

Responsive Email

it's not as bad as you think

Who Am I?



Justine Jordan
Wearer of Many Hats, Litmus



@meladorri @litmusapp

litmus.com/lp/artifact

Sample HTML, slides, templates, frameworks, and other goodies.

Disclaimer:

I am not a web designer.

Disclaimer:
I love email.

...HTML and plain text alike ☺



Jack Swagger ~ @defeated · 4h

@meladorri hope #artifactconf is a great trip! Could you get @adactio to sign an I <3 Email shirt for me? ;)

[Details](#)

[Reply](#) [Retweet](#) [Favorite](#) [More](#)



Jeremy Keith @adactio · 3h

@defeated @meladorri Only if it says "I ❤ Plain Text Email." 😊

[Details](#)

[Reply](#) [Retweet](#) [Favorite](#) [More](#)



Justine Jordan @meladorri · 3h

@adactio With any luck I may be able to convince you that email's not half bad. I'll wear my tomato-proof suit just in case. cc @defeated

[Details](#)

[Reply](#) [Delete](#) [Favorite](#) [More](#)



Jeremy Keith @adactio · 3h

@meladorri @defeated Oh, email's fine. It's just HTML email that is satan's spawn. 😊

[Details](#)

[Reply](#) [Retweet](#) [Favorite](#) [More](#)



Justine Jordan @meladorri · 3h

@adactio @defeated Why deprive users that want a beautiful experience in their inbox from having one? I <3 plain text, HTML has a place :)

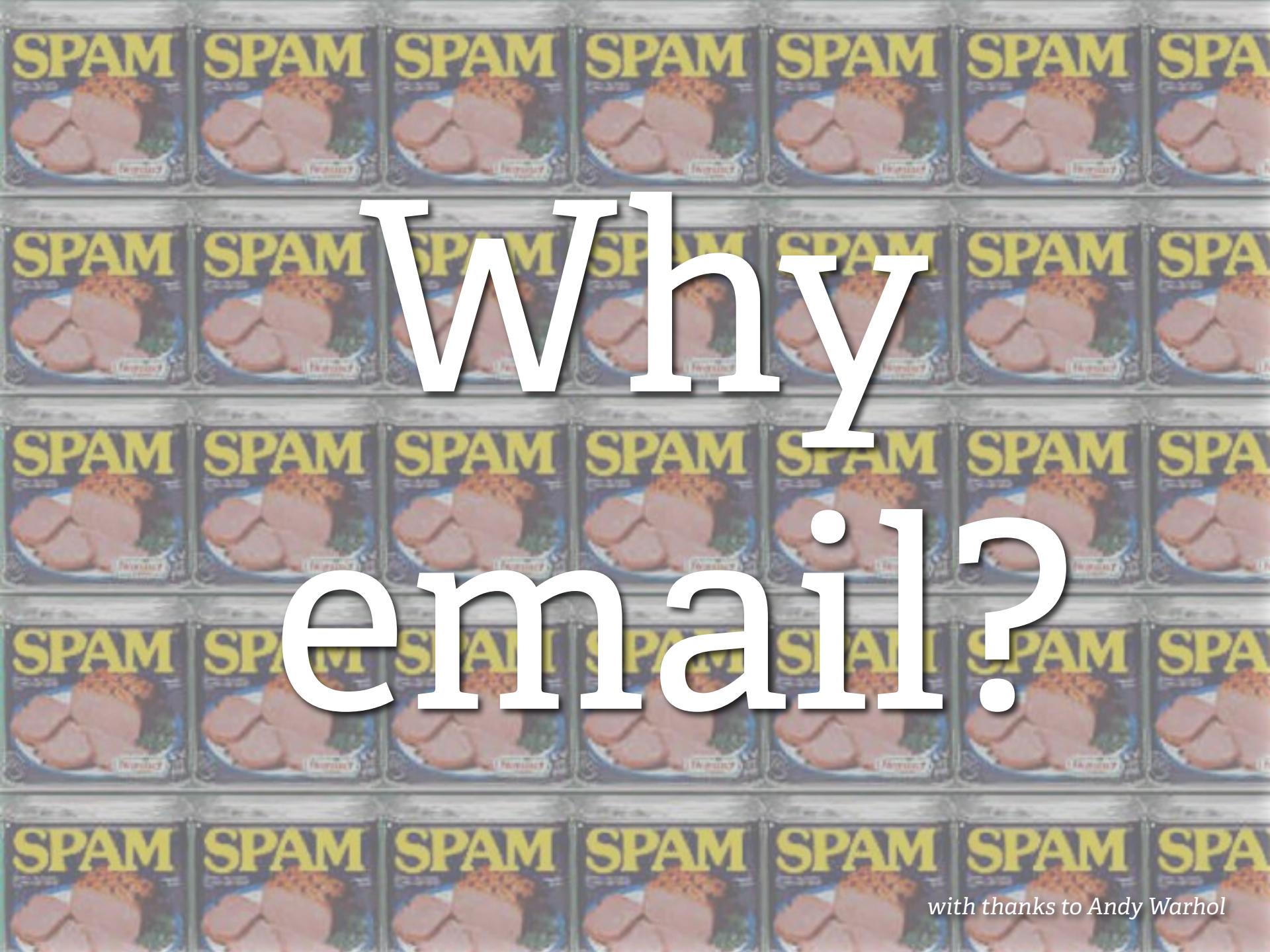
[Details](#)

[Reply](#) [Delete](#) [Favorite](#) [More](#)

A favorite quote from 2007

“There are many times when a well designed, and well laid out HTML email can be a lot clearer, easier to scan and overall better experience than the equivalent in plain text.”

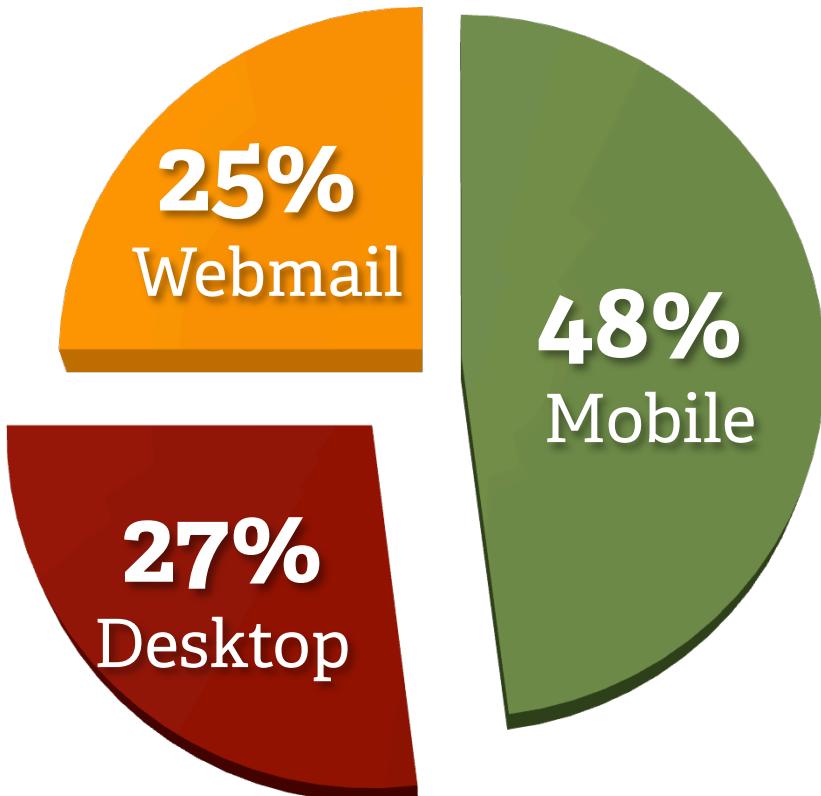
<http://www.campaignmonitor.com/blog/post/2511/zeldman-says-html-mail-still-s-1>
<http://www.zeldman.com/2007/06/12/eight-points-for-better-e-mail-relationships/>



Why
email?

with thanks to Andy Warhol

Where do users read email?



Mobile:

Smartphones (iPhone, Android) and tablets

Desktop:

Installed email programs (Outlook, Apple Mail)

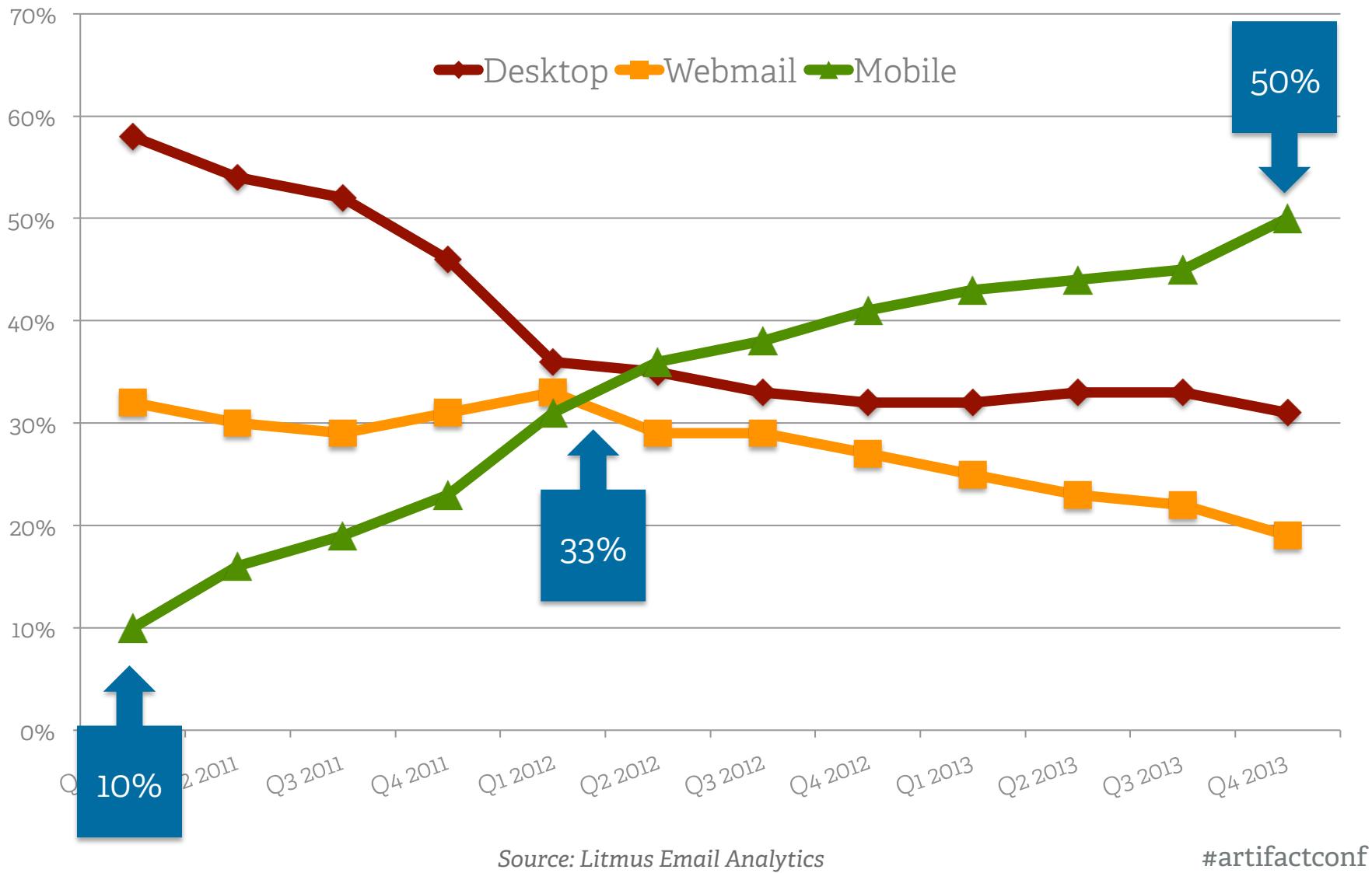
Webmail:

Email accessed through a web browser (Gmail, Hotmail, Yahoo!)

Source: Litmus Email Analytics

#artifactconf

Looking back to 2011...



Users do not always conform to averages

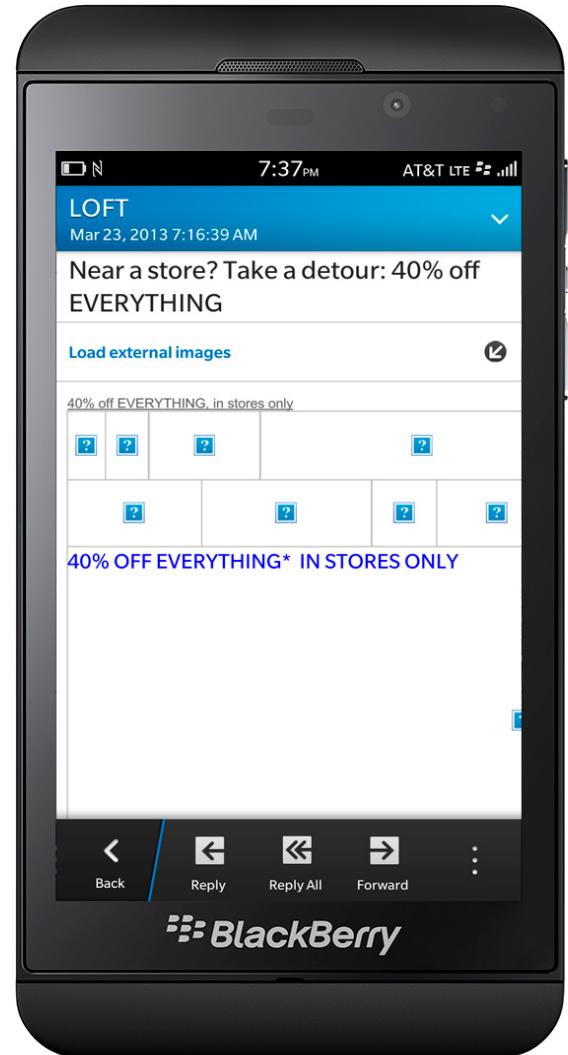
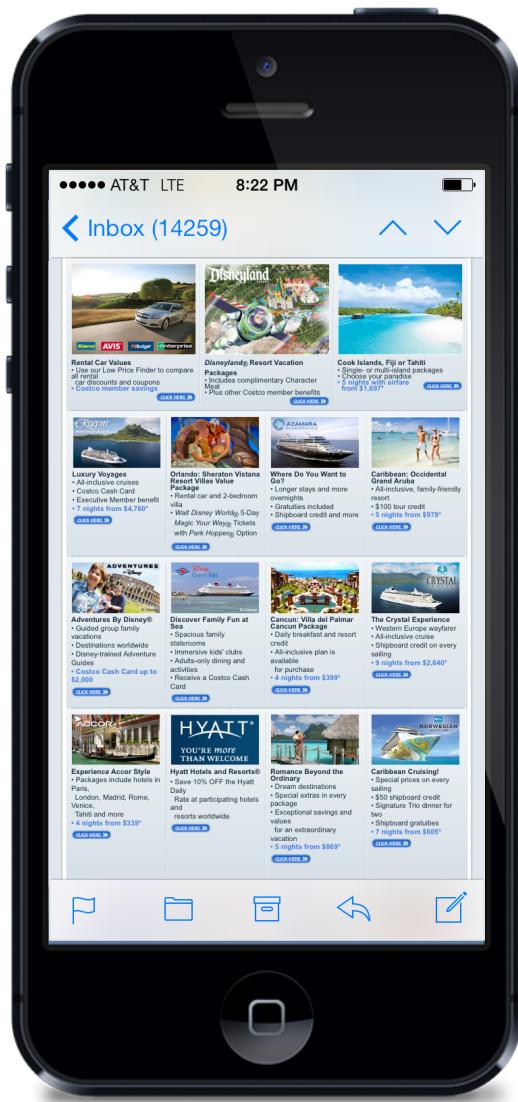


70%+ read on mobile

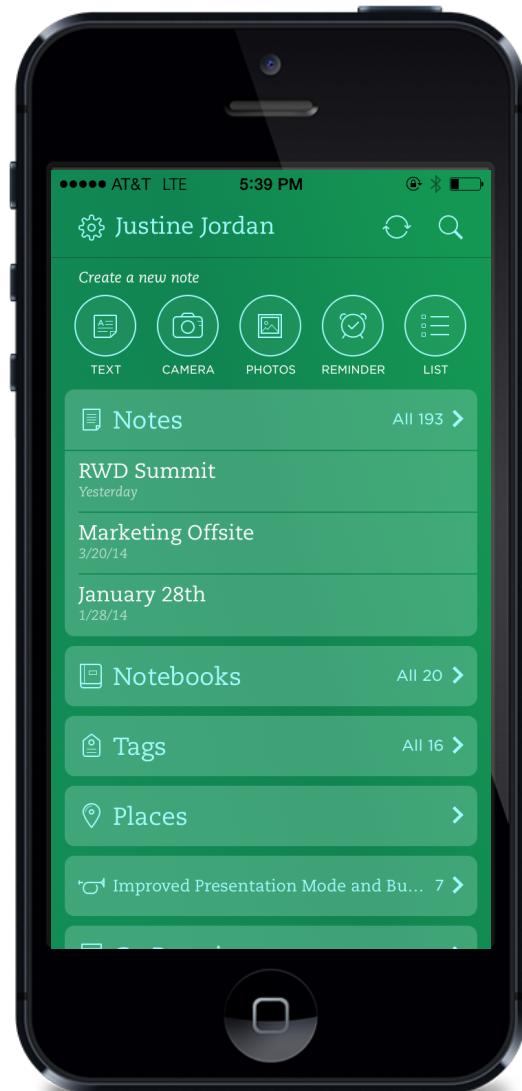


< 15% read on mobile

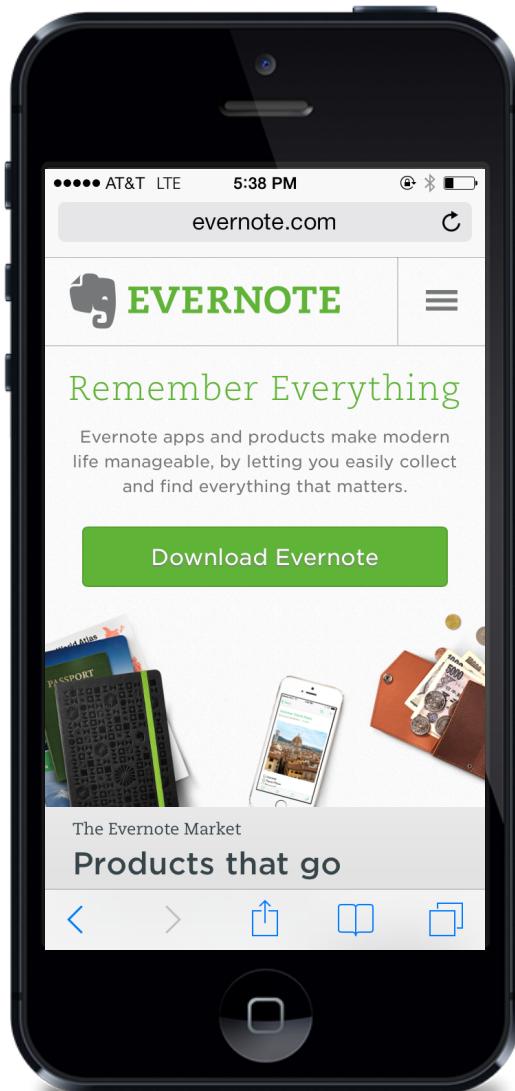
Their experiences often suck.



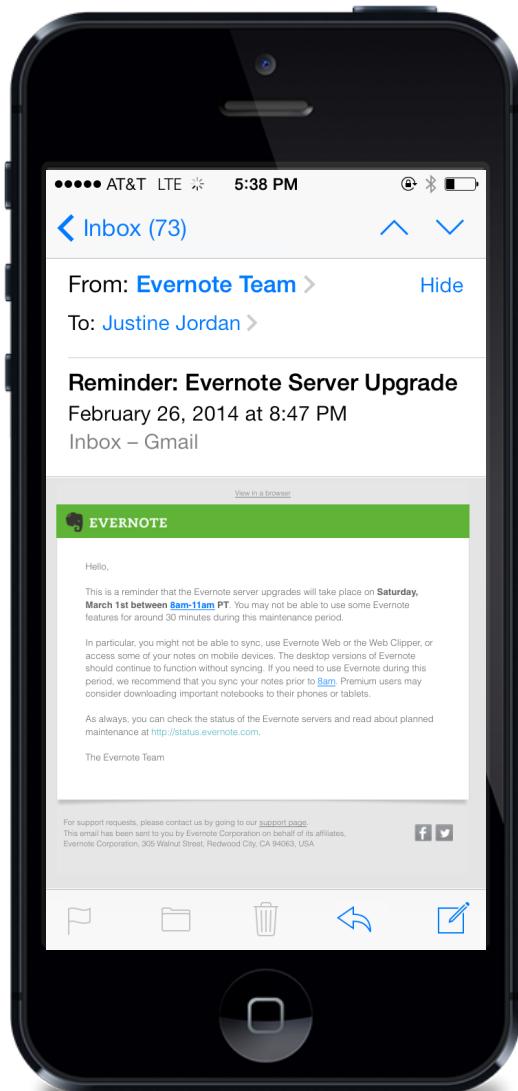
Their experiences often suck.



great app

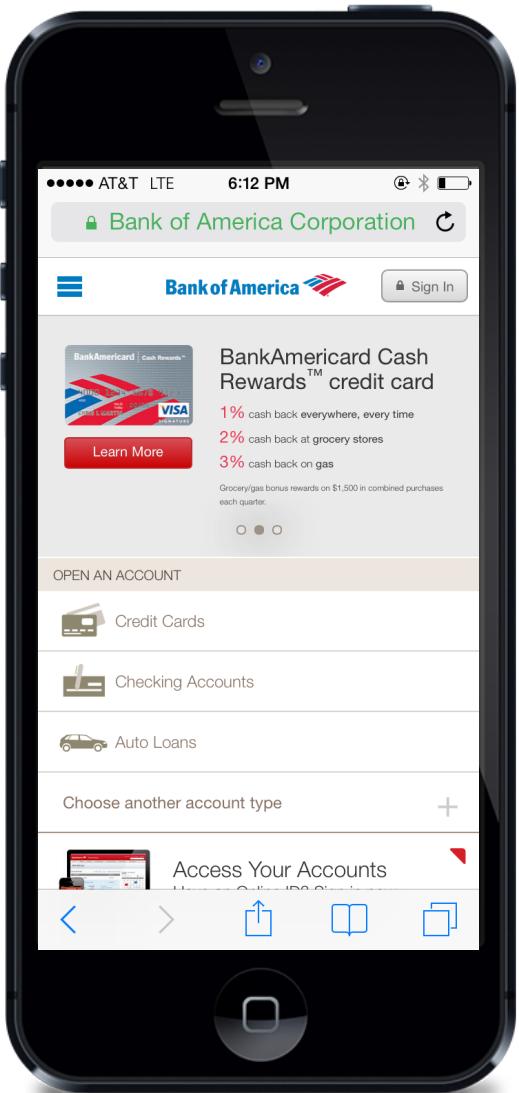


great site

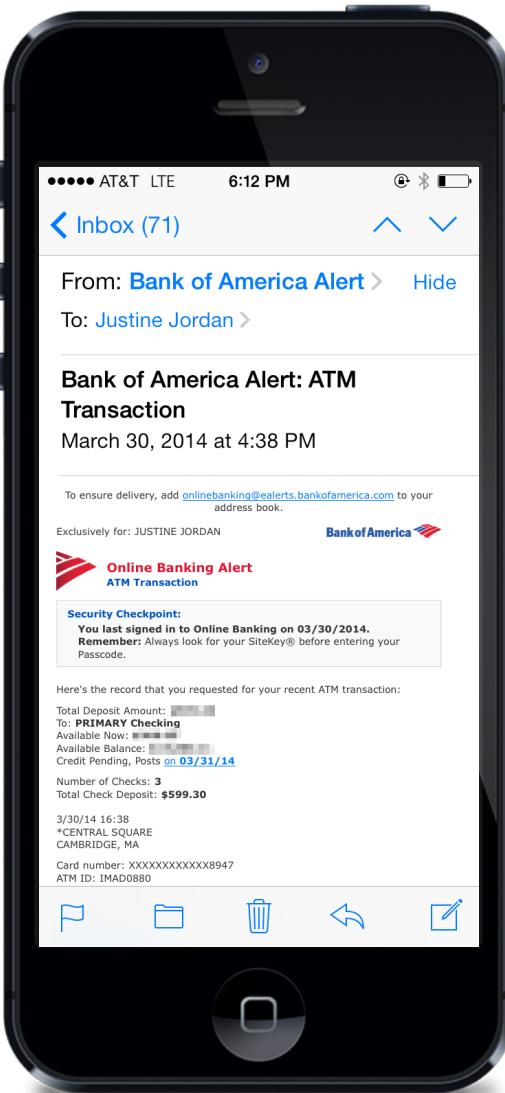


not-so-great email

Their experiences often suck.



great site



not-so-great email



email receipt
requested from an
ATM transaction!

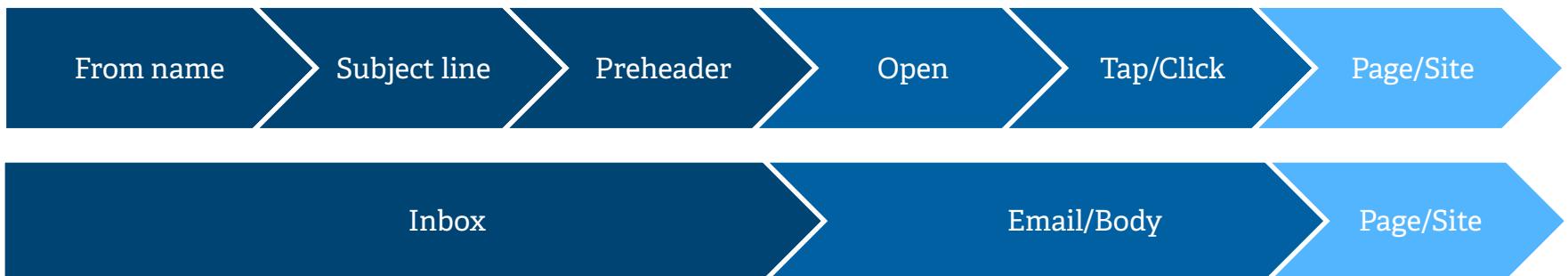
Email
is a unique medium
with unique
considerations

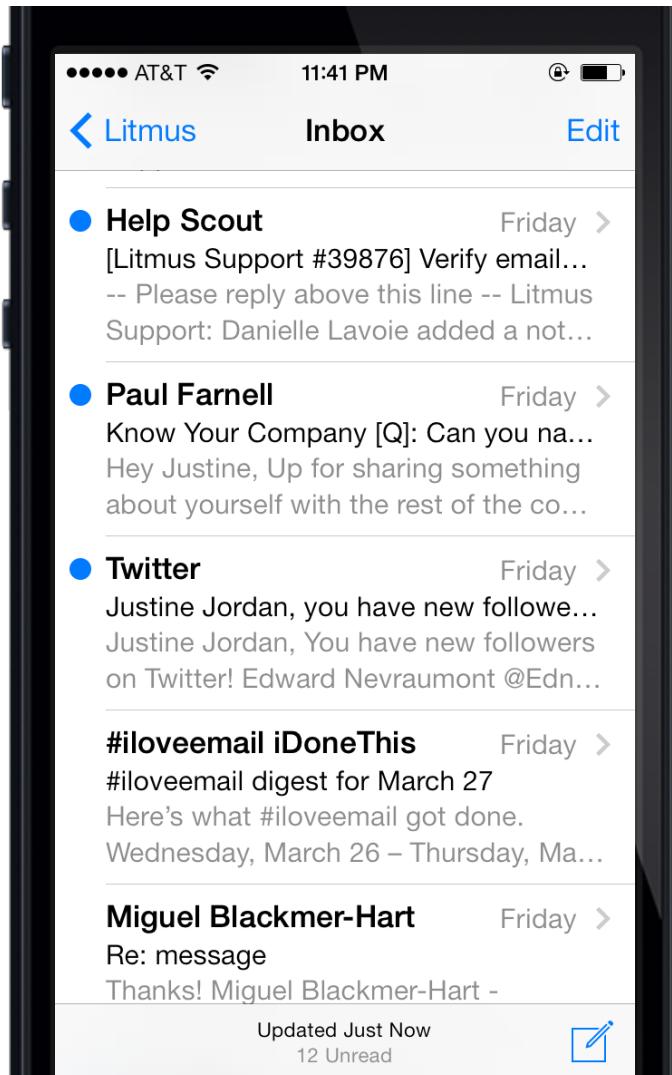
Email is not
a jpg
a print ad
a one-page website

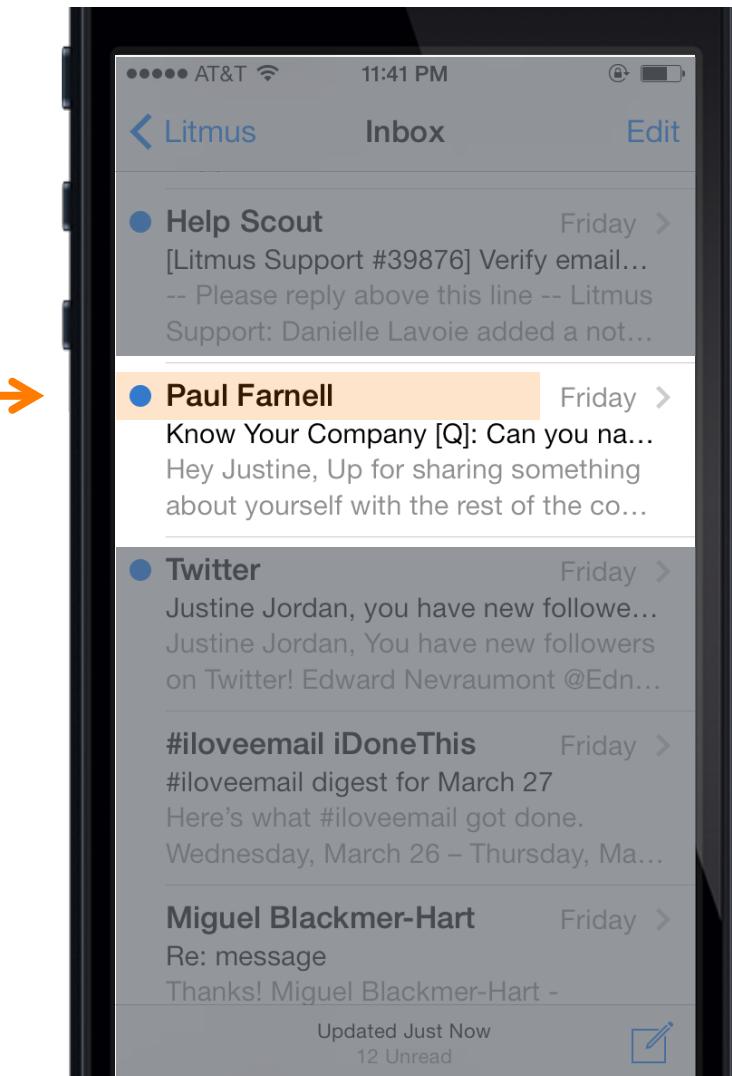
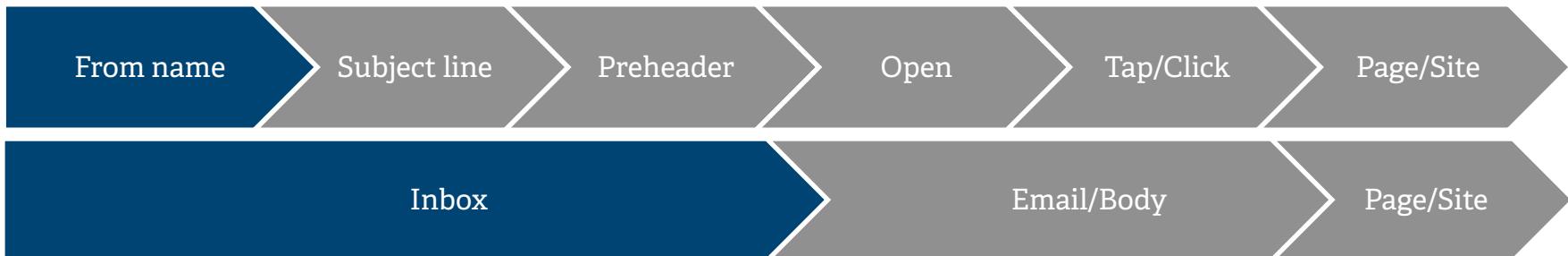
Email is not
a jpg
a print ad
a one-page website

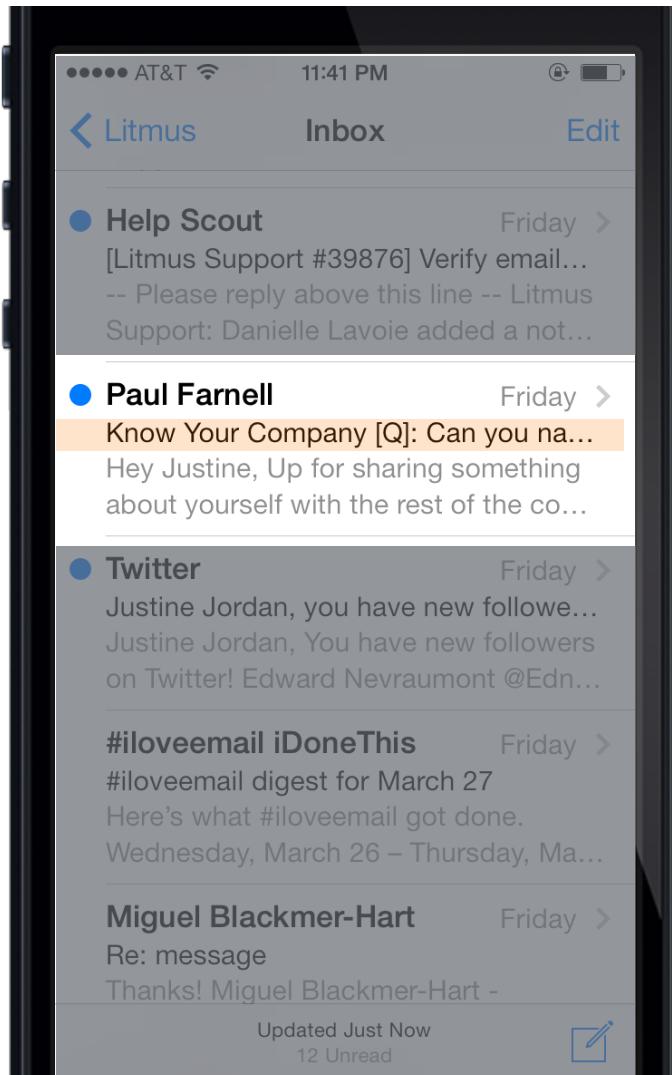
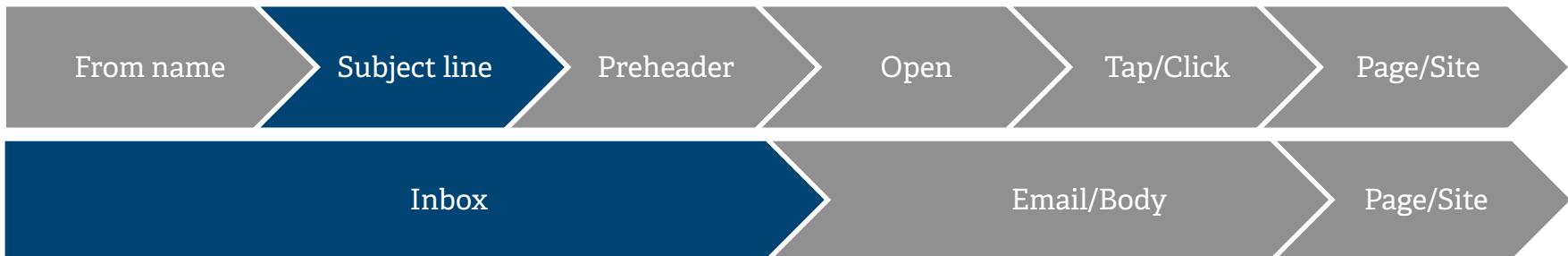
Email user flow

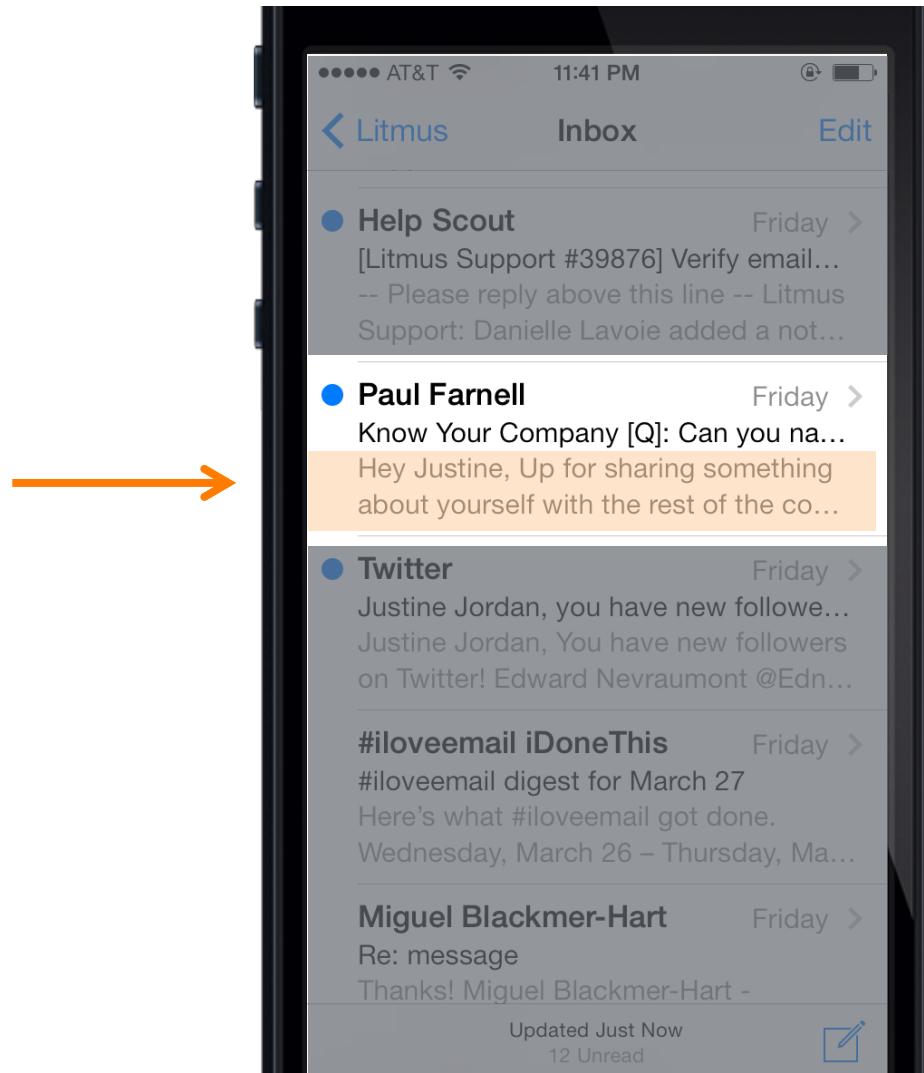
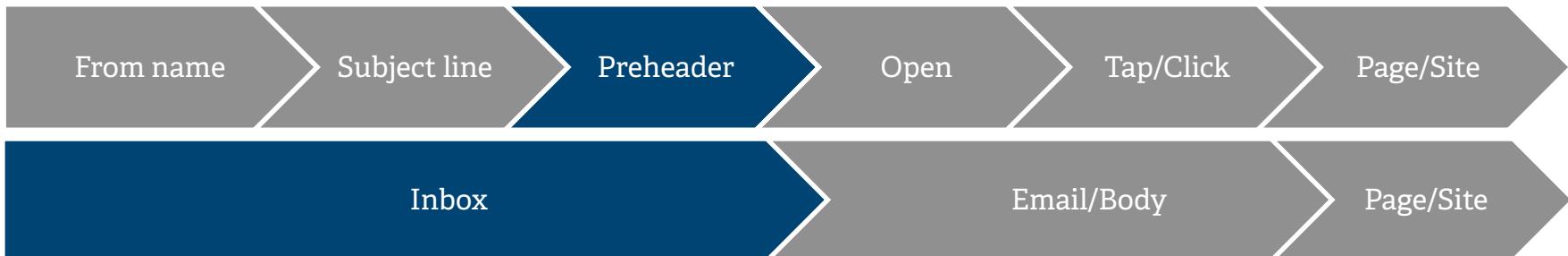
Subscriber experience

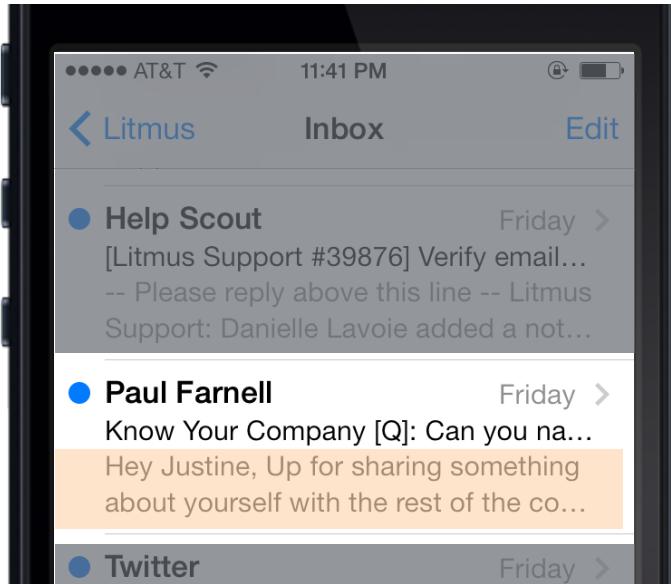
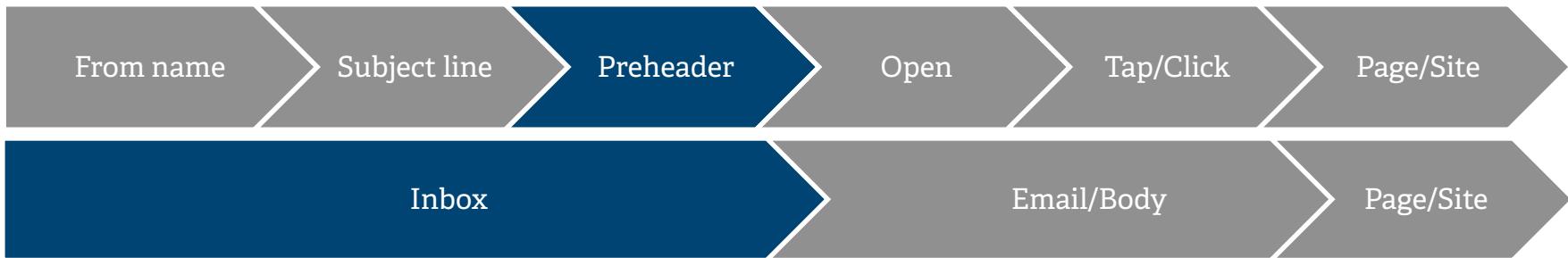










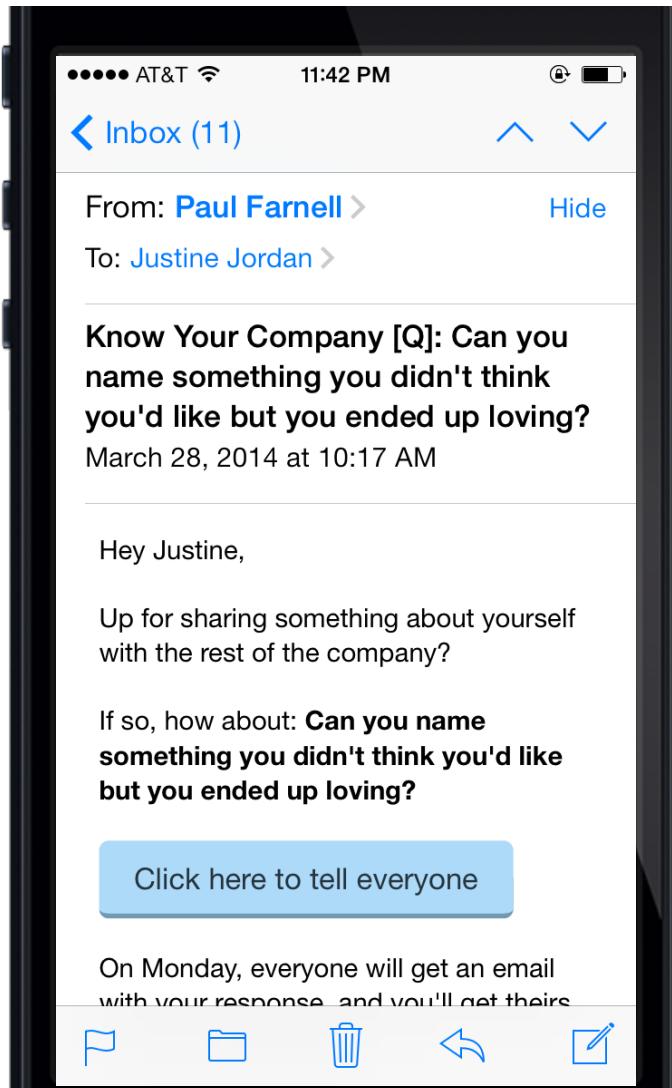
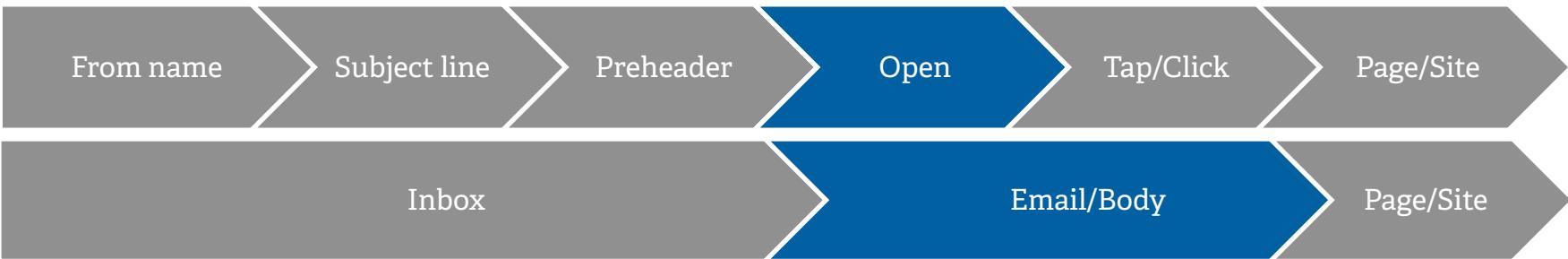


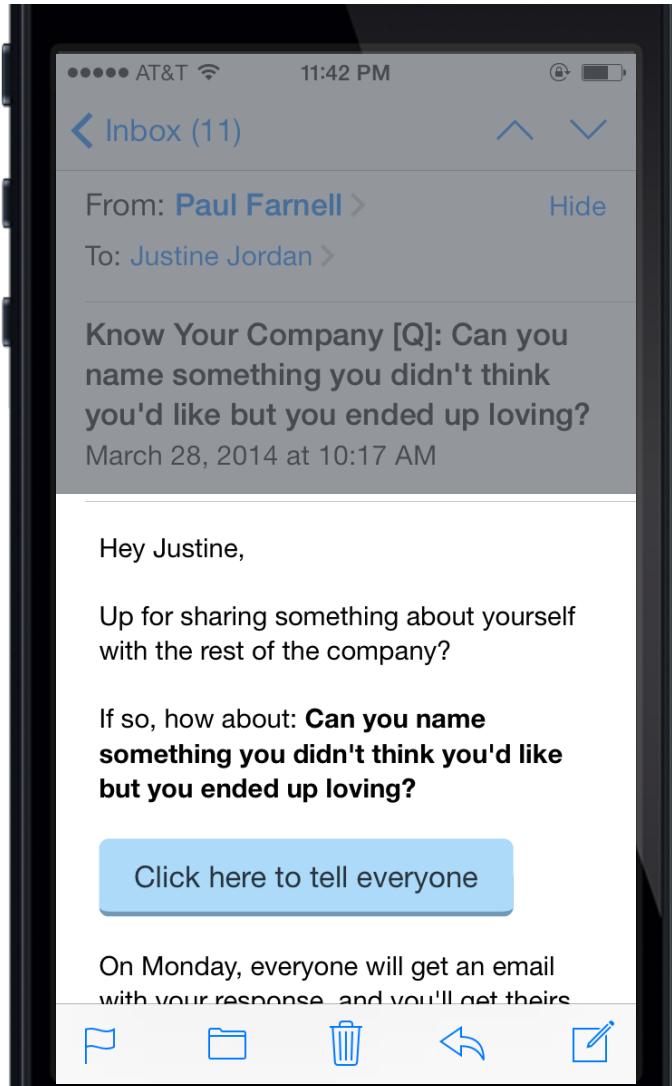
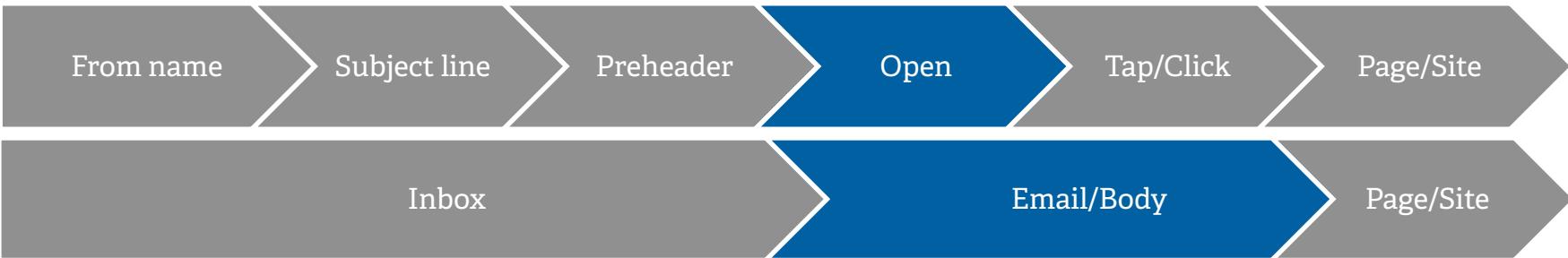
```
<div style="line-height:1px;font-size:1px;color:#FFFFFF;display:none;">
```

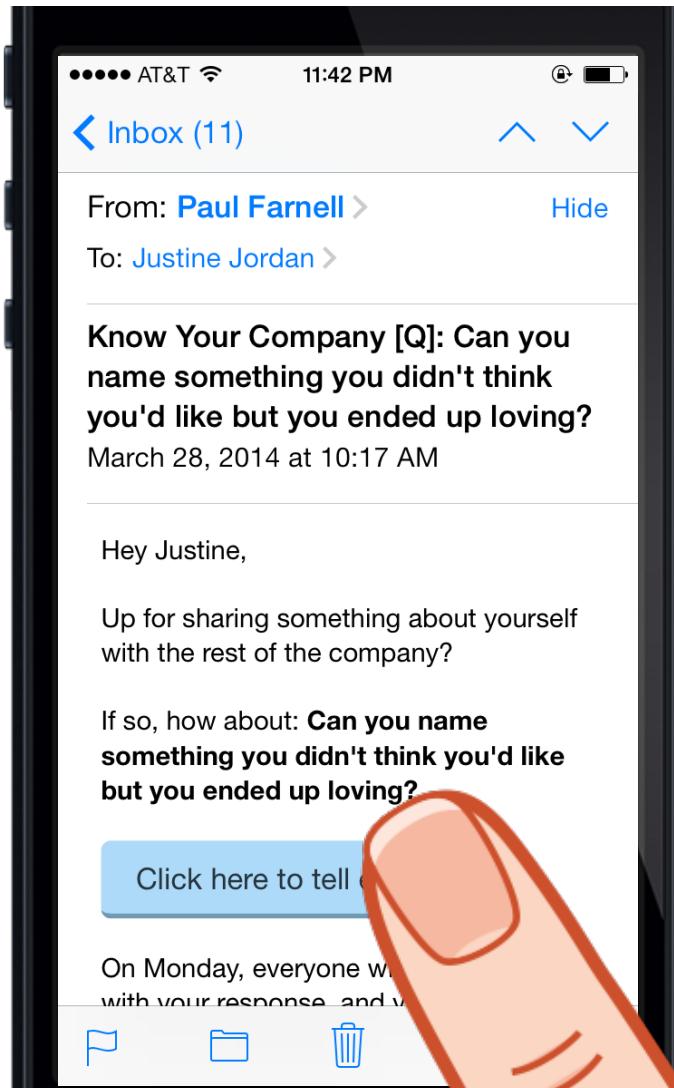
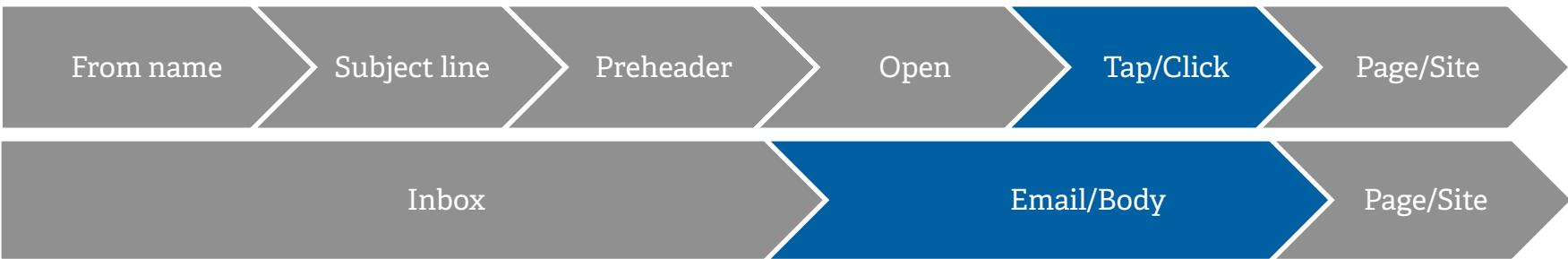
Hey Justine, Up for sharing something about yourself with the rest of the company?

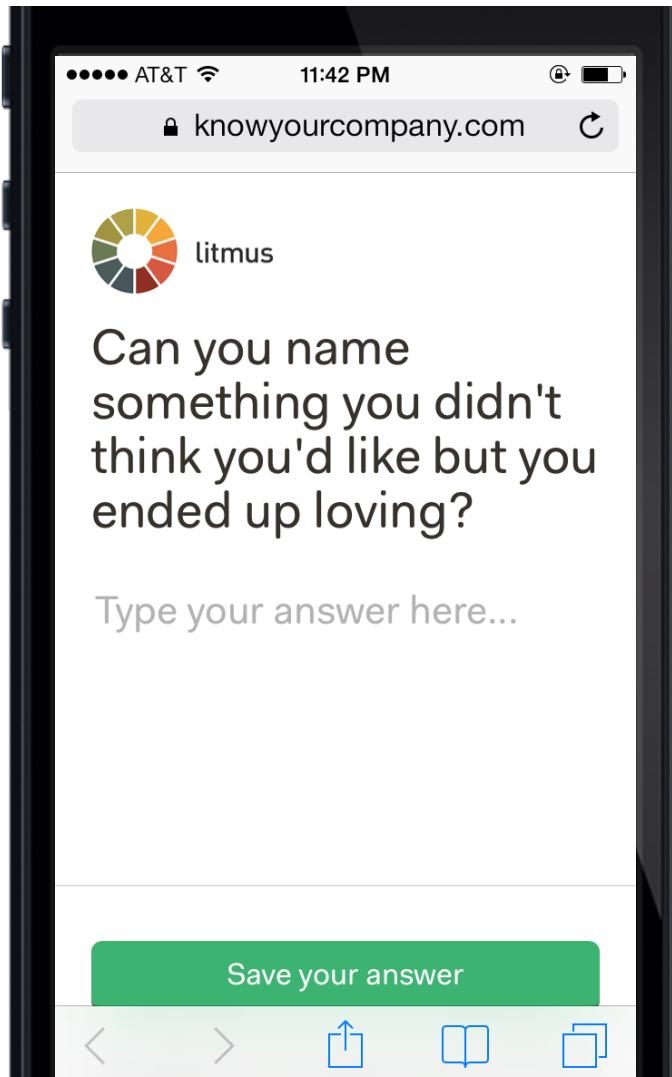
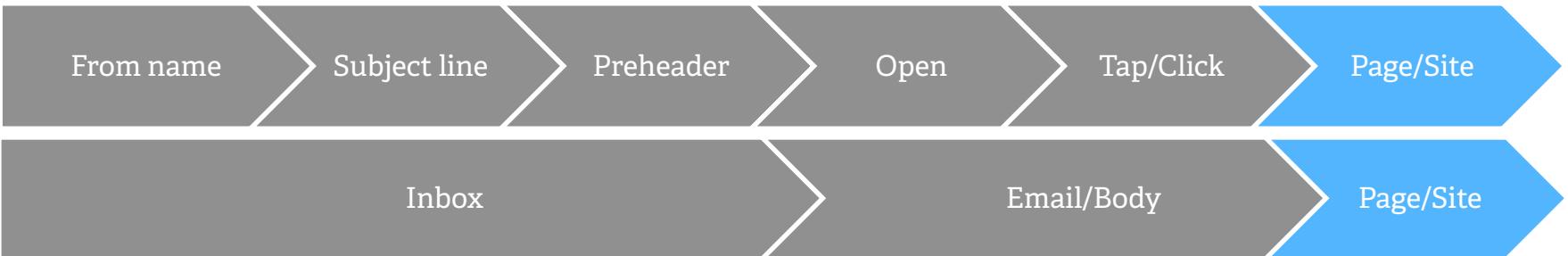
```
</div>
```









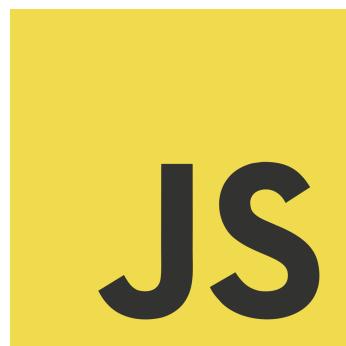


Some ways that email and the web are the same

Email	Web
HTML	✓ HTML
CSS	✓ CSS
Images	✓ Images
Text	✓ Text
Design	✓ Design
Links	✓ Links
Hierarchy	✓ Hierarchy

Some ways that email and the web are different

Email	Web
<table>	<div>
<td>	<h1>
<td>	<p>
px	em
style="font-face"	<style>
bgcolor	background-color
padding	margin



The W3C logo consists of the letters "W3C" in a large, blue, serif font. A registered trademark symbol (®) is located at the top right of the "C".

Remember the browser wars?



YAHOO!

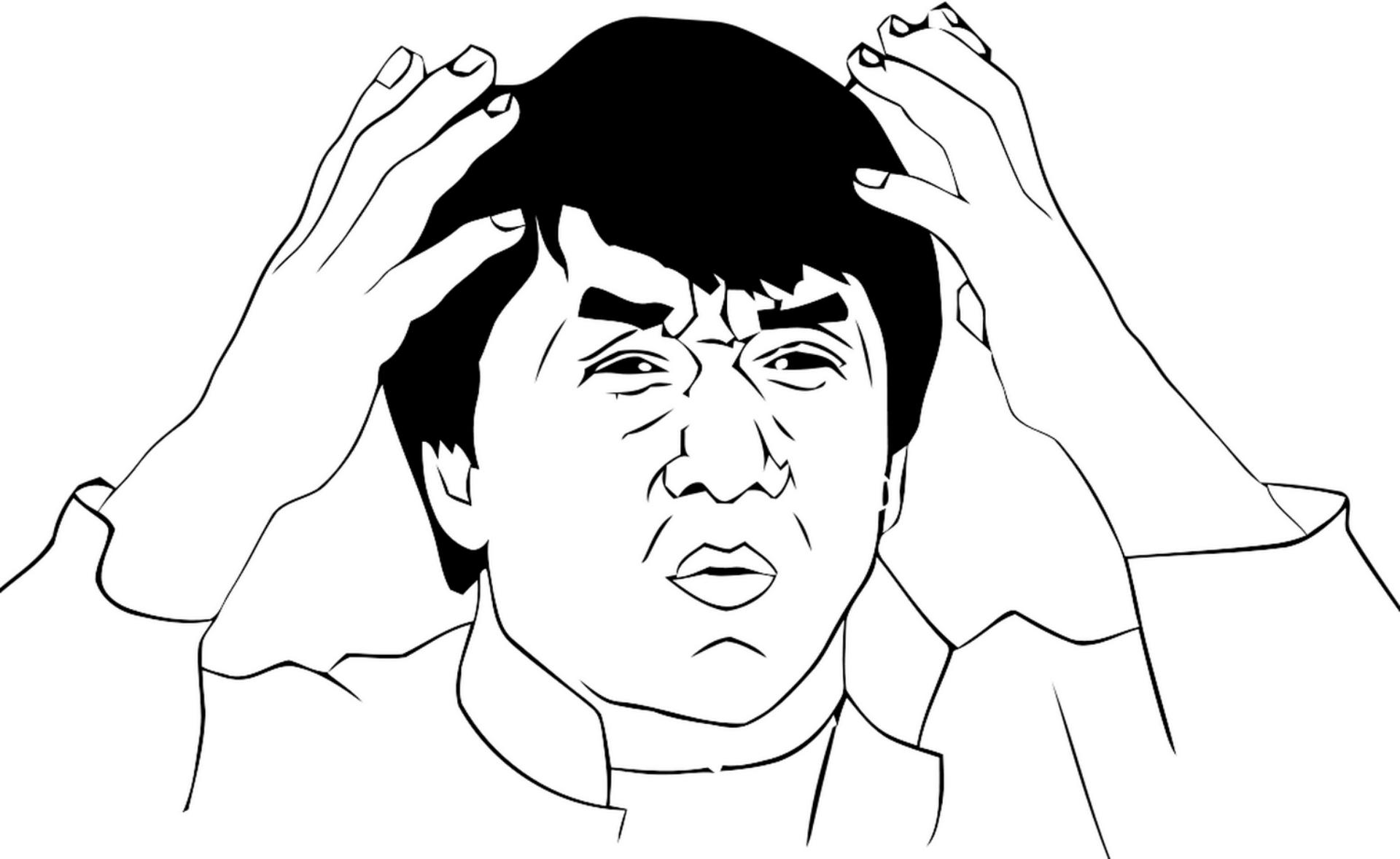


@media support in email

	iPhone native	yes
	iPad native	yes
	Android 2.1 native	no
	Android 2.2 native	yes
	Android 2.3 native	yes
	Android 4.x native	yes
	Gmail mobile apps	no
	Mailbox iOS app	sorta

	Yahoo! mobile apps	no
	Windows Mobile 7	no
	Windows Mobile 7.5	yes
	Windows Mobile 8	maybe
	BlackBerry OS 6	yes
	BlackBerry OS 7	yes
	BlackBerry Z10	yes
	Kindle Fire native	yes

Previewing your responsive HTML email in some modern browsers won't work so well, either. 



So how in the world do you make these things responsive?



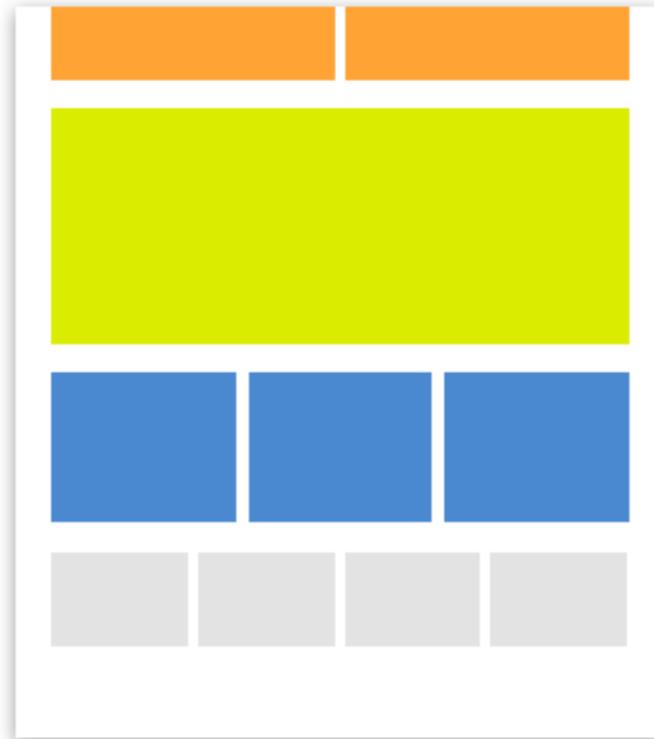
320px



768px



1024px



Responsive email is often more like adaptive web design

This probably looks familiar...

@media screen and (max-width: 525px)



The screenshot shows a Mac OS X window titled "responsive-email.html". The window contains a code editor with the following content:

```
1 <html>
2 <head>
3 <title>Abstraction</title>
4 <meta charset="utf-8">
5 <style type="text/css">
6
7     @media screen and (max-width: 525px) {
8
9         table[ class="wrapper" ]{
10             width:100% !important;
11         }
12
13         td[ class="logo" ]{
14             text-align: left;
15             padding: 20px 0 20px 0 !important;
16         }
17
18         td[ class="logo" ] img{
19             margin:0 auto!important;
20         }
21     }
```

...but with some email quirks thrown in

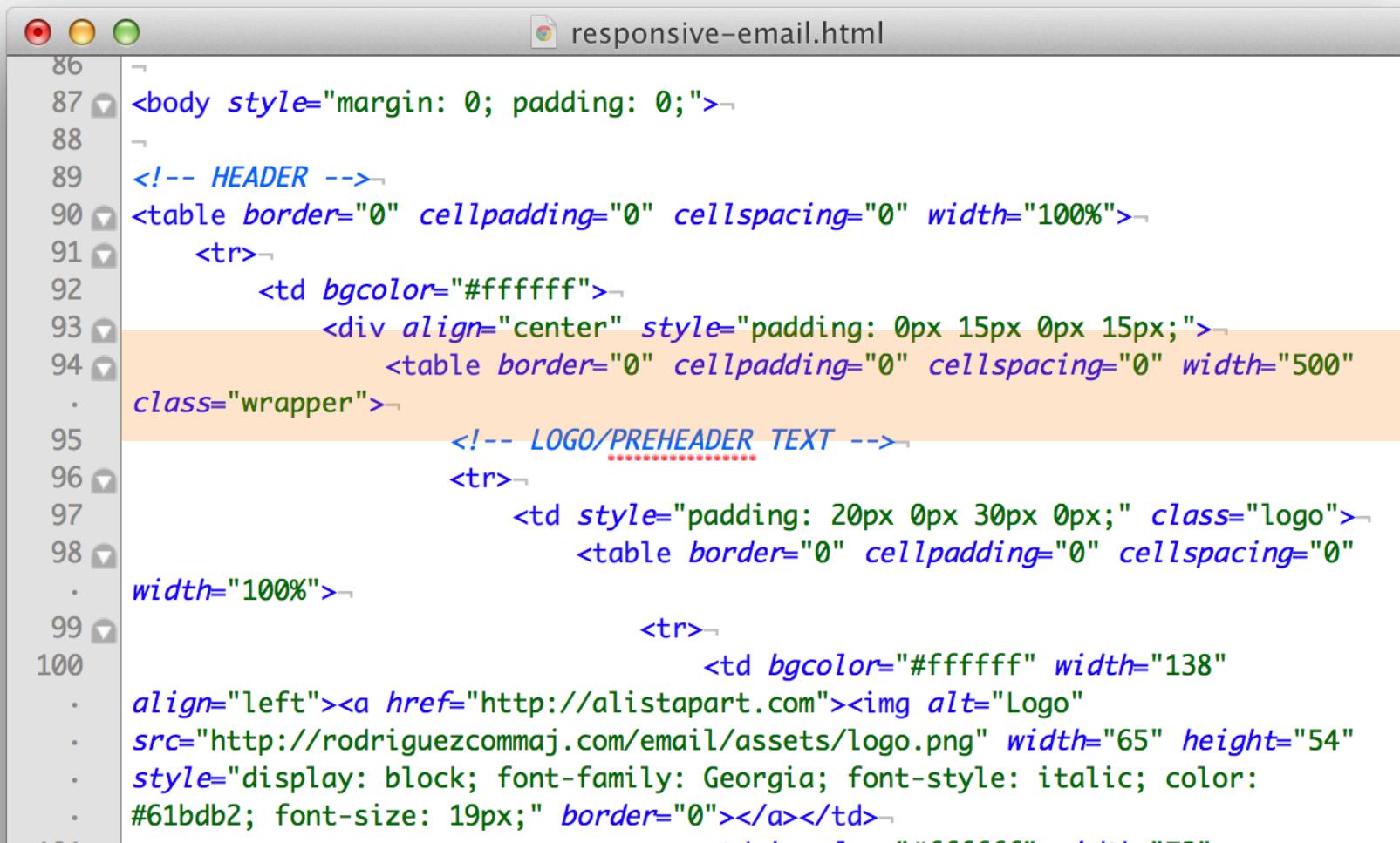
```
table[class="wrapper"] {  
    width: 100% !important;  
}  
  
td[class="logo"] {  
    text-align: left;  
    padding: 20px 0 20px 0 !important;  
}  
  
img[class="mobile-hide"] {  
    display: none !important;  
}  
  
img[class="img-max"] {  
    max-width: 100%;  
    height: auto;  
}
```

...but with some email quirks thrown in

```
table[class="wrapper"] {  
    width: 100% !important;  
}  
  
td[class="logo"] {  
    text-align: left;  
    padding: 20px 0 20px 0 !important;  
}  
  
img[class="mobile-hide"] {  
    display: none !important;  
}  
  
img[class="img-max"] {  
    max-width: 100%;  
    height: auto;  
}
```

Play nice with Outlook

```
table[class="wrapper"] {  
    width:100% !important;  
}
```



A screenshot of a code editor window titled "responsive-email.html". The code is written in HTML and CSS, demonstrating responsive design techniques for emails. The code includes a CSS rule for a table with class "wrapper" and a main section of HTML with various styles like "margin: 0; padding: 0;" and "border="0" cellpadding="0" cellspacing="0" width="100%" for tables. A specific section of the code is highlighted with an orange background, starting with a table row containing a td with class "wrapper" and ending with a td with class "logo". This highlighted section contains a logo image and some text.

```
86  
87 <body style="margin: 0; padding: 0;">  
88  
89 <!-- HEADER -->  
90 <table border="0" cellpadding="0" cellspacing="0" width="100%">  
91     <tr>  
92         <td bgcolor="#ffffff">  
93             <div align="center" style="padding: 0px 15px 0px 15px;">  
94                 <table border="0" cellpadding="0" cellspacing="0" width="500"  
95                     class="wrapper">  
96                         <!-- LOGO/PREHEADER TEXT -->  
97                         <tr>  
98                             <td style="padding: 20px 0px 30px 0px;" class="logo">  
99                                 <table border="0" cellpadding="0" cellspacing="0"  
100                                     width="100%">  
101                                         <tr>  
102                                             <td bgcolor="#ffffff" width="138"  
103                                                 align="left"><a href="http://alistapart.com"></a></td>
```

Making images fluid

```
img[class="img-max"] {  
    width:100% !important; height: auto !important;  
}  
  

```

height and width for the desktop view

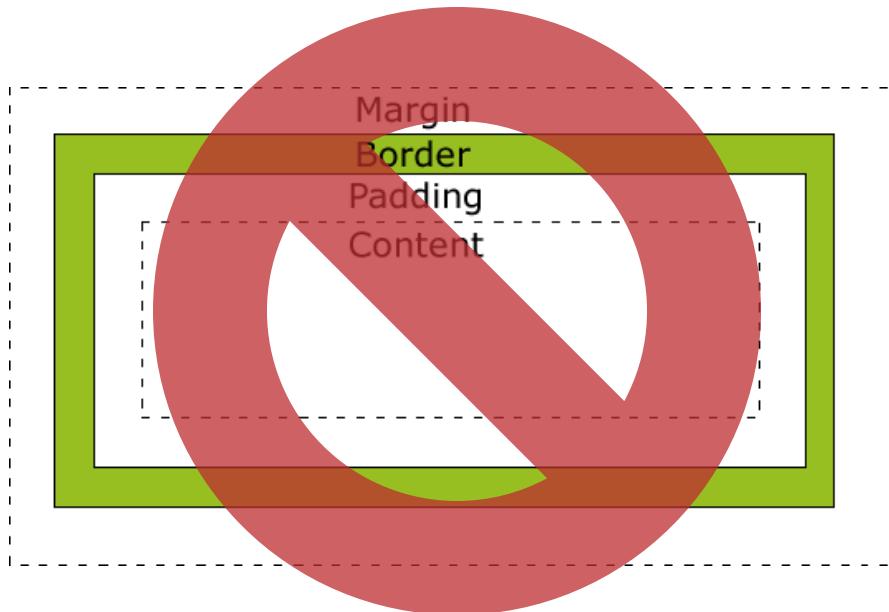
border to prevent, well, borders

alt attribute for accessibility and defensive design/image blocking

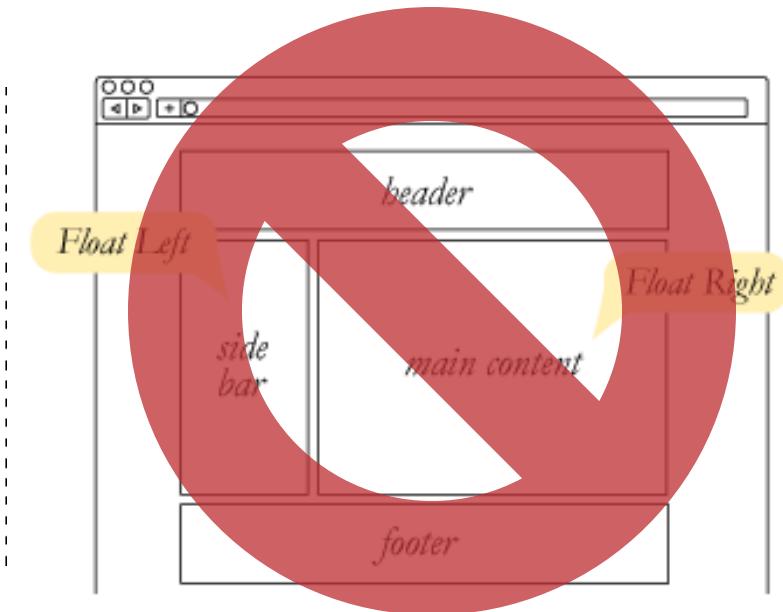
inline style for hacky email stuff

fluid image class for smaller screens

Multi-column layout



wonky support for the box model



floats don't work in Outlook

Multi-column layout

```
84
85
86 <!-- STACKING COLUMNS -->
87 <table cellspacing="0" cellpadding="0" border="0" width="100%">
88   <tr>
89     <td valign="top" style="padding: 0;" class="mobile-wrapper">
90       <!-- LEFT COLUMN -->
91       <table cellpadding="0" cellspacing="0" border="0" width="47%" align="left" class="responsive-table">
92         <tr>
93           <td style="padding: 20px 0 40px 0;">
94             <table cellpadding="0" cellspacing="0" border="0" width="100%">
95               <tr>
96                 <td align="center" bgcolor="#ffffff" valign="middle">LEFT COLUMN</td>
97               </tr>
98             </table>
99           </td>
100         </tr>
101       </table>
102       <!-- RIGHT COLUMN -->
103       <table cellpadding="0" cellspacing="0" border="0" width="47%" align="right" class="responsive-table">
104         <tr>
105           <td style="padding: 20px 0 40px 0;">
106             <table cellpadding="0" cellspacing="0" border="0" width="100%">
107               <tr>
108                 <td align="center" bgcolor="#ffffff" valign="middle">RIGHT COLUMN</td>
109               </tr>
110             </table>
111           </td>
112         </tr>
113       </table>
114     </td>
115   </tr>
116 </table>
117
118
```

Multi-column layout

```
<table cellpadding="0" cellspacing="0" border="0"
width="47%" align="left" class="responsive-table">

<table cellpadding="0" cellspacing="0" border="0"
width="47%" align="right" class="responsive-table">
```

The important bits...

```
width="47%"

align="left"
align="right"

table[class="responsive-table"] {
    width:100% !important;
}
```

Bulletproof button

```
table[class="responsive-table"] {  
    width:100% !important;  
}  
  
<table border="0" cellspacing="0" cellpadding="0"  
class="responsive-table">  
    <tr>  
        <td bgcolor="#cccccc" style="padding: 12px 18px 12px  
18px; -webkit-border-radius:3px; border-radius:3px"  
align="center"><a href="https://litmus.com/" style="font-  
size: 16px; font-family: Helvetica, Arial, sans-serif;  
color: #ffffff; text-decoration: none;">Litmus</a>  
        </td>  
    </tr>  
</table>
```

Use HTML attributes instead of CSS

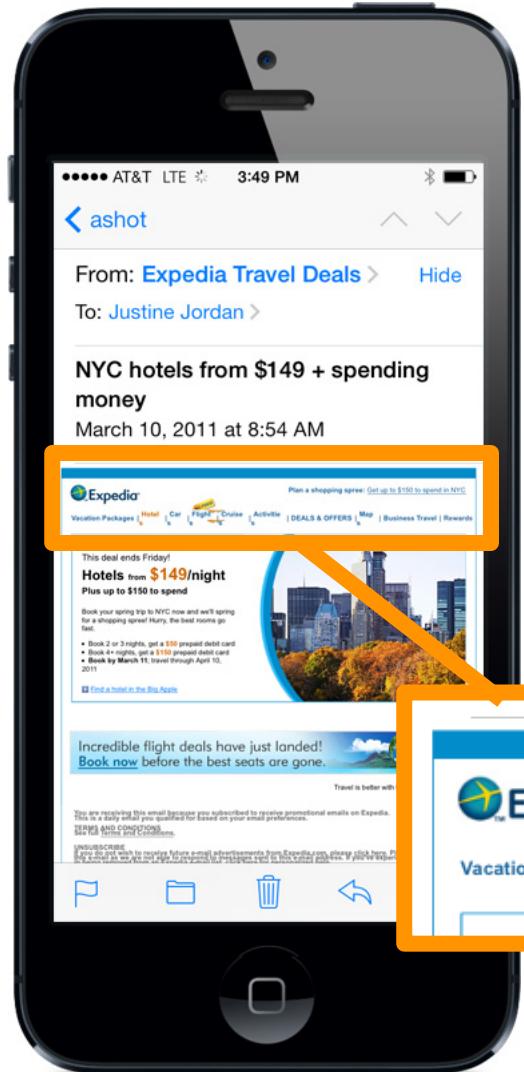
Use this

#ffffff
bgcolor
individual properties
width="100"
style="..."
align="left"

Not this

#fff or rgb
background-color
shorthand
width:100px
<style>
text-align:left

What to know: iPhone



- 24% market share
- Automatically scales to fit
- Excellent support for media queries
- Images on by default
- Resizes fonts under 13px

Blue links on iOS

AT&T 4G 10:07 AM

Inbox (17)

19 of 50



FIND A STORE
PREFERENCES
CONTACT US
FORWARD TO A FRIEND
OUR BLOG

MOBILE FACEBOOK
PINTEREST TWITTER
YOUTUBE INSTAGRAM

United The North Face brand Spring 2013 marked item
Face location.) All other merchandise excluded. N
retailers of The North Face merchandise or online. C
unt is not applicable to sales taxes, any mail orders,
holds. This discount cannot be combined with any ot
North Face reserves the right to verify identity before
d all other decisions of The North Face with respect
will not be provided. No price adjustments allowed d
his discount. Void where prohibited, taxed or restrict
ssociates. Limited to summer sale items only at reta
(). Offer available [from 7/17/2013 until 7/24/2013](#).

justine.jordan@yahoo.com.

ressed interest in news and offers from The North Fa

ion regarding your personal information can be view
[here](#).

UBSCRIBE

AT&T LTE 10:19 AM

Inbox (48)

15 of 50



BOSTON BECKONS FROM \$179

- Get away [Thurs-Sun](#)
- Or get 15% off our best available rate [Mon-Wed](#)
- Stay [June 20 - September 2, 2013](#)



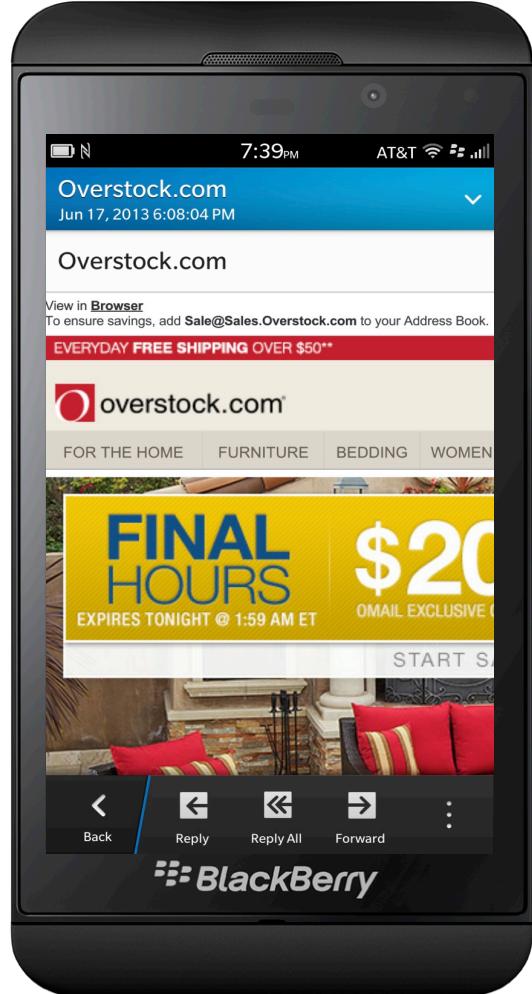
smokin' hot winn

Executive Chef Jay Silva o
Fest" with his famous glaz
when you mention the sec
cocktail. [reserve your tabl](#)

Blue links on iOS

```
.appleBody a {  
    color:#ffffff; text-decoration: none;  
}  
  
<tr>  
    <td align="center" style="padding: 10px 0 0 0; font-size:  
13px; line-height: 16px; font-family: Helvetica, Arial,  
sans-serif; color: #ffffff; "> Get away <span  
class="appleBody">Thurs-Sun</span>  
  
    </td>  
</tr>
```

What to know: BlackBerry



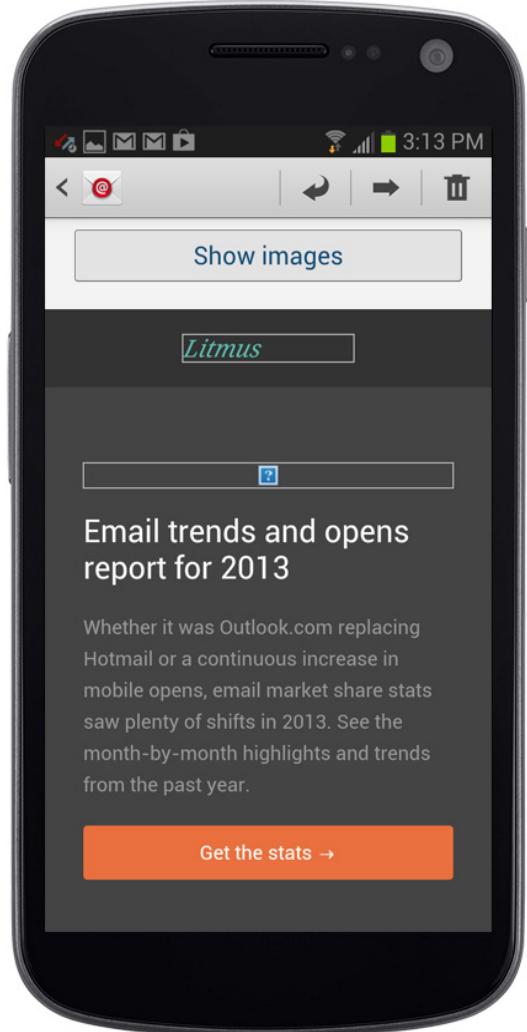
- 0.097% market share
- Media query support
- Blocks images; supports ALT text
- Does not scale/auto-zoom
- No separate app; email joins social, SMS and voice in the “hub”

What to know: Windows Phone



- 0.163% market share
- Mixed media query support
- Inconsistent font display
- Blocks images
 - CTAs require 2 clicks for image-based emails
- No ALT text

What to know: Android



- 9% market share
- Support for ALT text
- Various screen sizes, OS and app versions
- Mixed support for media queries
- Some auto-scale, some do not

Fancy stuff is possible!

<http://lit.ms/emailanimation>

<http://lit.ms/videobackground>

<http://lit.ms/communityemail>

Great responsive emails: Litmus

Litmus <hello@litmus.com>
To: Justine Jordan <justine@litmus.com>
Reply-To: Litmus Support <hello@litmus.com>
It takes an (email) village

February 20, 2014 1:22 PM
[Hide Details](#)

Do you ❤ email? Join the club. Literally.
[Tweet this](#) [Forward this](#)



Spot yourself? [Tweet about it →](#)

Join us in the Litmus Community!

Email marketing is hard. From design to deliverability, there are countless questions that need answering. The Litmus Community is the place to get those questions answered.

Access the Community Now →

AT&T 2:32 PM

< Emails (1)



litmus



Spot yourself? [Tweet about it →](#)

Join us in the Litmus Community!

Email marketing is hard. From design to deliverability, there are countless questions that need answering. The Litmus Community is the place to get those questions answered.

Access the Community Now →

Flag File Delete Back Forward

Fancy stuff is possible!

<http://lit.ms/emailanimation>

Target mobile webkit browsers (and the email apps that use them)

Varying support for some HTML5/CSS3 techniques

```
@media screen and (-webkit-min-device-pixel-ratio:0)
```

- webkit-transform
- webkit-keyframes
- webkit-animation

Even HTML5 video background!

<http://lit.ms/videobackground>

<https://litmus.com/blog/how-to-code-html5-video-background-in-email>

Great responsive emails: Twitter

From: Twitter <n-whfgvar=yvgzht.pbz-0332e@postmaster.twitter.com>
Subject: Because you have more to show
Date: September 26, 2012 2:49:31 AM EDT
To: Justine Jordan <justine@litmus.com>

Hide

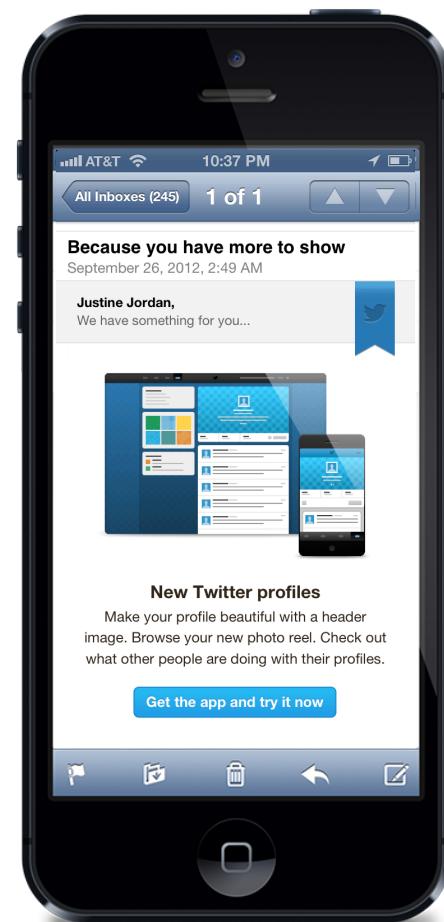
Justine Jordan,
We have something for you... 

New Twitter profiles
Make your profile beautiful with a header image. Browse your new photo reel. Check out what other people are doing with their profiles.

Try it now

Have an iPhone, iPad, Android, Windows Phone 7 or Blackberry?
[Get the Twitter app at Twitter.com/download](http://Twitter.com/download)

Forgot your Twitter password? [Get instructions on how to reset it.](#)
You can also [unsubscribe to these emails](#) or change your [notification settings](#). Need [help](#)?
If you received this message in error and did not sign up for Twitter, click [not my account](#).
Twitter, Inc. 1355 Market St., Suite 900 San Francisco, CA 94103



Great responsive emails: Expedia

Fly last-minute & save | View email in web browser

Packages Hotels Cars Flights Cruises Things to Do Deals Rewards

Last-Minute Deals

Last-minute doesn't have to mean more money. Save big with today's flight deals and leave as early as tomorrow, this weekend, or next!

See Deals

Book on our app & get TRIPLE Expedia Rewards points!

••••• AT&T LTE 3:23 PM

Inbox (81)

From: Expedia Travel Deals Hide

To: Justine Jordan

Super low fares
March 31, 2014 at 10:16 AM
Inbox – Gmail

Download our award-winning app Available on the App Store ANDROID APP ON Google play

Packages Hotels Flights Cruises

Last-Minute Deals

Last-minute doesn't have to mean more money. Save big with today's flight deals and leave as early as tomorrow, this weekend, or next!

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Wide variety of ways to access email



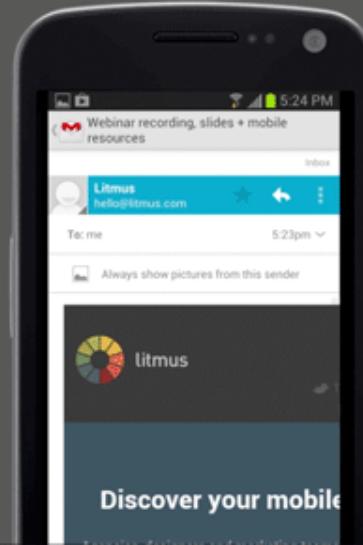
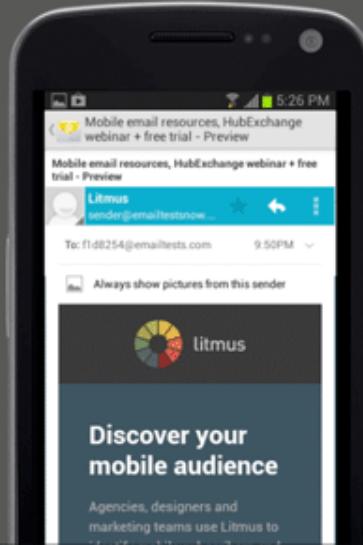
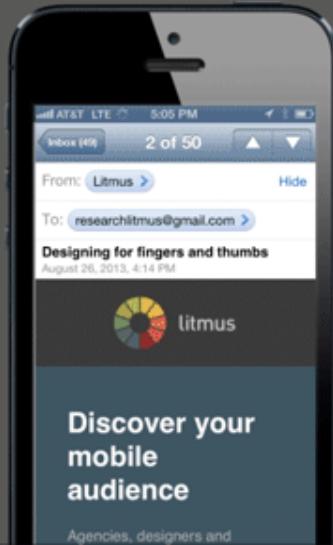
iPhone: email app



Android: email app



Android: Gmail app



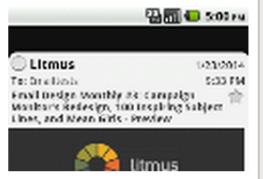
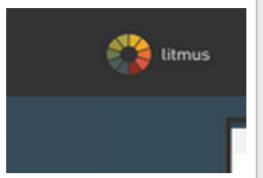
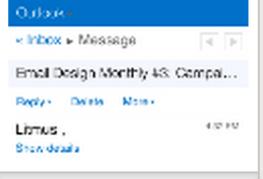
Rendering is inconsistent
across devices and operating systems

Testing is crucial

Mobile Clients [Toggle all](#)

| Client | Version | Status |
|-----------------------|-----------------|---------------------------------------|
| Android | (5) | <input checked="" type="checkbox"/> |
| Android 2.3 | Android 2.3 | <input checked="" type="checkbox"/> |
| Android 4.0 | Android 4.0 | <input checked="" type="checkbox"/> |
| Gmail (Android) | Android Browser | <input checked="" type="checkbox"/> |
| Gmail App (Android) | Android 4.0 | <input checked="" type="checkbox"/> |
| Outlook.com (Android) | Android Browser | <input checked="" type="checkbox"/> |
| Blackberry | (2) | <input checked="" type="checkbox"/> ► |
| iOS | (6) | <input checked="" type="checkbox"/> ► |
| Symbian | (1) | <input checked="" type="checkbox"/> ► |

Mobile Clients

| | | |
|--|--|--|
| 
Android 2.3 | 
Android 4.0 | 
Gmail App (Android) |
| 
BlackBerry 10 OS | 
iPhone 5s | 
iPad (Retina) |
| 
Outlook.com (iPhone) | 
Symbian | |

responsiveemailresources.com



Responsive Email Resources

A collection of tools & resources for responsive email design

[Submit A Resource](#)

Design Tools

- Photoshop
- Style Tiles
- Invision App
- GuideGuide: Photoshop Grid Tool

Text Editors & Plugins

- Sublime Text
- Coda
- TextMate
- Emmet
- Litmus Builder
- Word to Clean HTML

Preprocessors

- Sass: CSS Preprocessor
- LESS: The dynamic stylesheet language
- MailChimp CSS Inliner
- Premailer: Pre-flight for HTML Email
- Premailer Ruby Gem
- Ink: CSS Inliner

Frameworks & Templates

- Responsive Email Patterns

Testing

- Chrome Dev Tools

Project Management

- Basecamp

litmus.com/scope



templates.mailchimp.com

The screenshot shows a web page with a teal header bar. In the header, the MailChimp logo is on the left, followed by a separator icon and the text "Email Design Reference". Below the header is a large white content area. At the top of this area, the title "Getting Started" is displayed in bold black font. Below the title is a paragraph of text. At the bottom of the content area, there is a horizontal list of links in blue text.

Getting Started

Coding an HTML email isn't much different than coding a website was back in the late '90s. The same design tools are used to produce your final result. And the same general design principles are still in play: contrast, repetition, proximity, and alignment are all important. In this section, we'll go over some HTML email basics and introduce you to some MailChimp-specific information to help you get started.

[HTML Email Basics](#)
[Merge Tags](#)
[Template Language](#)
[Using MailChimp](#)

Concepts

If you're new to email marketing, there are some basic principles and background information on HTML emails that every email designer and marketer should know. In this section, we'll go over some HTML email specifics so you can make sure your campaigns get delivered.

[Email Clients](#)

[How HTML Email Works](#)

Design

This is where the fun starts. Email is all about keeping your design simple and straightforward, and focusing on your message. In this section, we'll delve into the specifics of designing your email for desktop and web email clients, as well as mobile devices.

[Calls to Action](#)

[Images](#)

modernhtmlemail.com

Modern HTML Email

Building Robust, Responsive, and
Effective HTML Email



Jason Rodriguez

litmus.com/community

account: Litmus Marketing

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Code Questions

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- CSS
- Email Clients
- Email Design
- ESPs
- Fonts
- HTML
- Images
- Resources
- Responsive
- Tools

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@alexcwilliams



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Responsive email resources

Thanks for attending my talk at ARTIFACT! Enjoy the resources and tools below, and feel free to [get in touch](#).

[GET HTML SAMPLE](#) [DOWNLOAD SLIDES](#)



Justine Jordan, Litmus

FAVORITE ARTICLES

- [MailChimp Email Template Reference](#)
- [Media Query Support in Email](#)
- [Responsive Email Design Guide](#)
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EMAIL TEMPLATES & FRAMEWORKS

- [MailChimp Blueprints](#)
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- [Antwort](#)
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