

# Reversals from the Paradigm Shift

*The opposite of every great idea is another great idea. –Niels Bohr*

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In the 21st century, if a message is not from an accountable sender, it should expect to be rejected. Senders must be authenticated. Senders must also be known, reputable, or accredited.

## 20th century email

*The average message is good. Spam is the exception.*  
*By default, accept a message unless we have a good reason to reject it.*  
*Spammers evolve. The list of reasons to reject a message keeps growing.*  
*Filter out spam based on content.*  
*File suspected spam to a spam folder.*  
*Spamfolders reduce reliability. Senders have to ask "did you get my mail?"*  
*The biggest challenge in solving spam is reducing false positives.*  
*End-users can send mail through any SMTP server, as anyone.*  
*Expectation: strangers can email each other totally out of the blue.*  
*Corporations, particularly sales accounts, are very sensitive to FPs, so the "default accept" paradigm will never go away entirely.*

## 21st century email

*1 The average message is spam. Ham is the exception.*  
*2 By default, reject a message unless we have a good reason to accept it.*  
*3 Good senders are relatively static. The list of reasons to accept a message stays short.*  
*4 Filter in ham based on sender.*  
*5 There is no spam folder.*  
*6 If a message is accepted, senders can be confident it will be read.*  
*7 If we can solve the FP problem perfectly, spam is solved as a side effect.*  
*8 End-users have to phone home using 587 AUTH and send mail as themselves.*  
*9 Expectation: strangers need to be generally reputable or else be introduced.*  
*10 Humans, particularly children, are much more sensitive to false negatives, so "default reject" will eventually become dominant.*

The two paradigms will coexist for quite some time.

Mail that passes the 21st century challenge may end up in a "first-class" folder, giving it attention priority from the end-user.

Mail that does not meet 21st century criteria will be subject to the gauntlet of 20th century antispam techniques, and runs a greater risk of being filed (by mistake) to the spamfolder.

The reversals below are much bigger than the reversals above. They'll probably have to wait for a next-next-generation architecture, but I'll record them here anyway.

*Mail follows a push paradigm. Messages are stored at the receiver.*

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*Mail follows a pull paradigm. Messages are stored at the sender. (IM2000)*

*Email is asynchronous.*

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*Messaging can be both asynchronous (email) and synchronous (IM).*