7 The change agent

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INTRODUCTION

The term 'change agent' is used in the library literature to encompass phenomena and events which drive change, such as new technologies or change in government policy through to individuals who lead change. This chapter focuses on change agents as people rather than events. It places change agents within the context of the diffusion of innovation and explores some of the possible roles which are proposed for change agents in communication and management literature.

Much of the theory related to change agents is underpinned by a two-step model of the communication of information. The two-step model was originally proposed by Katz and Lazarsfeld in 1955 to describe how media messages are diffused through opinion leaders. Although primitive, this model is still used by writers and researchers on innovation. It works in the following way. In step one innovations are promoted to opinion leaders who are likely to be receptive to new ideas. Once new ideas are accepted a second phase begins in which opinion leaders encourage others to adopt them. In the first phase change agents are active in promoting innovations, in the second phase the diffusion of new ideas becomes an integral part of the communication processes of opinion leaders.

Following the logic of this framework two types of change agent emerge: first, those who are 'made' – highly communicative individuals who are likely to take a leading role in any organization which they join; and, second, those who choose to take on the role, perhaps working on behalf of an agency whose objective is to promote an innovative product or a new behaviour. A third category is proposed for those whose role as change agent is emerging from an existing role. Information professionals might fall within this third category, since, as a result of developments in networked information and networked communication, they find themselves at the forefront of technological change within their organization. This is, of course, a generalization, as such individuals may also find themselves in either or both of the first two categories.

NATURE'S CHANGE AGENTS: A BRIEF REVIEW OF THE COMMUNICATION LITERATURE

The role of opinion leader or excellent communicator has long been identified in communication research. They are likely to be the innovators or early adopters in the cycle of innovation proposed by Rogers (1983). Broadly, the definitions offered combine the concept of the gatekeeper with the identification of key attributes and traits. Kurt Lewin proposed the gatekeeper concept in the 1940s and it has since been widely adopted. This simple idea describes a highly networked individual who controls the flow of information into and out of an organization. Adapted by Allen (1969) as the technological gatekeeper, the concept was revised by Shoemaker (1991) in an attempt to give it more depth.

Adams (1983) identified the boundary role person (BRP) who works as a link between an organization's internal and external environment. The key characteristic which he identified was a certain psychological, and perhaps physical, distance from their organization. The BRP is a representative of their organization and its agent of influence in the external environment. Tushman and Scanlan (1981) take a slightly different perspective. They identified the role of boundary spanners who are perceived internally as technically competent and, externally, as communication stars who have a specialized area of expertise.

Smith (1980) describes the intermediary role of the relay men who pass information from source to recipient using their expert knowledge to filter and process information. Liaison persons described by Farace and Danowski (1973) and cosmopolitanites described by Rogers combine good education, communication skills and intelligence, and become centres of communication inside and outside their organization. McClure (1978) talks of the information-rich employee who combines the traits of liaison person with the capability to acquire, process and utilize information to a high degree.

THE CHARACTERISTICS OF BOUNDARY-SPANNING INDIVIDUALS

The terms I have adopted to describe this group is boundary-spanning individuals – a term which reflects their most significant ability. A brief review of the literature suggests that such individuals are likely to have five characteristics in common.

1. They transfer information between the internal and external environments of their organizations. This combines with the ability to understand and interpret the local language of the source and represent that information in the language of the recipient.

2. They are able to interact with many groups, but do not belong exclusively to one group. They form ties transferring information between groups and individuals.
3. They are likely to be excellent communicators with extensive external contacts, to communicate frequently with others and be consulted often by colleagues. This combines with other qualities such as a good educational level and intelligence. Within a research-based organization like a university, they are likely to have published, give papers at conferences, attend conferences and have links with professional organizations.
4. They are likely to have a high status. Tushman and Scanlan (1981) suggest this is because that they are well favoured by colleagues and therefore likely to be promoted. Mintzberg suggests that this collection of skills is an essential part of a successful manager's make-up and linked to high performance and to promotion. However, high status need not imply any formal recognition such as a title.
5. They are likely to have a recognized area of expertise.

The task of the change agent is to seek out and contact boundary-spanning individuals. They are the conduit through which innovations will be adopted by the majority.

CHANGE AGENTS AND CHANGE ORGANIZATIONS

Rogers, in his pioneering book the *Diffusion of Innovations*, has a clear idea of the change agent working within a change organization. The change agent has the task of promoting a specific innovation or new behaviour. This model reflects the origins of diffusion research focusing on the promotion of innovation in the areas of agriculture and health by government agencies. From his synthesis of diffusion studies Rogers identified a seven-point process of change agent activity from an initial contact to the end of the agent–client relationship:

- to develop the need for change on the part of their clients
- to establish an information exchange relationship
- to diagnose their problems
- to create intent to change in their clients
- to translate this intention into action
- to stabilize the adoption of an innovation and to prevent discontinuities
- to achieve a terminal relationship.

In this context eLib projects, such as TAPin and Netskills, could be viewed as change agencies. Staff working within them are placed in the role of change

agents following closely the model of change agent activity Rogers outlined. Rogers also summarizes behaviours and factors which researchers have found to be positively related to the adoption of change:

● the extent of change agent effort in contacting clients
● a client orientation rather than a change agency orientation
● the degree to which the diffusion programme relates to clients' needs
● the change agent's empathy with clients
● homophily (similarity) with clients
● credibility in clients' eyes
● the extent to which change agents work with opinion leaders
● increasing clients' ability to evaluate innovations.

THE CHANGE AGENT AS AN EMERGING ROLE

The change organization/change agent model has limitations, however, when it is applied to people already working within organizations. A comparison of the change agent/change agency model with that of an information professional in an emerging change agent role highlights some of the key differences (see Table 7.1).

There are dangers in associating too closely with the change agency/change agent model. Examples of these dangers might be: becoming too closely associated with a single innovation; the danger of failure or rejection of the innovation reflecting on other aspects of work; and the finite nature of the change agent–client relationship.

The emerging change agent should adopt behaviours that are likely to encourage and facilitate change but which are compatible with their existing role and skills.

CHANGE, UNCERTAINTY AND INFORMATION SEEKING

Communication scholars argue that all communication seeks to reduce uncertainty. Evidence from research (Farace *et al.*, 1978) suggests that both organizations and individuals increase their information-seeking in times of uncertainty. Other effects also noted are the greater use of external sources and a stronger preference for face-to-face communication. (Huber and Daft, 1987).

The degree of uncertainty is difficult to measure. However, complex innovations, such as networked communication and networked information, create significant levels of uncertainty for the individuals and organizations affected by them. A subjective measure proposed by Duncan (in Daft, 1995)

Table 7.1 Comparison of change agent role versus emerging role

Change agency/change agent model	Emerging role (information professional)
Simple organizational structure	Complex organization (for example, an academic library working within a university)
The change agent volunteers to participate and is likely to have a strong motivation and identification with the task	The information professional may have both a strong motivation and dedication to the existing or previous role but be uncomfortable or ambivalent about a change agent role
Single defined objective	Many objectives
The change agent has a finite relationship with the client	The information professional seeks an ongoing relationship with academics
Likely to promote a single innovation. Change agency has the advantage of selecting and refining the innovative product or behaviour	Many innovations and new behaviours stemming from developments in networked information and networked communications
There is certainty as to role, task and form of the change agent organization	The information professional operates under conditions of uncertainty, which affect role organizational structure and task
The change agent is selected on the basis of appropriate skills	The information professional is selected on the basis of the skills for their profession, which may or may not incline them towards the role of change agent

records the degree of uncertainty across two axes: simple–complex and stable–unstable. These technologies score highly on both. They have a large number of diverse elements (complex), and these elements change frequently and are unpredictable (unstable). *Information professionals are operating in conditions of uncertainty. This changes communication preferences and information seeking.*

Grosser, in a survey of the literature of human networks and information processing, concludes that there is evidence for 'an overwhelming preference for human as opposed to document- or computer-based information sources' (Grosser, 1991: 387).

Researchers suggest that the need for information changes for the decision-making process: impersonal sources create awareness, but personal sources are preferred for decision-making. Daft and Lengel (1984) suggest that the selection of communication media is linked to the degree of equivocality or the existence of multiple and conflicting interpretations of the evidence. The idea of equivocality is closely linked to that of uncertainty, where previous experience does not necessarily provide a guide to future actions. The authors suggest that,

in equivocal situations, individuals are likely to choose the richest media – that is, the media that carries the most information – or face-to-face communication.

Face-to-face communication offers the opportunity to give immediate feedback, can convey multiple cues, such as tone of voice and facial expression, can be easily tailored to the immediate situation and allows variety in language. By comparison, progressively 'leaner' media might be a telephone conversation, a written personal message or a written report (Huber and Daft, 1987; Daft, 1995).

Other research reviewed in Robertson and Kassarjian (1991) suggests that interpersonal communication is sought in situations where other forms of information are unavailable or conflicting, or where they are seen as biased. Personal contact, where it draws on the experiences of peers who may enable the information-receiver to avoid extensive and expensive information-seeking on their own behalf, reduces anxiety. It is possible that, in a personal encounter, information will be presented in the form of a conclusion or decision or that a decision may emerge from dialogue with colleagues.

Several studies have tested the relationship between electronic media and face-to-face communication (McKenny *et al.*, 1992; Trevino *et al.*, 1990). They support the idea that individuals choose channels of communication based on the equivocality (ambiguous nature) of the task and furthermore suggest that, in equivocal situations, face-to-face communication is preferred over electronic communication.

Change agents should seek to emulate the preferred communication style of their client community. Research suggests that this is face-to-face interpersonal communication – a preference favoured even more highly under conditions of uncertainty.

INFORMATION SOURCES AND UNCERTAINTY

In their review of the literature on diffusion and technological innovation, Maguire and Kench (1984) argue that external sources are important in the innovation process but the degree to which external contacts are the source of innovation cannot be determined. Other research supports the idea of the significance of external sources. Innovative individuals tend to be characterized by the extent of external networks. Research in the management literature suggests that effective managers (boundary-spanning individuals) engage in scanning and probing focused searches. Scanning is a routine monitoring of the external environment. Probing focused searches result from a dissatisfaction with existing information and a conscious decision to discover new information, likely to come from external sources perhaps triggered by rapid technological change, where internal information will be inadequate and levels of uncertainty are high.

Evidence suggests a greater use of external sources during periods of uncertainty. Change agents may become the target of probing and focused searches. They will be more effective the more visible they are to their client community.

INFORMATION AND KNOW-HOW

Descriptions of the innovation process are underpinned by the assumption that signalling or passing on information is the most important factor in adoption. Attewell (1992) raises questions about the differences between information and know-how. His approach is to look at innovation in terms of a learning organization theory. Attewell suggests that organizations have knowledge barriers to innovations. Passing on information is not enough: barriers to knowledge have to be lowered in order for organizations to take on new ideas. Such barriers are lowered by acquiring know-how – skills that enable organizations to internalize innovations. The example offered is that of the computer industry: in cases where new service organizations appeared to develop and install products for clients, they carried the burden of know-how until the clients were able to take it on. Because they completed the same tasks many times over for different clients, they also learned faster and were more effective.

Know-how is the knowledge that makes the implementation of innovative ideas possible, bridging the gap between awareness and knowledge. Change agents take on the burden of knowledge until clients are able to accept their know-how. The successful exchange of know-how with individuals who are motivated and powerful within the organization leads to learning and, finally, to implementation.

Change agents need to be experts, prepared to take on the burden of holders of know-how on their clients' behalf.

UNCERTAINTY AND NETWORKS

Grannovetter's (1973, 1982) theory of the strength of ties provides a basis for understanding how links between individuals can lead to mass actions. He defines the strength of ties as a function of three factors:

1. time spent communicating
2. emotional intensity
3. intimacy.

Strong ties, which would score highly on Gannovetter's three measures, tend to exist between similar people who know each other well and who share the same knowledge. These ties are unlikely to be sources of new information. Weak ties,

however, are bridges between different groups where members of each group are unlikely to be known to each other. Therefore weak ties carry new information between groups.

This paradox gives rise to the idea of the 'strength of weak ties' in conveying information between groups. The theory suggests that those with many weak ties are more likely to receive and convey new and novel information. The capacity to build 'weak' networks is well developed among boundary-spanning individuals, but is also a requirement for change agents to be able to influence across many groups.

Some research suggests that, under conditions of uncertainty, the use of weak and strong ties changes. Grannovetter (1982) suggests that people in insecure positions are more likely to resort to friendship (strong) ties as a means of reducing uncertainty. In their discussion of élites and outsiders Albrecht and Hall (1991) suggest that élite groups form to discuss new ideas as a tactic to reduce uncertainty. These groups, based on personal relationships, form a stable and trusting environment in which to discuss new ideas. The significance of these élite groups is that they are likely to have control over information and resources and be influential in the decision-making process.

Krackhardt (1992) proposes the existence of two types of group within organizations: advice networks centred around the expertise of key individuals and philo (friendship) networks based on trust, friendship and frequent communication. During routine changes, information flows through advice networks. In times of crisis, change or uncertainty advice is sought within the philo (friendship) network.

Albrecht and Hall draw a distinction between the outsider, the weak tie, who is the source of new information and the élite group which controls decision-making and has a large stake in the decision outcomes.

Change agents need to be outsiders with weak ties to many groups. They cannot become part of the closed group if they have no stake in the outcomes of the decision process.

NETWORKS AND COMMUNITIES

Monge and Contractor (1996) define communication networks as structures built on the basis of relationships between individuals, groups, organizations or societies. The network perspective allows an examination of the ties and links between individuals and of how their communication activity can lead to the mass dissemination of information and wholesale adoption.

Rogers and Kincaid (1981) describe the communication process as a sharing of information in order to arrive at a mutual understanding. Their convergence

model envisages several iterations of question and response before mutual understanding is achieved. This model better fits the ideas of communicating across (electronic) networks which frequently, although not always, take the form of an iterative exchange of information.

Ideas of what constitutes community are also changing. In their review of the literature on virtual communities Fischer *et al.* (1996) suggest a continuum from communities, linked by social relationships and a sense of belonging created by face-to-face communication and shared space, to those linked by a sense of shared identity. The latter would encompass the idea of virtual communities. Cohen departs from the concept of community expressed as structure and physical place and advances the idea of the symbolic construction of community:

> The symbols of community are mental constructs: they provide people with the means to make meaning. In doing so, they also provide them with the means to express the particular meanings the community has for them. (Cohen, 1985: 19)

Contractor and Eisenberg (1990) suggest that there is evidence to support the theory that adopting communication technology changes communication networks. They suggest that it increases communication between employees and managers, increases the volume of communication and the diversity of 'strong ties', and helps reduce uncertainty by adding additional channels of communication (multiplexity).

New ideas about networks and communities provide evidence of the potential power that resides in the change agent role. Change agents are able to use the capacity of networks to distribute information, and digital networks add an extra dimension to this, reducing barriers of time, space and distance. A redefinition of the nature of communication as an iterative process is sympathetic to the exchange of information across networks. A redrawing of the definition of communities allows the concept of communities existing within digital networks or physically disparate communities connected by digital networks.

In this context networks are the weak ties which connect one to many. Individuals may be linked to more than one network. Information provided to one individual may feed into many networks. Information delivered into different networks will reach many individuals.

Looser definitions of community, based on research interests, academic disciplines, work groups or personal interests, equate with friendship groups, and perhaps with élite decision-making groups which translate information into action.

Obviously this is a simplistic interpretation. There exists a significant area of research devoted to theories directed at understanding information exchange that is not discussed here. Nor can electronic communication fully emulate the immediacy of face-to-face contact which is so important in the decision to adopt

113

change. However, communication networks and communities, both virtual and real, have a magnifying and unpredictable effect on the distribution of information. New communication technologies increase the volume of information, the diversity of channels and possibly the efficiency of the communication process. The power of an individual change agent may seem limited, but this power can be significantly increased by appropriate exploitation of networks.

(Digital) networks are powerful tools at the disposal of change agents. Change agents need to exploit their potential as well as recognize their limitations.

BEING A CHANGE AGENT: BEHAVIOURS THAT ARE LIKELY TO LEAD TO SUCCESS

The intention of this chapter has been both to extend and refine an understanding of the role of the change agent. To have value, however, theory must influence practice and practice should be informed by theory. For information professionals experiencing uncertainty and change and who are placed in the role of promoting innovative technologies, some approaches are likely to be more effective than others. The analogy of doing and being, borrowed from advice given to those who enter other cultures, is useful here. Whoever we are (being), changing our own behaviour (doing) will make our actions more appropriate and communication more effective. The analogy between information professionals and *being* change agents is profoundly unhelpful if no advice on *doing* is offered. The following summary suggests behaviours likely to engender change in others.

- Change agents are experts. They have know-how to pass on to clients and act as a reservoir of knowledge from which clients can draw.
- Change agents understand the communication networks of their client group. They seek to identify boundary-spanning individuals who are influential in the distribution and use of information.
- Change agents emulate the communication patterns of boundary-spanning individuals. There is a significant body of research suggesting that these individuals prefer interpersonal communication and most favour face-to-face contact. This preference is reinforced during periods of uncertainty.
- Change agents are visible. Change agents, who are visible to their client community, are likely to be targeted by information-seeking boundary-spanning individuals and others. This behaviour increases during periods of uncertainty.
- Change agents are outsiders. Research suggests that, during periods of change and uncertainty when information-seeking increases, élite groups

prefer to discuss this within their immediate circle. The change agent needs to be accessible to many groups, but not necessarily a member of any. There is some evidence to suggest also that, in times of uncertainty, people prefer to seek information outside their immediate circle.

● Change agents should exploit networks. These can have a powerful amplifying effect on the distribution of information.

REFERENCES

Adams, J.S. (1983), 'The structure and dynamics of behavior in organizational boundary roles', in M.D. Dunnette (ed.), *Handbook of Industrial and Organizational Psychology*, New York: John Wiley & Sons, 1175–1200.

Albrecht, T.L. and Hall, B. (1991), 'Relational and content differences between outsiders in innovation networks', *Human Communication Research*, **17**(4), 535–61.

Allen, T.J. (1969), 'Information needs and uses', *Annual Review of Information Science and Technology*, 4, 2–29.

Attewell, P. (1992), 'Technology diffusion and organizational learning: the case of business computing', in M.D. Cohen and L.S. Sproull (eds), *Organizational Learning*, London: Sage.

Cohen, A.P. (1985), *The Symbolic Construction of Community*, London: Methuen.

Contractor, N.S. and Eisenberg, E.M. (1990), 'Communication networks and new media in organizations', in J. Fulk and C. Steinfield (eds), *Organizations and Communication Technology*, Newbury Park, CA: Sage.

Daft, R.L. (1995), *Organization theory and design*, Minneapolis, MN: West Publishing Company.

Daft, R.L. and Lengel, R.H. (1984), 'Information richness: a new approach to managerial information processing and information design', in B. Shaw and L.L. Cummings (eds), *Research in Organizational Behavior*, Greenwich, NY: JAI. 191–233.

Farace, R.V. and Danowski, J.A. (1973), *Analyzing Human Communication Networks in Organizations*, Michigan: Michigan State University, Department of Communications.

Farace, R.V., Taylor, J.A. and Stewart, J.P. (1978), 'Criteria for evaluation of organizational communication effectiveness: review and synthesis', in B.D. Ruben (ed.), *Communication Yearbook 2*, New Brunswick, NJ: Transaction Books, 271–93.

Fischer, E., Bristor, J. and Gainer, B. (1996), 'Creating or escaping community? An explanatory study of Internet consumers' behaviors', in K.P. Corfman and J.G.

Lynch (eds), *Advances in Consumer Research*, Provo, UT: Association of Consumer Research, 178–82.

Grannovetter, M. (1973), 'The strength of weak ties', *American Journal of Sociology*, **78**(6), 1360–80.

Grannovetter, M. (1982), 'The strength of weak ties: a network theory revisited', in P.V. Marsden and N. Lin (eds), *Social Structure and Network Analysis*, London: Sage.

Grosser, K. (1991), 'Human networks in organizational information processing', in M.E. Williams (ed.), *Annual Review of Information Science and Technology*, **26**, Medford, NJ: Learned Information.

Huber, G.P. and Daft, R.L. (1987), 'The information environments of organizations', in F. Jablin, L.L. Putnam, K.H. Roberts and L.W. Porter (eds), *Handbook of Organizational Communication: An Interdisciplinary Perspective*, Newbury Park, CA: Sage.

Krackhardt, D. (1992), 'The strength of strong ties: the importance of philos in organizations', in N. Nohria and R.G. Eccles, *Networks and Organizations*, Boston, MA.: Harvard Business School, 216–39.

McClure, C.R. (1978), 'The information rich employee and information for decision making: review and comments', *Information and Processing Management*, **14**, 381–94.

Maguire, C. and Kench, R. (1984), 'The introduction and difussion of new technological innovation in industry: an information research perspective', in B. Dervin and M.J. Voigt (eds), *Progress in Communication Sciences IV*, Norwood, NJ: Ablex, 163–99.

McKenny, J.L., Zack, M.H. and Doherty, V.S. (1992), 'Complementary communication media: a comparison of electronic mail and face to face communication in a programming team', in N. Nohria and R.G. Eccles (eds), *Networks and Organizations*, Boston, MA.: Harvard Business School, 262–87.

Monge, P.R. and Contractor, N.S. (1996), 'Communication networks', in A. Kuper and J. Kuper (eds), *The Social Science Encyclopedia*, (2nd edn), London: Routledge, 108–109.

Robertson, T.S. and Kassarjian, H.K. (eds) (1991), *Handbook of Consumer Behavior*, Englewood Cliffs, NJ: Prentice-Hall.

Rogers, E.M. (1983), *Diffusion of Innovations*, (3rd edn), New York: Free Press.

Rogers, E.M. (1995), *Diffusion of Innovations*, (4th edn), New York: Free Press.

Rogers, E.M. and Kincaid, D.L. (1981), *Communication Networks: Towards a new Paradigm for Research*, New York: Free Press.

Shoemaker, P.J, (1991), *Communication Concepts 3: Gatekeeping*, Newbury Park, CA: Sage.

Smith, A., (1980), *Goodbye Gutenberg: The Newspaper Revolution of the 1980s*, Oxford: Oxford University Press.

Trevino, L.K., Lengel, R.H., Bodensteiner, W., Gerloff, E.A. and Muir, N.K. (1990), 'The richness imperative and cognitive style: the role of individual differences in media choice behaviour', *Management Communication Quarterly*, **4**(2), 176–97.

Tushman, M.L. and Scanlan, T.J. (1981), 'Boundary spanning individuals: their role in information transfer and their antecedents', *Academy of Management Journal*, **24**(2), 289–305.