



Electronic Communication

During September 2009, a delightful experiment was conducted to demonstrate how slow South Africa's data transfer services were. A carrier pigeon called Winston was able to transfer 4 GB of data across the 80 km between Howick and Hillcrest, Durban in just over two hours, whereas Telkom's ADSL service was able to complete only 4% of the transfer in that time. Since then, fibre-optic connections to the internet have improved the situation considerably, at least in some wealthier areas of the country. The bigger limitation is now on the human end, not just the technical capacity.

I remember, as a child in the 1960s and 1970s, that my father wrote letters at least once a week to his mother in England. On Sundays, around lunchtime, we would drive to the mail sorting office and deliver the latest air-mail letter for despatch on the Sunday evening overseas flight to London. A reply would arrive a few days later; this turnaround time allowing for quite a reasonable conversation to take place.

When I started work, in the mid 1980s, most formal communication took place by hand-written or typed letters, delivered to office in-boxes by messengers, and a response time of a few weeks was expected. People with desk-bound jobs could also be reached by fixed-line telephones for more immediate interaction. Telex machines were still used, albeit only occasionally, but soon thereafter faded away. My first business cards contained a telex address, before the widespread advent of more modern technologies. Fax machines opened up the possibility of faster international communication, but it took a while for this to become widespread, as fax technology was often treated as a centralized resource that was tightly controlled. In our case, a manager had to sign off all faxes before they were sent.

Yet, even with paper-based communication conducted at a fairly sedate pace, it was possible to fall behind in one's work. I had a colleague whose in-tray became stacked perilously high. One day, he simply moved the entire contents of his in-tray to his out-tray (which must have overwhelmed the poor messenger). The remarkable thing was that most of it never came back to him.

E-mail became mainstream in the 1990s (although it was first used in a very limited form in 1971) and this introduced some wonderful efficiencies to communication. It became possible to write to someone on the other side of the world and to send documents or photographs (with no loss in quality), and to get a reply by the next day. Unsurprisingly, by 1997, e-mail volume overtook that of postal mail ('snail mail'). E-mail remains the most important form of business communication to this day. I enjoy this asynchronous mode of communication that allows one to write at a time convenient to you, and for the recipient to be able to respond at a time convenient to them. E-mail has become almost universal, with 2.6 billion people being reachable via e-mail. Recent estimates indicate that over 200 billion e-mail messages are sent and received daily. No wonder that most of us experience this as a flood of messages.

But there is a downside to the convenience of e-mail. Because it is so easy to use, e-mail has proliferated to the extent that it has become almost unmanageable for many people. Spam and other unwanted mail accounts for at least as much traffic as meaningful mail. People are often automatically copied in on correspondence that they are only peripherally involved in, but presumably are expected to read. People have got used to expecting an almost immediate response to messages, and this results in the 'tyranny of the urgent over the important'. A great deal of stress is caused by this.

If one is away travelling, or even in extended meetings, the backlog of correspondence can seem unmanageable. It is sometimes necessary to declare an 'e-mail amnesty' where (like my former colleague) all mail in the overflowing in-box is simply removed. Some people are brave enough to simply delete it all, in the expectation that anything really important will be asked for again. When I have had to resort to this sort of tactic, I have simply moved the messages into a '2016' folder, for example, where they could be found again if necessary.

It is certainly true that the past few decades have brought about vast changes. We have seen, or are busy seeing, the obsolescence of the telex, fax, landline phone calls, voice messages, and postal services.

The advent of social media and instant messaging has placed even more pressure on people. New diagnosable disorders have come into being around the worry that can arise from being 'disconnected' even for short periods, and from the feelings of inadequacy, jealousy, anxiety, and depression that often result from the daily unhealthy self-comparisons people make to others online.

Facebook (publicly launched in 2006) is by far the largest of the social networks, having 1.59 billion active users who use the system at least once a month. In the USA, for example, where 85% of adults use the internet, 72% of

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internet users use Facebook, compared to the 23% who use Twitter (which has 320 million users worldwide). Initially, Facebook was used purely for social and recreational purposes, but it has now become essential to business too. A social media report by Sensis in 2015 reported that nearly half of all Australians access one or more social networking sites every day. The report also found that Australians now spend an average of 8.5 hours per week on Facebook alone, with 24% checking social media more than five times a day. Seven out of ten people used a smartphone to access their accounts.

The rise of smartphones has led to people being reachable for communication throughout their waking hours. Accompanying this, there has been a massive shift from voice communication to text communication, with instant messaging growing enormously. The short message service (SMS) has largely been superseded by instant messaging systems, as they offer almost free communication and are much more flexible to use. The number of SMS messages on the Vodacom network in South Africa peaked in 2012, and since then has been declining by about 14% year-on-year. The number of SMS messages sent annually per subscriber has declined from 245 in 2011 to 110 in 2016.

The most globally popular instant messaging service, WhatsApp, was launched in 2009. In 2013, WhatsApp became the most popular mobile instant messenger in South Africa. WhatsApp reached 1 billion users in February 2016, with 70% of those using the service daily. WhatsApp is a cross-platform instant messaging service, available on most smartphones and computers. This system transmits more than 34 billion messages per day (with a peak throughput of 64 billion messages on a single day). The system is also used to share about 700 million photographs per day. We are told that the average user spends 195 minutes per week on WhatsApp. The average number of messages received by WhatsApp users is 2200 per month, with 1200 being sent per month. WhatsApp was bought by Facebook in 2014. Despite this, Facebook has its own Messenger instant messaging system as well, and this has 900 million users. Snapchat (which supposedly does not store messages or photographs) is increasingly being used by younger people, with about 200 million daily active users.

LinkedIn (launched in 2003) is the system of choice for professional networking, allowing people to stay in touch with their network of business contacts. LinkedIn has 433 million users, with about 25% of those (that is, over 100 million) using it at least once a month. Of all the social networks, this one seems to me to be the least demanding of one's time (unless one is actively in the job market). As your circumstances change, a simple update can be done. Otherwise, you can simply wait to receive occasional updates about the career movements of your friends and colleagues.

Instagram is widely used for sharing photographs. It has 400 million active (at least monthly) users.

Skype (launched in 2003) is widely used for video and voice chatting. It relies on a reasonably good internet connection to work well, requiring about 30 MB per minute of video (*i.e.*, about 4 Mbps). It has 300 million monthly active users, with 4.9 million of those being active daily. Skype was bought by Microsoft in 2011. By 2014, Skype had taken over 40% of the market share of international calls. More recently, services such as WhatsApp, WeChat, Telegram, and others, also let one make Skype-like voice and video calls to other users, using VOIP (voice-over-internet-protocol), on top of their picture messaging and group chat capabilities.

My personal pattern is to receive over 120 e-mail messages per day, about 30 WhatsApp messages, about 2 SMS messages (usually banking-related), about 4 phone calls, and about 0.2 printed letters (usually bills). In addition to this, there is a seemingly endless stream of items on my Facebook news feed (literally uncountable items which I don't ever get to see), and I hardly ever get to see what is sent to my Instagram (which I check occasionally) or Twitter accounts.

On top of this, there is the vast amount of news that one is tempted to try to keep up with. Also, the vast personal library that is the internet makes huge quantities of information available just waiting to be explored. Collectively, we carry out 3.5 billion Google searches per day.

Our challenge seems to be how we manage today's communication media, instead of letting it control us. In addition to our e-mail service and website, SA IMM currently has a presence on Facebook, LinkedIn, and Twitter. I would be interested to hear which of these communication channels you find most effective.

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