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35 Years of Service to the Construction Industry

1970 — 2005

Revay and Associates Limited

On the occasion of the thirty-fifth anniversary of the firm, Revay and Associates Limited would like to recognize and express its deepest appreciation for the loyalty and support of its clients, business partners and associates in the construction industry. The success the company has enjoyed over the past thirty-five years is directly and fully attributable to these relationships, many of which date back to the early days of the firm.

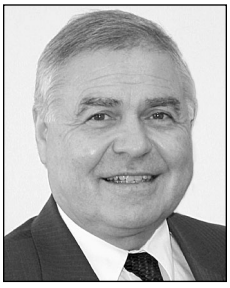
In 1970 Stephen G. Revay and a few selected colleagues from a heavy civil contracting firm which was closing its doors, founded a small consulting company in Montreal. Initially, their aim was to provide typical construction management services. Their contractor clients, however, had other ideas. Over time, more and more clients engaged Revay and Associates Limited to assist them in seeking redress for perceived injustices on construction projects. This new line of work was a challenge, enthusiastically regarded as an opportunity that needed to be addressed, and was met with complete devotion.

From its modest beginnings, the firm has grown and evolved to include a staff of over fifty construction professionals, operating from five offices across Canada and one in the United States. It has successfully completed assignments on five continents, and enhanced its reputation as an industry leader in construction dispute resolution. Moreover, it has expanded and diversified its service offerings, which now include a broad range of project management services.

The firm's client base now embraces the full spectrum of the construction industry including private sector owners, all levels of government, general contractors, trade contractors, architects, engineers, legal firms, financial institutions, as well as a variety of industry associations. Its senior professionals are frequently in demand as speakers at industry conferences and training seminars, and continue to promote the original objectives of advocating fairness in construction contracting procedures.

Although the year 2004 marked the passing of the founder, Stephen G. Revay, and the end of an era, the torch has been passed to a new generation of management and staff within Revay and Associates Limited. These professionals look forward, individually and collectively, to continuing the development of business relationships with past and present associates as well as the evolution and growth of the present range of services to an even wider client base, while continuing to build on the goals and legacy established by the founder.

E-mail – an Emerging Risk in Construction



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INTRODUCTION

Construction professionals have become entirely dependent on the computer and the convenience of e-mail. This change in the way today's construction industry operates has placed a complex burden on company operations which is reflected in an increase in exposure to their financial, security and legal risk.

Paradoxically over a relatively short period of time, the power of the computer has provided the construction industry with the management control tool it always needed but it has also thwarted the ability of business to protect its own interests. The lack of document control is not only unfortunate but it has created a litigation minefield since e-mail is a discoverable form of communication[1].

While e-mail risk is inherent in all business ventures, the intent of this article is to review some of the specific issues that may affect the construction industry as it transitions from a paper-based system to an electronic-based system. This review will also look at developing e-mail policies and why they are important in protecting the interests of the concerned parties.

THE USE OF E-MAIL IN THE CONSTRUCTION INDUSTRY

In the electronic information age the construction industry shares many common perils with other businesses exposed to the use of e-mail; however, the construction sector carries additional risks due to its unique nature and often non-standard managerial procedures. Construction projects exist for a limited time period and during this time, various combinations of personnel having diverse training and backgrounds are

expected to represent the interests of the owner and/or the contractor. E-mail commitments made by short-term project personnel can have unexpected ramifications reflecting on the financial commitments assumed by the owner or contractor.

Any time employees are allowed to access a company's e-mail system, the organization's assets, future and reputation are at risk. Employees often treat e-mail as an informal mode of communication and incorporate into it poorly conceived comments or messages that they would never dream of putting in a letter. In the construction business, the constant pressure of contractual performance, close personnel interaction and the daily stress of avoiding monetary loss creates an environment which is rife with conflict and creates the potential for spawning crude, blunt, inflammatory, irrelevant and poorly conceived e-mail messages.

Additionally, in cases where employees use their own laptop computers rather than company computers, information may never be transferred to the company files. Studies indicate that up to 70% of e-mail documents only exist electronically and are never printed in hard copy. Without company computers, managers may lose control of correspondence with their clients or, more alarmingly, they will have no control over messages that are transmitted to third parties. The lack of documents or the loss of data can frustrate normal business operations or worse, it may create litigation nightmares.

E-mail systems provide a new platform that works against many previously established corporate safeguards and this is why companies must now consider the need to monitor electronic communication.

Construction e-mail and electronic records are business communications and many companies do not have a system in place to consolidate and prepare their information and electronic record systems in the eventuality of claims, dispute resolution or litigation. Employers must be prepared to educate employees on e-mail etiquette[2] and to implement a strategic e-risk management program to help control liabilities.

As e-mail is quickly replacing written documents, faxes and even telephones as the primary conduit of communication between parties, it is imperative for companies, large and small, to manage electronic records and e-mail or face potentially costly risks involving the retrieval of information from their computer system or electronic record storage medium.

There is little to remedy the havoc that mismanagement of e-mail can unleash. Dealing with the problem is compromised by the common albeit false perception that the destruction of unwanted or undesirable records by "deleting" the file results in a final, quick and easy safeguard that eliminates all record of their existence. However, discoverable electronic information includes files that have been deleted[3].

Deleting does not actually erase the file but only deletes the "address" of that file. Only when the electronic files containing the information on the hard drive are overwritten or physically destroyed are the files permanently destroyed in the computer hard drive. However, even some seemingly deleted or destroyed information can be retrieved by forensic computer experts.

E-MAIL AS EVIDENCE

Electronic Mail Discovery (E.M.D.) has emerged as an evolving area of law, driven by a number of high profile cases, which are either recently completed or are part of ongoing investigations. These cases have been undertaken by individuals, corporations and governments with a large part of the evidence involving e-mail document discoveries. Interestingly, these cases have created a new feature in the discovery procedure because questions have arisen as to the admissibility of e-mail as evidence[4].

The question of the admissibility of e-mail as evidence has potentially immense repercussions in the area of construction claims since experts estimate that within five to seven years, electronic evidence will replace paper as the primary source of discovery in commercial litigation[5]. For the construction industry, the cost of e-mail discovery must be carefully considered as a potentially significant liability.

Construction projects normally generate large numbers of documents that are indispensable as evidence in litigation. Many, if not most, of these documents have as their origin a computer file and in some cases the documents may never exist as a paper record. In most instances, the common perception of evidence is a hard copy or paper record. However, if the document is generated or created by utilizing a computer software program, then it is this "native" electronic file format of the document in which it originated, that may be the preferable form of evidence over a paper copy. Electronic files contain metadata, which is information created by the software as part of the electronic document file but is not revealed on the physical printout of the document or when a document is converted into an "image file format." As evidence, this metadata can be useful in establishing historical timelines.

The metadata in the "native" electronic file records the date a document was created or revised and further, in the case of e-mail, metadata can reveal the date the e-mail was sent, received, opened, forwarded, replied to, and whether a "cc" was sent.

As revealed in several recent high-profile court cases, electronic information created a discovery process run amok at great cost. In answer to this situation, the American courts responded with a broader refinement of the legal definition of a document and what constitutes evidence[6].

In a recent Canadian construction case, *Walter Construction v. Greater Vancouver Sewerage & Drainage*[7], a claim was also brought against the design engineers. The rights to information as presented before the court are recorded as follows:

> "Walter has brought an application for an order compelling ABR to produce further documents. The orders Walter seeks are set out in Appendix "A" to these Reasons. ABR has declined to produce some documents on the basis that they are not relevant. With respect to electronic documents, ABR argues that all relevant documents have already been produced in hard copy and that production of electronic records is not necessary. With respect to documents in the hands of the individual engineering companies rather than at the offices of the joint venture ABR, Mr. Matheson argued that production of these documents would be onerous and the likelihood of anything relevant resulting from such an order is so small that the court should exercise its discretion under Rule 21(1.2) to decline production of such documents."

In the case cited above, the court accepted the application by Walter to have access to the electronic documents subject to further review of specific documents which may be considered partly or fully privileged or that contain irrelevant information that may be sensitive.

From the above we can see that once litigation is commenced, the parties will find themselves slogging through the discovery process and living with the consequences of haphazard actions or inactions involving company e-mail and electronic records. Companies are generally under a duty to preserve records that are likely to be relevant to pending

or threatened litigation. However, companies in a legal action are also faced with a new challenge: the expense arising in the discovery procedure where it is necessary to produce electronically stored records and e-mail.

THE IMPORTANCE OF HAVING A COMPANY E-MAIL POLICY

When e-mail is used as the primary means of business communication and specifically in construction as a means to make project related records, it will lead to an increasing series of crises and liabilities [8]. As a result of the increasing risk, companies operating in the construction industry must adopt and enforce an e-mail policy for both the company as a whole and for individual project related communication. The specifics of the policy will vary according to the nature of the project, the policies and culture of the firm but some of the basic components that should be considered in any such plan are presented as follows [9]:

- Standards or criteria for what information may be received electronically for use or incorporation into the design.
- Procedures and standards for verification and authentication of information received electronically.
- Express recognition that internal and external e-mail becomes a part of the project records and directions that all team members are to treat all such e-mail communications as official project communications, using the commensurate level of care and consideration.
- Standards establishing who is authorized to communicate with outside parties on project related issues using e-mail.
- Procedures to ensure all project related e-mail communications are communicated to all participants, internally and externally, who need to be aware of the information.
- Procedures to preserve project related e-mail communications as a part of the project records.
- Procedures to ensure that responses or follow-ups to e-mail are documented and included in project records.

Storing e-mail and electronic records is part of a process called archiving, and it has become an essential strategy in the development of a company policy as a way to protect an organization from liability issues. The decision on which e-mails to capture depends on the particular needs of the organization and the sector of the construction industry in which it operates.

A comprehensive e-mail policy should cover a wide range of issues and be developed in conjunction with the input of legal counsel. The policy should make clear that the computer and e-mail systems belong to the business and that they are only to be used for authorized purposes. Depending on the nature of the business, such policies can range from a few paragraphs to lengthy, multi-page documents with exhibits. A guideline or basic outline for the general development of an e-mail policy may include the following elements [10]:

- Intent and purpose of the policy.
- Legal requirements that may be legislated or established in common law.
- Requirements that set out the retention criteria and scheduling of record deletions.
- Defining documents that are considered non record materials.
- Defining what constitutes official records.
- Guidelines and best practices for managing e-mail.

Any e-mail policy must be shown to employees to make them fully aware of what is permitted to be transferred using company computers and to point out the inherent dangers of disseminating information via the electronic media. The policy may also contain a notice to the employee that their e-mail may be monitored by the use of technological tools that automatically record such things as e-mail sent and received, web site visited, applications launched and key stroke sequence.

E-mail messages are routinely received, stored, copied and deleted by companies on a daily basis. Unfortunately, this can lead to the presumption that the evidence was not preserved because it was not favourable to the party's position. To avoid accusations of the spoliation of evidence there is a specific need for companies to establish a policy that addresses the period of e-mail retention [11]. Document retention and deletion policies that are developed and applied prior to litigation are more likely to be considered legitimate by the court. In the event of a discovery where an employer is ordered to produce records that have been destroyed, it will be important to show that the destruction of the e-mail complied with the employers existing e-mail and deletion policy. However, the destruction of documents during or with knowledge of impending litigation, even in accordance with an existing policy risks sanctions for spoliation.

In developing a document retention and deletion policy a number of other factors must be considered [12] including:

- Storage imposes a significant cost.
- Generally there is no formal structuring of informal e-mail.
- Rapid changes in technology can affect retrieval and storage of information.

Proceeding with a retention policy introduces complex choices and decisions have to be made on what constitutes official records and what are non official records. For the construction industry the number of official records which are generated will depend on individual circumstances including the size of a company, the nature of its business, the number of projects that are being managed or the number of active contracts. In some cases establishing a policy on the retention of e-mail as official records may be viewed as equivalent to or akin to paper records and therefore, the retention period may be subject to existing government regulation or as established by precedence based on standard historical procedures. It must be kept in mind that the legal status of electronic communications has been an evolving area of law since the late 1980's and early 1990's but the retention period for paper records for both legal and commercial requirements, existed prior to the advent of the desktop PC.

An added complexity to the retention of e-mail records is the handling of any attachments. These are separate electronic files that are attached to and transmitted by using the e-mail and hence become a part of the electronic e-mail record [13]. These attachments, whether they are drawings, photographs or schedules, are separate electronic files that are created in a separate software application and in themselves contain metadata that differs from the metadata created in the e-mail message. There are a number of different e-mail software programs in the market place and each has its own approach in the manner in which it operates and stores information. Some e-mail systems store information by creating a database that incorporates the attachment file while other e-mail programs segregate and separate e-mail attachments by placing them into a separate file folder. While the choice of e-mail software is a matter of personal preference, the installation of the technology capable of maintaining the storage and retrieval of electronic records must follow the e-mail policy.

While decisions on the classification of official and unofficial records can be burdensome, there are also further decisions to be made that invoke the time period for deleting records. Some records may have different retainer periods and therefore sorting records using different criteria adds further layers of complexity.

For the sake of simplicity there are two common approaches that are normally used to solve this dilemma. The first alternative is the "blanket cut off" approach where e-mail is retained for some specific period of time and then deleted "en masse." However, this approach must also consider retention rules based on current law and sound business judgement. The second alternative is called the e-mail "as a record" approach where e-mail is categorized by subject and retained for the same period as all other data records falling within that category. One of the most important e-mail management activities is separating business records from non-essential or useless information and establishing the appropriate retention period for maintaining business records.

Contractors are constantly engaged in negotiations or dealing with issues that involve contractual disputes. Therefore, seeking advice from legal counsel using e-mail communication is not unusual. However, this aspect also touches on the subject of lawyer client privilege because the discovery process can easily reveal all documents existing on the computer, even confidential information that would be considered privileged. While this subject matter is, in itself, a separate area of discussion, it is a consideration to keep in mind. A document retention policy should attempt to remain neutral but it should also be adjusted over time to reflect the changes in technology, changing requirements under statutory law or to account for changes arising from case law.

The construction industry is heading in a direction where more and more tendering and bidding will take place using the computer and coordination of projects will be carried out utilizing a project website. Web based project management sites proceed on the promise of electronic collaboration and up to the minute documentation. Increasing the number of project websites will also increase the number of electronic records. This raises further questions as to who will be responsible for selecting, programming and administering the project website and whether the website administrator has inadvertently also become responsible for many of the risks, such as the security of the website.

Companies engaged in partnering or alliances also bring new risks to their own operations by opening a joint project website. Most Internet sites are exposed to hackers who use the website to gain further access to individual company computer systems. As firms communicate and exchange data, they now expose themselves to the possibility that information will be intercepted or worse, that data or false information will be introduced into their system. In dealing with increasing security risks, companies will have to consider scrambling data or adding encryption mechanisms into their system as part of their e-mail policy. Such extensions of company e-mail policies into the project website will also have to extend to all subcontractors and suppliers who also have access to the website.

Traffic in e-mail is expanding in North America and growing world-wide at an increasing rate that reflects the fact that two thirds of workers now use e-mail as part of the daily routine. Essentially e-mail is becoming a corporate memory of how an organization has conducted itself including compliance with any Quality Management policies and procedures. For any company that is ISO 9001 registered, the risk and liability of a poorly contrived e-mail policy could also result in it becoming de-registered when audited. This is possible if the e-mail policy is at odds with a company's own Quality System requirements.

Reflecting on past strategies dealing with construction litigation, there has always been a mantra coming from legal counsel to "document", "document", "document". While this advice still has merit, the mantra of the future will now have to change slightly so that it becomes "document", "document" and "have a proper e-mail policy".

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