Introduction: Informal Information Flow

Stuart Macdonald

Everyone knows what informal information is – much as everyone knows what high technology is – until asked to provide a definition. Informal information is obviously what formal information is not. This is not terribly enlightening, but it is a start. Formal information is institutional information, that which is required for the institution to function, and which is therefore organised by institutions so that they can function. There is a now a vast mass of academic and practitioner writing on how institutions might organise their information in order to function better. Informal information is that which is not, perhaps cannot be, so organised. Probably in consequence, there is very little writing on what might be done with informal information.

But can information itself be formal or informal? Sources of information can certainly be one or the other – there is a clear distinction between, say, an edict from government and advice from a friend. Similarly, the means by which information travels from one point to another are easily distinguished by their formality or informality – acquiring information through being on the distribution list for committee minutes is quite different from picking up information from a chat in a bar. It is often assumed, though not by the authors in this volume, that information technology (IT) overcomes the problem by removing the distinction between formal and informal information flow. Both Zaremba in his paper on the role of electronic mail in university education, and Lievrouw and Finn in theirs on the organisational use of new information flow. They do not, however, conclude that IT necessarily makes information flow informal.

But does information itself acquire characteristics of formality or informality quite distinct from those of its source or those of the channel along which it travels? Perhaps only in that certain information could have come only from certain sources or through certain channels which are themselves formal or informal. It is hard to categorise information as either informal or formal without categorising either, or both, its source and the means by which it was acquired. Lievrouw and Finn examine the matter and explore the possibility of classifying the formality of information in terms of individual perception. Individuals have difficulty contemplating abstract information; occasionally the philosopher might manage it and often those who chatter mindlessly in supermarket aisles, but for most of us the provenance of information and how it has been acquired are essential information about information. Labels are required before information can be judged safe to use. So great is this need for identification that it is hard for those who study information to dissociate what they study from its source, from the channels along which it travels, and also from what is not quite the same thing - the means by which its journey from source to destination along these channels is arranged. A good few of the papers in this volume, either directly or indirectly, are concerned with the informality of these information transactions, much more than with the informality of sources or channels. Their authors argue that it is not so much the medium that is the message as the arrangements which allow the medium to transfer information. And so it is that this volume is concerned with informal information flow rather than just informal information.

Should it matter whether information flow is formal or informal? As many of the papers in this collection demonstrate, it matters a great deal. A common theme is that informal flow may be just as essential for the functioning of institutions as formal. A common conclusion is that informal information flow deserves rather more academic attention than it gets. Most academic research on information is very much concerned with formal information systems, with how these systems can best accommodate institutional systems, a preoccupation intensified by the growing importance of IT in institutional organisation - and in the organisation of just about everything else. This collection of papers seeks not to redress this inequality - for that is far too ambitious a task – but to reinforce, or at least support, what interest is already being taken in informal information flow. That such interest is evident in many disciplines indicates how widespread is the relevance of the topic, but it also means that efforts to advance understanding are isolated and unconnected. The unyielding nature of disciplinary boundaries permits little flow of information - formal or informal - among these efforts. An invitation was extended to authors who had treated the subject of informal information flow in their own disciplines to write papers for this volume which would demonstrate their own approach to the subject. It is this demonstration of the variety of possible approaches to a universal issue which gives this volume a large part of whatever value it may have.

It is, of course, ironic that a collection of papers in a journal should be considered an appropriate way to treat the subject of informal information flow: publication in an academic journal is anything but informal. However, despite what IT is able to accomplish, publication is still an important means by which academics communicate, at least with each other. This is not to say that it is the only important means, or that it takes place in isolation from other important means, or even that communication is the primary function of academic publication. Some academics still regard publication as an art form; the means by which the most complete and perfect version of their thoughts is preserved for posterity. Others use publication for public confirmation of their research, a sort of book-keeping exercise which makes their achievements a matter of public record. Increasingly, and certainly in the UK of late, publication has come to be exploited as a measure of individual and institutional performance, a means by which merit is gauged. While the number of journals soars to accommodate this demand for official record, academics devote an increasing proportion of their time contributing to them and, almost inevitably, a decreasing proportion to reading them. In consequence, academic publication may be declining in importance as a means of communication precisely because its importance is growing for other reasons.

Does this mean that academics communicate less with each other than they once did? Possibly, if communication is taken to embrace the reception as well as the sending of information. Certainly they have become more involved with forms of information transfer which often transfer very little information. Drafts and preprints were always circulated to colleagues working in the same area; now abstracts and executive summaries suffice. Glossy brochures from a welter of new research units announce achievements in an orgy of self-puffery, and the press release has become an obligatory accompaniment to the publication of academic research. This gap between image and reality is explored by Midgley, Kadiri and Vahl in another context altogether, that of community health programmes. They find that brochures have little impact when information circulating by informal means tells a very different story. Some information systems have fared less well than others in this world of high profile research. Some

Introduction

means of communication have fared less well too, in particular the peer review mechanism, which provides the foundation for scholarship and which is itself dependent on that archetypal informal information network, the invisible college. Certainly the interrelationship, the balance, between formal and informal information flow has been altered.

In practice, information flow is not either formal or informal; the two co-exist, sometimes intersect and may even combine. Conversations in a bar and the minutes of committee meetings are not alternatives. Poor complements for each other they may be, but in the real world they exist together. Just how do they relate? It is the interaction of formal and informal information flow which intrigues many of the authors in this volume. Fleck, for instance, sees informal information flow in the financial services sector as sustaining and authenticating the expertise which allows formal market transactions in information to take place, much as peer review is supposed to support academic publication. But do the various means of informal information flow complement each other? It is clear that peer group networks, for example, while efficient in the exchange of information between members, are also efficient in excluding those who are not members. Networks of various sorts are considered by several of the authors here: Malecki and Tootle examine the use that small firms make of informal networks, and speculate that such networks may be less critical for competitiveness in urban areas, where proximity allows other sorts of informal information flow. Welch, looking particularly at international business in Eastern Europe and the former Soviet Union, finds that the decisions determining the activities of international firms depend on information obtained through informal flow, and especially on information from personal networks.

This volume confirms that informal information flow is indeed an issue of importance in many disciplines, and that authors from different disciplinary backgrounds tend to treat the subject in very different ways. There is little in common between, say, Arnow's treatment of information flow between doctor and patient and that of Gibbons and Prescott of the efforts firms make to gain information about their competitors' activities. Perhaps there should be more commonality rather than just a greater awareness of how others look at informal information flow. But this should never be allowed to progress to the stage where informal information flow becomes a subject in its own right, perhaps even a sub discipline. Of its very nature, informal information flow is disorganised, frequently impromptu, casual, sporadic, and very often personal. Far from being a variant of the ordered flows studied in information systems departments, it is anarchic. This is not to say that there are not systems at work; there are, and often of such complexity that even the most intricate flow diagram would be quite unable to cope, and of a subtlety and sophistication that would make a flow diagram inappropriate anyway. It is to say that informal information flow, of its very nature, cannot be controlled, at least not in the way that an IT system or an organisational information system can be controlled. To control the informal renders it formal, and negates whatever advantage informal information flow may have. As Arnow, Welch, Macdonald and several others of these authors demonstrate, even the attempt to control informal information flow can have serious consequences; in Arnow's example, fatal. Even interference with informal information flow can be counter-productive for the organisation. In her study of KONE Elevators, Marschan reveals that the decentralisation which might have been expected to facilitate informal information flow in the company had just the opposite effect. Informal information flow may, though, as von Hippel and Schrader explain, be managed. Indeed, it must be managed if the firm is to reap more than opportunistic benefits from it. But managing without control is not easy; it demands skills and an approach to information as yet unlikely to be found in an MBA syllabus. Beltramini also emphasises the need to manage informal information flow in his study of communication between R&D managers and marketers in high technology, an area which, presumably because of its information intensity, has learnt much about the importance of informal information flow and about how this flow might be managed. It has much to teach other industries growing in information intensity.

But just what are the advantages that informal information flow may bring? It would seem that informal information flow copes much better than formal with tacit information, the sort that cannot easily be encapsulated in the codification and classification of formal systems, the sort which is the product of experience rather than education and training, and which is often embodied in people. As Tann and Hanson have discovered in their study of the approach of pharmacists to pharmaceutical audit, informal information flow can also cope well with the sort of information that is required for classification, and with the information that emerges from formal classification. It would seem, as both von Hippel and Schrader and also Macdonald point out, that informal information flow is particularly appropriate to the transactions by which information must often be obtained. Dickson sees reciprocity as characteristic of these transactions, and trust as absolutely fundamental; in other words, informality is essential if the information transactions he describes are to take place. In part, this is explained by the failings of the market and of institutional systems to cope with the peculiar characteristics of information. Only when these are tempered by imposing on information the characteristics required by the market, which is what the intellectual property system attempts to do, or the codification required for internal transactions, can either system begin to cope. Informal information flow is much less finicky, much more robust, much more adapted to the reality of the environment, both within the organisation and without.

Informal information flow is unruly, defying the organisation of both market and institution. It cannot be brought to heel and directed as formal information flow can. With difficulty it can be managed, but informal information flow cannot be controlled. Organisations can do little to encourage informal information flow, but they can do much to constrain it. There are obvious reasons why they should wish to do this, the most evident of which is the threat to power and control informal information flow is perceived to present. Among the less obvious reasons is the sheer difficulty experienced in mixing information obtained informally with that obtained formally, a problem explored by Gibbons and Prescott in their investigation of the acquisition and use of information for competitive intelligence. Less obvious still may be a lack of awareness that informal information flow has a part to play in the serious world, that it has a role beyond the promotion of social interaction in the bus queue or over the garden fence. Sweeney's comprehensive consideration of the importance of informal information linkages in regional development, the treatise with which this volume starts, provides evidence enough that informal information flow is a serious business. If this volume is to achieve anything beyond the presentation of different ways of looking at and studying informal information flow, let it be that the volume encourages those who have thought it unacceptable, or unnecessary, to take informal information flow seriously, to reconsider.