2017

WHITE PAPER

Contents

1. Introduction

Electronic mail, known commonly by its abbreviation 'email', is probably the most used way of communication today. 50 years ago, had someone said that it would be possible to instantly deliver documents to a recipient sitting half way across the globe, he would have been a laughingstock. However, email came, saw, and conquered the world wide web. Today, it offers so much more than just written text communication. Its ability to securely forward multimedia, photos, software, etc., has made it a popular choice. It's rightly said that 'necessity is the mother of all inventions', and we humans have always found a way whenever the need arose.

1.1 Major problems of e-mail services

In recent years the world found a lot of unexpected information which became known thanks to hacking of e-mail. WikiLeaks, Julian Assange, Anonymous, Edward Snowden, "Anonymous International" — all these people and groups became known thanks to the publication on the Internet of confidential information. And the considerable part it was received by hacking of e-mail. Leaks in network of correspondence of government officials of the highest rank generated the real paranoia, worldwide.

Who can be interested in gaining access to someone's mailbox? First of all, it is the state organizations, post provider and cybercriminals. Certainly to hide correspondence from the usual mail service it will not turn out, the ordinary user will also hardly be able to resist to hackers.

1.2 The reasons one would want to crack your e-mail

- Public authorities: mass tracking and data acquisition about individuals;
- Gmail: scanning of letters in keywords for advertising;
- Hackers: spam sending, theft of bank data, theft of personal information – the list is limited only to ingenuity of hackers who find all new ways of receiving money by means of the stolen personal data.

The chart of the researcher of information security Brian Krebs is given below — it demonstrates that the mailbox of the average user is of very great value.
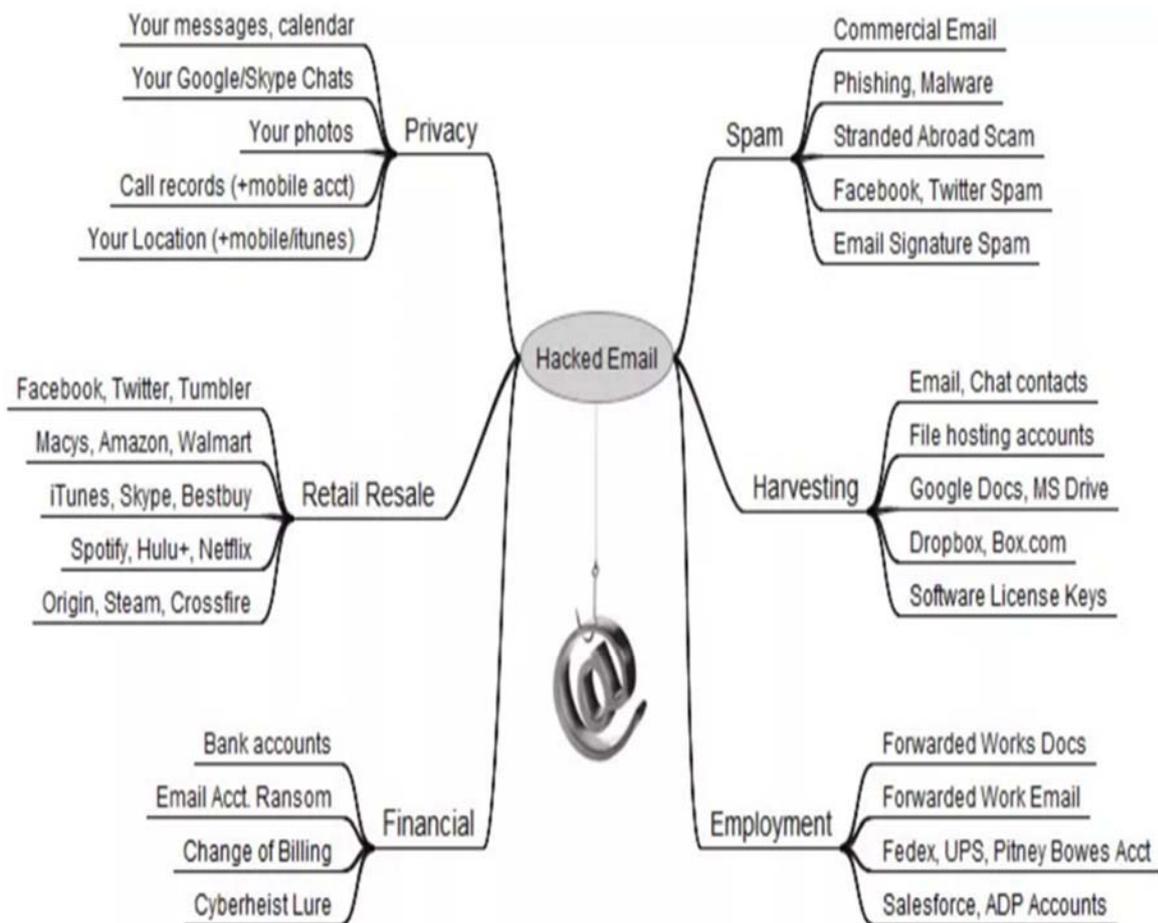
1.3 Weaknesses of e-mail

There are many ways of interception of the e-mail in seven above-mentioned points of access. Franklin told about how it can be done in his example. Most quicker (this way takes about an hour) to crack base in Cardiff where the transatlantic telephone cable originates, to establish there knot for interception of the e-mail and wait for the e-mail to be sent.

The U.S. National Security Agency has an opportunity to get access to your email in all seven points of access. And, according to Jacob Appelbaum and Glen Greenwald articles, the activities of the NSA to collect are not limited to this.

As an example the PRISM program is the program of observation started by the U.S. National Security Agency which is used including for interception of e-mails. At the same time the largest post providers Microsoft, Yahoo! and Google among the first took part in it. And, nevertheless, e-mail remains more popular means of online communication, than Facebook or any other service. Therefore its importance for intelligence agencies, is obvious. So, sending the post message, you have to assume that it will appear on the PRISM servers or other similar programs where "employees" will be able to read them.

Besides technical shortcomings of safety of e-mail, we can also consider the laws protecting confidentiality of its users. As an example we will consider Gmail.

- After 180 days your e-mails on servers of the American post providers become the property of the USA.
- The research showed that 55% of the American employers read electronic correspondence of the employees.
- It is worth reading history of the Lavabit service which nowadays stopped the work which Edward Snowden used. It is possible to draw a conclusion that it is impossible to conceal any email while it is on the server of the company.

1.4 Metadata

Metadata, or simply data on data, are very important. For example, metadata of this answer to Quora - is time of its publication, data on the author, duration of his stay on the website, the location, the browser which it uses, given about its computer, local time ... generally, the list turns out very long. In e-mails of metadata is more. In the performance on a subject "How the NSA betrayed the world's trust - time to act" Mikko Hypponen tells importance of metadata.

When you send email, all metadata go together with it. When you answer email, you automatically send all metadata from the previous letter. For example, if several people conduct the general correspondence by e-mail, by means of any above-mentioned way of interception any interested person with ease will get access to data on location of all participants of correspondence and also learns a discussion subject, even without reading contents of letters.

1.5 Our mission and goals

Bmail – It will be the protected mail service working at base of technology a blockchain. The idea is: the mail service will be the network decentralized by autonomous P2P with own cryptoeconomy which is not needed to be controled from outside. Advantages of technologies of the distributed data storage allow us to create the platform for integration of third-party applications, steady against blocking, protected from censorship and collecting personal data. It means, for example, that you will not need to worry about possible loss of correspondence because Google will decide to close Gmail, and if something happens you will be able to replace the postal address because completely you will control it with ease. But the mail service is not only mail, on this base we plan to develop the big multipurpose platform. There will be a photo and video hostings, communication and entertaining services

Our main objective to declare oneself and attract the maximum audience which will be able to use the safe e-mail service of messages by the time of start of the platform of a mail service and will develop together with us.

1.6 Safety

The most protected and closest to the functions of the chat are the blockchain-wallets and their peers – they are decentralized, they cannot be blocked, they have a reliable authentication system. We propose a system where users exchange a hash of a public key that also functions as the user's address. If the public key can be obtained by the underlying protocol, then it can easily be hashed to verify that it belongs to the intended recipient.

Till February, 2018 will earn the website bmail.com on which our platform will be based. We will place all information on our project there, will also be open the forum for discussion of all possible questions concerning the BMAIL project.

Various blockchains allow to distribute data on different chains that in combination with various types of enciphering allows to create the most flexible and protected communication network. We took the best from this that there is for realization of bmail on the basis of technology a blockchain today.

2. Token BMLT

Blockchain E-mail Token – The token BMLT will be the only cryptocurrency used by participants, by means of it you will receive an award for advertising viewing, will be able to pay services of partners, to pay various entertaining services.

2.1 Specifications

The token of BMLT of the ERC20 standard on the basis of a blockchain of Ethereum will be an integrated part of Bmail network. Its main mission — to provide exchange of conditional value between participants of network.

Token name	Blockchain E-mail Token
Token ticker	BMLT
Token type	ERC20
Token issuer	Bmail Limited
Total supply	88 000 000 BMLT (fixed, no more tokens will be issued)
Mining	The concept of a mining is absent, the quantity of tokens after the sale does not change

The Bmail company will produce 88 million tokens of BMLT and any more will never change their quantity. On a sale 44 million BMLT will be exposed. Within the main Token Sale 30 million 800 thousand tokens and 12 million — within Presale will be sold out.

BMLT tokens distribution	BMLT	Percenta
Total supply	88 000 000	100%
Token Sale	30 800 000	35 %
Presale	12 000 000	13,6 %
Participants of the bounty program, consultants	1 200 000	1,3 %
All remained tokens including which are not sold on ICO will be burned and are not available before start of work of a mail service of Bmail, i.e. till 2nd quarter 2018*	44 000 000	50 %

* new distribution of tokens of BMLT will be announced in day of start of a mail service of Bmail.

The price of a BMLT token will be 0.001 ETH or for 1 ETH you will receive 1000 BMLT. The minimum allowed amount to contribute at the Presale is 0.50 ETH. The maximum amount is not limited. Our goal is to collect during Token Sale from 3 200 to 36 391 ETH.

2.2 Presale

Within the preliminary sale 12 000 000 tokens of BMLT which will be on sale with a bonus of 70% will be released, for everyone 1 ETH= 1000 BMLT will be added 1700 (1000 + 700 bonus). These tokens will be added at once.

The maximum duration of a preliminary sale — 1 week. If the maximum sum in 7 058 ETH is gained earlier, we will stop sale of tokens. All not sold tokens will be burned.

Presale details	
Distributed on Presale	12 000 000 BMLT
Price	1 ETH = 1000 BMLT
Bonus	70% (1 BMLT = 1,7 BMLT)
Max goal (hard cap)	7 058 ETH
The maximum duration	10 days
Start date	20.12.2017 at 14:00 UTC
End date	30.12.2017 at 14:00 UTC
Minimum amount	1 BMLT = 0,001 ETH

2.3 Token Sale

Within Token Sale 30 800 000 BMLT with bonuses from 5% to 50% depending on purchase time will be offered for sale. Participants will be able to receive a special bonus of 50% in the first 48 hours of a sale. Further bonuses will decrease every week. The maximum duration of a sale — three weeks.

If hard cap of 29 333 ETH is reached earlier, we will stop the sale. If we reach soft cap of 3 200 ETH and the period is over - unsold tokens will be burned. If we don't reach soft cap of 3 200 ETH we will refund payments to the Token Sale contributors.

Token Sale details	
Distributed on Token Sale	30 800 000 BMLT
Price	1 ETH = 1000 BMLT
Bonuses	First 48 hours: 50% (1 BMLT = 1,5 BMLT) Week 1: 30% (1 BMLT = 1,3 BMLT) Week 2: 15% (1 BMLT = 1,15 BMLT) Week 3: 5% (1 BMLT = 1,05 BMLT)
Min goal (soft cap)	3 200 ETH
Max goal (hard cap)	29 333 ETH
The maximum duration	21 days
Start date	03.01.2018 at 14:00 UTC
End date	24.01.2018 at 14:00 UTC
Minimum amount	1 BMLT = 0,001 ETH

2.4 Use of Funds

Token Sale		
Details	Minimum goal (soft cap)	Maximum goal (hard cap)
Development of e-mail service *	50 %	45 %
Contractors *	10 %	5 %
Marketing and advance *	20 %	25 %
Operating expenses and contingencies *	7 %	10 %
Administration*	13 %	15 %

* **Development of a mail service:** 40%-50% of the raised budget funds will go for financing of creation of a mail service. Our team at the moment consists of 27 people, and full financing at this stage goes from our partner mister He Tengfei Kim. In this regard we made the decision that before start of a mail service the team does not receive bonuses from ICO sales, we consider it honestly – all will receive bonuses only for a ready-made product. All our developers thanks to our main investor, before start of the Bmail service get paid and work on start of the project. After start of a mail service of Bmail we will distribute bonuses to our team what we will report in advance about.
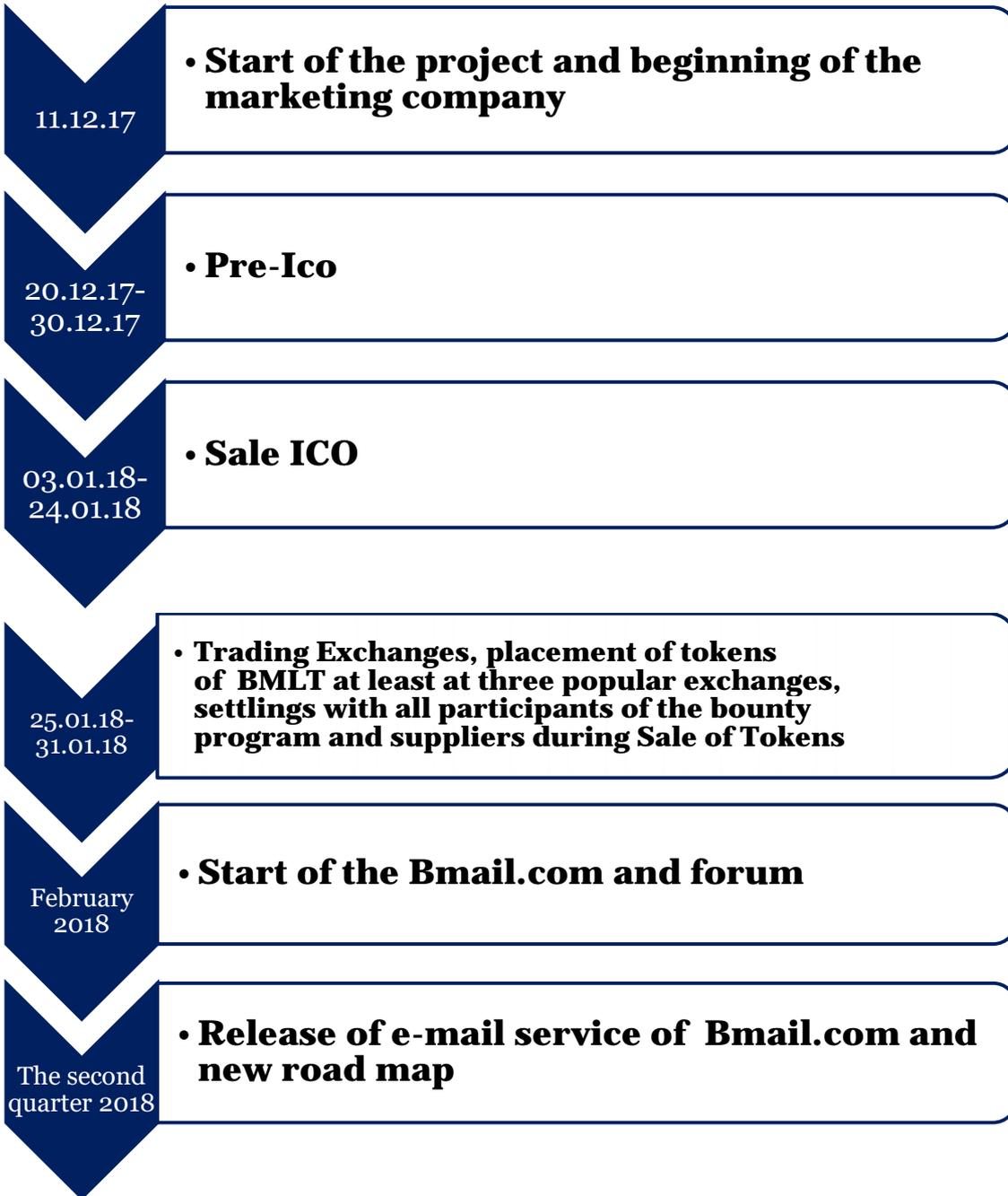
* **Contractors:** 5-10% of the budget these funds will be allocated for the third-party suppliers offering engineering, marketing, PR of the program and many other things.

* **Marketing:** 20-25% of the budget Marketing will be concentrated on expansion of awareness and acceptance of a mail service and the decision among users, publishers and advertisers. It also includes growth and maintenance of the world community.

* **Operating expenses and contingencies:** 7-10% of the budget are offset of contingencies.

* **Administration:** 13-15% of the budget consist of the legal, security, accounting and other connected with it administrative expenses.

ROAD MAP

11.12.17	• **Start of the project and beginning of the marketing company**
20.12.17-30.12.17	• **Pre-Ico**
03.01.18-24.01.18	• **Sale ICO**
25.01.18-31.01.18	• **Trading Exchanges, placement of tokens of BMLT at least at three popular exchanges, settlings with all participants of the bounty program and suppliers during Sale of Tokens**
February 2018	• **Start of the Bmail.com and forum**
The second quarter 2018	• **Release of e-mail service of Bmail.com and new road map**

3. Competition and opportunities

- Email continues to show strong growth worldwide, in terms of both users and revenues. Table 1, shows the growth forecast for email users and revenues from 2017 to 2021.

  o Today, there are over 3.7 billion email users worldwide, and this figure is expected to grow to over 4.1 billion by year-end 2021.

  o Revenues for all segments of the Email Market combined are expected to total over $23.8 billion in 2017, and will grow to over $46.8 billion by year-end 2021, an average annual growth rate of 18%. Revenue growth is driven mainly by the migration of on-premises mailboxes to cloud mailboxes.

Worldwide Email Market Forecast	2017	2018	2019	2020	2021
Worldwide Email Users (M)	3,718	3,823	3,930	4,037	4,147
% change		3%	3%	3%	3%
Worldwide Email Market Revenues ($M)	$23,881	$29,028	$34,357	$40,256	$46,814
% change		22%	18%	17%	16%

Table 1: Worldwide Email Market Forecast, 2017-2021

- This report looks at the Email Market as comprising five segments:

  o **Enterprise Messaging Platforms** – on-premises email and collaboration platforms from vendors such as: *IBM, Microsoft,* and others.
  o **Messaging Platforms for Service Providers** – messaging platforms deployed by service providers to offer email to business or consumer subscribers. Leading platforms include: *Open-Xchange, Oracle, Synchronoss Messaging, Synacor (Zimbra)* and many others.

o **Cloud Business Email** – are multi-tenant or dedicated hosted services that provide business email and collaboration services to organizations of all sizes. Leading providers include: *Intermedia, Google, Microsoft,* and many others.

o **Email Clients** – desktop or web-based interfaces for accessing and working with email, such as *IBM Notes, Microsoft Outlook*, and others.

o **Consumer Email** – email services geared to consumers. Leading consumer email services, include: *Google Gmail, Microsoft Outlook.com, Yahoo! Mail,* and many others.

- On-premises Enterprise Messaging Platforms are increasingly yielding market share to Cloud Business Email solutions. Cost, ease of use and low administrative overhead are the main drivers for cloud email adoption. However, organizations still voice concerns over the security and privacy of cloud email solutions.

- Consumer email use continues to grow worldwide, as more people gain access to the Internet on a worldwide basis. Email remains a key component of the online experience, as email accounts are required for any form of online activity ranging from signing up to social networking sites (e.g. Facebook and Twitter), accessing chat or instant messaging services, online shopping or any other type of online activity.

- The total worldwide email traffic, including both Business and Consumer emails, is estimated to be over 269 billion emails/day by year-end 2017, growing to over 319.6 billion emails/day by the end of 2021.

Daily Email Traffic	2017	2018	2019	2020	2021
Total Worldwide Emails Per Day (B)	269.0	281.1	293.6	306.4	319.6
% Change		*4%*	*4%*	*4%*	*4%*

Table 2: Worldwide Daily Email Traffic, 2017-2020

3.1 Mobile email statistics: Growth and usage of email on mobile
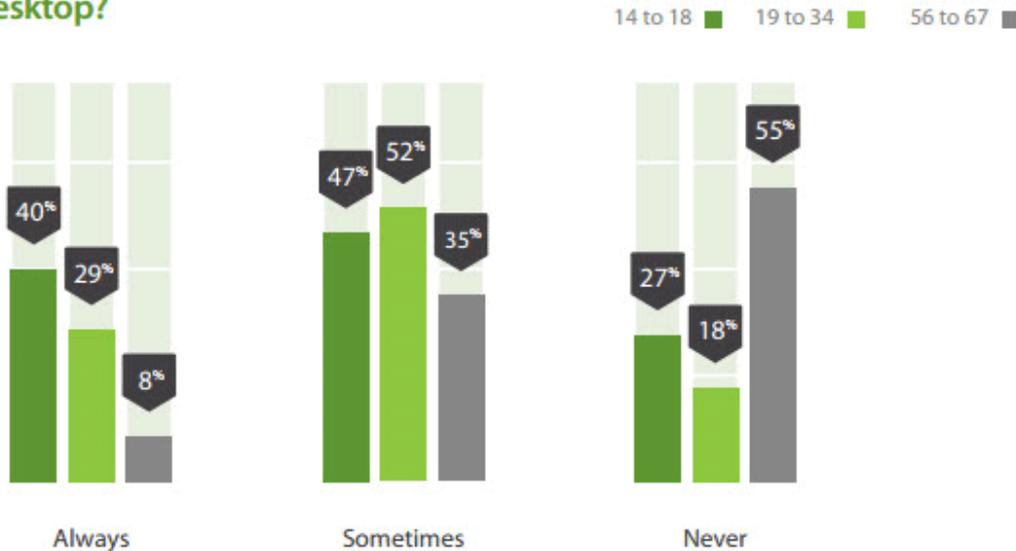
**Email is always read first on email for an average of 25,6%.** 40% aged 14-18 will always read emails on mobile first, 29% for ages 19 – 34 and 8% of the group of 56 – 67. – *Adestra* "Consumer Adoption & Usage Study" (2016)

55% of consumers 56-67 say **they will never read email on their mobile first**. This is only 18% for the age group 19 – 34. – *Adestra* "Consumer Adoption & Usage Study" (2016)

More email is read on Mobile than on desktop email clients. Stats say 51% of email is now opened on a mobile device – *Litmus* "Email Client Market Share Trends for 2017" (July 2017)
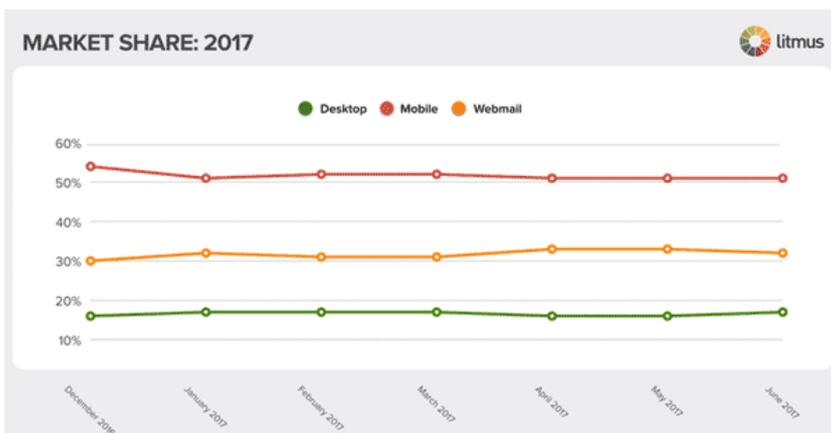
See previous graphs: sept 2012 | march 2013 | june 2013 | august 2013| Jan – Dec '14 | Jul '14 – Jun '15 | Jan '15 – Nov '15 | March 15 – March 16 | Jun 15 – Jun 16 | 2016

Desktop represents 16% of all email opens, webmail 30% and mobile 54%. – *Litmus* "State of Email" (March 2017)

45% of email opens occurred on mobile, 36% on desktop and 19% in a webmail client. – *Adestra* "Top 10 email clients" (March 2015)

33% of emails are opened in a mobile application, 17% in a webmail client and 48% on desktop. – *Freshmail* "Best practices for email coding" (May 2015)

56% of total email opens occurred on a mobile phone or tablet in Q4 2015, compared to 54% in Q3 2015. – *Experian* "Quarterly email benchmark report" (Q4 2015)
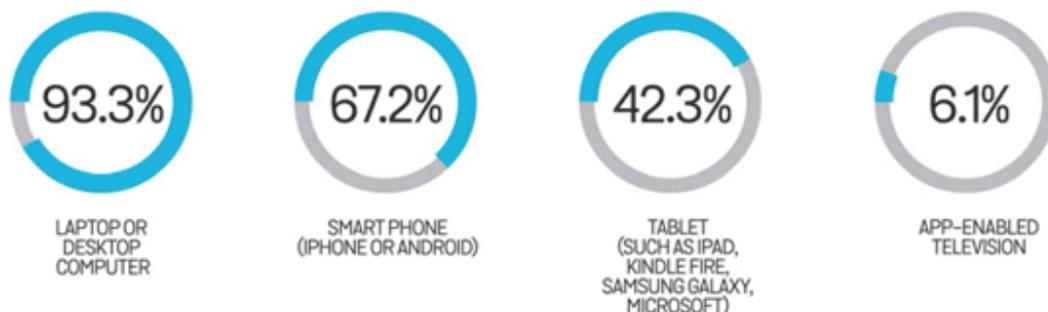
Mobile accounts for 35.12% to 39,51% of all unique email opens over the course of 2014 in the Netherlands. *DDMA* "Nationale email benchmark 2015" (2015)

Women interact with email for just over a hundred million more minutes per month than the industry average. Per individual, it means that women spend seven minutes more per month on a smartphone checking email compared to men. – UKOM & Comscore data (2016)

Majority of Email Is Opened on a Mobile Device. According to Kahuna data, 86% of emails in Q1 2016 were opened on a mobile device. – *Kahuna* "The Kahuna Mobile Marketing Index" (Q1 2016)

SELECT ALL THAT APPLY

Which of the following devices do you own and use to check your email?

| 93.3%	67.2%	42.3%	6.1%
LAPTOP OR DESKTOP COMPUTER	SMART PHONE (IPHONE OR ANDROID)	TABLET (SUCH AS IPAD, KINDLE FIRE, SAMSUNG GALAXY, MICROSOFT)	APP-ENABLED TELEVISION

67,2% of consumers use a smartphone to check their email, 42,3% use a tablet while 93,3% uses desktop environment. – *BlueHornet* "Customer Views of email marketing 2015" (2015)

Mobile accounts for 28.55% in Q1 to 33,43% in Q4 of unique email clicks in the Netherlands. – *DDMA* "Nationale email benchmark 2015" (2015)

Webmail and desktop opens have steadily declined throughout 2015, each dropping 13% since January. *Litmus*–"Email Analytics" (Nov 2015)

75 percent of Gmail users access their accounts on mobile devices. Gmail now has 900 million users. – *Google / TechCrunch* "I/O developers conference" (May 2015)

Mobile email opens have grown with 180% in three years. From 15% Q1 2011 to 42% in Q1 2014. – *Campaign Monitor* "Email interaction across mobile and desktop" (Q1 2014)


OPENS BY ENVIRONMENT PER QUARTER: Q1'11 - Q1'14
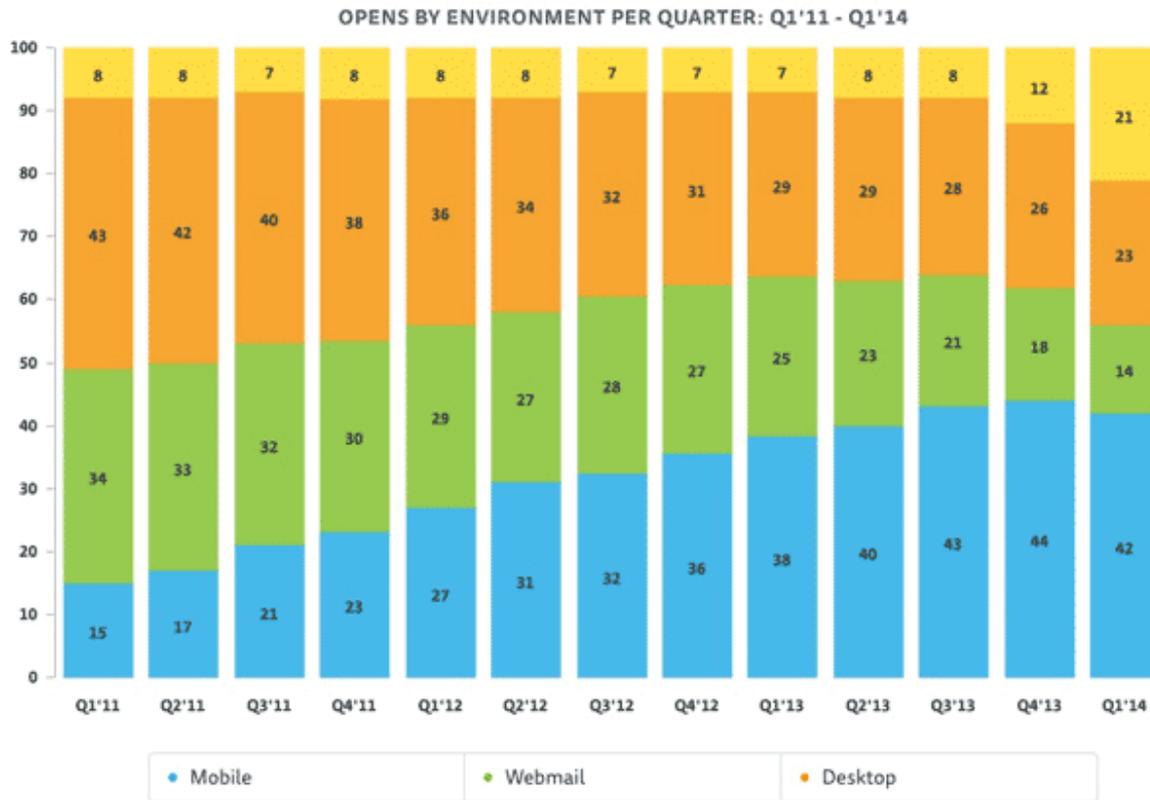
Data based on 4 billion opens across 5 million campaigns during 2011 - March 2014. The yellow bar at the top represents opens in an undetectable environment. Undetected increased in 2013 Q4 due to introduction of Gmail image caching on proxy servers.

An average of 34.1% opens their emails on Mobile devices – ***Moosend*** "Mid-season year report" (Q3 2014)

Unique Click Rates

Total Click Rates

Responsive design results in a nearly 15% increase in unique clicks for mobile users from a 2.7% average to 3.3%. – *Litmus and MailChimp* "The Science of Email Clicks: The Impact of Responsive Design & Inbox Testing" (December 2014)

Mobile Click Rate of Responsive Emails by Link Order
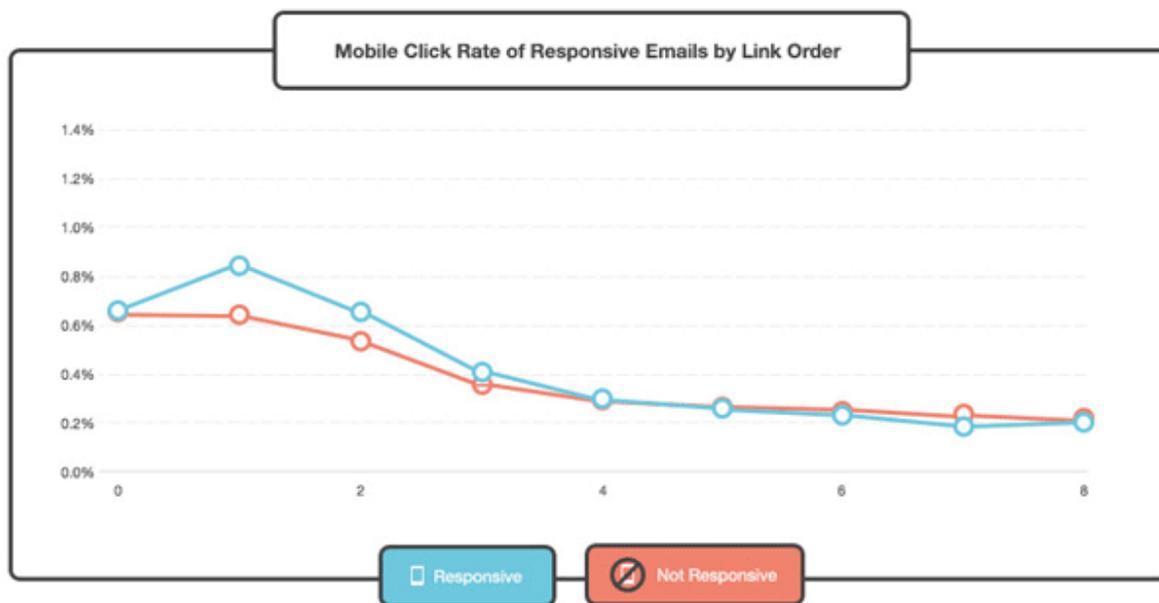
The first link in a responsive design email on mobile has a 30% higher click rate than non-responsive design. –*Litmus and MailChimp* "The Science of Email Clicks: The Impact of Responsive Design & Inbox Testing" (December 2014)

The iPhone is the most popular platform in the mobile email space (60%) followed by Apple iPad (21%) and Google Android (18%) *Litmus* "Email Analytics" (March 2016)

The iPad is the third most popular email client (11%). But iPad opens have been on a continuous decline over the past year, dropping over 7% from January to July 2015. – *Litmus* "Top 10 Email Programs" (July 2015)

Mobile received 39% of unique clicks, with 9% from tablets and 61% from all desktop. – ***Experian*** "Quarterly Email Benchmark Study" (Q3 2014)

The percentage the percentage of overall opens happening on smartphones has gone up about 7% from 2015 to 2016. – ***MessageGears*** "Mobile Email Engagement Is On The Rise" (2017)

Smartphone click rates are significantly higher than before. More clicks are now happening on smartphones (47.5%) than desktops (41.7%). – ***MessageGears*** "Mobile Email Engagement Is On The Rise" (2017)
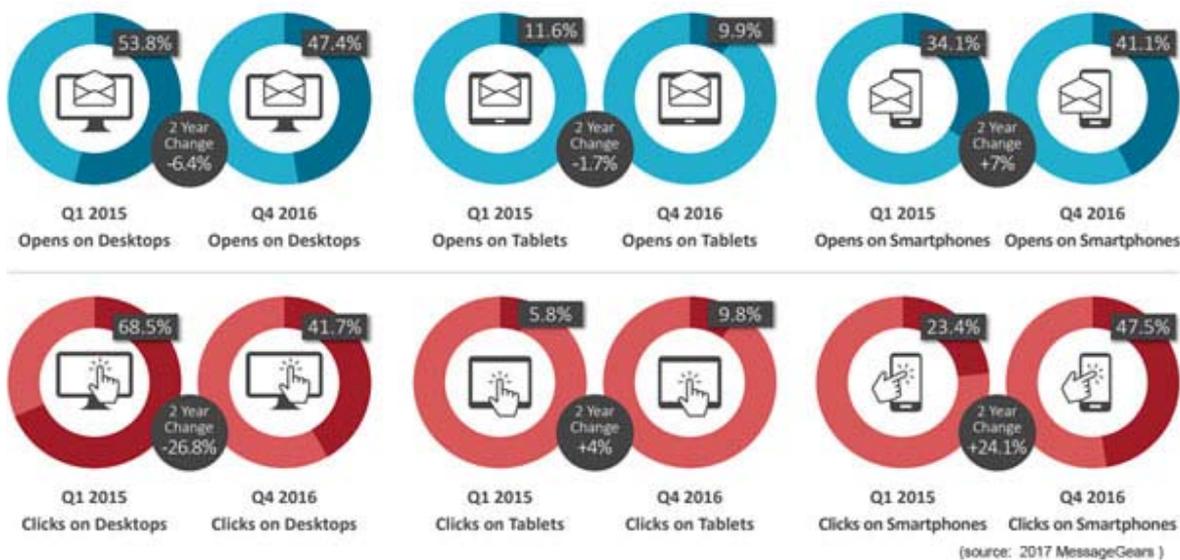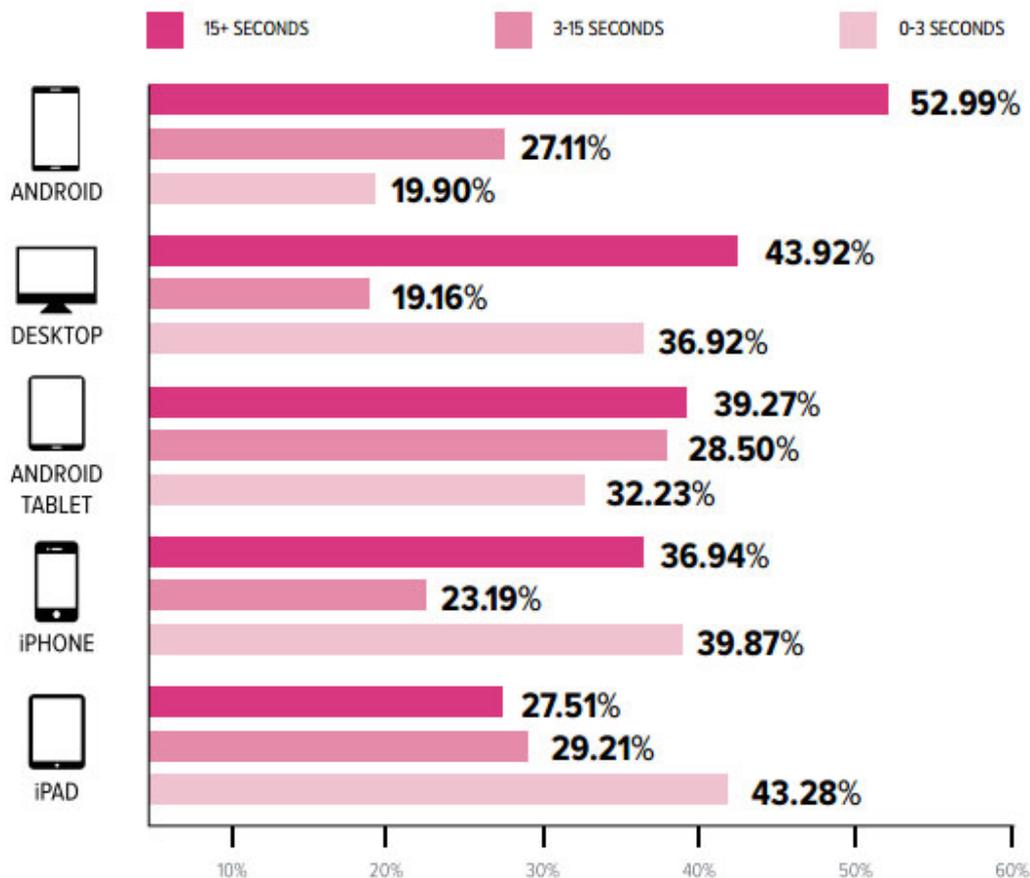

Mobile email click-throughs grew 22.8 percent on Black Friday, from 44.7 percent in 2014 to 54.9 percent in 2015. This increase is noteworthy because mobile opens were up only 2.7 percent, from 56.1 percent in 2014 to 57.6 percent in 2015. – IBM Silverpop "Watson Trend benchmark" (2015)

The Gmail App reaches 43.5% of the US smartphone users – *Comscore* "Reports January 2014 U.S. Smartphone Subscriber Market Share"

Apple users are quick email readers; Ipad and Iphone both show a higher percentage with a 0-3 seconds email read length. – ***Movable Ink*** "US Consumer Device Preference Report: Q2 2014" (2014)
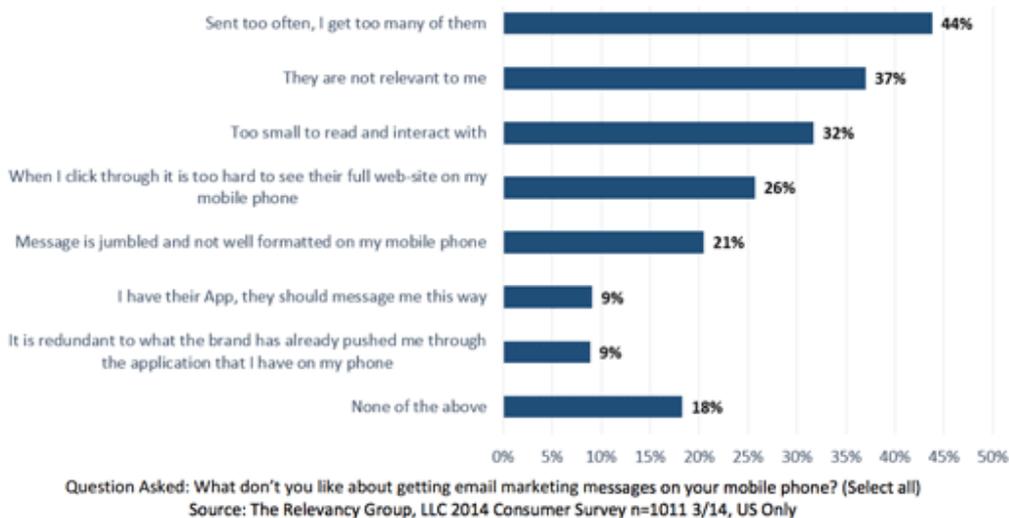
Android phone users spent the most time viewing emails. Android smartphone 52,99% of users spent 15 seconds or more viewing each message. Desktop users came in second, with 43,99% spending 15 seconds or more viewing an email. ***Movable Ink*** "US Consumer Device Preference Report: Q2 2014" (2014)

	15+ SECONDS	3-15 SECONDS	0-3 SECONDS
ANDROID	52.99%	27.11%	19.90%
DESKTOP	43.92%	19.16%	36.92%
ANDROID TABLET	39.27%	28.50%	32.23%
iPHONE	36.94%	23.19%	39.87%
iPAD	27.51%	29.21%	43.28%

By the end of 2018, worldwide mobile email users are expected to total over 2.2 billion. – **The Radicati Group** "Email Statistics Report, 2014-2018"

By 2018 80% of email users are expected to access their email accounts via a mobile device. – **The Radicati Group** "Email Statistics Report, 2014-2018"

The biggest turnoffs people have with mobile email are: Receiving too many (44%), Not relevant (37%), Too small to read and interact with (32%), Website and landingpages not mobile optimized (26%) and Not well formatted for mobile phones (21%) – *LiveClicker and The Relevancy Group* "Exploring the Benefits Real-Time Email – Driving Marketing Effectiveness" (2015)

Question Asked: What don't you like about getting email marketing messages on your mobile phone? (Select all)
Source: The Relevancy Group, LLC 2014 Consumer Survey n=1011 3/14, US Only

Replies sent from phones are 54% faster than those sent from desktops. Mobile replies have a median reply time of only 28 minutes, followed by emails sent from tablets with 57 minutes and finally replies from desktops with 62. – *Yahoo* "Evolution of Conversations in the Age of Email Overload" (April 2015)

Replies sent from mobile devices are 60% shorter than those sent from desktops. Replies from phones have a median length of 20 words, replies from tablets are 27 words and from desktops are 60 words. – *Yahoo* "Evolution of Conversations in the Age of Email Overload" (April 2015)

The number of mobile e-mail users is predicted to grow 22% in 2015 and 23% in 2016 – *The Radicati Group* "Email Statistics Report, 2014-2018"

	2014	2015	2016	2017	2018
Worldwide Mobile Email Users* (M)	1,152	1,422	1,732	2,002	2,282
% Growth		23%	22%	16%	14%

Table 2: Worldwide Mobile Email User Forecast (M), 2014-2018

In 2017 2.282 million people will access email via their mobile device.- *The Radicati Group* "Email Statistics Report, 2014-2018"

3.2 Mobile email stats per country

Nearly half (49%) of all emails are read on mobile devices throughout the world Some regions a bit higher and or substantially lower. "Rest of the World" and United Kingdom regions had the highest mobile readership at 56% and 55% respectively. – *IBM Marketing Cloud* "2016 Email Marketing Metrics Benchmark Study" (2016)

DEVICE & EMAIL CLIENT USAGE (by Country/Region)

| Device/Email Client Usage	Webmail	Mobile	Desktop
Overall	29%	49%	22%
United States	29%	49%	22%
Canada	27%	48%	25%
United Kingdom	27%	55%	18%
Rest of Europe	47%	32%	21%
Middle East & North Africa	65%	25%	11%
Australia & New Zealand	25%	50%	25%
Rest of World	23%	56%	21%

■ Highest in category

Higher consumer adoption of mobile in emerging economies is likely driving the "Rest of the World" region's higher mobile readership, with contacts often skipping over desktop computer ownership entirely. – *IBM Marketing Cloud* "2016 Email Marketing Metrics Benchmark Study" (2016)

The "Rest of Europe" region lagged at 32%, while the extremely low 25% for Middle East/North Africa is surprising and could result from the higher cost of data plans and culture in certain markets. – *IBM Marketing Cloud* "2016 Email Marketing Metrics Benchmark Study" (2016)

In North America, Mobile opens accounted for 57.4% of total email opens. Tablets accounted for 15.6% of unique email opens. – *Inbox Marketer* "The mobile Shift" (2015)

For the first time ever, mobile represented the largest proportion of email clicks in North America with 52.1% of all clicks. – *Inbox Marketer* "The mobile Shift" (2015)
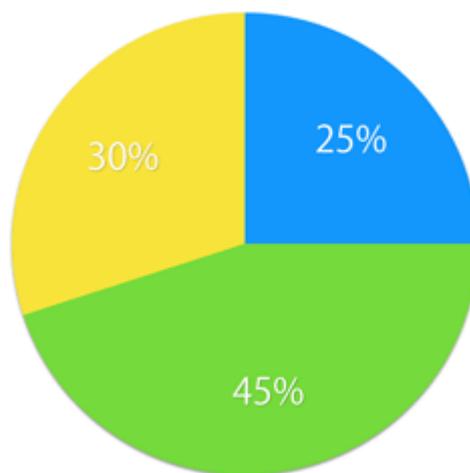
Email open rates onderzoek (2016)   addtofavorites[+]
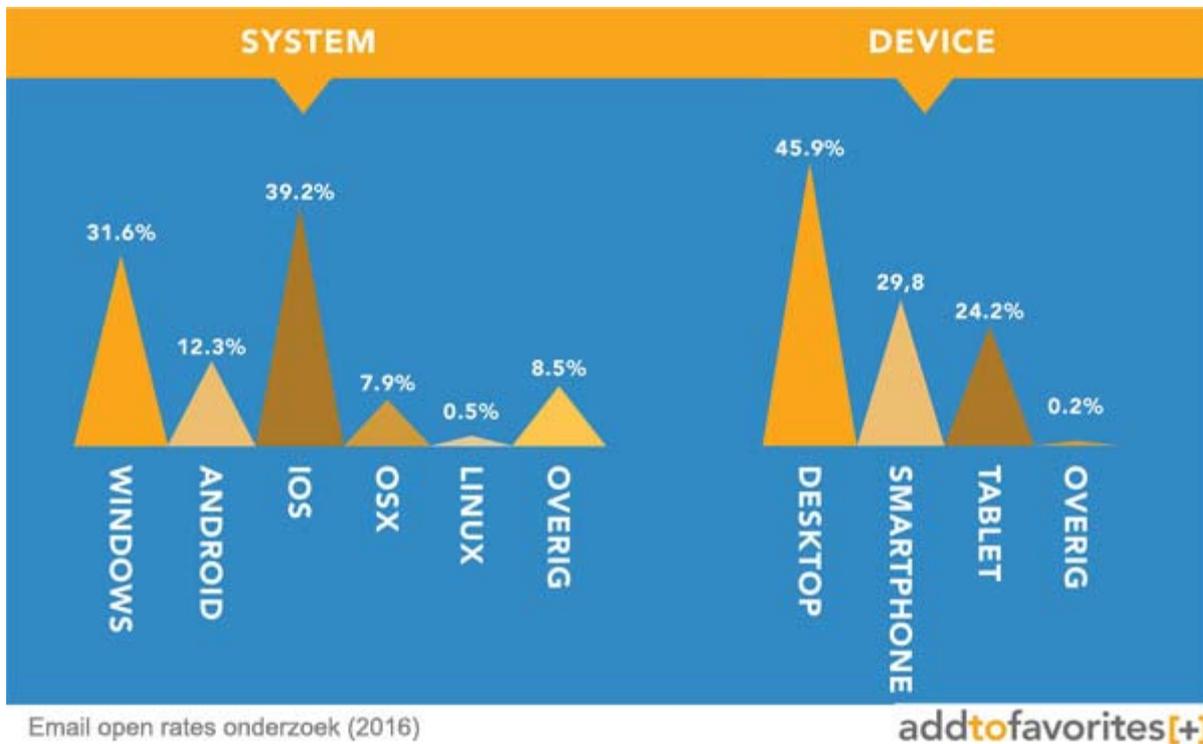
In the Netherlands 29,8% of email opens happened on smartphone, 24,2% of email opens occured on a tablet making a total of 54% mobile opens. – *Add to Favorites* "Email Open Rate Onderzoek" (2016)

The number of email opens on a mobile device has increased with 6,7% in the Netherlands. – *Add to Favorites* "Email Open Rate Onderzoek" (2016)
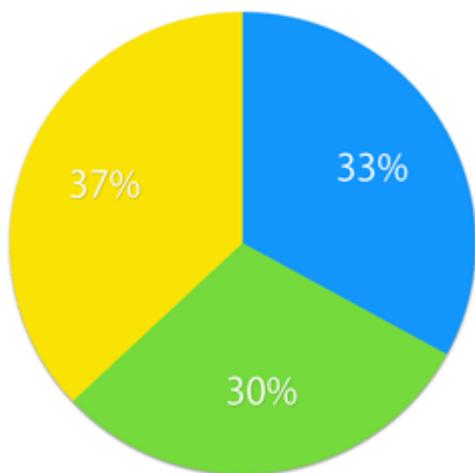

37% email opens are on Desktop, 30% on webmail and 33% on mobile across countries. – *Freshmail* requested exclusively for "The Ultimate Mobile email statistics overview" (2016)

Poland has a low percentage of people checking email on mobile. With 45% of emails opened on webmail, 30% on desktop and only 25% on Mobile. – *Freshmail* requested exclusively for "The Ultimate Mobile email statistics overview" (2016)

When do people check their email on mobile?
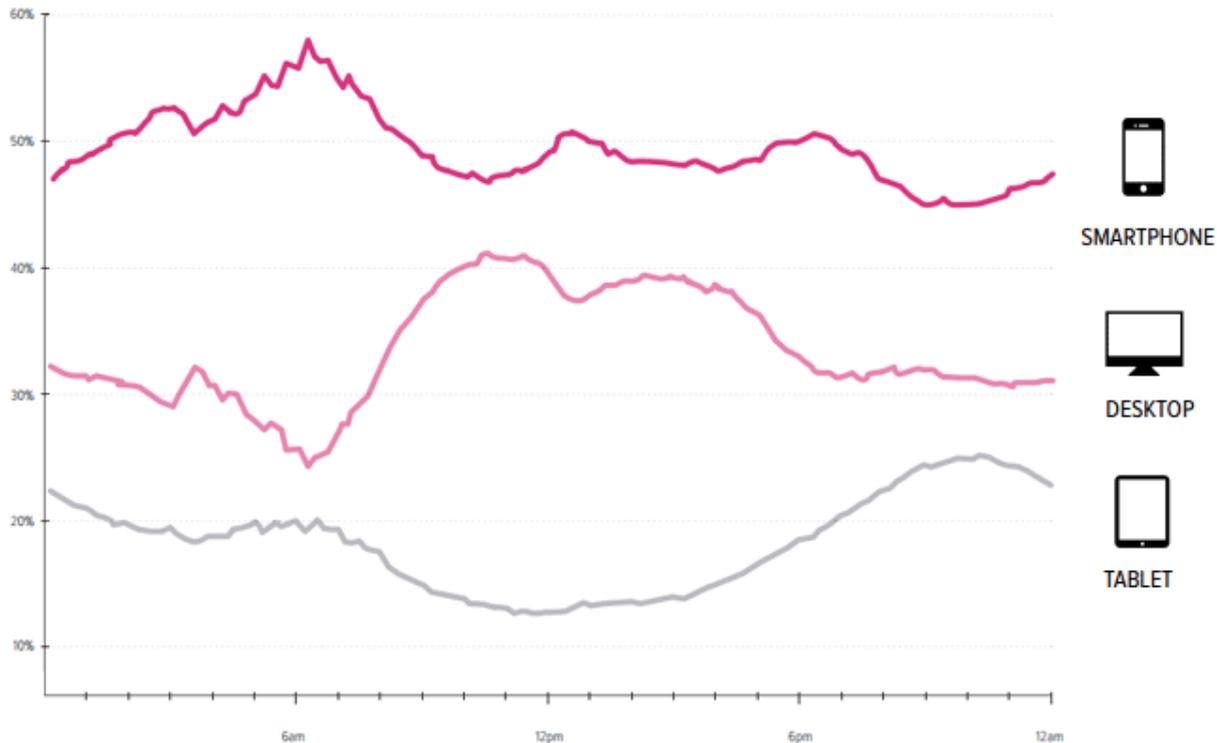
Smartphone use for reading email dominates throughout the day, desktop use peaks during the mid morning hours and tablet use spikes at night and increases on the weekend. – *Movable Ink* "US Consumer Device Preference Report: Q3 2014″ (2014)
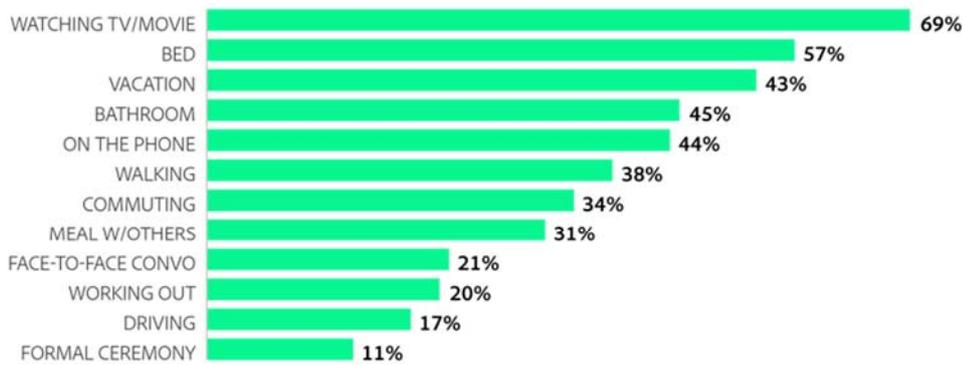
Americans love to multitask with email. They check email while watching TV or a movie (69%), in bed (57%), and on vacation (79%). – *Adobe digital Insights* "ADI Email Survey 2016"

A quarter of Americans report checking email regularly right up until they go to bed, with 3% actually gets up in the middle of the night to check messages. – *Adobe digital Insights* "ADI Email Survey 2016"

How and When we Use Our Apps in an average day

	Email Apps	Travel & Local Apps	Social Apps	Shopping Apps	Messaging Apps	Browser Apps
App category includes:	Yahoo! Mail, Gmail, etc.	Google Maps, Waze, Airbnb, etc.	Facebook, Twitter, etc.	Amazon, eBay, etc.	WhatsApp, Kik, etc.	Chrome, Firefox, etc.
% of smartphone segment* who use this app-type	71%	27%	75%	33%	88%	83%
Among those who use this app-type on their smartphone...						
% who use at home	45%	28%	47%	40%	45%	44%
Peak daypart use, by total time spent	Late Morning	Evening	Night	Evening	Afternoon and Evening	Night

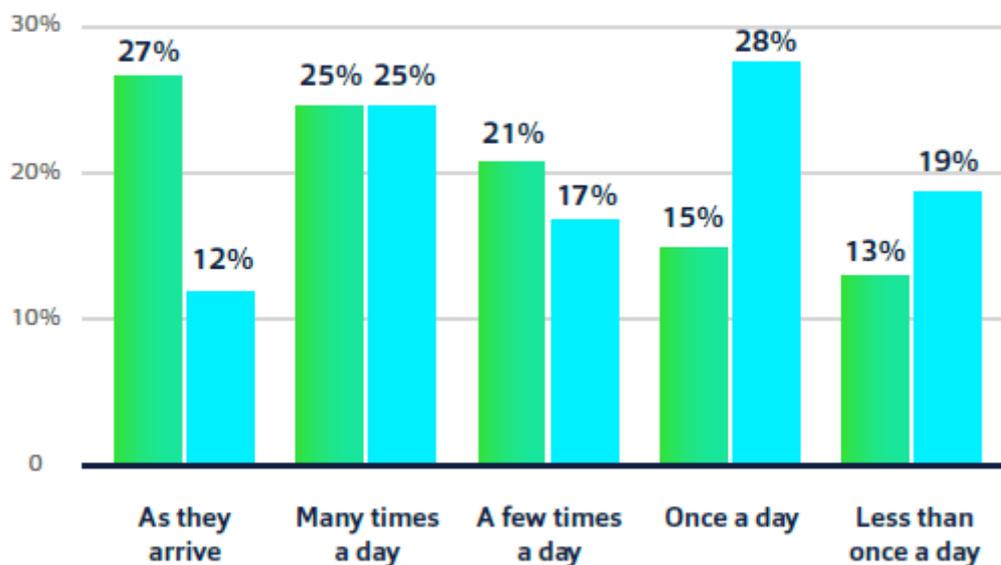Source: How People Use Their Devices 2016

think with Google

The Late morning is peak time for using email apps on smartphones, based on total time spent. – *Google* "How People Use Their Devices 2016 – What Marketers Need to Know" (Sept 2016)

Of people using email apps on their smartphone, only 45% use them at home. – *Google* "How People Use Their Devices 2016 – What Marketers Need to Know" (Sept 2016)

In a given hour when actively using their phone, users interact with 4.8 apps – *Google* "How People Use Their Devices 2016 – What Marketers Need to Know" (Sept 2016)

HOW OFTEN DO YOU CHECK EMAIL?

● Primarily check on smartphone ● Primarily check on another device

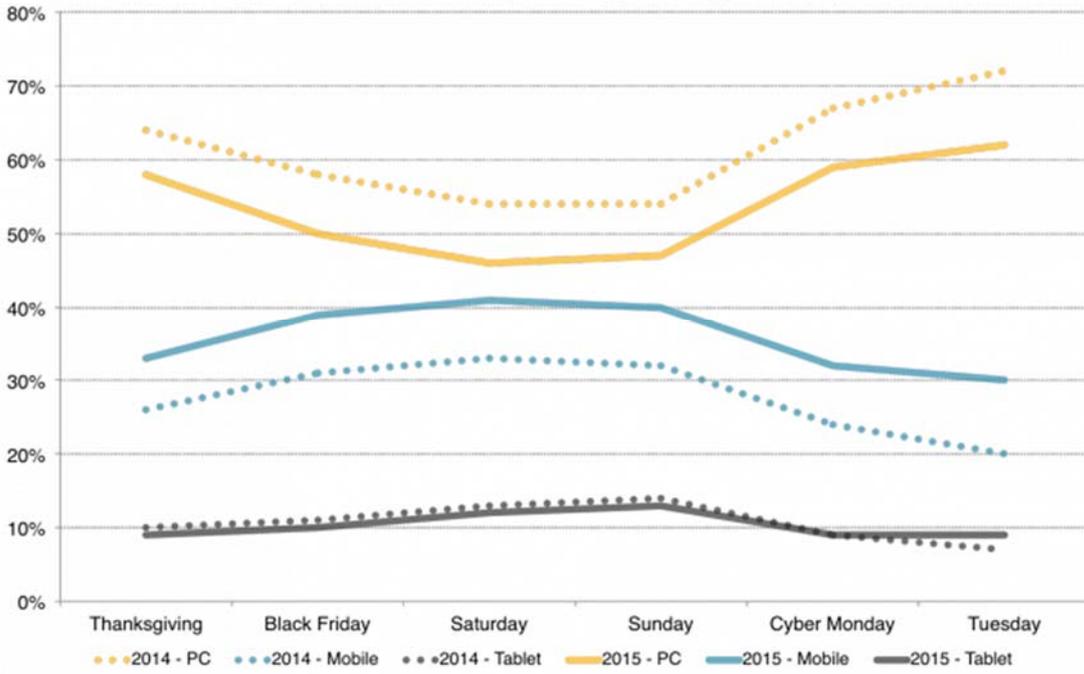|	As they arrive	Many times a day	A few times a day	Once a day	Less than once a day
Primarily check on smartphone	27%	25%	21%	15%	13%
Primarily check on another device	12%	25%	17%	28%	19%

(source: Fluent the inbox report 2016)

Nearly 3 in 4 (73%) of Smartphone-first consumers check their email more than once a day, 19% higher than those who primarily check on another device. – *Fluent* "The Inbox report 2016, Consumer perceptions of email" (2016)

27% of users that primarily check email on their smartphone, do so as the emails arrive. – *Fluent* "The Inbox report 2016, Consumer perceptions of email" (2016)

Around the holidays there was a significant drop in desktop engagement as mobile engagement increased. If trends continue into 2016, we'll see mobile engagement surpass PC engagement by 10-15%. – *Mailchimp* "A MailChimp Record: 1.2 Billion Emails on Black Friday" (Dec 2015)

Percent of daily clicks by device/year

| | Thanksgiving | Black Friday | Saturday | Sunday | Cyber Monday | Tuesday |

Legend: • • •2014 - PC   • • •2014 - Mobile   • • •2014 - Tablet   2015 - PC   2015 - Mobile   2015 - Tablet

91% of consumers check their email at least once per day on their smartphone, making it the most used functionality *ExactTarget* "Mobile Behavior report" (2014)