There are some estimated four-billion email users around the world, and unbeknownst to most, their incoming and outgoing messages are more than likely scanned by their email service provider. As most email services are privately owned and operated, their right to withhold certain business information, such as data analysis and algorithms, should be recognized, however, the right of consumer privacy should also be considered. Regardless of what user information is gathered or how it is used, email service providers should, in an ideally-ethical world, fully disclose their data collection practices to their users. If a privately-owned service wishes to withhold said information, they should at a minimum be required to inform their users that data collection is used on their service. The user, as always, maintains their right to use, or not use, that service.   
Email scans are generally performed by an automated program which “opens” and “reads” the message content. The gathered information is then parsed, processed, and used for a variety of purposes. Some of these purposes are beneficial, such as providing enhanced security against phishing and malware, and others are much more controversial, such as providing targeted advertisement. While the later practice may seem harmless, the accumulation of any personal user information can prove very valuable for a malicious attacker.   
Sometimes, the content of emails may not only be very personal and private, but may also be protected under law. The Family Educational Rights and Privacy Act (FERPA), signed into federal law in 1974, protects the privacy of student education records. Given a scenario in which a student’s academic transcript is sent to them via email, is it illegal for the email service provider to scan said email? I think a solution to this issue needs to be approached from a different angle. If an email service has clearly disclosed their data collection practices to the user, then the email service should not be held at any fault if it implicitly violates FERPA. The true responsibility resides upon the original sender, and the individual receiving the information. The sender should safe-guard the information, and the student should only provide a safe email address to which the institute may send the information. Many educational institutions provide an email service which is more secure and adherent to FERPA. (e.g. see Resource 5)

Resources:  
1. https://www.maketecheasier.com/which-email-providers-scanning-emails/  
2. https://www.templafy.com/blog/how-many-emails-are-sent-every-day-top-email-statistics-your-business-needs-to-know/  
3. https://www.lifewire.com/how-many-email-users-are-there-1171213  
4. https://www.colorado.edu/registrar/students/records/ferpa  
5. https://www.insidehighered.com/news/2014/05/01/google-ends-automatic-ad-keyword-scanning-university-email-accounts



