**Unpublished Research Note**

**30 Years On – What has changed in office communication?**

by

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**Abstract**

In the rich information society that we live in, individuals deal with large numbers of emails, tweets, pictures and videos on a daily basis as a matter of course. Information overload is commonplace even while new technologies continue to emerge and place more demands on the individual. Yet this is hugely different from the situation before the arrival of the PC in the late 1970s. As time goes by, it becomes harder to gain a perspective on the enormous changes that have occurred – not least because of a lack of data of how it was back then. This research note unearths some previously unpublished data about an individual’s communication patterns in 1981 and compares it to the same individual’s communications exactly 30 years later. Because the data was collected in the same way and for the same period at both points, it is possible to make some direct comparisons of communications types, loads and work style in the two different eras. The data and work experiences reported for this one individual provide an indication of the huge changes that have occurred in written communications. However, they also raise questions as to whether employees can cope with the new technology deluge and whether they are being given adequate support to do so.

**Keywords:** Communication styles; email communication; volume of information; information management

**Introduction**

In the rich information society that we live in, nearly everything can be tallied and recorded because of the electronic nature of communication. Many of the communication statistics presented can be difficult to comprehend, for example, in 2011 every sixty seconds in the world over 25 hours of video were uploaded to YouTube, 168 million emails were sent, over 98,000 twitters were tweeted, and over 6,000 pictures were uploaded to flickr (Go-Gulf, 2011). Within a few hours, there is more information produced than a human can process in their lifetime. Just within an office environment, an individual can suffer from information overload even though we now know the contributing factors (Jackson & Farzaneh, 2012). To provide a perspective on what has happened, this Research Note compares the written communication records of one employee from an eight week period some 30 years ago in 1981, with the equivalent period in 2011. The data provides a feel for the degree of change that has occurred, as well as illustrating some of the extreme volumes of email that some professional workers now have to contend with. Since the rate of change is by no means abating at present, this Research Note also outlines some questions raised by the experiences described.

**Method**

The data collection and viewpoint of the findings presented are based on one employee, Paul Wilson. In 1981, he used a log sheet to record the written communications he received over an eight week period during October and November of that year. Thirty years later, in October and November 2011, he used a similar log sheet to record the same details of his hard copy communications, and he stored all emails sent and received during that period in folders. The data collected over the two periods were put into the twenty-two subject categories listed in Table 1. This was done by:

a) grouping each of the communications recorded in 1981 into similar topic areas and then naming each area as a subject category,

b) placing each of the 1,943 communications recorded in the 2011 period into one or other of these categories, and, where no suitable category existed, establishing a new category, and

c) refining and integrating the new categories with the 1981 set of communications. Following this analysis, written and verbal conversations were held with Wilson to establish his experiences of the difference between working in an office in 1981 and in 2011.

**Table 1 – Subject Categories and their relative frequencies in the comparison periods**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1981  No of Items Recvd | 2011  No of Items Recvd | 1981 % of Total Recvd | 2011 % of Total Recvd |
| Abstracts | 5 | 24 | 6.3% | 1.2% |
| Adverts | 1 | 112 | 1.3% | 5.8% |
| Company Friends | None | 12 | 0.0% | 0.6% |
| Company Information | 5 | 74 | 6.3% | 3.8% |
| Computer Systems & Support | None | 50 | 0.0% | 2.6% |
| Department | 1 | 62 | 1.3% | 3.2% |
| Journals | 3 | 1 | 3.8% | 0.1% |
| Family & Friends | None | 68 | 0.0% | 3.5% |
| Mainstream Work | 18 | 1030 | 22.8% | 53.0% |
| Meeting Invites & Room Bookings | None | 155 | 0.0% | 8.0% |
| News & Knowledge | 19 | 80 | 24.1% | 4.1% |
| Pension, Salary & Benefits | 1 | 33 | 1.3% | 1.7% |
| Personal Transactions | None | 9 | 0.0% | 0.5% |
| Professional Bodies | 2 | 13 | 2.5% | 0.7% |
| Social Club | 20 | None | 25.3% | 0.0% |
| Social Networks | None | 17 | 0.0% | 0.9% |
| Sporting Activities | None | 16 | 0.0% | 0.8% |
| Training | None | 2 | 0.0% | 0.1% |
| Travel & Expenses | 1 | 120 | 1.3% | 6.2% |
| Union | 3 | None | 3.8% | 0.0% |
| Parish Council | None | 63 | 0.0% | 3.2% |
| Wrong Address | None | 2 | 0.0% | 0.1% |
| **Totals** | **79** | **1943** | **100%** | **100%** |

**Context**

In 1981, Wilson worked in the UK’s National Computing Centre, an organisation of about two hundred and fifty staff based entirely in the UK and aimed at supporting the UK’s use of computers. He was part of the newly established Office Automation (OA) Team which sought to establish best computing practice and information, and to feed that knowledge back to UK industry. Office Systems were very new in 1981. The IBM PC had just emerged but, at that point, was running a command line operating system (DOS). Office software was in its infancy. Word Processing was performed by submitting hand written text to specialist departments (WP Pools) which used specialist hardware and software. Email was unknown to most people, and written communication, including the dissemination of marketing and advertising material, was largely achieved by hardcopy overland mail augmented by the long-established Telex service (enhanced by a newer Teletex system) and an increasingly popular Fax capability. Inside organisations, the internal mail was key, with typed internal memos being distributed in internal envelopes by people working for the Mail Room.

Wilson’s work involved taking an OA topic, exploring the relevant business and academic literature, visiting leading-edge users and disseminating the findings by writing books, briefing notes and articles, and giving talks and running workshops. He had a large amount of external communication with a diverse range of user, supplier and academic organisations both in the UK and elsewhere in the world. There was also a fair amount of internal communication with colleagues and management, and also with all parts of NCC in his voluntary role as Chairman of the Sports & Social Club. These activities are all reflected in the comparison of the 1981 and 2011 survey data shown in Table 1. A Local Area Network with integrated email system was being implemented by the OA group at the time of the survey to provide the team with some hands-on experience of the technology, however, email usage at that point was only just starting and was of a negligible quantity.

At the time of the follow-up survey, 30 years later in 2011, Wilson was working as a Bid Manager in the European operation of a global computer services and outsourcing organisation with some 94,000 employees. His role was to assemble and manage specialists in teams of between 10 and 90 people to pursue outsourcing deals valued between $100M and $2.5B. Communications were primarily within the bid team, with the organisation’s management, and with the potential client. Submissions in bidding engagements were typically complex, detailed and very onerous. They required a huge amount of work in very aggressive timescales. To perform at this work rate required constant communication with the team and with the organisation’s management. Consequently email volumes were very high and hardcopy was hardly used as a communication mechanism. The volume of physical mail handled by the mail room was many magnitudes lower than thirty years earlier. Word Processing Pools had long since disappeared and individuals at all but the most senior levels in the organisation, typed their own material. Telex and Teletex had died completely, and Fax, although now a fully mature service, was not heavily used.

**The Management of Increased Communication Volumes**

In 1981, it was a major challenge to manage paper in the office, whereas in 2011, although paper was still a bit of a problem, the major challenge was to manage the email. Table 2 shows the numbers of written communications received by Wilson over the eight weeks in 1981 and the equivalent eight weeks in 2011. The huge increase in volumes over the two periods can only be partly attributed to the change in the role he was performing. The greater flexibility of email has in itself changed communication patterns and increased communication volumes. Table 2 also shows the number of emails sent by Wilson during the 2011 period since the creation of emails is probably even more demanding than reading them and comprises a significant part of the overall written communications workload.

**Table 2 – Number of written communications in each week of the comparison period**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Wk 1** | **Wk 2** | **Wk 3** | **Wk 4** | **Wk 5** | **Wk 6** | **Wk 7** | **Wk 8** |
| ***Communications Received*** |  |  |  |  |  |  |  |  |
| 1981 Total received (all hardcopy) | 9 | 13 | 10 | 10 | 11 | 10 | 8 | 8 |
| 2011 Total received (hardcopy and email) | 248 | 276 | 291 | 245 | 339 | 193 | 210 | 141 |
| 2011 Emails received | 246 | 275 | 290 | 243 | 339 | 191 | 207 | 139 |
| 2011 Hardcopy received | 2 | 1 | 1 | 2 | 0 | 2 | 3 | 2 |
| 1981 Hardcopy received on Saturday or Sunday | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2011 Emails received on Saturday or Sunday | 8 | 18 | 8 | 15 | 29 | 16 | 10 | 14 |
| ***Communications Sent*** |  |  |  |  |  |  |  |  |
| 1981 Total sent (all hardcopy) | *Data not collected (but none was sent at weekends)* | | | | | | | |
| 2011 Emails sent | 98 | 99 | 85 | 79 | 128 | 33 | 71 | 42 |
| 2011 Hardcopy sent | *Data not collected (but likely to have been very few, if any)* | | | | | | | |
| 2011 Emails sent on Saturday or Sunday | 1 | 12 | 4 | 4 | 12 | 1 | 2 | 1 |

Wilson reports that to read and deal with his email load demanded considerable dedication and determination. Many could be glanced at, but a substantial number of others required detailed reading, perhaps the opening up of attachments, and a reply – and this had to be done while handling face-to-face interruptions and phone calls. To cope with the load, he started work earlier, finished later, and limited the time spent on lunch and other breaks.

Indeed, Wilson has witnessed several occasions when a very high, peaking, workload resulted in individuals losing control of their emails, and ceased to look at email altogether for a period of several days or more, akin to declaring Email Bankruptcy (Smith and Strong, 2008).

**The Need to Manage Digital Records as well as Paper**

Increased volumes and the increased flexibility in communication, has meant employees have had to increase their information management capabilities in areas such as records management, information retrieval, and security awareness (Steventon et al., 2012). Wilson says that, in 1981, office workers really just needed paper and a pen for written communications, whereas in 2011 employees required computing equipment (laptop, desktop or handheld) close to them at all times in order to perform their work and to be contactable at all times. Furthermore, it had become essential to be skilled in the computing facilities for storing and retrieving documents and emails in order to be able to manage and use the very high volumes of documents and emails being produced and received.

**Work-Life Balance Getting Out-of-Kilter**

Turn-around time expectations for communication had reduced from several days in 1981 to a matter of hours in 2011. In 1981 there was considerable inter-continental communication, but it was largely by letter and one-to-one phone calls, and between distinct groups of people with their own specific agendas. By 2011, however, business had gone global and was conducted by interlinked teams working together across continents. Worldwide conference calls and video calls demanded that many participants had to join communications at unsocial hours – and these were a regular occurrence. Email was the glue bonding the participants together. This has had a dramatic effect on work-life balance as employees no longer had clear boundaries between what was work time and what was not (Waller and Ragsdell, 2012). The data from this study exemplifies this, as in 1981 there were no communications received or sent over the weekend whereas, as indicated in Table 2, in the eight weeks in 2011, 118 emails were received and 37 emails sent, on Saturdays or Sundays. The main reason for no written communications occurring over the weekend in 1981, as confirmed in conversations with Paul Wilson, was simply that he did not attend his workplace at weekends which is where all written communications were received or sent from. In 2011, however, work was done over the weekend at home on laptops and handheld devices.

**The Blurring of Work and Non-Work Communications**

In 1981 the phone was a fixed object located on the office desk, whereas by 2011 it had become mobile and multi-purpose such that there was a much more immediate and tighter coupling between voice and written communications. In Wilson’s experience, many of the major uses for ‘snail’ mail in 1981, for example, magazines, newsletters and marketing materials, had been moved in part or entirely into email or internet web sites by 2011. However, the accessibility of the technology has simply multiplied the amount of such material that is sent to individuals thereby demanding a commensurate increase in the amount of time required to deal with each day’s inflow. Web sites appear to make it easier to get information, however more time seems to be spent looking for more information than in 1981. In addition, a number of new uses for email have emerged, as indicated in Table 1 by those subject categories appearing in the 2011 data but not in the 1981 data. Although many of these new uses are not directly work-related, two factors combine to result in work communication systems being used for these additional uses:

a) the ease of access of email, and

b) significantly greater workloads making it inefficient, difficult and sometimes impractical to run two separate email addresses.

**Questions Raised by these Experiences**

This Research Note has illustrated the huge changes in written communications in the last thirty years. However, Wilson does not recall having been giving any guidance in his career as to how to cope with the technology – only training on how to use some of the new systems. This raises a number of questions:

* Are organisations aware of the pressures imposed on their employees by the communication systems that they use?
* Are organisations helping their employees to gain the skills and knowledge to cope with the information and communication systems?
* Are organisations managing the deluge of new technology effectively?

Perhaps a pre-requisite to addressing these points is knowledge of what is going on. One way to achieve this might be for organisations to conduct a regular assessment of the detailed experiences of a few of their employees, comparing the results from year to year, and taking pro-active steps to benefit their business and their employees. Academic research might also find such long term studies valuable, and enable them to contribute to the development of information and communication strategies.

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