

Using Email Effectively, Safely and Well

NU Staff In-Service Retreat
2019-01-09

M. E. Kabay, PhD, CISSP-ISSMP
Professor of Computer Information Systems
School of Business & Management
College of Professional Schools
Norwich University

1

Topics

- DELIVERY NOT GUARANTEED
- FIRST E-IMPRESSIONS
- DISCRETION IN EMAIL CRITICISM
- HTML-FORMATTED EMAIL DOESN'T WORK RELIABLY
- TO/CC + REPLY ALL = TROUBLE
- MAILSTORMS
- BCC PREVENTS EMAIL NUISANCES
- BURYING YOUR EMAIL MESSAGE
- MISLEADING SUBJECT FIELDS
- FORWARDING CORPORATE EMAIL
- EMAIL CARRYING MALWARE
- THE KEEPER OF THE LISTS

2

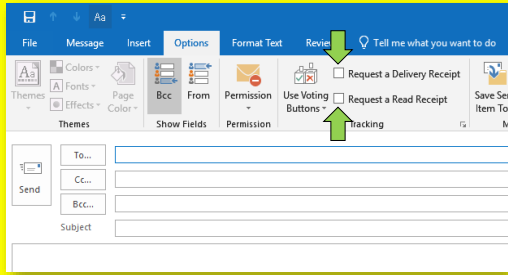
DELIVERY NOT GUARANTEED (1)

- IETF* definition of email** does not include guaranteed *delivery*
- DEFINITELY does not guarantee *reading!*
- Do NOT assume delivery or reading
- Use *Request a Delivery/Read Receipt* when necessary
- CALL YOUR CORRESPONDENT for urgent messages

* Internet Engineering Task Force < <https://tools.ietf.org/> >
** White, J. (1973). "A Proposed Mail Protocol." IETF RFC 524. < <https://tools.ietf.org/html/rfc524> >

3

DELIVERY NOT GUARANTEED (2)



4

FIRST E-IMPRESSIONS

- Context matters
 - ❑ Friends do *not* communicate the same way as *colleagues*
- Research indicates email 1st impressions matter more than in phone calls*
 - ❑ Spelling/grammar mistakes
 - ❑ Offensive language
 - ❑ Off-color humor

(may also violate Title IX)

*Winerman, L. (2006). "E-mails and egos." *Monitor on Psychology* 37(2):16. American Psychological Association. < <https://www.apa.org/monitor/feb06/egos.aspx> >

5

DISCRETION IN EMAIL CRITICISM

- Sources of disagreement
 - ❑ Fundamental assumptions
 - ❑ Vocabulary
 - ❑ Unspoken goals & values
 - ❑ Implicit reasoning
 - ❑ Missing information
 - ❑ Mistakes
- Avoid verbal hostility
 - ❑ Ad hominem remarks
 - ❑ Aggressive content
- TALK to the person if email gets rude!

6

HTML-FORMATTED EMAIL DOESN'T WORK RELIABLY

- HTML email not guaranteed to look like what sender sent
 - ❑ Recipient's system may have **RADICALLY different font assignments**
 - ❑ Sizes may differ from original
 - ❑ Some characters altered (e.g., ' becomes ?)
 - ❑ Worst case: sending posters as HTML!
- If appearance *must* match, use
 - ❑ Acrobat PDF (include fonts)
 - ❑ Image (JPG, PNG....)

7

Copyright © 2019 M. E. Kabay. All rights reserved.

TO/CC + REPLY ALL = TROUBLE

- TO: people who should reply
- CC: people who should be able to reply
- BCC: everyone else
- Trouble from REPLY ALL w/ visible distribution lists
 - ❑ Violate privacy
 - ❑ Cause mailstorms (see next slide)
- REPLY ALL restrictions
 - ❑ Don't REPLY ALL unless appropriate
 - ❑ THINK before using REPLY ALL

8

Copyright © 2019 M. E. Kabay. All rights reserved.

MAILSTORMS

- Dec 2018: Utah state worker sends invitation to 25,000 recipients in TO: field for pot-luck dinner*
 - ❑ Some REPLY ALL with dietary preferences & "OK GREAT!" messages
 - ❑ Many send REPLY ALL asking to be removed from list
 - ❑ Others REPLY ALL to tell everyone to stop using REPLY ALL
 - ❑ Potentially crash mail servers
- DO NOT PUT LARGE DISTRIBUTION LISTS IN TO: OR CC: – USE THE BCC FIELD

* Dumais, E. (2018). "Office Potluck Email Mistakenly Sent to 25,000 Employees, Reply-All Chaos Ensues." Thrillist
< <https://www.thrillist.com/news/nation/utah-state-office-potluck-email-reply-all> >

9

Copyright © 2019 M. E. Kabay. All rights reserved.

BCC PREVENTS EMAIL NUISANCES

- Listing extensive contacts in TO: or CC: may betray confidential information
 - ❑ People may copy list to spam recipients
 - ❑ May betray operationally sensitive info
- Worse if email goes to outside addresses
 - ❑ May reveal organizational addresses that are supposed to be internal-only
 - ❑ E.g., specific participants on confidential projects

10

Copyright © 2019 M. E. Kabay. All rights reserved.

BURYING YOUR EMAIL MESSAGE

- Errors that can delay having your message read
 - ❑ Using a non-corporate email address
 - ❑ Using a non-descriptive subject line
 - ❑ Mixing critical information with non-critical info (especially if non-critical comes first)
- Never use non-corporate email for internal email (& may violate FERPA)
- Always have clear, informative subject
- Put one critical topic per email – use additional messages for additional topics

11

Copyright © 2019 M. E. Kabay. All rights reserved.

MISLEADING SUBJECT FIELDS

- REPLY automatically copies subject line & puts RE: in front
- But some users think REPLY is shortcut instead of NEW EMAIL
- Fail to correct subject line
- Results
 - ❑ Confusion
 - ❑ Message ignored or reading delayed
 - ❑ Irritation for all concerned
- Use NEW EMAIL, not REPLY when composing email on a new topic

12

Copyright © 2019 M. E. Kabay. All rights reserved.

FORWARDING CORPORATE EMAIL

- Some information *must* be protected against public release
 - ❑ FERPA: student information
 - ❑ HIPAA: medical information
 - ❑ GLB/SoX: information that can influence stock prices
 - ❑ Military applications
- Do NOT include external email addresses in distribution unless
 - ❑ Justified
 - ❑ Necessary

13

Copyright © 2019 M. E. Kabay. All rights reserved.

EMAIL CARRYING MALWARE (1)

- Malware can generate email using fake origination addresses
- Some *phishing* email carries infected attachments (HTML, PDF, DOC[X]...)
- Many phishing emails have links that don't match appearance
 - ❑ Link has 2 components
 - ✓ Appearance – can look like good link
 - ✓ Actual hyperlink – can be for criminals' Website
- ❑ ALWAYS look at lower left corner of email window or in popup to see *real* link

14

Copyright © 2019 M. E. Kabay. All rights reserved.

EMAIL CARRYING MALWARE (2)

The screenshot shows an email interface with a toolbar at the top. The email content includes a header with 'reporting@nsf.gov' and 'Final Project Report'. The body contains redacted information and a link: 'https://reporting.research.gov/fedawardid/'. A green callout box points to the link with the text 'The URLs match!' and a smiley face icon.

15

Copyright © 2019 M. E. Kabay. All rights reserved.

THE KEEPER OF THE LISTS

- Anyone can copy a visible (TO:, CC:) list
- But copies can become *outdated*
- Best to use an official Keeper of the Distribution Lists
 - ❑ Typically administrative assistant / secretary
- Messages for everyone in a group (department, school; students, staff, faculty, committee...)
 - ❑ Send to Keeper of the Lists
 - ❑ Guarantees up-to-date distribution

16

Copyright © 2019 M. E. Kabay. All rights reserved.

For Further Reading

- Kabay, M. E. (2016) "Using E-mail Safely and Well"
 - < <http://www.mekabay.com/infosecmgmt/emailsec.pdf> >
- Bauer, J. & D. G. Jerz (2000). "Email Tips: Top 10 Strategies for Writing Effective Email." Jerz4z;s Literacy Weblog.
 - < <https://jerz.setonhill.edu/writing/e-text/email/> >
- Doyle, A. (2018). "How to Write and Send Professional Email Messages." The Balance Careers.
 - < <https://www.thebalancecareers.com/how-to-write-and-send-professional-email-messages-2061892> > or
 - < <http://tinyurl.com/y9r4s3yp> >

17

Copyright © 2019 M. E. Kabay. All rights reserved.

Now go and study

18

Copyright © 2019 M. E. Kabay. All rights reserved.