

“Know about E Affairs: Electronic Mail as Means of Electronic Communication”

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The recent trends in communication has provided a large boost for electronic transactions and communication. It has become a legitimate and valuable means of communication. From the day when computers were first linked together through some form of a network, computer users have been sending messages to each other over the wires. As the Internet grew in the 1990s, so did the legitimacy of the Internet and e-mail communication. Electronic communication is a whole new world that offers more opportunities to interact, share information, and support one another, as a result E-business, e-commerce, and e-government have emerged.

Now with the worldwide presence of the Internet, computer networks handle trillions of messages every day. Electronic mail, or *e-mail*, is one of the most commonly used services on computer networks and the Internet. E-mail has become one of the primary forms of communication for individuals everywhere. E mail is primarily used to send and receive text based messages such as

personal or business letters, orders, reports and statements. It has been observed that 70% of Internet traffic is towards email communication alone.

The major attraction of e-mail is its almost immediate delivery. Despite the distance between the sender and the receiver, an e-mail message can find its way anywhere in the world within minutes. E-mail has a way of drawing the global community closer together.

The first e-mail was sent in 1971 by Ray Tomlinson of ARPANET (Advanced Research Projects Agency Network). For several years, e-mail remained mostly private, used only by computer scientists, the military, and then colleges and universities. MCI Mail and CompuServe teamed up in 1989 to provide the first commercial electronic mail connection to the Internet through the Corporation for the National Research Initiative (CNRI) and Ohio State University. In 1991, the World Wide Web, developed by Tim Berners-Lee, was released by CERN, in Geneva, Switzerland.

America Online and Delphi started to connect their proprietary e-mail systems to the Internet in 1993. This was a significant step toward the adoption of e-mail by the general public. E-mail has become an increasingly common tool for communication over the past decade. In the beginning, it was viewed as a very informal means of communication. Typically, individuals used it for their personal needs rather than for business use. But as time grew, for businesses, email has

become a targeted channel of communication to potential customers about their products and services.

An e-mail message is simply an electronic note sent between computer users over the Internet or some other computer network. The message is usually prepared on a user's computer using an e-mail program or software. Otherwise, a user connects online to an Internet service provider, or *ISP*, to prepare their e-mail.

After the user has composed their message, they instruct the e-mail program to send the message to a specified recipient. The e-mail program then transfers the message to the ISP's computer which specifically handles e-mail. This computer is called an *e-mail server*, as it serves the requests of the e-mail users. When the e-mail server gets a message to be sent, it first identifies the destination of the message. Then as needed, the server transfers the message to another e-mail server which routes the message closer to its ultimate destination. Depending on the path followed, the message could be transferred through a few e-mail servers as it makes its way to its destination. The name of the server depending upon the nature of their affiliation contains a suffix after the dot. Some common examples are .com (commercial), .edu (educational), .gov (government), .mil (military), .org (noncommercial), .net (networking) and so on. Also, e-mail addresses from outside the United States of America often use a two letter suffix designating a

country . For e.g., .jp (Japan), .in (India), .ca (Canada), .uk (United Kingdom) and so on.

After its trek through the Internet, and any other networks, the message reaches the destination e-mail server. The message is kept on the server until the recipient asks to get their e-mail. Then from time to time, as the user runs their e-mail program, they ask for any incoming e-mail messages waiting for them. The e-mail program transfers or downloads the user's e-mail from the server to their own computer. Then the user can read their messages. Alternatively, a user might read their e-mail online with their ISP's services. Although it may seem like a long and drawn out process, it is actually very fast and the actual transmission route is immaterial to the users.

What are the basic functions of an e-mail? Reading, printing, saving, replying, writing, attaching, sending, keeping and removing. The typical components of an email are the text or body of the message, the recipient's address, the subject line and the sender's address. Some of the additional features are the Header Information, Signature at the bottom of the message containing brief information about the sender along with sometimes 'humorous or philosophical' quotes. Although there are various types of email services but the features are more or less common in each of them.

Advantages of e-mail:

- Can be retrieved and read at a time and place that is convenient and suitable;
- Can be sent to multiple locations and people with “Carbon copies” at the same time;
- Can mark “Blind carbon copies” to those recipients wishing to maintain their privacy without displaying their names;
- May be exchanged within a very short time;
- Can include the text of a previous e mail message as part of a reply to a message;
- Copy and paste text from other message or files;
- Automatic reply is possible without having to repeat the sender’s address again;
- Can forward the same message to others;
- Can be sent to large groups of people through distributed lists or groups, common are ‘Listservs’, “Newsgroups like Usenet”, “Discussion forums” etc. The membership boundary of the e-mail interactive space is as flexible as its members want it to be.
- Plain text and Multimedia files such as images, audio, video files can be sent as attachments;
- Digital signatures can be incorporated at the bottom of the message for official transactions;
- Can be sent and retrieved from any computer anywhere in the world;
- Messages can be kept postponed for any time before sending;

- Messages can be saved under 'folders' or "Directories' for easy retrieval;
- Reduced communication costs;
- Can provide an efficient, cheap and fast means of communication for business organizations;
- Yahoo, Rediff, Hotmail, India times etc.offer free email up to certain amount of defined space for sending/accessing mails.

Advanced technologies: In recent times, accessing/retrieval e-mails

- through Digital television, WAP or SMS mobile phones is possible;
- **Simple Mail Transport Protocol (SMTP)** as a protocol, provides the rules that enable email servers to locate each other across the Internet, and then transmit messages between them.;
- **Gmail** is a free, search-based webmail service that includes 1,000 megabytes (1 gigabyte) of storage;
- **POP** (Post Office Protocol) client programs have a "profile" feature that will allow you to POP e-mail from multiple accounts without having to change settings each time you retrieve e-mail.

Networking Islanding:

The proxy-based filtering approach removes the risk of delivery failure due to 'network islanding.' Network islanding is the term used when the destination server identifies a message as undeliverable and the message becomes

stranded between the originating server and its destination. Unlike the store-and-forward method, proxy-based filtering removes this risk by never accepting responsibility for the delivery of legitimate message traffic. If disaster strikes at the destination message server, the email will bounce back to the sender normally as mandated by the SMTP and delivered when the receiving email server is back online.

E-Mail Program Features

Many commercial and shareware e-mail programs are available in the marketplace. One popular e-mail program is Eudora, which is available commercially and as shareware. There are e-mail programs included with some web browsers, for instance Netscape, Microsoft Outlook Express etc.

Personalizing email marketing

If one is looking for a way to increase the response to your email marketing efforts, you should definitely consider personalization. Email marketing programs such as Broadcast [<http://www.html-publishers.com>] can automatically compose and send mass email messages with personalized fields and content, driven by a database.

E Mail Alerts:

Keep users informed about the latest news in their interested disciplines.

Several types of email marketing through e-mail alerts are available like:

1. Journal table of contents
2. Early Release articles alerts
3. Announcements
4. New issue articles

Disadvantages of E-mail:

- Receiving junk or SPAM mails
- Unwanted Multiple copies being received
- Lengthy download time for mails and attachments especially images
- Attachments format may be inappropriate

SPAM Mails:

Inevitably, e-mail users are subjected to the "spam" of unrequested messages designed to sell an idea or a product.. One of the very few good things about spam is that it reminds you of how e-mail is NOT a totally private space. To **block junk e-mail** many e-mail programs have built-in filters that helps to separate spam from the required e-mail. For example, MSN Hotmail® can stop receiving junk e-mail or delete junk e-mail before it arrives. One can also be able to enlist the help of your Internet Service Provider (ISP).

Vulnerability and Security

From a security standpoint, a postcard can be read by anyone on its way through the postal system before its delivery to the intended recipient. Whether the

postcard is read by a postal worker, someone receiving it by accident, or someone who has intercepted the mail, the act requires considerable effort and criminal intent. And, if someone were trying to read a *specific* postcard, they would have to search through millions or even billions of pieces of mail to find it.

An email message is very similar to the traditional, open-faced postcard. On its journey from sender to recipient, email traverses the public Internet and can be read by anyone who has the right technology and messaging knowledge – and who knows exactly what email messages they are seeking.

Spam, viruses, fraud and other security breaches are inundating e-mail system servers and user mailboxes. Email today is under siege and, as users clamor to harness its potential, they have only a fragile framework in place regulating its use, protecting their privacy and safeguarding their networks.

Conclusion:

Despite its insignificant disadvantages, E-mail has become a dire necessity in our lives. Access to e-mail is quickly becoming as easy and commonplace as the telephone. As the Internet continues to become a regular part of our lives, e-mail will continue to be a popular method of communication between computer users.

In the future, we can expect to see more and more advanced e-mail systems. These systems will improve over time to make transactions easier and faster. And, since most email systems are not secure, we can also expect to see improvements in Internet security -- a must if more sensitive information is going to be sent electronically. There has also been discussion of creating a network specifically for government agencies that will not be accessible to the general public. This would further increase the security of not only our e-mail, but of specific agencies' internal Web sites as well. These are just a few of the advances we can expect in the years to come.

To conclude with a quote:

“Today, however, most of the planet’s 6.1 billion inhabitants are within reach of email service... for the first time in history there are now more email subscribers worldwide than there are households”.

Thank You
