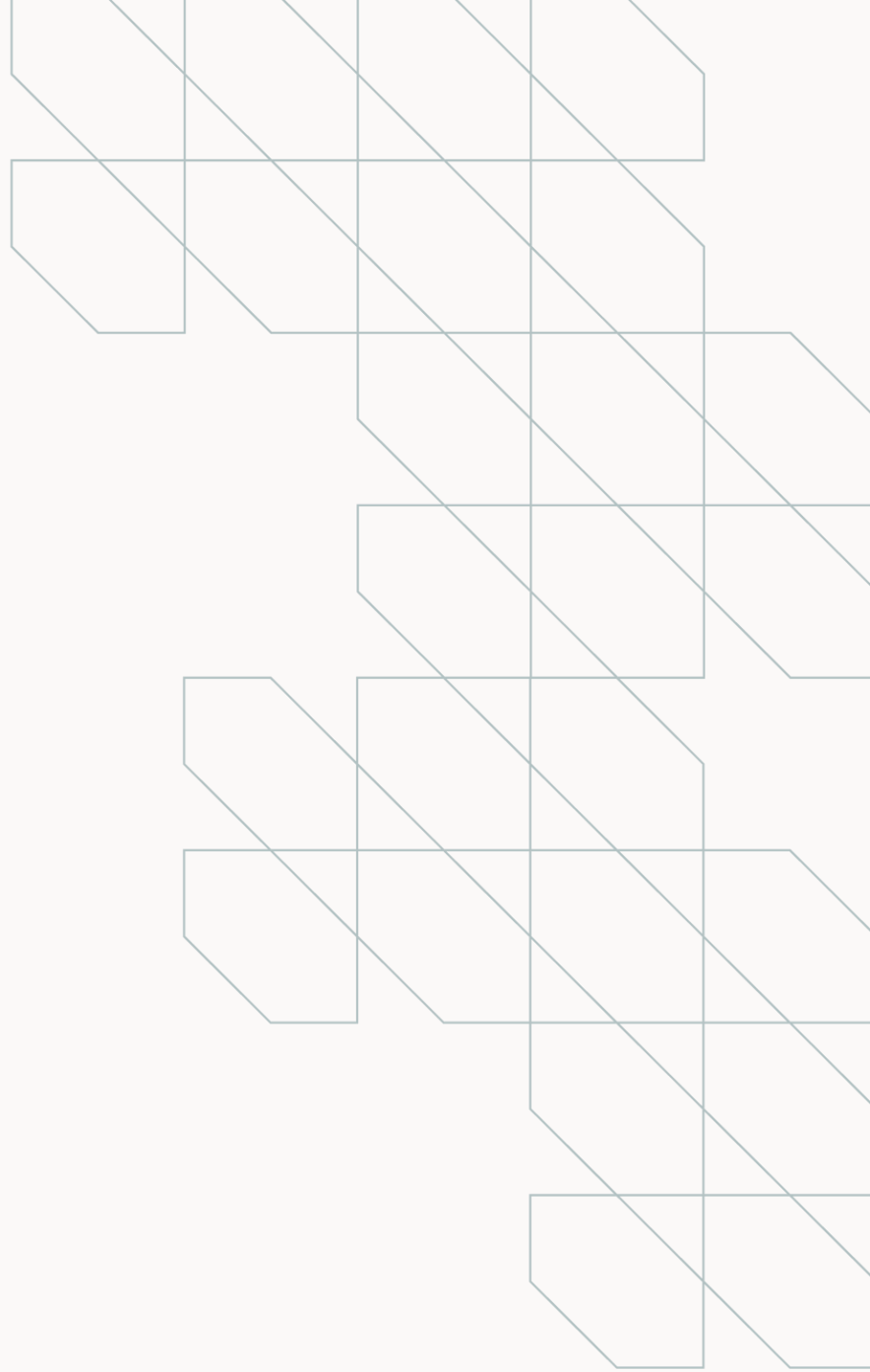
WHAT IS NEXT

# Progressing enhancement



WHAT IS NEXT

AI



EMAIL DESIGN SYSTEMS

**A good EDS makes it very  
hard to create a bad email**





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