Internationalising Media Production: Early Users of Remote Creative Collaboration Tools

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ABSTRACT: During 1996 there was a sharp increase in the use of remote collaboration technologies within the advertising and film industries. There was even some international collaboration, driven by the need to use scarce expertise located elsewhere. This paper reports on a series of case studies carried out in Australia, the U.S. and the U.K. to assess the reactions of these forefront users and to try to determine 1) which CSCW tools will be most useful for international production applications and 2) what conditions will facilitate creative collaboration internationally.

KEYWORDS CSCW, Multimedia, Art and Media, New or Emerging Technologies, Management Issues.

1. INTRODUCTION AND METHOD

Global working encounters many difficulties (O'Hara-Devereaux & Johansen, 1994) and international collaboration on creative products presents additional challenges, because their failure rate is high and media production is costly. Anxiety levels are high and staff tend to be chosen on the basis of long-term relationships nurtured during previous projects. Media production is generally divided into three segments (pre-production, production, post-production) and remote collaboration may be needed within any of these stages. Creative staff generally carry out assigned work independently and then submit it periodically for approval.

Semi-structured interviews were conducted in seven organisations in L.A., London and Sydney that recently used remote international collaboration for motion-video production. Further information was obtained from two wide-area-network consortia, Sohonet in London and Hollynet in L.A. Most of the companies were in post-production, one was a major U.S. studio. Two of the companies have offices in both L.A. and London.

2. COLLABORATION TECHNOLOGIES

These early users confirm that close collaboration is possible in media production work internationally, even with the support tools available in 1996. Tools currently used fall into three categories.

1) *Electronic Delivery* is used instead of couriers, to get quicker decisions or approvals, or to transfer computer image files for additional processing, such as effects work. Some systems (e.g. the Videofax) have been specifically designed for media industry applications.

2) *Interactive access or control* extends the reach of the creative person beyond their own workstation. Some companies have high speed internal networks connecting all their equipment and these networks are now being extended internationally. Nominated files are accessed, modified and then returned to the host computer by the collaborators, which corresponds to the CSCW category 'different time, same place'.

3) *Synchronous collaboration systems* support person-to-person, real-time collaboration on visual material, the CSCW category 'same time, different place'. The most

commonly used form is a combination of the telephone with some technology for simultaneously viewing a frame or film clip. Generally this uses only prior electronic delivery but a number of systems, specifically designed for media production work, with shared workspaces, are now available (e.g. Sprint Drums). The software supports scrolling and annotating of motion video in a shared workspace and has a small video-conferencing window for a view of users' faces.

One of our case study companies felt that the information participants would receive about each other on a workstation would be too limited, so instead they began with a room-based videoconferencing system and then integrated other functionality on an 'as needed' basis. They use this system regularly between L.A. and London.

3. FACILITATING INTERNATIONAL COLLABORATION

Our case studies point to a number of propositions.

1) *Asynchronous vs synchronous* - Real-time collaboration will be needed but most communication will be asynchronous, due to time zone differences and the advantage of a quick response over scheduling a meeting. Collaborators will capitalise on time-zone differences, to maximise the effective working time at each location or to allow work to go on around the clock.

2) *Coordination needs* - Extensive coordination will be an important need, as is illustrated by one case study. Animation work for a film was being done in L.A. and London simultaneously and integration of these activities required continual use of auxiliary support facilities, such as electronic mail.

3) *Increased creative control* - User acceptance of International collaboration will often depend on whether it results in increased creative control for the film/TV director or advertising/studio executive. Interviewees reported greater involvement in the details of productions by these people, even if they were in another country at the time.

4) *Security* - Current security concerns about the use of computer networks for media collaboration will decrease,

along with current concerns about credit card information over the Internet.

5) *Trust, stress reduction, improved work practices* - Remote collaboration will require trust between media co-workers. Although there are strong bonds from similarity of norms within the worldwide media production community, prior in-person collaboration will still probably be necessary. Use of CSCW tools will result in creative production staff having shorter waiting times for feedback and everyone feeling more confident that the desired product will emerge at the end. Work practices will also be normalised and become more efficient, with less shift work and fewer very long workdays.

6) *Videoconferencing* - Media production provides a good example of what Whittaker (1995) called 'video as data', and also may provide support for what he called the 'social cueing hypothesis', that visual information provides cues about emotion. Our interviewees (both those who use videoconferencing and those who don't) emphasised the importance of seeing the people you are collaborating with. Although people generally overestimate the usefulness of seeing the people they are communicating with, in this relationship-dominated industry seeing faces may be more valuable, and specially designed support systems may facilitate collaboration.

Overall, the successes reported by the early users studied indicate that, although there are challenges ahead, this is the future direction of media production.

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4. REFERENCES

- O'Hara-Devereaux, M. & Johansen, R. (1994) *Global Work* Jossey-Bass, San Francisco.
- Whittaker, S. (1995) Rethinking Video as Technology for Interpersonal Communications. *International Journal of Human-Computer Studies*, 42, 501-529.