Teleworking

Warren Singer discusses the trend towards flexible working and tools and applications that can be used when teleworking.

Introduction

Social and demographic trends, together with technological advances, are changing organisation attitudes towards flexible working, where staff combine time in the office with time working from home. This article describes some of the tools and applications available for remote working (teleworking) and discusses whether the trend towards teleworking is likely to continue.

Technical communication and teleworking

Technical communication is a field that lends itself to remote working. While a certain amount of on-site time may be essential to set up a project, gain access to systems and meet the team, the rest of the time can be spent working off-site.

Modern technology provides us with tools to create a virtual working environment.

Over the past decade I have had the opportunity to benefit from a significant amount of teleworking. In previous projects I have worked with development teams spread across the UK, Europe and US. Some of this work has required on-site meetings, but much of my time was spent working off-site or from home, and most of it could have been done off-site. It has become increasingly common for organisations to be prepared to offer their technical communicators the flexibility to work a mixture of both on-site and from home.

The technologies and opportunities for remote working have changed significantly since Iain Wright (retired ISTC Council member) wrote his original article on 'Remote Working' for Communicator in 1994, over twenty years ago.

The rise of the virtual workplace

Is it possible to create a virtual working environment? Modern technology provides us with the tools to enable this to happen. Some of these tools are described below.

The Virtual Private Network (VPN)

A secure Virtual Private Network (VPN) enables employees working from remote locations to access their organisation's networks and systems. The VPN uses encryption technology to establish a secure link, over the public internet, between your computer and the organisation's internal network.

Once the VPN is established, employees are typically able to access the same applications and services that are available when physically on-site, such as internal WIKI's, intranets and other systems.

In the past, slow internet connections made VPN access troublesome and often cumbersome. However, with modern fast-speed broadband, working from home is usually a seamless and painless experience.

Smart phones and tablets

The rise of modern smart phones (for example, BlackBerry and iPhone) and tablets (for example, iPad, Kindle) enable employees to access their email and other corporate services while at home or on the move.

Web-based technologies and cloud computing

Cloud-based services such as Amazon Web Services provide virtual computing and data storage, so that core organisation systems and applications no longer need to reside in physical locations on an organisation's premises or on your machine, but can be farmed out to secure, remote data centres and managed remotely.

Web-based services, from desktop publishing to graphic design, enable you to access applications that no longer need to be installed and run from your computer.

If the systems and technology you are using no longer have a physical presence which you can see and touch, there is no need to be on-site to manage or access them.

Nowadays, organisation systems and applications, such as webmail, SharePoint and Confluence sites can often be accessed from anywhere in the world.

Videoconferencing

Video-conferencing over the internet has come a long way since the days of broken video, plagued by image pixilation and poor voice quality. These days a multi-party conference call over Skype from the US to the UK, or the UK to Germany offers good quality voice and video, without lags and without any cost.

There are many applications and services available which offer videoconferencing and collaboration facilities. Examples include Google hangout, Skype, NetMeeting and GoToMeeting.
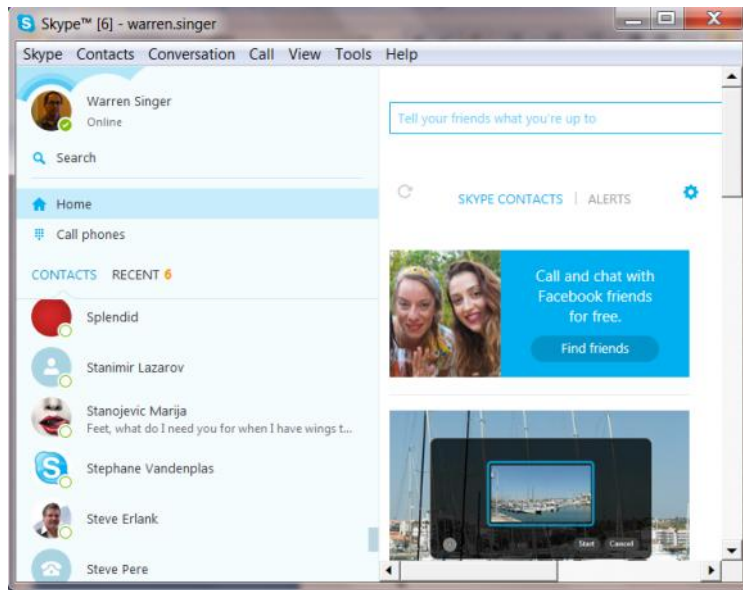
Figure 1: Skype window

Google Hangout is an application that enables multiple participants to take part in virtual online meeting rooms, with the ability to join videoconference meetings and share files and messages.

Both Skype and Google Hangout enable screen sharing, so your work can be shared online with others during the meeting.
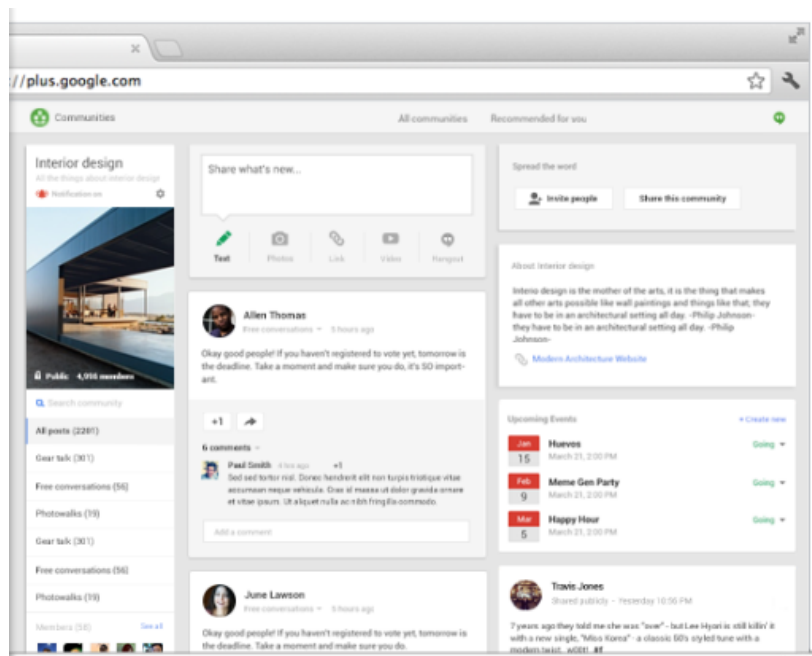

Figure 2: Google Hangout

Immersive Videoconferencing

The old days of awkward TV videoconferencing facilities, irksome to set up, and which required you to sit stiffly and face a screen, is slowly becoming a feature of the past.

Companies such as TATA Communications have built high-end virtual conferencing facilities, which provide a fully immersive experience, designed to mimic the experience of being on-site in the office. TATA's immersive conferencing suites are installed in the premises of large corporations across the globe and can be accessed by employees working remotely.

Email

Email is one of those taken for granted tools that is essential to modern office communication. The rise of the smart phone enables work email to be easily accessed and responded to while on the move, at home or in a meeting.

When not using a smart phone, organisation email can be accessed from an organisation laptop or a web page.

Email provides an excellent tool for recording communication. Email threads can be stored and forwarded to others in the team. It is an essential tool for technical communicators working remotely, enabling meetings to be set up, agreed action items to be recorded and disseminated, information to be exchanged, and draft documents sent for review.

Instant Messaging

Instant Messaging (IM) provides a means for informal and spontaneous communication, aimed to facilitate 'chat-like' behaviour between colleagues.

Applications such as Microsoft Office Communicator and Skype provide IM functionality, enabling colleagues to chat and exchange messages as easily as if they were sitting next to each other.

 IM is not just a tool for remote working—it can be used both in and out of the office to communicate with colleagues.

File sharing applications

Many applications and services are now available to enable you to collaborate and share work across remote teams. For example:

- **Digital asset management systems** – enable file sharing and working on a single version of a document, which is centrally stored (for example, Widen, Third Light, Celum).
- **Wiki applications** – provide an information repository where different team members can contribute files and information (for example, SharePoint and Confluence)

- **Online code repositories/version control systems**– provide a centralised, version-controlled repository of files, which can be uploaded from your desktop. (for example, GitHub, CVS)
- **File sharing and cloud-based applications** – enable files to be uploaded to a secure location and shared with multiple users. (for example, Google Drive and Dropbox)

Project tracking applications

When team members are dispersed and work remotely, one concern for project and team managers is how to efficiently monitor the progress of the team.

Online task tracking systems, such as JIRA, enable time spent on a project to be logged, new tasks raised and progress updated. This enables project managers to keep track of time spent on projects and the progress of remote workers.

Where an online task tracking system is unavailable, a simple spreadsheet may be sufficient.

What do these applications provide?

While communication technology has come a long way, these applications do not totally replace the need for and benefits of direct face-to-face communication. However, they do enable functional and effective communication from remote locations, at the level required for a technical communicator.

Building a virtual team

What's the best way to build a virtual team?

One way in which this can be effectively done is to hold daily stand-up video-conferencing team meetings to keep the team informed of what others are doing.

Collaboration tools such as Google Hangout enable issues to be shared and communicated, and questions raised immediately.

Dealing with time lag issues for teams spread across different time zones can take some juggling. By staggering working hours, a mutual common time can often be found — or colleagues can arrange to take a conference call from home in the early morning or evening.

Is teleworking the way of the future?

The current trend towards teleworking is being reinforced by a perfect storm of factors that are reshaping the way in which we work and engage with our colleagues. Some of these factors are described below.

Globalisation

In an increasingly global community, technical communicators often enter working environments in which offices and staff are dispersed across remote locations. Remote working tools provide a cost-effective means of communicating with dispersed teams.

At the same time, travel across continents and national boundaries has become cheap and easy, so more staff have the opportunity to travel between offices and need to be able to connect to the office from remote locations.

However, with increased mobility comes increased commuter numbers. Countries such as the UK are facing strain on their public transport systems and roads, due to the huge volume of commuters. As costs and time of commuting spiral, this in turn places increased pressure on organisations to allow their staff to work from home more frequently.

Changing lifestyles

The traditional family model has changed. The nuclear family, with the husband as the main bread-winner and wife staying at home, is now viewed as an anachronism—a concept of family life which increasingly does not reflect the reality of a modern family, in which work, travel and family must be balanced by both partners.

The breakdown of the traditional family model is driven not only by changing social expectations of women's role in the workplace, but also by the cost of living, which makes it necessary for both parents to work to support their families. These factors place an added pressure for flexible working, to accommodate changing lifestyles and the balance between work and family life.

Skilled labour shortage

There is a shortage of skilled workers across the globe, in both rapidly advancing and industrialised economies, which puts pressure on organisations to find suitable candidates. Employees now have much greater power in requesting flexible working (if an organisation is not prepared to offer flexi-working, they may not be able to recruit the staff they want).

Rising property costs

Rising property costs means that available office space is at a premium, to the point where in larger cities like London it becomes cheaper to hire someone who is able to

work remotely than pay the premium of increasing office space or finding larger premises.

Advances in technology

Technological advances are making it increasingly easier to work from remote locations. The rise of smart phone and tablet devices, 3G and 4G wireless, fast broadband, high quality voice over IP (internet protocol), and in the cloud services makes the technology available for workers to have a similar experience remotely as they enjoy in the office.

When you combine all these factors together, the picture which emerges is that of a tsunami of social, demographic and technological change that is reshaping the way in which we work.

Conclusion

The days of a boss looking over your shoulder to "check" your work belong to the old model of the industrialised factory work force, which is increasingly looking out-dated and old-fashioned. This production-line mentality does not lead to better productivity and efficiency—on the contrary; it is increasingly out of synch with modern social and demographic trends.

Teleworking is now firmly embedded in our culture and this trend towards flexi-working is likely to continue, driven by the factors described in this article.

However, teleworking on its own is not the most effective way of working – too much remote working can be isolating and alienating. Teams are best established when they can also meet face-to-face regularly. New employees need more support and training, not all of which can be done from remote.

In conclusion, remote working is best when used in combination with on-site time, when you can forge friendships, establish working relationships and get to know the people you are working with.

Resources

Below are links to the applications used for remote working that were referred to in this article:

Videoconferencing

- Skype: www.skype.com
- Google Hangouts: www.google.com/+/learnmore/hangouts
- TATA Virtual Conference System: www.tatacommunications.com/products-services/enterprises/unified-communications/audio-and-web-conferencing-services
- NetMeeting: www.microsoft.com/en-gb/download/details.aspx?id=23745
- GotoMeeting: www.gotomeeting.co.uk

Instant messaging

- MS Office Communicator: https://support.office.com/en-nz/article/Microsoft-Office-Communicator-2007-R2-Product-Overview-489fc717-bd73-49f2-97b6-19935274255f
- Skype for Business: https://products.office.com/en-us/skype-for-business/online-meetings

Data/file storage, version control and sharing

- GitHub: https://github.com
- Dropbox: www.dropbox.com
- Google Drive: www.google.co.uk/drive
- WIDEN: www.widen.com
- Third Light: www.thirdlight.com
- Celum: www.celum.com
- MS SharePoint: https://products.office.com/en-us/sharepoint/collaboration
- Atlassian Confluence: www.atlassian.com/software/confluence
- Concurrent Versioning System (CVS): www.cvshome.org/eng

Task/Ticketing system

- Atlassian Jira: www.atlassian.com/software/jira

Reference

Wright, I (1994) 'Teleworking - Home Alone 3?'
Communicator, June 1994: 22-24