Title: Case Study 10(1) – University of British

Columbia School of Music: Policies, Procedures

and Tools for E-mail Management and

Preservation in an Academic Unit

Case Study Report

Status: Final (public)

Version: 1.2

Date Submitted: August 2009
Last Revised: May 2013

Author: The InterPARES 3 Project, TEAM Canada

Writer(s): Donald Force

School of Library, Archival and Information Studies,

The University of British Columbia

Project Unit: Research

URL: http://www.interpares.org/ip3/display-file.cfm?doc="http://www.interpares.org/ip3/display-file.cfm">http://www.interpares.org/ip3/display-file.cfm?doc="http://www.interpares.org/ip3/display-file.cfm">http://www.interpares.org/ip3/display-file.cfm

ip3 canada cs10-1 final report.pdf

Document Control

Version history					
Version	<u>Date</u>	By	<u>Version notes</u>		
1.0	2009-08-10	D. Force	Discussion draft prepared following identification of action items for CS10(1) at TEAM Canada Plenary Workshops 02 and 03.		
1.1	2009-11-24	R. Preston	Minor content and copy edits.		
1.2	2013-05-05	R. Preston	Minor copy and content edits for public version.		

Table of Contents

A.	Overview	1
B.	Statement of Methodology	1
C.	Description of Context	2
	Provenancial	2
	Juridical-administrative	3
	Procedural and Documentary	4
	Technological	4
D.	Narrative Answers to the Applicable Set of Questions for Researchers	5
E.	Narrative Answers to the Project's Applicable Research Questions	5
F.	Bibliography of Relevant Material	6
	1. InterPARES 3 Project, TEAM Canada—CS10(1) School of Music Documents	6
	2. E-mail Bibliography	6
G.	Glossary of Terms	10
Н.	Activity Model	11
I.	Diplomatic analysis of records, if applicable	11
J.	Findings, Recommendations and Products	12

Case Study Report

A. Overview

Created in 1946, the University of British Columbia School of Music is located on the Point Grey campus of the University of British Columbia (UBC). In 1986, the School of Music (hereinafter "the School"), was fully established as a department within the Faculty of Arts. The School strives to provide professional preparation and qualification for music performers, composers and teachers.

In December 2007, the School accepted an invitation from InterPARES 3 (IP3) to join the Project as a test-bed partner. Alan Doyle, UBC's Records Manager, agreed to work with the Graduate Research Assistants (GRAs), facilitating meeting arrangements between the GRAs and the test-bed, as well as assist them with the data collection. The study intended to be a part of the tri-university study of e-mail management and preservation studies for TEAM Canada. These case studies offer three different perspectives for preserving e-mail: UBC serves as an academic unit, University of Victoria (UVic) presents a governance unit, and Simon Fraser University (SFU) examines e-mail in an administrative support unit. In particular, the UBC School of Music case study concentrated on e-mails handled by the School's Director and sought to devise an appropriate use of Information Technology policy specific to the School; and to create corporate e-mail guidelines that would improve the School's e-mail management at the administrative level.

In November 2008, the School of Music test-bed was abandoned as a TEAM Canada test-bed partner due to the unavailability of the School's Director. This report discusses the circumstances and activities that transpired during the examination of this test-bed.

B. Statement of Methodology

Between September 2007 and April 2008, the GRAs interviewed Dr. Richard Kurth (the Director of the School) and Mr. Doyle, collecting information regarding the School's history,

InterPARES 3 Project, TEAM Canada

¹ The other universities participating in this study are: 1) the Office of the University Secretary (USEC) at the University of Victoria (UVic), case study 10(3)—for documentation pertaining to this case study, see http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs10-3_final_report.pdf; 2) initially, the Facilities Development at Simon Fraser University (SFU), case study 10(2a)—for documentation pertaining to this case study, see http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs10-2b_final_report.pdf. as of April 2009, the latter test-bed was replaced by the Human Rights Office (HRO) at SFU, case study 10(2b)—for documentation pertaining to this case study, see http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs10-2b_final_report.pdf.

status within UBC, its records and its operations. These data were used to draft the contextual analysis and the answers to the records case study research questions.

Based on these two documents, at the May 2008 TEAM Canada Plenary Workshop, the researchers recommended that the following action items be completed for the November 2008 Plenary:

- 1. Draft corporate e-mail guidelines for the School and solicit feedback from Dr. Kurth;
- 2. Draft a "cheat-sheet" that maps the classification plan to the more common types of e-mails; thus, highlighting the most important categories of e-mails that need to be managed;
- 3. Investigate the human resources issues/concerns related to the recommended expanded e-mail management job description for office staff;
- 4. Investigate the technological issues related to providing shared access to Dr. Kurth's e-mails;
- 5. Investigate the privacy issues related to providing shared access to Dr. Kurth's e-mails;
- 6. Draft an appropriate use (of IT) policy in relation to the proposed recommendations for the management of Dr. Kurth's e-mails; and
- 7. Develop "what if" scenarios to demonstrate e-mail management issues and concerns that would resonate with Dr. Kurth and other senior managers.

Since all the necessary information could not be obtained from the School, the GRAs only completed tasks 1, 3, 6 and 7. The information for these action items was collected during a meeting with Dr. Kurth in May 2008, during several meetings with Mr. Doyle, and via an Internet research. The inability to fulfill the remainder of these action items served as one of the deciding factors to abandon this test-bed.

C. Description of Context

Provenancial

The School operates within the Faculty of Arts at the University of British Columbia and its duties and responsibilities of university faculties are defined by the British Columbia *University Act* (1996). The School offers a wide range of undergraduate and graduate degree programs: the Bachelor of Music degree in performance, composition, or scholarship; the Bachelor of Arts degree in Music; the Diploma in performance or collaborative studies; the Master of Music degree in performance or composition; the Master of Arts degree in Music

History, Music Theory or Ethnomusicology; the Doctor of Musical Arts degree in performance or composition; and the Doctor of Philosophy degree in Music History, Music Theory or Ethnomusicology.

The Director of the School of Music is the head of the test-bed and reports directly to the Dean of Arts (who is the head of the Faculty of Arts). The Director also oversees both the academic and administrative operations of the test-bed. School employees comprise twenty-seven full-time faculty members, sixty-six sessional lecturers, the Concerts and Communications Manager, the Administration Supervisor, the Student Advisor, the Piano Technician, the Electronics Technician, the Director's Secretary, as well as two additional Secretaries and two administrative Clerks.

The test-bed includes the School's Director and the employees involved in the Administrative operations of the School: the Director's Secretary, the Concerts and Communications Manager, the Administration Supervisor, the Student Advisor, the two additional Secretaries, and the two Clerks. All of these positions are permanent and full time, except for one of the Clerk positions, which is 80%.

The major functions of the School include teaching, research, coordinating and conducting performances by School of Music students and other musicians, and the day-to-day administrative operation of the School.

Juridical-administrative

The School of Music is part of UBC. UBC was formally established with the passing of the *University Act* of 1908, which instituted the school's governance structures including a Board of Governors, a Convocation, and a President. The University is currently governed by the *University Act* of 1996. In this Act, all of British Columbia's universities are identified as "corporations," and given the "power and capacity of a natural person of full capacity."²

UBC is defined as a public body by the British Columbia *Freedom of Information and Protection of Privacy Act* of 1996. All records generated by university employees, therefore, are subject to this Act, barring certain exemptions.

The School of Music also holds a large number of recordings produced by students and faculty members. These recordings are subject to the federal *Copyright Act* (1985).

.

Procedural and Documentary

The e-mails received and sent by the School and its employees belong to the fonds of the School. There are no maintenance strategies in place facilitating the long-term preservation of the digital records generated by the School. Each member of the test-bed is responsible for maintaining his/her own e-mails and there are many different maintenance strategies currently being used within the School. Some employees have developed foldering structures for filing e-mails, some transfer e-mails to folders located on their computer hard drives, while others print e-mails and transfer them to physical folders. Many e-mails received by members of the test-bed remain in inboxes and are not arranged or filed due to the reliance on the applications' search functions.

It is unclear if the e-mails received by members of the test-bed are maintained on servers provided by UBC or if they are always downloaded to individual hard drives. Some members of the test-bed stated that they attempted to back up their e-mails whenever possible, others were unsure of how to back up e-mails. Methods for backing up e-mails vary a great deal within the test-bed and there are no standard procedures for backing up e-mails.

Technological

The technological infrastructure at the School is not standardized. Some staff members use Macintosh computers (Macs) while others use Personal Computers (PCs). According to those individuals within the test-bed who have been employed at the School for some time, the use of both Macs and PCs has caused some problems in the past. More recently, however, compatibility between the two platforms has not been particularly problematic.

Two employees, the current Director and the Academic Advisor, use laptops both at the office and at home. The office computers do not seem to be networked to each other. The previous Director attempted to procure a server for the School, but it appears that this was never finalized.

Many of the textual digital records created by the School are generated using Microsoft Office software. They also maintain a large number of .pdf files. The audio and visual records created and maintained by staff members seem to be produced using a variety of software in a variety of formats including .jpg, .gif, .mp3 and .mp4.

D. Narrative Answers to the Applicable Set of Questions for Researchers

At the School, e-mail is generated for communicating matters to faculty and staff regarding the School and the Director's activities.³ E-mail also is used to send drafts and final copies of documents relating to these activities. These messages are not handled in any unusual way and the Director does not add any additional metadata to them. When necessary, he alters the name of attachments to reflect their creator, date or version; all attachments reside in the e-mail application and remain attached to their original messages. Many of the attachments also are downloaded and filed into folders onto the computer desktop, though these copies of documents have no way of being identified as e-mail attachments. The Director takes no other measures to ensure the accuracy, reliability and authenticity of his e-mails and attachments.

When he is at work or at home, the Director downloads all e-mails to his computer's email application, Mac Mail, which stores all of his e-mail dating back to 2004. All incoming emails reside in his inbox, and he transfers them every six months to a separate folder for archiving purposes (e.g., "Jan-June 2007"). All sent mail is automatically stored in a sent mail folder. When he sends e-mails from home, he copies them to himself so that he may download those messages to his desktop at work. The only messages the Director deletes are junk mail and some listsery messages, with the vast majority of his e-mails retained in this inbox or sent folders.

The Director abandoned the hierarchical folder system in his e-mail application in favour of keyword searching, or by sorting by the "to," "from" or "subject" fields. The Director felt that the use of folders was too time-consuming since he was receiving approximately 100 e-mails each day. He feels he can find nearly anything he needs by remembering the topic of discussion or the person with whom he was conversing.

Despite the influx of messages, currently no records, paper or electronic, are transferred to the archives and there is no plan to acquire these e-mails or their attachments in the foreseeable future.

E. Narrative Answers to the Project's Applicable Research Questions

Due to the brevity of this test-bed and the limited amount of data collected, these questions cannot be addressed.

³ The intended users of these e-mails and attachments are Dr. Kurth, the former Associate Director, full-time faculty members, sessional lecturers, the Concerts and Communications Manager, the Administration Supervisor, the Student Advisor, the Piano Technician, the Electronics Technician, the Director's Secretary, as well as two additional secretaries and two administrative clerks, students, and staff of the Faculty of Arts.

F. Bibliography of Relevant Material

The following bibliography is divided into two main categories, those documents created as part of this specific case study and a group of secondary literature on e-mail management and preservation. The latter section is further divided into five different sections: Case Studies, Records Management, Personal Information Management, Legal, and E-mail Standards & Guidelines.

1. InterPARES 3 Project, TEAM Canada—CS10(1) School of Music Documents

- Force, Donald (September 2008), "Case Study 10(1) University of British Columbia School of Music Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit: Workshop 02 Action Item 33 E-mail Management 'What If' Scenarios," InterPARES 3 Project, TEAM Canada.
- Force, Donald and Alan Doyle (September 2008), "Case Study 10(1) University of British Columbia School of Music Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit: Workshop 02 Action Item 27 Corporate E-mail Guidelines," InterPARES 3 Project, TEAM Canada.
- Gasztonyi, Cathryn (February 2008), "Case Study 10(1) Contextual Analysis: University of British Columbia School of Music," InterPARES 3 Project, TEAM Canada.
- Robinson, Maria and Libby Coyner (April 2008), "Case Study 10(1) University of British Columbia School of Music: Records Research Questions," InterPARES 3 Project, TEAM Canada.

2. E-mail Bibliography

Case Studies

- Hacker, Kenneth L., Blaine Goss, Charles Townley and Valerie J. Horton, "Employee Attitudes Regarding Electronic Mail Policies: A Case Study," *Management Communication Quarterly* 11 (1998): 422-452.
- "Institutional Records Management and E-mail," Loughborough University (2003). Available at http://www.lboro.ac.uk/computing/irm/ (accessed 10 June 2009).
- Seow, Bee Bee, K. Ramaiah Chennupati and Schubert Foo, "Management of E-mails as Official Records in Singapore: A Case Study," *Records Management Journal* 15(1) (2005): 43-57.

Records Management

Enneking, Nancy E., "Managing E-mail: Working Toward an Effective Solution," *ARMA Records Management Quarterly* 32(3) (July, 1998): 24-43.

- Montaña, John C., "Managing the E-Maelstrom: Strategies for Minimizing the Risks of E-mail," *Hottopic: ARMA International* (2008): 1-12.
- Pennock, Maureen. "Managing and Preserving E-mails." *Managing and Preserving E-mails* (Digital Curation Centre, UKOLN, September 2006).
- Phillips, John T., "Start with e-Mail!" *The Information Management Journal* (October, 2001): 56-58.

Personal Information Management

- Bälter, Olle, "Keystroke Level Analysis of Email Message Organization," in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (The Hague, The Netherlands, April 1-6, 2000). CHI '00. ACM, New York, NY, 105-112.
- Bälter, Olle and Candace L. Sidner, "Bifrost Inbox Organizer: Giving Users Control over the Inbox," (2002). Available at http://bit.ly/2sM (accessed 10 June 2009).
- Bellotti, Victoria, Nicolas Ducheneaut, Mark Howard and Ian Smith, "Taking Email to Task: The Design and Evaluation of a Task Management Centered Email Tool," in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Ft. Lauderdale, Florida, USA, April 5-10, 2003). CHI '03. ACM, New York, NY, 345-352.
- Camargo, Marta Rocha, "A Grounded Theory Study of the Relationship between E-mail and Burnout." *Information Research* 13, no. 4 (December, 2008). Available at http://informationr.net/ir/13-4/paper383.html (accessed 10 June 2009).
- Dabbish, Laura A., and Robert E. Kraut, "Email Overload at Work: An Analysis of Factors Associated with Email Strain," in *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work* (Banff, Alberta, Canada, November 4-8, 2006). CSCW '06. ACM, New York, NY, 431-440.
- Dabbish, Laura A., Gina Venolia, and J. J. Cadiz, "Marked for Deletion: An Analysis of Email Data," in *CHI '03 Extended Abstracts on Human Factors in Computing Systems* (Ft. Lauderdale, Florida, USA, April 5-10, 2003). CHI '03. ACM, New York, NY, 924-925.
- Dabbish, Laura A., Robert E. Kraut, Susan Fussell and Sara Kiesler, "Understanding Email Use: Predicting Action on a Message," in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Portland, Oregon, USA, April 2-7, 2005). CHI '05. ACM, New York, NY, 691-700.
- Danis, C., Kellogg, W. A., Lau, T., Dredze, M., Stylos, J., and Kushmerick, N. 2005. "Managers' Email: Beyond Tasks and To-dos," in *CHI '05 Extended Abstracts on Human Factors in Computing Systems* (Portland, OR, USA, April 2-7, 2005). CHI '05. ACM, New York, NY, 1324-1327.

- Duane, Aidan and Patrick Finnegan, "Managing Email Usage: A Cross Case Analysis of Experiences with Electronic Monitoring and Control," in *Proceedings of the 6th international Conference on Electronic Commerce* (Delft, The Netherlands, October 25-27, 2004). M. Janssen, H. G. Sol, and R. W. Wagenaar, Eds. ICEC '04, vol. 60. ACM, New York, NY, 229-238.
- Ducheneaut, Nicolas, "The Social Impacts of Electronic Mail in Organizations." *Information, Communication & Society* 5(2) (2002): 153-188.
- Ducheneaut, Nicolas and Victoria Bellotti, "E-Mail as Habitat: An Exploration of Embedded Personal Information Management," *Interactions* 8(5) (2001): 30-38.
- Elsweiler, David, Mark Baillie and Ian Ruthven, "Exploring Memory in Email Refinding." *ACM Trans. Inf. Syst.* 26, no. 4 (September, 2008): 1-36.
- Gwizdka, Jacek, "Email Task Management Styles: The Cleaners and the Keepers," in *CHI '04 Extended Abstracts on Human Factors in Computing Systems* (ACM: New York, 2004): 1235-1238.
- Higa, Kunihiko, Olivia R. Liu Shen, Bongsik Shin and Aurelio Jose Figueredo, "Understanding Relationships Among Teleworkers' E-Mail Usage, E-Mail Richness Perceptions, and E-Mail Productivity Perceptions Under a Software Engineering Environment," *IEEE Transactions on Engineering Management* 47(2) (May, 2000): 163-173.
- Hooff, Bart van den, Jasper Groot and Sander de Jonge, "Situational Influences on the Use of Communication Technologies: A Meta-Analysis and Exploratory Study," *Journal of Business Communication* 42(4) (2005): 4-27.
- Jackson, Thomas W. and Gordana Culjak, "Can Seminar and Computer-Based Training Improve the Effectiveness of Electronic Mail Communication within the Workplace?" 17th

 Australasian Conference on Information Systems (December, 2006). Available at http://bit.ly/Mwaz (accessed 10 June 2009).
- Mackay, Wendy E., "Diversity in the Use of Electronic Mail: A Preliminary Inquiry," *ACM Transactions on Office Information Systems* 6(4) (October, 1998): 380-397.
- McNeil, H. L. and R. M. Kort, "Discovery of E-Mail and Other Computerized Information," *Arizona Attorney*, April 31, 1995: 16-21.
- Mitra, Ananda, Michael D. Hazen, Betty LaFrance, and Randall G. Rogan, "Faculty Use and Non-Use of Electronic Mail: Attitudes, Expectations and Profiles." *Journal of Computer-Mediated Communication Journal of Computer-Mediated Communication* 4, no. 3 (1999).
- Skovholt, Karianne and Jan Svennevig, "Email Copies in Workplace Interaction." *Journal of Computer-Mediated Communication* 12 (2006): 42-65.

- Sumner, Mary, "The Impact of Electronic Mail on Managerial and Organizational Communications," in *Proceedings of the ACM SIGOIS and IEEECS TC-OA 1988 Conference on office information Systems* (Palo Alto, California, United States, March 23-25, 1988). R. B. Allen, Ed. ACM, New York, NY, 96-109.
- Tang, John C. et al., "Tag-it, Snag-it, or Bag-it: Combining Tags, Threads, and Folders in Email," in *CHI '08 Extended Abstracts on Human Factors in Computing Systems* (ACM: New York, 2008): 2179-2194.
- Webber, Ron, "The Grim Reaper: The Curse of E-mail," MIS Quarterly 28(3) (September, 2004): iii-xiii.
- Whittaker, Steve, Victoria Bellotti and Jacek Gwizdka, "Email in Personal Information Management." *Communications of the ACM* 49(1) (2006): 68-73.
- Whittaker, Steve and Candace Sidner, "Email Overload: Exploring Personal Information Management of Email," in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems: Common Ground* (Vancouver, British Columbia, Canada, April 13-18, 1996). M. J. Tauber, Ed. CHI '96. ACM, New York, NY, 276-283.
- Winget, Megan A., Kimberly Chang and Helen Tibbo, "Personal Email Management on the University Digital Desktop: User Behaviors vs. Archival Best Practices," *Proceedings of the American Society for Information Science and Technology* 43(1) (2006): 13 pages.

Legal

- Atwater, Justin, "Who Owns E-mail? Do You Have the Right to Decide the Disposition of Your Private Digital Life?" *Utah Law Review* 2 (Spring, 2006): 397-418.
- Bauccio, Salvatore Joseph, "E-Discovery: Why and How E-mail is Changing the Way Trials are Won and Lost, " *Duquesne Law Review* 45(2) (Winter 2007): 269-291.
- Dreyer, Anthony J., "When the Postman Beeps Twice: The Admissibility of Electronic Mail Under the Business Records Exception of the Federal Rules of Evidence," *Fordham Law Review* 64 (April, 1996): 2285-2328.
- Flynn, Nancy and Randolph Kahn. *E-Mail Rules: A Business Guide to Managing Policies, Security, and Legal Issues for E-Mail and Digital Communication* (New York: American Management Association, 2003).
- McNeil, Heidi and Robert M. Kort, "Discovery of E-mail: Electronic Mail and Other Computer Information Shouldn't be Overlooked," *The Oregon State Bar Bulletin* 56 (December, 1995): 21-24.
- Morgan, Charles and Julien Saulgrain, *E-Mail Law* (Markham, ON: LexisNexis Canada, 2008). Nash, Kim S., "E-Mail Retention: The High Cost of Digging Up Data, "*Baseline Magazine* (August 2, 2006). Online. http://www.baselinemag.com/c/a/Projects-Processes/EMail-Retention-The-High-Cost-of-Digging-Up-Data/

Raskin, Jeffrey S., "Discovery of Ghosts in the Machine: Electronic Mail Communications Can Have Major Litigation Consequences," *Los Angeles Lawyer* 19 (November, 1996): 17-42.

E-mail Standards & Guidelines

- "Commentary on Email Management: Guidelines for the Selection of Retention Policy," Thomas Y. Allman, ed., *Sedona Conference Journal* 8 (2007): 239-250.
- "Electronic Records as Documentary Evidence," CAN/CGSB-72.34-2005, Canadian General Standards Board, 2005.
- "Electronic Records: Responsible Recordkeeping: Email Records," Smithsonian Institution Archives, 2007.
- "E-mail Guidelines for Managers and Employees," Collaborative Electronics Records Project (Rockefeller Archive Center, Smithsonian Institution Archives, 2006).
- "Email Records Guidance," Collaborative Electronics Records Project (Rockefeller Archive Center, Smithsonian Institution Archives, 2007).
- "Guidelines on Developing a Policy for Managing Email," National Archives (Australia): 2004.
- "Requirements for Managing Electronic Messages as Records," ANSI/ARMA 9-2004. ARMA International, 2004.

G. Glossary of Terms

Attachment (e-mail): An additional document that is manually connected to an e-mail. This document may be in any format and size (though some e-mail applications have size limits).

Disposition Schedule: See Retention Schedule.

Electronic mail (e-mail): A document created or received via an electronic message system, including brief notes, formal or substantive narrative documents, and any attachments, such as word processing or other electronic objects, that may be transmitted with the message along with its descriptive transmission metadata. Also see **transitory (e-mail)** and **ephemeral (e-mail)**.

Ephemeral (e-mail): A type of e-mail that has no connection to the work of the unit (e.g., junk mail).

Hierarchical folder system: A classification system used to manage a person's, office unit's or organization's documents.

⁴ ARMA International, "Requirements for Managing Electronic Messages as Records," ANSI/ARMA 9-2004 (Lenexa, Kansas: ARMA International, 2004), 2.

Physical file: A file used to store and manage hardcopy (i.e., printed) documents and records.

Retention Schedule: A document providing description of records series and/or classes and specifying their authorized dispositions.

Transitory (e-mail): A type of e-mail that serves only a short and immediate purpose (e.g., a meeting reminder message).

H. Activity Model

This case study did not warrant the creation of any activity models.

I. Diplomatic analysis of records, if applicable

E-mails generated during the course of budget creation, writing of student recommendations, or policy creation are potential records. Messages resulting from particular activities and act as documentation of an action are records. Some e-mails exist only to communicate messages such as "see attachment"—these are not records. All attachments are records because they are made or received in the course of business and set aside for future consultation.

Preservation is not necessarily required for the Director's e-mails or attachments. Under the UBC Records Management Policy (which is not mandatory), they may not fall under the definition of "Permanently Valuable Records." Furthermore, preservation should focus on the e-mails' stored form, as it is the information within the e-mails and the attached metadata that is important to preserve. In most cases, an e-mail does not have to be seen in exactly same way in which it originally was created; the same applies to certain attachments. It is the information in the budget file, the student recommendation letters, and the policy drafts that needs to be preserved; its manifested form is less pressing.

Characteristics of e-mail communications that have been deemed records that must be preserved include "to" and "from" lines, date, subject and the body of the e-mail. Characteristics of attachments that must be preserved include spreadsheets and letters of recommendation in their intended manifestation. All attachments must be maintained with information assigned by the Director, such as placement within a folder or sub-folder.

J. Findings, Recommendations and Products

In fall 2008, TEAM Canada abandoned this specific test-bed. Following repeated attempts by Mr. Doyle to solicit feedback on the e-mail guidelines and establish another appointment to meet with the Director regarding the status of the case study, the Director's secretary notified Mr. Doyle that the Director had too many ongoing administrative projects and would no longer be available for the case study. This lack of cooperation proved to be the major obstacle for this test-bed and stemmed, in part, from the lack of a sense of urgency from the Director and his staff to better manage their e-mail.

When the project was initiated in fall 2007, and as recently as spring 2008, the Director seemed willing to work with the InterPARES project team members. The Director acknowledged that his two bucket approach (an inbox and sent folder) for e-mail management was not ideal. Yet, he repeatedly stated that he lacked the time to create a folder hierarchy and classify his messages. As a result, he would forward messages to one of his secretaries so s/he could properly handle the e-mails.

To date, the Director has not encountered any problems locating needed messages by using the search and filter features of his e-mail application. The lack of urgency for better managing the office e-mails may also stem from the fact that the office has not come under any external criticism or scrutiny from other administrative departments, such as the Faculty of Arts, Information Technology, or UBC legal counsel, for the messages it manages. Based on these observations, for an academic unit to take more seriously the importance of better e-mail management, it is essential that the issue be emphasized or relayed by higher administrative authority figures who either order or strongly encourage academic units to improve their records management methods.

Although the School has had no external pressure to modify its e-mail management procedures, the School's office is not without e-mail management issues. First, the amount of e-mail duplication within the office is unnecessarily excessive, primarily due to those messages that the Director forwards to secretaries to file. This situation may be alleviated if either the Director took better control over his own management habits or allowed one of his secretaries to directly access and manage his messages—an option that the Director seemed to be reluctant to approve because, as Director, he prefers a "hands on" approach, including in relation to responding to e-mails.

By not creating a folder structure, the Director rarely deletes messages other than spam and the occasional listserv message; thus, he does not adhere to retention or disposition schedules for his messages. This is problematic for two reasons. First, it causes an unnecessary buildup of messages that may slow the retrieval process because at some point in the future, the Director may be unable to effectively filter e-mails and locate the ones he needs. Second, in the event that he or the School encounters litigation, where those e-mails (regardless of their location) would be discoverable; failure to produce or disclose them (for whatever reason) may have severe consequences for the Director, the School, or the University.

Furthermore, given the sensitive nature of many of his messages, the unresolved discussion regarding which computers and locations the Director downloads messages to is a major point of concern. The messages he receives and sends on behalf of serving as a UBC employee are the property of the University, regardless which computer he sends them from or receives them to. Unauthorized access to these messages also leaves open the potential for damaging legal action against him, the School, or the University.

Finally, despite the short duration of the interaction with this case study's test-bed, two products were created. The first product is a set of e-mail guidelines for the School's office. The document stresses the importance of better e-mail management, while offering advice for improving the management of the messages, as well as providing some recommendations for e-mail etiquette. The other document is an overview of Canadian case law focusing on how e-mail has been used during litigation. This document is an annotated list of mostly civil cases where messages (and in some case, digital documents in general) have been used in court as evidence or sought during the discovery process to vet an argument. The document emphasizes that failure to produce requested documents may prove detrimental to the side unable to disclose the e-mails, thus resulting in financial penalties.

5

⁵ See McNeil, H. L. and R. M. Kort, "Discovery of E-Mail and Other Computerized Information," *Arizona Attorney*, April 31, 1995: 16-21; Morgan, Charles and Julien Saulgrain, *E-Mail Law* (Markham, ON: LexisNexis Canada, 2008); and Force, Donald, "Case Study 10(1) – University of British Columbia School of Music - Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit: Workshop 02 Action Item 33 – E-mail Management 'What If' Scenarios," IntePARES 3 Project, TEAM Canada (September 2008).

⁶ Donald Force, "Case Study 10(1) – University of British Columbia School of Music - Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit: Workshop 02 Action Item 33 – E-mail Management 'What If' Scenarios," InterPARES 3 Project, TEAM Canada (September 2008). Available at http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs10-1_wks02_action_33_v2-3.pdf.

⁷ Donald Force and Alan Doyle, "Case Study 10(1) – University of British Columbia School of Music - Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit: Workshop 02 Action Item 27 – Corporate E-mail Guidelines," InterPARES 3 Project, TEAM Canada (v2.3, September 2008). Available at http://www.interpares.org/ip3/display file.cfm?doc=ip3 canada cs10-1 wks02 action 27 v2-3.pdf.