

# The Duality of Email as Corporate Information Channel

Dick Stenmark



*Dick Stenmark, who has a background in computer science, has been with Volvo for 13 years and is now responsible for the intranet search initiative at Volvo Information Technology. He is also a PhD student at the Viktoria Institute in Gothenburg, where his research focuses on IT support for information dissemination and knowledge sharing in large organisations. Webpage: [w3.informatik.gu.se/~dixi/](http://w3.informatik.gu.se/~dixi/)*

***Email has served us well as a communication tool but its usefulness has been overshadowed by the well-documented phenomenon of information overload. As a result, email has been much-maligned as a communication tool. The solution: by shifting "for your information"-type messages from email to intranet, and by taking advantage of new awareness services, email can reclaim its rightful place as a vital dialogue channel within the corporate communication function.***

Corporate communication has come a long way from the electronic messages sent between mainframes in the sixties. Now, given proprietary email systems of the eighties and with Internet and intranet having become broadly available, email has reached international standard. As such, it plays an important role as companies' number one information channel. However, a number of problems have come with it.

Unlike the telephone, the asynchronicity of email enabled

people to communicate with others who didn't necessarily have to be present at the other end of the line. The message would be waiting in the inbox for the recipient to continue the dialogue whenever convenient. However, research has shown that email usage has developed in a different direction from what was intended or desired. Three partly related problems can be identified:

- a growing amount of the traffic consists of non-personal, non time-critical messages;
- we cannot leave our mailboxes unattended for more than a day without having them filled with unread email demanding our attention; and
- the asynchronous benefit of the media is losing its value.

## **Communication deficiency**

The first problem concerns the explosive growth of for-your-information (FYI) emails. Several studies have shown that the amount of FYI email (i.e. non time-critical, non-personal, informative email sent to

several recipients simultaneously without expecting any of them to answer) increased dramatically during the nineties. Many organisations using email as a major information channel regularly post FYI email to all their members, which may be several hundreds or even thousands of people. Press releases, organisational bulletins, corporate newsletters are only a few examples of FYI email. Some of this information is important to some members of the organisations, but most people couldn't care less. To those people, FYI emails only hide other more urgent messages. In an article in *Communications of the ACM*, Robert Hall last year argued that the usefulness of email is seriously threatened by the amount of unwanted email that distracts the employees from more important tasks. This problem is sometimes referred to as "*communication deficiency*".

### **Information overload**

Jacob Palme described a second and related problem at a conference back in 1984, where he presented an article entitled "You have 134 unread mail! Do you want to read them now?" You are probably familiar with the fact that if we stay away a day or two from our mailboxes they are immediately flooded with unread email, which will take us much time and labour to sift through. While trying to catch up, we receive new email asking why we haven't read the previous ones. This phenomenon is called "*email information overload*". Though

the problem has been around for quite some time it has now become acute, partly due to the previous mentioned problem with FYI mail. Your problem when facing 134 unread emails is that you don't know where to start. There is no indication of which emails require your immediate attention and which can wait until later. You have to manually open, read, and, possibly, delete each and every message. I once interviewed a manager who admitted that he every now and then had to cancel meetings to attend his mailbox. The FYI emails do make the situation worse but even if we would only receive directed personal email the situation would hardly be manageable. This is why people desperately try to connect to their mailboxes even during weekends or when on holiday.

### **Increasing demand for fast information**

The third related problem is that the asynchronous benefit of the media is losing its value since people are handling email as they are handling the telephone. Instead of being a helpful tool, available at our convenience, email has started to demand our full attention. We are expected to answer emails as soon as they arrive - if we don't people get irritated. I receive phone calls from people requesting me to read their email, which I think illustrates how absurd the situation has become. Part of this problem can be traced back to the problems of communication deficiency and email information overload. We must waste time reading and

discarding non-important information instead of answering more time-critical messages, and the 134 unread emails in our inbox effectively hide the urgent call for help. However, part of the problem also stems from a growing need for faster responses. Information, and its refined cousin *knowledge*, constitutes a larger part of today's business. Communication used help us do the work - now communication *is* the work. The right information is needed fast or the opportunity will be gone.

### **The awareness aspect of email**

What can be done? Well, there is no single best solution or no channel appropriate to handle all kind of information. My prescription is, therefore, first to thoroughly analyse and categorise the information and *then* to assign each category to a suitable media.

If we start with the first problem, one cannot simply cut the FYI email since some of the information is important to some of the receivers. Even if the information is not needed at the very moment it arrives, FYI email provides a certain level of awareness that is both wanted and needed. Aside from official organisation awareness, email can also provide awareness on a peer-to-peer level. Colleagues informally share with each other things they have heard or come across. Such electronic awareness is even more important in large and disperse organisations, where members cannot meet in person. *Correctly* used, email is a great

facilitator of active knowledge sharing and far superior to synchronous media such as telephones or more restricted channels such as corporate newsletters. The keyword here, however, is "correctly".

The *information sharing problem*, as defined by Thomas Malone and his colleagues back in 1987, is about disseminating information so it reaches people to whom it is useful without distracting and disturbing people to whom it is not. Malone's group conducted research on sophisticated filters that would screen out unwanted email based on a profile of interests. Though being interesting, such an approach is somewhat problematic since it requires the users to create and maintain profiles, which would require extra manual work. It has also been argued that no system can both remove all irrelevant information and at the same time allow all important messages to pass, especially so since some information is irrelevant today but may be useful tomorrow.

Malone's team argued that that a good filtering system does not just reduce the junk mail, but also actually increases the flow of *useful* information that a user otherwise would not have received. This would be achieved since the content providers are likely to send out more information if they do not have to worry about cluttering the uninterested receivers' mailboxes. However, for such a system to be used, the users must feel confident that the filter does what it is suppose to do, and such a trust may be

troublesome to achieve if the users have little chance of controlling what has been screened.

### **Selecting the right media**

An alternative to hiding and filtering messages would be to move some load off the email systems to more suitable channel. Email was intended for dialogue and not just one-way communication. Let's use it for its original purpose and move sheer information dissemination to another media - for example the corporate intranet. Such a shift would address the problem of email information overload even if it might not be sufficient to solve it. It would also off-load the email systems since there would be no need to distribute and save hundreds of identical copies of news bulletins. Instead, a single news flash on the dedicated web page is all that is needed. Replacing the original web page rather than resubmitting a new bunch of emails takes care of updating. This would save both band-width and disk space.

However, there are also problems with a shift from email to intranets. Email is *push-oriented*, i.e. the information is *delivered* to the users, while intranet is *pull-oriented*, i.e. it requires the users to actively search for the information. Such a shift requires the users to change their attitudes, which is often far more difficult and takes much longer time than simply replacing technology. Besides, searching the web, even if it's just an intranet, is in itself a non-trivial task. How should the

organisational members be able to handle that? Chances are that much awareness will be lost since users don't realise that they are expected to search for certain things. To make the intranet a realistic alternative, both new policies and additional tools must be engaged to help the users deal with the new situation.

Helping users to find, organise, and prioritise the information on the web requires a good information structure supported by an intuitive and consistent design. The organisation must help and encourage the contributors to comply to the policy by providing them with easy-to-use stylesheets and templates. Technical solutions such as advanced search tools, web monitoring applications, and software agents should also be considered and integrated with each other and with the policy. However, the driving force behind the web explosion is the creativity that chaos allows, whereby no structure, no design guidelines, or no consistency is required. To impel restrictions would limit creativity and make spontaneous knowledge sharing more difficult. It is important to understand and appreciate this delicate balance between order and chaos. Over-emphasising either side will produce a non-optimal situation.

If properly managed, the intranet is a very powerful and yet non-intrusive vehicle for information and knowledge sharing, and, by using it for one-way communication, email could return to being the communicative tool that enables

organisational members to engage in mutually beneficial dialogue.

### **Real-time communication**

To address the third problem, the lost asynchronicity, we must ask ourselves what the reasons for this behaviour are. I believe the answer is found when looking at another phenomena that recently has entered the arena - the real-time awareness and communication devices. With the advent of the likes of ICQ and Yahoo messenger, a hybrid is introduced to meet the situations where neither telephone nor email is adequate. I may need an answer to a question right *now*, not in two minutes. Asking colleagues across the hall or in the adjacent cubicles is always an option, but they may be absent - or occupied with a visitor, or busy answering a phone call - and thus unable to assist me. Another option is to call a colleague on the phone, but that approach has the same shortcomings as the previous, *plus* the additional problem of me not being able to see whether or not the colleague is present. I could also email a whole bunch of people. This may seem appealing since I reach several people simultaneously which increases my chances of getting a quick reply. However, as soon as someone returns with the answer the remaining email becomes junk mail. Even if I state that "if you haven't answered this within two minutes you may delete it" it still requires the recipients' attention.

---

**"Information, and its refined cousin knowledge, constitutes a larger part of today's business. The right information is needed fast or the opportunity will be gone"**

---

Besides, no matter how many I send, there is still no guarantee that anyone is available to answer.

Here is where these new awareness and communication applications come in. I think it is important to stress both these features: I am able to see who's on at this very moment, *and* I can engage them in a dialogue. Being an awareness device only would not have made them so successful. This way, they have some interesting properties that really qualify them as hybrids. They operate like a telephone in that they work in synchronous mode: the dialogue takes place here and now in real time, with the added benefit of being able to tell who's on and who's not. In another aspect they are more like a persistent media such as email since the dialogue is written rather than spoken, and may be saved for later reference.

### **Concluding summary**

To summarise, email has its virtues and it has, indeed, earned its role as a major channel for corporate information - both official and unofficial. However, the technology on which it rests roots back more than 20 years and it would be unwise to think that the situation is the same today as it was in the seventies. Data has been replaced by

information, which, again, is being replaced by knowledge as the focal point of business. As the business changes, the information need changes with it and new ways of communicating must be considered - not to replace but to complement, the established channels.

Intelligent use of intranets could facilitate an increased flow of both information and knowledge since it would satisfy the informative needs of both corporate officials and individual employees without overloading the organisational members. However, proper tools and carefully architected policies must help and guide the users.

Finally, the popularity of new tools such as ICQ and Yahoo Messenger indicates that there is a need and a market for these kinds of awareness services. I believe it would be unwise of organisations not to take advantage of new technology and include it in their repertoire of internal communication channels.

*The opinions presented in this article are those of the author and are not necessarily shared by his employer.*