Stepping Up: Information Practice in the 21st Century

2004-2010 Academic Plan for the Faculty of Information Studies
A Professional and Research Faculty of the University of Toronto

June 30, 2004

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Executive Summary

In recent decades, in response to the profound impact of computing, the Faculty of Information Studies (FIS) has expanded its core expertise in library and information science to consider a wide range of information practices. In this it joins an elite group of North American faculties collectively known as the “Information Schools,” or *i*-schools. They are forging the future of information studies—but they also face daunting challenges. The intellectual landscape of information practice is evolving so rapidly, and involves such a wide swath of the university (as well as of society in general), that maintaining leadership—even establishing identity—defies traditional planning.

Rather than defining itself in terms of a “core subject matter,” as a traditional department, or “circling the wagons,” to preserve mastery of a distinct subset of the informational realm, FIS adopts a third strategy: of serving as a catalyst for change in information study and practice:

1. In terms of subject matter, it casts its net widely—identifying its mission, goals, and programs relationally, in terms of an encompassing plan for a collaborative information alliance to study the informational realm through interdisciplinary and interdivisional partnerships;

2. In reflexively self-conscious fashion, it commits itself to revamp its enabling informational practices, to become a pilot project for an e-University: a site of technologically-enabled “best practice” for library, student, and administrative services; distributed education; open-source publication; etc.;

3. It proposes to establish a major research and teaching institute, provisionally called the McLuhan Institute, to serve as a “site” for the alliance—an intensive, interdisciplinary and interdivisional laboratory to explore how the content and conduct of academic teaching and intellectual research are being, and will continue to be, transformed by accelerating developments in information technologies.

FIS has 16 tenure lines, ~350 students (~280 FTES) in both master’s and doctoral programs, and burgeoning research funding (Figure A). But it is small (by any measure <1% of uoft), and cannot shoulder this mission alone. Instead, it proposes to create 4 intellectual areas (Figure B), to be developed in conjunction with such partners as Museum Studies, ccit, Rotman, health faculties, kmdt, etc. FIS will also (i) take the lead, using open-source models, in introducing distributed education to information studies (with local, national, and international partners); and (ii) work with other single department faculties (sdfs) on matters of organization, administration, and information practice.
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Appendix A — Challenges for Information Schools A-1

Appendix B — FIS Self Study B-1
Stepping Up: Information Practice in the 21st Century

2004–2010 Academic Plan for the Faculty of Information Studies
A Professional and Research Faculty of the University of Toronto

In response to the profound impact of computing, the Faculty of Information Studies (fis) has expanded its core expertise in library and information science to consider a wide range of information practices. As well as studying the stewardship of information collections and resources, the Faculty has taken up issues of archives, architecture, knowledge management, social context, system design, user behaviour, and numerous other factors affecting information practice in the digital age.

In so broadening its mandate, fis joins an elite group of North American faculties collectively known as the “Information Schools” or i-schools. They are forging the future of information studies—but they also face daunting challenges. First, the immense consequences of computing for information-based practice has permeated every corner of the university; no faculty (in spite of its name) can lay claim to information as a distinctive subject matter. Second, technological progress, and concomitant reconfigurations of practice, organisation, and culture, are developing so rapidly that information schools must constantly reinvent themselves—faster than academic procedures typically allow—in order to maintain leadership in the face of unrelenting technical advance. It is very demanding for a small faculty (by almost any measure, fis is much less than 1% of uoft) to make a discontinuous difference on such a rapidly changing intellectual landscape.

One strategy would be to “circle the wagons” and narrow the faculty’s focus to a subset of the informational realm. fis chooses the opposite. The mission, priorities, goals, and strategies articulated here are designed to allow fis to play a catalytic role, across the university, for information practice generally. In particular, fis intends to meet, head-on, four specific requirements, discussed in detail in Appendix A: (i) maintain identity in the face of ubiquitous information projects across campus; (ii) move nimbly in the face of fast-paced diachronic change, (iii) preserve and renew its expertise in the stewardship of information collections, resources, and records in ways appropriate to 21st century practice; and (iv) integrate its expertise and skills with other university divisions. Some of these requirements have been recognized in information faculties around the world, but (to our knowledge) no single program successfully meets all four. In aiming for this high standard, this plan is non-standard in at least 3 major ways:

1. In terms of subject matter, it casts its net widely—identifying fis’s mission, goals, and programs relationally, in terms of an encompassing plan for a collaborative uoft information alliance to study the informational realm through interdisciplinary and interdivisional partnerships;

2. In reflexively self-conscious fashion, it commits fis to revamp its enabling informational practices, to become a pilot project for an e-University: a site of technologically-enabled “best practice” for library, student, and administrative services; distributed education; open-source publication; etc.; and

3. It proposes the establishment of a major teaching and research institute, provisionally called the McLuhan Institute, to serve as a “site” for the alliance (fis and its partners): an intensive, interdisciplinary and interdivisional laboratory for exploring how the content and conduct of academic teaching and intellectual research are being, and will continue to be, transformed by accelerating developments in underlying information technologies.

If fis can meet these goals—together with its partners, and backed by university support—uofr will achieve international prominence for stepping up to one of the 21st century’s greatest challenges.

1Name [and rank] in the most recent (1999) u.s. News & World Report rating of library schools: Univ. of Illinois (Urbana Champaign) [1], Univ. of North Carolina (Chapel Hill) [1], Syracuse Univ. [3], Univ. of Michigan (Ann Arbor) [3], Univ. of Pittsburgh [3], Indiana Univ. [6], and Univ. of Washington [ranked 18th in 1999 but very much “on the move” since then].

2“Of or concerned with phenomena…as they change through time”—American Heritage Dictionary.
1 • Self Study

FIS currently consists of 14 tenured and tenure-track faculty members and approximately 350 students (~280 FTES) enrolled in 4 graduate programs: (i) an accredited, professional Master of Information Studies (MIST); (ii) a post-master’s Graduate Diploma of Advanced Study in Information Studies (G.Dip.ISt), (iii) a combined Law and Information Studies J.D./MIST; and (iv) a Doctor of Philosophy (Ph.D.). Most of the students are in the MIST program; there are currently ~45 registered doctoral students. FIS also participates in 6 collaborative uoft programs, supplying the largest student group in both Book History and Print Culture (BHPC) and Knowledge Media Design (KMD). Through its Professional Learning Centre (PLC), FIS also offers a continuing education program that is the largest of its kind in North America.

FIS began life 75 years ago as a library school, but in recent decades has shifted its identity more towards that of an “i-school.” In the last 7 years it has also substantially developed its research funding (Figure 1). It has undergone 3 external reviews in the last 2 years (1 in 2002, 2 in 2003), and hired a new Dean in 2003, charged with leading the Faculty on a major program of reconception and renewal. Information about those reviews, and more “self-study” details, are given in Appendix B. Their net effect was to poise the Faculty to forge a long-term strategic vision. FIS has therefore used this planning process as a catalyst for an unusually thorough examination of what it wants to be, and where it wants to go.

2 • Mission, Values, Priorities, and Goals

2a • Mission

FIS will adopt an integrated 3-part mission:

a. At the level of information subject matters:

1. Within the Faculty: Renew and reconfigure its traditional strengths in collecting, stewarding, curating, organizing, presenting, managing, preserving, and providing (public) access to diverse information collections, resources, and cultural records. The mission is:

a. Dedicated to a seamless integration of 21st-century information technologies, including paper, electronic, digital, dynamic, and other knowledge media—undergirded by leading-edge computational systems and architectures;

b. Cognizant that information stewardship may take diverse and unfamiliar organizational and institutional form—beyond libraries, archives, and museums; and

c. Focused on intellectual content, professional judgment, and socio-technical practice, rather than on enabling technological systems and technologies.

Figure 1 — FIS Research Funding

$ (Millions)

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Figure 1 — FIS Research Funding

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Though future-directed, the $\alpha\cdot 1$ mission builds on the Faculty’s historical strengths. Understanding the future of information practice requires a profound understanding of how information stewardship evolves—and has evolved—over time.

- Success in the $\alpha\cdot 1$ mission will require significant relational partnerships across campus (with law, management, the library system, medicine, computer science, university archives, public policy, the university press, etc.). Nevertheless, the $\alpha\cdot 1$ mission remains fundamentally FIS’s responsibility.

2. **Relationally** (in collaboration with alliance partners): establish a focal point, with critical mass, for the study of new and important information-based subject matters that, even if they may ultimately be shouldered in other units, have not yet fully reached that stage, and/or that are not otherwise supported at uoft. That is: serve as a **collaborative academic incubator** for the study of important emerging areas in the informational realm.

- Even more than in the case of $\alpha\cdot 1$, the content of the $\alpha\cdot 2$ mission is contingent on fast-changing facts about the surrounding intellectual and academic landscape. It also depends critically on partnerships among members of the information alliance. Shouldeering its mandate therefore presents special organizational challenges (perhaps unequalled on campus), especially regarding rhythm and pace—requiring flexible, adaptive response.

$\beta$. At the level of **information practice**: take a leadership role in establishing a wide range of strategic partnerships—across campus, with other universities, and throughout society—to explore, develop, prototype, and study the **new and reconfigured academic and administrative information practices** being unleashed by developments in underlying information technologies.

- Whereas both $\alpha$-missions concern the subject matter of academic programs, the $\beta$-mission focuses on how universities (and information-based institutions generally) **conduct their business**. In the academic case, this includes: distance/distributed education; open-source models of creative work; revision to standards and practices of academic publishing; financial, administrative, and student services; the role of libraries and laboratories; etc.

These three mandates will be tackled together, in integrated fashion. They involve overlapping concerns, share technological expertise, and rest on common intellectual foundations—involving such notions as **architecture**, **representation**, **behaviour**, **authenticity**, **classification**, and **cultural context**. Pragmatically, they should be located in a single site, in order to concentrate and catalyse requisite energy, focus, and excitement. Embracing them together will allow FIS and its partners to (i) strengthen their international leadership in teaching and research, (ii) shoulder responsibility for educating informational professionals and meetings society’s emerging informational needs, and (iii) help the University of Toronto develop a coherent, compelling information strategy—from high-level intellectual content through to enabling socio-technical practice.

2a.i — **Information Strategy**

The academic priorities and goals discussed below (§2c–§2d) focus primarily on $\alpha$-projects, and on their shared intellectual foundations. Understanding how the $\beta$-part fits into the mission requires understanding a university’s overall **information strategy** in terms of 3 interrelated levels:

13. **Information subject matters**: A highest level where information in its myriad forms, and practices and processes explicitly understood in informational terms, enter into academic teaching and research projects as **explicit subject matters**;

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5For example: whereas studies of online communities, the use of the internet in democratic politics, etc., may once have needed incubating in Information Faculties, such topics are increasingly central in sociology and political science departments.

6Examples: computer science; biology studying organisms and genetic structures as information-based processes; sociology investigating the way in which information networks reconfigure community; literature programs and cultural theorists
In order to achieve/maintain greatness, all universities (as preeminent information organizations) must take a leadership position on all 3 levels, so as to take advantage of and help shape—rather than be left behind by—sweeping technological, organizational, and intellectual change. That is: the great university of the future must be reflexively aware of its information processes and practices, in order to be able, nimbly and effectively, to transform them appropriately, and establish new best practices, in light of emerging understandings and rapid technological developments. Merely addressing the α-parts of the mission will not ensure this reflexive awareness. To put it colloquially: FIS and its partners must “walk the talk”—must practice what they preach. That is: we must not only tackle the l3 α-missions, but also, in so doing, exemplify—and substantially advance—best practice at both levels l1 and l2, by doing things in ways that accord with the content of our on-going research.

2a.ii — Pilot Project

The organizational challenges involved in achieving the tri-partite mission are formidable. Both the α- and β-missions demand highly dynamic, relational, interdisciplinary and interdivisional collaborations, well beyond the pace and isolation characteristic of the modern academy. A number of the strategies proposed in §3 are explicitly addressed to meet this challenge of ensuring flexible, light-weight, dynamic reconfiguration. Funding and organizational structures will also be required that cross-cut the traditional division of a University into faculties, departments, collaborative programs, centres and institutes. In addition, partnerships will be forged with both public and private sectors, with affiliated professions, and with national and international partners.

To achieve this breadth, energy, and dense relationality, without losing focus or concentration, FIS proposes not only (i) to develop the academic programs detailed in this plan, and (ii) to develop partnerships both with units across all three campuses, and with the public and private sectors, but also (iii) with other members of the alliance, to establish a major new institute to host this collaborative, interdisciplinary exploration of transformed information practices. In honour of the legendary UofT figure who presaged many of these developments, the proposed institute is provisionally labeled the McLuhan Institute.9 It aims to be a place where dynamic programs, collaborating faculty, distinguished visitors, multi-disciplinary and multi-divisional graduate students, intensive studios and laboratories, and affiliated programs can convene to explore the transformation of the academic mission, from content to practice to supportive systems. In addition, by serving as a site of leading-edge information practices in both education and research, it will prototype the future of the technologically-enabled university. Backed by this strategy, the Institute will thus serve as skunkworks for future university information practice—or to put it in a slogan: a Pilot Project for the e-University.

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7 Examples: libraries, archives, professional papers and books, student registration services, peer review protocols, systems to support teaching and learning (including distance and distributed teaching), ways in which documents are accessed, etc.

8 Examples: networks (wired and wireless); email; spam and virus control; backup and archiving services; security; grid and mesh networks; high performance computing systems; directory and identity services; web servers; document, presentation, and publication standards; etc.

9 The proposed McLuhan Institute is different from (though related to, and a possible home for) the current McLuhan Program in Culture and Technology (§3e). Formal permission to use the name in any form would depend on obtaining appropriate permission. In particular, there is reason to believe that the phrase ‘McLuhan Centre’ is unlikely to be approved.
2b • Values

Three fundamental values will drive this mission forward:

v1. **Excellence**: A compassionate but uncompromising effort continually to improve the quality and calibre of the Faculty: people (faculty members, librarians, staff, and students), programs, practices, teaching, research, facilities, etc.

v2. **Relationality**: A commitment to pursue all aspects of the FIS agenda in as productively relational a manner as possible, with many different constituencies and stakeholders. Numerous considerations mandate this relational emphasis, including: (i) the intrinsically broad nature of the subject matter; (ii) the importance of interdisciplinarity and interdivisional collaboration; (iii) the specifically relational character of the α-2- and β-missions; and (iv) the need to combat structural academic tendencies towards "silo-ing," isolation, and scholasticism.

v3. **Diachronics**: Constant, vigilant attention to the fast-changing character of: the intellectual landscape; the development of academic agendas in affiliated departments; the pace of emerging technologies; changes in the social, institutional, and political context; reconfigurations in university structure and commitment; and—in general—the live intellectual and professional history in which FIS aims to take a part.

2c • Priorities

FIS currently offers both professional and research programs: a professional Master of Information Studies (MIST), which also serves research students via a thesis option; and a Ph.D. The MIST program is divided into 3 streams: archives (A), library and information science (LIS), and information systems (IS).

Two fundamental priorities guide the development of this plan:

P1. Through the structure of the alliance, combine strengths in archives and libraries (first two streams) with those of the uoft program in Museum Studies. While the organizational (and political) consequences of this fusion need to be worked out, strong substantive arguments militate in favour of such integration. In responding to IS/IT advances and resulting changes in constitutive practice, museologists, librarians, and archivists increasingly deal with common issues: acquisition, organization, classification, curation, presentation, and preservation of diverse cultural records.

P2. Rethink the “information systems” (IS) stream in a much wider context, in order to focus on what matters about this effort, tie it into other dimensions of FIS's expertise, and give it adequate resources to fulfill its part of the mission. For fundamental academic (as well as resource) reasons, this is not something FIS can do alone. Success will require establishing key strategic partnerships with a number of other programs on campus—particularly with the Knowledge Media Design Institute (KMDI) and its KMD collaborative program.

The emergence and development of the IS stream has been critical to FIS. The Faculty has high-quality IS faculty and major IS research programs, and relies on generous support from the Access to Opportunities Program (ATOPS). Yet the Faculty has still had insufficient resources (i) to serve its student constituency adequately, (ii) to attract the very best students, or (iii) to serve the university's need for a coherent information strategy. In order to address all three problems, in ways that enhance current strengths, it is necessary simultaneously: (i) to reconfigure the place of systems and technological expertise within the Faculty, in order to tie it more closely to other FIS strengths; and (ii) simultaneously, to link it integrally into efforts of strategic partners.

Five additional priorities will also be adopted:

10As well as holding on-going strategic discussions about common concerns, FIS and MS (an independent SGS program) are organizing a 2004 conference (“Curating Knowledge”) on the future integration of Libraries, Archives, and Museums.
p3. Build on the strengths of the FIS continuing education program (the “Professional Learning Centre,” or PLC) not only to provide life-long learning opportunities for FIS graduates and information professionals, but also to help with other FIS goals, including distributed education (P4), effective use of information technology, curricula for part-time students, etc.

p4. Make major investments in distributed education—a mix of physical co-presence (face-to-face contact) and technologically-mediated distance collaboration. It is a theme of FIS research that distributed education, rather than pure “distance” or “online education,” is the right notion on which to base the future of the university. This thrust will build on expertise developed in PLC (which runs a number of distance courses), tie into several faculty members’ research interests in remote collaboration, exploit the existing McLuhan Program (§3e), and involve strategic partnerships with such other uoft units as kmdi, oise/ut and the School of Continuing Studies. With these partners, the distance education projects will also be studied—as part of the mandate to develop, and leverage, reflexive awareness of our own information practices.

p5. Review and reconfigure the relationship with the UofT Library System (UTL), which, like FIS, is engaged in rethinking its role, systems, practices, and relations to the University as a whole. In part, this goal stems from FIS’s historic role in educating professionals of the sort that UTL hires. But the intellectual connections go deeper, in many areas. UTL has taken the lead in several other areas of importance to the FIS strategy: research in the Resource Centre for Academic Technology (RCAT), the Adaptive Technology Research Centre (ATRC),11 and initiatives in information literacy—especially at UTL Mississauga.

p6. Partner with appropriate divisions, units, programs, centres, researchers, and students in the health faculties and affiliated hospitals to develop research and education in the informational realm, in maximally synergistic ways. In spite of some differences in vocabulary, models, and methods, there are many areas of substantial overlap (e.g., in information technology mediated distant collaborations, problem-centred learning, etc.). Potential collaborators include the Knowledge Translation Program, Health Care Technology and Place, and the Centre for Global e-Health Innovation. Notably, the e-Health Centre shares with the proposed McLuhan Institute the mission of serving as a pilot project for future information-enabled practice.

p7. Take a leadership role in the study, implementation, and use of open source systems and practices at the University of Toronto. This will involve, but not be limited to, basing the information technology and systems of the Faculty and Institute, and of as many alliance partners as possible, on open-source standards.12 In addition, open-source techniques, organizational impact, economic models, etc., will be delivered as part of the academic program. Finally—and ultimately more importantly—the alliance will pioneer the use of the open-source model as an economic model of creative work more generally (not just in the area of software). In more than a superficial sense, academic and research output, in the form of research publications, academic books, conference presentations, etc., are an exemplary case in which to explore the use of open-source models.

2d Goals: A University-Wide Information Strategy

All 7 priorities listed above involve forging an intellectual vision with greater scope than that of FIS alone. P2, for example, involves integrating the (current) IS stream with other units; P4, through its instantiation in the McLuhan Institute, will recruit other units, particularly OISE/UT; P5 and P6 are explicitly aimed at establishing cross-divisional programs and priorities; and implementation of P7, involving

11 Internationally renowned for its work on universal design (for disabled information practitioners).
12 KMDI has taken the lead on bringing open-source models of systems and knowledge to uoft (e.g., at its May 2004 Open Source conference in Convocation Hall).
the use of an open-source model not only for IS/IT systems but for creative work more generally, is a strategy FIS will pioneer for the university as a whole.

Realizing these priorities, therefore, will require a larger intellectual effort than FIS can mount by itself. A broad focus is also a consequence of values v2 and v3, and the α1-2-mission. It is required, in addition, in order for UOFT to take international leadership on the suite of challenges facing i-schools. And it is necessary in order that UOFT “get a leg up” on figuring out its own future, in light of sweeping impending changes to informational practice (of which teaching and research are paradigmatic examples). For all these reasons, it is essential, in order for FIS to achieve and maintain excellence, to develop a plan in two stages: (i) formulate a plausible “information” strategy for the university as a whole, and then (ii) identify that portion of the whole which FIS can reasonably be expected to shoulder.

Start with the top-level (l3) issue of information strategy: information-based subject matters. Figure 2 proposes a structure for the subject matters of the overall “information alliance” here being proposed, in which FIS will play a major part. The proposal: (i) adopts priorities p1–p7, (ii) separates those IS areas in need of explicit nourishing, (iii) integrates the libraries, archives, and museum programs, and (iv) grounds the whole in terms of a common base of shared intellectual concerns. The areas of primary focus are described first; areas of shared theoretical concern, in §2d.i.15

A1. Libraries, Archives, and Museums (LAM): As described, a consolidation, refocusing, renewal, and expansion (to include museum studies) of FIS’s expertise in the collection, stewarding, curation, organization, presentation, management, preservation, and provision of (public) access to diverse information collections, resources, and cultural collections—building on historical strengths and perspectives, but renewed, re-understood, and reconfigured for 21st-century organizations, and for a seamless mixture of paper, electronic, digital, and dynamic technologies.

The majority of the Faculty’s current faculty members and programs have strengths in this area; for some, it is their intellectual centre of gravity. Professional needs in this area are widely expected to grow substantially over the next decade, as a generation of librarians and archivists retire. Increased emphasis on professional qualifications of archivists and curators will also lead to substantial future hiring growth in both museums and archives.

A revitalized focus on these topics, plus the shared base, will require resources on the order of the Faculty’s current complement (though not exactly the same resources; see §2e).

A2. Communication, Culture, and Information Practice (CCIP): the sociological, historical, anthropological, cultural, political and policy dimension of socio-technical information practice more generally (i.e., including, but not restricted to, its application in LAM).

The social/cultural dimensions of information systems is an emerging FIS strength; it is also

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13Levels l2 and l1 are discussed in §2a-i.
14On the model, perhaps, of the airlines’ Star Alliance.
15Discussions of FIS faculty complement, divisional collaboration, etc., are given in §2e.
16Ian Wilson, National Librarian and Archivist, expects the shortage to last 10–20 years (personal conversation).
increasingly recognized, internationally, as a critical emerging area of research.\textsuperscript{17} As manifested in the Munk Centre, Faculty of Law, and sociology departments, the political dimensions of information practice are also critical factors in public policy. A number of non-FIS uoft researchers are strongly involved with these issues as well—from history, sociology, education (oise/ut), the Institute for the History and Philosophy of Science and Technology (ihpst), and the undergraduate Culture, Communication, and Information Technology (ccit) program at uoft Mississauga (utm). The proposed program would also tie strongly into the proposed uoft Centre for Public Policy. Ccip is also a central strength of kmdi (an alliance partner), in its work on the social impact of technology, internet studies, and its studies (and manifestation) of interdisciplinary.

In spite of this wide interest, these issues have never been consolidated at uoft, in part because uoft does not have a communications program (although communication is considered in the McLuhan Program—q.v.). And although utm is developing a new undergraduate program in its ccit program,\textsuperscript{18} that program has yet to be affiliated with a graduate faculty. uoft is also "behind the curve" with respect to Science and Technology Studies, a major emerging intellectual discipline involving history, sociology, anthropology, and some philosophy (with new departments at Cornell and mit, for example).\textsuperscript{19} Although FIS has some expertise in this socio-politico-cultural area,\textsuperscript{20} we are unable to offer a full graduate program, and have no resources at the undergraduate level.

Doing justice to this area will therefore require FIS combining forces with: the utm ccit program, a reworked McLuhan Program (§3e), and affiliated faculty from oise/ut, icc, utsc, history, etc. This integration would also distill and focus a number of intellectual areas that do not currently have a home at the University of Toronto:

a. Science and technology studies (sts)

b. Philosophy of technology

c. Communications

d. Collaboration Studies

e. Cultural and literary theory (re: approaches to technology)

Establishing a high-quality, dynamic, and internationally visible program in these critical areas would greatly redound to the University’s overall reputation and strength.

A3. \textbf{Strategic Information Management and Systems (SIMS):} Strikingly, no program in the Toronto area offers graduate education in the use and management of information processes and systems—technical and organizational education for professionals charged with designing, deploying and managing information processes in diverse institutional environments. There is thus nowhere for tomorrow’s “information officers” (cio), “knowledge officers” (cko), knowledge management professionals, etc., to receive appropriately directed education.

A tremendous opportunity exists to launch such a program—an opportunity others will seize, if uoft does not take the lead.\textsuperscript{21} Many is students come to ffs looking for such education. The competitive advantage of such programs are manifest—as organizations “lift their sights” above information systems and information technology (is/it) to focus on information practices and organizational reconfiguration.\textsuperscript{22} In addition, there is an urgent need for such expertise throughout the health care sector; almost enough to warrant launching such a program in the health area on its own.

\textsuperscript{17}This is especially so as society—and the university—raise their sights from the level of information \textit{systems} and \textit{technologies}, which are increasingly being commoditized, to the level of information \textit{practices}, as discussed in §2a-i.

\textsuperscript{18}There is also a ccit building, set to open in August 2004.

\textsuperscript{19}It is striking that uoft does not even have an stps program.

\textsuperscript{20}E.g., Profs. Andrew Clement and Nadia Caidi.

\textsuperscript{21}York’s “InfoTech” program has been planning to do exactly this—pace André Kushniruk’s move to Victoria.

\textsuperscript{22}See the discussion in §2a-ii.
In spite of its importance, FIS again cannot mount such a program by itself (though some FIS faculty members again have interests and expertise in this area). Partly this is due to a lack of resources, but once again the reasons are more than fiscal. Staying up to date requires: uncompromised technical expertise, implying close collaboration with computer science (CS) and electrical & computer engineering (ECE); a thorough understanding of the changing industrial context, linking the program to mechanical and industrial engineering (MIE); strength in management and organizational theory, requiring strong collaborations with Rotman; etc. In medical areas, similarly, state of the art programs would need to be developed in conjunction with medical faculties and laboratories. Overall, though, filling this gap should be an urgent uoft goal.

Partners in mounting such a program would include:

- Rotman School of Management
- Electrical and Computer Engineering
- Computer Science
- Mechanical and Industrial Engineering
- Health Policy, Management, and Evaluation
- A number of other programs in the Health Faculties, especially the Knowledge Translation Program, Health Care Technology and Place, and the e-Health Centre.

The proposed area would bring together expertise in: (i) computer and information systems and technologies, especially including issues of information architecture; (ii) knowledge management, organizational theory, and general issues of management (perhaps including some fiscal expertise); (iii) health informatics, and general information systems in health care; and (iv) the social context of information as a socio-technical practice. It should be investigated by students and faculty from both within and outside the medical divisions, in order to share insights and elucidate issues particular to health care fields. As well as providing cio- and cko-directed education, aims of this area include: (i) enable substantial technical expertise to be brought to bear on the information challenges in lam and elsewhere throughout the program, (ii) give technical experts an understanding of the social context of system deployment; (iii) strengthen ccip by ensuring on-going interaction with system designers; and (iv) nourish connection among technical, medical, and managerial professionals.

A4. **Information and Media Design (IMD):** Creative design is an increasingly important aspect of developing new information technologies, systems, and practices. A critical emphasis on design is also a component of human-computer interaction research (HCI), a traditional area of FIS expertise. KMDI is also committed to bringing issues of design into focus in considerations of new information media; the focus is also shared with some members the Faculty of Architecture, Landscape, and Design (which increasingly relies on information systems in the design and modeling of buildings and urban landscapes).

The aim of this fourth area is to recognize the importance of the design dimension, and to establish, in a concentrated and focused area, a student, faculty, and research focus on design as applied not only to technology, but to systems, practices, and organizations more generally. More than in the other three areas, faculty and students in this area would likely include some from performance, laboratory, and studio backgrounds. In part, identifying and resourcing a design area will go a long way towards supporting the KMDI mission—something FIS has done informally in the past, but which needs explicit structural realization (KMDI, being essentially cross-divisional, is

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23E.g., Profs. Chun Wei Choo, Eric Yu, and Ethel Auster.
24The uoft computer science department does not plan to move in to this more professionally-oriented direction, but some faculty members within Computer Science are likely to participate.
25As illustrated by the mit Media Lab.
not in a position to admit its own students, grant graduate fellowships, or hire or tenure faculty). Again, there are parts of the ccit program and the Institute for Communication and Culture (icc) at utm, the bio-medical communications area, and several new programs at utsc that would be natural partners for the development of this area.

2d.i — Methodology

Each area identified above will convene a methodologically coherent faculty and students—enabling coherent policies for admissions, hiring, tenure, promotion, etc. This is an essential virtue; methodological disagreements can easily block academic process, hobbling attempts to develop interdisciplinary programs. Dividing a university's information strategy in methodologically realistic ways is thus a critical, if tacit, ingredient in long-term success. In particular, the methodological styles of each area are expected to fall out approximately as follows:

1. Libraries, archives, and museums: primarily from extant library, archive, and museum traditions;
2. Communication, Culture, & Information Practice: primarily with social science sensibilities;
3. Strategic Information Management & Systems: a mixture of information professionals, organizational theorists, management faculty, health care professionals, and computer scientists and engineers interested in the deployment of technology;
4. Information and Media Design: a constituency sympathetic to creative practices of design, experimentation, prototyping, synthesis, etc., rather than a pure focus on theorization and scholarship.

The synergy of hci expertise at kmdi and fis stands witness to this design emphasis.

As detailed immediately below, it is the integration of these areas, and their common footing in shared intellectual issues, that would constitute the overall program's greatest strength. Situating the synthesis in the proposed McLuhan Institute (§2a·ii, §2d·vi) would also allow the integration to take place in an energetic and focused way—greatly amplifying (and benefiting from) the student experience.

2d.ii — Integration

As suggested in Figure 2 (p. 7), the four areas are tied together in powerful, synergistic ways.

1. Cross-cutting all four areas lies a shared base of theories and ideas—involving such notions as architecture, representation, privacy, authenticity, organization, classification, context, use, etc.
2. All four rely on shared technological and system expertise. As manifest in fis's is stream and at kmdi, a grounding in technology and systems is critical to the development of useful, leading-edge systems. Reciprocally, integrating technical expertise into the broader context of social use and institutional deployment has a beneficial effect back onto technological design.
3. Because of these shared concerns, a number of “core courses” will be offered to students in all areas.26 In conjunction with the mandate to adopt problem-centred learning methods (s4b, §3b.ii) and support joint teaching, these common courses would be ideal sites for students in each area to understand, and work with, the skills of other areas.27

In addition, the academic identification of specific faculty members will often rest as much on their expertise in foundational areas as in commitment to one (or more) program areas.

4. Many issues, while highlighted in one area, permeate others. Thus the social, cultural, and policy issues defining ccip are crucial aspects of all the others (lam, for example, depends crucially on

26Some possible courses: “The Representation, Organizing, and Categorization of Information,” “Architecture of Information Systems,” “The Social Life of Information,” etc. Others—such as “Managing Organizational Records”—would be applicable to more than one area, even if not to all (lam and sims, in this case).
27Whether the right mechanism for this commonality would be a common degree, with different specializations or concentrations, or different degrees with a strong common intellectual foundations (and a program of collaboration and joint projects) is one of the strategic implementation issues to be addressed during the coming year.
ccip; I AM students will take ccip courses, etc.). Issues of design, similarly, span all four areas: appropriate design is a critical part of managing information resources; considerations of appropriate use also impinge on both system and organizational design; and so on. Giving imd a distinct identity is thus not intended to suggest that design will be dealt with in that area alone; rather, it is a mechanism to bring creative academic and professional designers into the overall mix, to nurture and strengthen a design focus throughout the program.

5. Diachronically, researchers in all four areas are struggling to delineate the future of their perspective. No area can do it alone; each exists only in relation to the others. Thus librarians, archivists, and curators must chart a future in which they understand systems and organizations (SIMS) and the relations among people, technology, collections, systems, and social context (ccip). Media design (imd) not only relies on social (ccip) and system (SIMS and common) understandings; an emphasis on design, in turn, is increasingly recognized as essential in engineering, implementing, and managing systems that succeed in real-life situations. And so on.

6. To be successful, many research and laboratory projects would require contributions, skills, and insight from multiple areas. By having all four as part of the same common endeavour, such projects could be immeasurably improved by cross-area collaborations—with real, rather than merely imagined, contributions in all essential dimensions.

For these and other reasons, the viability of each area depends, in specific ways, on the viability of each of the others. Moreover, as documented in §2a·ii and §2d·vi, co-locating the four areas (along with other alliance activities) in the proposed McLuhan Institute will lead to major synergies, foster multidisciplinary and cross-divisional teaching and research, benefit the student experience, and allow expertise from all four areas to be directed towards emerging forms of information practice.

2d·iii — Health Sciences

Issues of information practice permeate the health sciences, and are recognized as urgent topics of teaching, research, and delivery. Genomics, telesurgery, crisis management (e.g., SARS), national medical record systems, health informatics, drug discovery, neural imaging, knowledge translation projects—the list of transformative health care information practices is virtually endless. Yet no specifically health-related area is included in the above list (in spite of priority p6). This is by intent: health is not separated out because it is too important. All four areas focus on issues of tremendous medical importance—as reflected in the growing number of efforts dedicated to these concerns, including the Centre for Global e-Health Innovation (e-Health), the Knowledge Translation Program (KTP), and Health Care Technology and Place (HCTP).

The plan’s aim, therefore, is to develop intensive collaborations with all health science faculties, as part of the information alliance—leading, overall, to an integrated uoft effort. For example: strategies are identified in §3 to garner annual participation of health care faculty and researchers in McLuhan Institute projects. Joint appointments will be explored, courses will be cross-listed as appropriate, collaborations will be developed between FIS laboratory facilities and corresponding medical ones (such as the e-Health Centre), etc.

It is unrealistic to expect all medical informational efforts (even those requiring explicit incubation, such as those at the e-Health Centre) to be co-located with FIS, or with a more encompassing McLuhan Institute. It is more plausible to conceive of the McLuhan Institute as one “pole” of a strong collaboration, partnered with corresponding/contrapuntal efforts in the health sciences complex. Details need to be worked out; the critical point is that the absence of a specific health-oriented area is intended to strengthen, not weaken, a health-alliance collaboration.

28And the requisite faculty complement (§2e).
29Some are already underway.
2d·iv — Systems and Technology

A second area that is not separated out—again, because it is too important—is systems, computing, and technology. As mentioned in the fourth challenge, information faculty have developed great expertise in understanding the strong vertical relationships among the three levels identified in §2a·i: (i) subject matters or task domains, (ii) information practices, and (iii) underlying systems and technologies. Moreover, as stated in the opening sentence, the original reconfiguration of practice underlying this entire plan was catalysed by explosive technological developments. While technical issues are highlighted in the Sims area (Strategic Information Management and Systems), technological and systems expertise is fundamental to the whole plan. Success in implementing this vision, therefore, will not only require the maintenance of the highest technical standards throughout the program (in faculty, staff, and students alike); it will also depend on strong, collaborative relations with such strong uoft units as Computer Science (cs), Electrical and Computer Engineering (ece), and Mechanical and Industrial Engineering (mie).

2d·v — Undergraduate Teaching

As currently structured, FIS neither offers (nor, with 16 faculty lines, can offer) an undergraduate program. The teaching profile of the whole alliance, however, across the graduate/undergraduate spectrum, is both richer overall, and much stronger on the undergraduate front. As envisaged, Lam and Sims would primarily shoulder graduate (professional and research) degrees; the envisioned level of expertise required for entry to each is beyond that of (first-entry) undergraduate students. In contrast, CCIP is intended, in part, to serve as a graduate home for faculty teaching in UTM’s undergraduate CCIT program (an idea supported by initial negotiations with UTM senior leadership). If FIS were to serve as the graduate home of those faculty, it would carry considerable undergraduate teaching responsibility.

Plans for distributed education, involvement in the establishment of the proposed McLuhan Institute, and the affiliation of some of its current faculty with other uoft undergraduate efforts (such as the Book and Media Studies program at St. Michael’s College) all add to FIS’s undergraduate responsibilities. Another opportunity for undergraduate teaching is implicit in the plan. In reconfiguring its relations with UTL (PS, §2c), FIS intends to participate more fully in UTL/UTM’s “information literacy” efforts. If tenure-track faculty are hired to teach in this program, FIS might again serve as their graduate home. Also, in line with FIS’s mandate to be a “pilot project for the e-university,” and because it has strengths in a number of areas relevant to information literacy (especially in Lam and CCIP), FIS faculty could participate in the design, development, and oversight of the UTL-shouldered literacy programs (with FIS doctoral students able to serve as instructors and TAs). This and other mechanisms would allow FIS experience to benefit the Uoft undergraduate student experience, without FIS itself mounting a full undergraduate program.

Further investigation of this topic will require consideration of the complex relations, at uoft,
among: (i) first-entry undergraduate programs; (ii) second-entry undergraduate programs such as Law's JD and Medicine's MD; (iii) professional and research master's degrees; and (iv) research-intensive doctoral programs. But to reduce it to simplest terms, the teaching situation can be understood in terms of two overall groupings (Figure 3): (A) programs focused on undergraduate and professional teaching (first and second entry undergraduate, and the professional part of the master's program); and (B) programs focused on research (master's and doctoral). This should in no way suggest that the master's degree be divided between professional and research segments; on the contrary, it derives strength from their integration. The diagram does show, however, that FIS itself, and the proposed alliance, shoulders considerable responsibility for the mandate emphasized in Stepping Up: that programs shoulder responsibility for the full student experience.

### 2d·v·i — Reflexive Information Practice

Sections §2d·i—§2d·v focus on the α-mission—on 13 informational subject matters. But teaching and research involve more than topic; they also depend on a layer of enabling information practices. All university missions share in this dependence; information faculties are distinct in being reflexive: they depend on the very sorts of system, practice, organization, etc., that they themselves study. This reflexive character opens the way to addressing the β-mission, as well.

Four major goals address the β-mission:

1. As indicated in priority p4, and detailed in §3b·ii, FIS will mount a substantial effort in distributed education—pioneering collaborative teaching arrangements with other i-schools, other Canadian library and information faculties, and other international partners.

2. FIS will undertake a major reflexive project (§3d) to raise its own academic, administrative, library, laboratory, and other information operations to a breakthrough level of "best practice"—not only in terms of information systems and technologies, but also with respect to the best emerging understanding of organization, management, metadata, etc., emerging from its own research;

3. Open source practices will be embraced, not only (again) at the level of underlying information systems, but for creative work in general, including pedagogical and academic publication;

4. A major research and education institute will be launched, to serve as a reflexive site to bring α- and β-mission together in a high-visibility site for the development of the future e-University.

One of FIS's great strengths—repeatedly praised by external reviewers—lies in its Inforum: an integrated laboratory, library, and information centre that, as well as providing unparalleled service to both faculty and students, begins to allow the Faculty to develop and prototype the very sorts of system, organization, practice, etc. pioneered in its research. Just as physicists need cyclotrons and accelerators,

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33The research component is carried by the thesis option.
34Appendix b.
35Many students, upon graduating, cite the Inforum as a highlight of their FIS experience.
and biologists wet labs, an empirically-oriented information faculty needs a laboratory for its social, cultural, and organizational work. The Inforum is also critical to the professional education program, providing students with in-house experience and participation in best-practices within their own areas of study. This manifestation of the reflexive character of FIS’s mandate means that the Inforum can serve as a living laboratory, contributing to the Faculty’s goal of becoming reflexively aware of its informational practice and behaviour (§2a).36

The reflexive promise of the Inforum has just barely been tapped. A major goal of the FIS plan is to strengthen this empirical, laboratory focus over the next six years. The “laboratory” focus will also be strengthened by FIS’s commitment to upgrade its administrative and information practices to be leading-edge, technologically-enabled “best practices” (§3d). But focus on the Inforum and practice is not enough. From the point of view of facilities, the Bissell Building (where FIS is located) needs a major overhaul, for faculty, staff, and students alike, in order to nourish and catalyse the achievements envisaged in the plan. In current form, it will not attract the range of alliance partners needed in order to achieve the overall vision adumbrated above.

For these and many other reasons, we propose to establish and raise funds for a major Research Institute or Laboratory, provisionally labeled the McLuhan Institute.37 Its aim is to serve as a high-profile, distilled and exciting site for the development of leading-edge research, education, and multidisciplinary/multidivisional collaboration on emerging informational practice. This Institute would bring numerous benefits to the work proposed here:

1. Crucible: It would serve as a dynamic “crucible” to host the work of the alliance: collaborative partners, shared students, intellectual strands, disciplinary approaches, etc.;
2. “Music”: Whereas several affiliated UofT units focus on technology (computer science, electrical and computer engineering, mechanical and industrial engineering, the Bahen Centre for Information Technology, etc.), the mission of this Institute would be at a higher level. It would exploit leading-edge technology, but its subject matter would be the (academic) practices and organizational processes developed on top of them. If technological units develop instruments (i.e., are the Steinways and Stradivarii of information practice), the McLuhan Institute would focus on music.
3. Skunkworks: In virtue of its subject matter (information practice) and forward-looking research profile, the Institute would act as a highly visible “pilot project” or “skunkworks” for the University as a whole. While not directly involving more than (say) 1% of the overall University community, everyone on all 3 campuses could understand it as pioneering some of the technologies and practices constitutive of their own futures. This in turn would help the plan as a whole achieve its goal of helping the University as a whole become reflexively self-aware.
4. Interdisciplinary and interdivisional research: By involving partners from all 3 campuses, representing all 4 graduate divisions (natural science, social science, life science, and humanities), it would exemplify best practice for both interdisciplinary and interdivisional teaching and research.
5. Student experience: Because of the intrinsically diachronic and relational character of the Institute’s mission, students who participate in it tend to come from all over campus—where some of them feel marginalized, because the approaches they are pursuing are not yet recognized as fully “legitimate” within their home departments and disciplines. Having a dedicated site where such interests were nourished and supported would both greatly contribute to the quality of the student experience, catalyse interdisciplinary interactions, and allow the standard of excellence on interdisciplinary projects to be raised.

36The empirical dimension of the research aspect of the Faculty ties into—but should not be confused with—the practical dimension of its professional education programs.
37The current UofT McLuhan Program might become part of this larger Institute; see §3e.
6. **Programs:** The Institute will sponsor regular international conferences, workshops, visitors, events, etc. (as does the Munk Centre). In addition, we propose each year to adopt a high-visibility programmatic theme. Topics would be announced in advance; proposals solicited from potential post-docs and visitors; seminars planned; etc. Some initial suggestions (inevitably, these are dated; each year the plausible list will change):
   a. “A year on the lam”: the convergence of libraries, archives, and museums
   b. The role of a campus in the university of the future
   c. Curating information in the knowledge economy
   d. Public knowledge: the fate of the intellectual commons
   e. Evidence-based reasoning
   f. Problem-centred learning, case-based teaching, and the multidisciplinary university
   g. Beyond software: open source as a general economic model of creative work
   h. What should be kept? — the fate of the ephemeral
   i. Beyond methodology: the organization of the post-disciplinary academy

7. **Dynamics:** An Institute could move at a pace much faster than that of a Faculty or Department. Yearly visitors (from elsewhere or from other uoft departments), post-docs, yearly program and themes (#6, above), seminar series, etc., would revolve on an annual schedule.

8. **Place:** In an era of virtuality, digitality, remote collaboration, distance education, etc., great imaginative focus has been placed on the “non-physical” character of the information revolution. As manifest in our proposals for distributed (as opposed to distance) education, we believe that this emphasis is misconceived, lacking an adequate appreciation of the continuing importance of site, place, and location. As a concrete physical place, the Institute could redress this imbalance, serving as a place for energy and physical interaction, complete with its myriad dimensions of materiality, peripheral vision, human contact, etc.—including coffee and late conversation.

9. **Recognition:** As illustrated in the case of the Munk Centre, having a named, physical place that is associated with exciting goings-on in an area is an immense aid to drawing recognition to the University of Toronto for the calibre and importance of its intellectual programs.

10. **Fund-raising:** Such an Institute would be in a much better position than a Faculty or academic program to raise funds, attract external (including public) attention, etc. This will involve major grant initiatives (including a plan to apply for major crf infrastructure support), as well as Foundation and corporate sponsorship.

11. **Outreach:** As discussed in §3, on strategies, the Institute would serve as a site for outreach into the wider community, including not only other universities, but also the public and private sectors of the city, province, and nation—as well as internationally.

12. **Education:** Using technical resources to support remote collaboration, the Institute will serve as a site to pilot the distributed education programs embraced elsewhere in this plan.

13. **Information Strategy:** The Institute would be an ideal and potentially high-profile pilot project to design, develop, and exhibit an integrated approach to all 3 levels of a university’s information strategy, as identified in §2a.i.

Such an Institute would be known, across campus, as a **pilot for an e-university** (or: the “e-u lab”).

While this document (an Academic Plan) is not a specific proposal for the creation of the McLuhan Institute, the proposal to locate within it (at least the centre of gravity of) the academic programs and research projects identified in this plan is a theme that permeates all other aspects.

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38Initial conversations are already underway with Xerox and IBM.
39Some will recoil at this remark, worried that embracing a seemingly technological conception will eviscerate the university of its historic—even sacred—role as a site of disinterested inquiry and learning. But such concerns highlight exactly why
2e • Complement

If realized, the information strategy espoused above will make uoft justifiably famous as a leading international site for exploring our collective information future. Implementing it will require resources and partners from across campus. Before formulating strategies therefore (§3), we need to consider issues of complement and partnership, in order to identify (i) what FIS can contribute, and (ii) what can be contributed by alliance partners.

To implement the full information vision, critical mass is required in each of the four areas. An indication of minimal faculty strength is given in Figure 4. While the total of ~40 (strictly: 37–45) is much larger than FIS’s current complement of 16, several considerations make the proposal realistic. They should be understood in terms of 2 preliminaries.

1. On the order of 40 faculty members for a full envisaged “i-school” is still very modest—considerably smaller than many uoft departments. If uoft’s fiscal situation permitted, the transformative importance of the information revolution would warrant direct allocation of the full complement (though we do not expect that to happen).

2. One reason to establish a minimal level required to offer each area at an appropriate level of excellence, and to identify where such resources are pragmatically likely to be found, is to allow FIS to be honest about what goals it can meet. If Figure 4’s numbers cannot be approximated, prudence dictates we not attempt to mount all these programs. The figure can thus be taken as an indication of the minimal complement required, in each area, for it to be worth pursuing.

FIS currently has 16 positions (14 filled). A rough allocation of these positions, by area, is given in Figure 5. Three assumptions:

1. 25% of each faculty member’s time has been allocated to foundations and common concerns (e.g., issues of representation authenticity, computing, systems, categorization, etc.), to reflect the synergistic power of combining the four areas in a single alliance;

2. The allocation of each person’s expertise is extremely imprecise; no attempt has been made to use a fine grain of analysis; and

3. As discussed below, the 2 open FIS slots are viewed as “wild-cards”; how they are allocated will depend on how alliance partnerships work out.

As the figure indicates, significant faculty strength is needed in each area, to reach critical mass.

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an Institute is essential. It is undeniable that digital technologies are reconfiguring the world as we know it (as writing and printing did, in their time). This makes it essential that we understand how to preserve what matters most a university, in this impending future. A top priority of the Institute will be to help in that task. And the commitment is small. Even if every goal identified in this plan were fully funded, and others added as well, the total investment would still represent less than 1% of the total University of Toronto budget—a small figure to spend envisaging and ensuring our future.

These figures might be larger if the distributed education proposal were to grow substantially.

Though base funding levels are not high enough to permit them all to be filled.

Except for Smith, whose work is squarely on foundations, resulting in a “common core” allocation of 50%.
2e.1 — Faculty complement, by area

Where can these positions be found? The answers are area-specific (Figure 6, next page):

1. **Libraries, archives, and museums (LAM):** Depending on the allotment of open positions, FIS and the Museum Studies program (MS), by working together, can come close to meeting this requirement. By combining resources, that is, they can mount a strong LAM program with minimal additional resources—providing that the following assumption is met:

   - Plans for the other 3 areas can be brought to fruition in parallel—providing LAM with critical support in intellectual areas of common concern (technical systems; social, cultural, and organizational context; knowledge management; etc.).

   If this assumption fails, FIS will face a very difficult challenge. One possibility would be to devote both open slots to LAM, bringing it up to par—but that would severely impact the intellectual profile of the Faculty (and challenge its status as an “i-school”). We would be more likely to shore up both LAM and CCIP—at the expense of SIMS and IMD (with consequences for communication, fund-raising, student and faculty recruitment, etc.). But this is a measure of last resort. Having to abandon SIMS and IMD would seriously weaken the Faculty’s aspirations (with consequences for retention), and vitiate the interdivisional intent of the plan, so strongly advocated in *Stepping Up*.

2. **Communications, Culture and Information Practice (CCIP):** Total required complement is 10–12; of this, FIS can contribute approximately 5, leaving a gap of 5–7. As indicated, however, the UTM CCIT program is a possible partner, with 1 or 2 FTEs already assigned. In addition, a Tier 1 Canada Research Chair (CRC) has been allocated to UTM sociology in culture and technology, which would constitute another CCIP FTE, if appropriate partnerships can be established. Additional collaborations are anticipated from the Centre for Innovation, Law, and Policy (CILP), the Faculty of Law, and from the academic programs in the McLuhan Program (with no faculty allocation). Finally, CCIP is an area of focus for KMDI; although KMDI does not have faculty appointments, per se, its involvement represents substantial strength in this area.

   The bottom line can be summarized in 2 key points:

   ![Figure 5 — FIS Faculty Complement by Area](image-url)

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a. If utm is willing (i) to develop the ccit program in synch with this plan, so that fis functions as a graduate faculty for ccit faculty, and (ii) to allocate 3–5 faculty to such an arrangement, (iii) if the extant McLuhan Program can also be merged into this area, in synergistic combination with the ccit program, and (iv) if kmdi can be enlisted as an alliance partner, the necessary complement of faculty lines will be in place to provide a strong ccip program.

b. The major outstanding need, if these faculty lines are present, is one of intellectual leadership. Someone—perhaps the recipient of the crc mentioned above—must be recruited to forge unity and common purpose among the currently diverse constituencies that potentially constitute the ccip area of teaching and research. This is not a small task; forging coherence in this area should be viewed as a several-year project.

It is intrinsic to the collaborative nature of the vision that, without appropriate leadership, the vision will fail, even if the faculty lines are available. Contrapuntally, with leadership, but sans additional positions (i.e., if utm is unwilling to make a commitment), the resources in place are felt to be too diverse (intellectually and methodologically, as well as physically) for coherence and consolidation to be achievable.

3. Strategic Information Management (SIMS): Required complement is 10–12; of this, fis can contribute at most 5 (even counting a significant “common issue” contribution from the other areas, and even if one or more of the open fis slots is allocated to someone with strong technical experience). Again, therefore, there is a gap of 5–7. The situation differs from that of ccip, however, in that we know of no impending allocations of appropriate faculty positions to this intellectual area, in the uoft context. One might therefore suppose that achieving the critical mass necessary to mount a cio/cko-directed program is more remote. But 4 considerations suggest a more optimistic outlook:

a. There is reason to suppose that the 3 proposed technical partners—Mechanical and Industrial Engineering (mie), Electrical and Computer Engineering (ece), and Computer Science (cs)—would benefit from the creation of a sims program. Moreover, in their own plans, they may have interests in moving this direction as well. This will be explored over coming months.

b. Dean Martin, of the Rotman School of Management, has stated that Rotman “needs more technology”; the proposed program would be an ideal vehicle to realize this goal.

c. The need for information system management in health care organizations is intense. Though detailed arrangements have not yet been initiated, the strategy of strong partnership with health science faculties (§2d.iii, above) may lead to health science support.
d. In the long run, FIS plans to explore the possibility of offering a self-funded SIMS or SIMS/MBA program, along the lines of Rotman’s “executive MBA” program. If there is a market for such education, the program may be able to generate its own resources. Resolving the SIMS situation is urgent because so many IS students come to FIS looking for such a program. Exploring potential partnerships (including with York’s “Infotech” program) and clarifying a resulting strategy will be a FIS priority task during 2004–05. The combined business and health care cases should also make it a high priority for UofT as a whole.

4. **Information and Media Design (IMD):** Required complement 6–8; FIS contribution: ~2. As described above, issues of design play an increasingly important role in the development of successful information systems and practices, when design is understood not only in its familiar physical/aesthetic sense, but more widely as an approach that incorporates a multiplicity of diverse factors. “Participatory” and “user-centred design,” for example, are leading-edge approaches to system development; organizational design is a major theme in schools of management; system design plays a pervasive role in computer engineering; etc.

The design of knowledge media is also a primary focus of KMDI, which FIS both formally and informally supports (in part by admitting a large fraction of the KMD student body). As recognized in the KMDI academic plan, however, KMDI’s ability to implement this vision is limited by its inability either to hire faculty or to admit students—a consequence of its status as an interdivisional research institute. Moreover, as FIS increases the focus and quality of its own graduate programs, unless it officially launches an IMD area it will lose its ability to admit KMD students who are inappropriate for its other programs. And so, in this area, KMDI’s and FIS’s futures are reciprocally interdependent.

FIS not only remains committed to KMDI’s success, however, but wants to deepen its participation, in order to strengthen the place of design in all its activities. A mechanism is therefore needed—perhaps jointly between FIS and KMDI—to admit students and recruit faculty whose qualifications are more grounded in design than in traditional scholarship. Faculty and students of this sort—those with interest in applying technology to communication, media, and the performing arts, and with a bent for creative work and experimentation—will likely stem from diverse backgrounds. Forming an IMD area is a compact, leveraged way to assemble such talents, and radically increase the quality of the alliance overall. Less clear, however, is how partnership with other UofT units can cover the complement gap. Direct university support may be needed, therefore, for this crucial leg of an information strategy.

**2e.ii — Faculty complement, summary**

Overall, FIS will search for support from a variety of sources to implement the information strategy detailed above. Such sources will include, but not be limited to:

1. The UT M CCIT program (in conjunction with UT M’s plan for undergraduate expansion);
2. The Academic Initiative Fund (AIF);
3. Increased enrolments through programs of distributed education (§3b·ii);
4. An “executive-MBA” style offering in the SIMS area (for educating Cios);
5. Fundraising (in conjunction with fundraising for the proposed McLuhan Institute);
6. Contributions of partial faculty lines, and/or funding, from such strategic partners as the health science faculties, Management, Law, OISE/UT, CS, ECE, MIE, UT M, CCIT, etc.

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4FIS is co-sponsoring a major conference on participatory design in July 2004.
4The IMD area is so named to recognize KMDI’s leadership in this area.
4And hopes that other members of the Institute (and collaborative program) will do the same.
4People such as William Buxton and a next generation Christopher Alexander.
3 • Strategies

FIS’s first priority, during 2004–05, will be to establish the suite of partnerships delineated above, as it starts to implement the vision outlined in §2. As details unfold, staging details will clarify: what parts of the overall strategy can be implemented, in what time frame, with what partners.

Meantime, FIS will also engage in major recruitment (faculty and student), conduct a thorough review of its curriculum (master’s and doctorate), and profoundly upgrade its information practices. This section lays out 14 major strategies, each with a number of sub-parts, to realize this vision.

3a • Recruitment

s1. Initiate a major program of faculty renewal and amplification:

a. Fall 2004: Launch a 5-person, open-area, open-rank, multi-year faculty recruitment program—a “mega-search,” internationally advertised, to attract top-rank faculty to provide leadership in implementing FIS’s strategic vision.

• FIS currently has 2 unfilled positions; a 3rd will open this year, from retirement. By default, FIS would thus expect to search for 3 people, during 2004–05, to come to FIS Sept. 2005. However, 2 more positions will be vacated 2 years later (end of 2006–07), again from retirement. The proposal, therefore, is to solicit a guarantee of bridge funding, in order to launch a 5-person, multi-year, simultaneous search this fall. This is unlikely to cost very much (if anything), as making 5 hires—a 33% turnover—is an enormous undertaking for a small faculty. Because the intent is to search carefully, world-wide, for faculty that can play a major role in leading the collaborative vision, it is almost certain that a maximum of 3 would be found during the first year—implying that the search would continue for at least an additional year. Overall, therefore, bridge funding is unlikely to be required (if at all) for more than 1 or 2 person-years.

A mega-search has many advantages. It will capture world-wide attention, giving the Faculty’s strategic plan a grip on the imaginations of the discipline and profession. It provides an opportunity to make a multi-person collective hire—a tested way to recruit senior faculty, and/or to bring a group of people, together, no one of whom would move without the others, whose collective arrival can have a transformative effect on an academic unit. It will also serve notice to potential graduate students of the seriousness and direction of the Faculty’s intent, helping to improve the incoming student body.

b. Initiate a 4-person “senior fellowship” program at the proposed McLuhan Institute, for UofT faculty from other units and divisions, dedicated to the Institute’s “topic of the year.”

• FIS will allocate $160,000 (from new base budget, AIF funding, or external support) to fund this fellowship program. Each year, when the McLuhan Institute theme for the following year is announced, applications will be solicited for UofT faculty from other divisions to apply for a one-year fellowship. Their home units will be awarded $40,000 each to cover stipendiary replacement teaching and other costs associated with their being on leave. The fellows will be given offices at the Institute, asked to teach one graduate seminar on the relation of their own research to the year’s theme, and invited to participate in an Institute seminar on the year’s topic, eventuating in a major international conference in the spring. Targeted funding for graduate students and post-doctoral fellows will also be solicited.

The program will provide a constant flow of people and ideas both into and out of the Institute, allowing it to remain lively, up-to-date, and relevant.

47Created by the departures of David Modjeska and Elaine Toms.
48Patricia Fleming.
49Ethel Auster and Clare Beghtol.
c. Work with the President and Jon Dellandrea to find funding for an endowed, high-profile junior fellows program, analogous to the junior fellows program at Harvard, for exceptional young faculty to come to the Institute for two years, to focus on the transformative effect of new information systems, technologies, and practices in their own field. Ideally, the University of Toronto would guarantee them a tenure-line position in one of its departments, upon completion of the program (though, if implemented correctly, one should not necessarily expect a high percentage to stay at UofT, as the program would target faculty members able to obtain positions at virtually any university of their choice).

d. FIS employs a number of adjunct faculty in its professional MIST program. Though adjunct faculty (and stipendiary teaching) are sometimes used to cover shortfalls in tenure-stream faculty, within the context of a professional school they also serve a much more substantial purpose: they bring up-to-date, professional expertise into the curriculum, from practitioners engaged in careers and organizations of the sort towards which many students are directed. That is, these adjunct faculty play, within FIS, the critical role that clinical faculty play in the medical context. Steps will be undertaken to give current and future adjunct faculty appropriate status, recognizing their essential role in the FIS professional context.

s2. In 2004–05 or 05–06 (once the overall shape of the new curriculum is clear) launch a major student recruitment program, in order to attract the very best students, world-wide, to come to the graduate programs of FIS and other alliance members.

- Affiliation with a dynamic, exciting interdisciplinary institute, centre, or program can have a major impact on student recruitment—as students take the lead with respect to domesticating new and emerging questions, territories, portions of the theoretical landscape, etc.

s3. In all faculty and student recruitment programs, pay vigilant attention to issues of gender, diversity, and internationalism. (Unusually for an academic division, FIS is more than 50% female; issues of gender must nevertheless always be kept in the forefront. In addition, it must be an ongoing commitment of the Faculty to conduct international searches and recruitment, at the level of both students and faculty.)

3b. Teaching and Curriculum

s4. During 2004–05, overhaul the master’s (MIST) curriculum, to address the following issues:

a. Aim at educating leaders in the information professions to which it is directed, rather than merely providing professionally competent training (as a strategy of differentiation with respect to other library and information schools).

b. Introduce problem-centred learning (§3b.ii) as a general pedagogical style—initially in electives or pilot versions of core and required courses; then, as experience is gained and bugs worked out, across the curriculum as a whole.

- Problem-centred learning is especially appropriate in a professional faculty, for a number of reasons: (i) it maintains an emphasis on concrete situations, appropriate for both professional education and for empirical research; and (ii) it facilitates inter- and multidisciplinary teaching by allowing faculty to bring diverse methods and approaches to bear on common problems—improving education and student experience.

c. As resources permit, support team-teaching, even at the expense of (at least some) larger classes, in order to bring multidisciplinary approaches to a problem-centred approach.

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50 This program should be developed in concert with uofT plans to start an Institute of Advanced Study.

51 Problem-centred approaches are not always appropriate; other methods are preferable in some cases/courses. Choice of teaching methods also remains the prerogative of the faculty member. Rather, the aim is to provide support, as a matter of general FIS strategy, for a method that seems especially well-suited to a number of Faculty-specific pedagogical issues.
d. Use group work, practica, and other mechanisms as appropriate, to exploit students’ diverse experiences (particularly those with prior professional experience).\(^5\) Increase practica opportunities, both at utl (particularly utl) and in professional settings.

e. If appropriate, develop—and publish—a series of information practice “cases,” able to be used in classes in other programs.

f. In general: raise standards substantially, by designing the curriculum for higher calibre students. Both the master’s and doctoral programs should be intensive, demanding programs—making full-time study incompatible with working more than 10 hours/week.\(^5\)

g. In recognition of the fast pace of technical and professional change in the information professions, give students flexible research and learning skills, sound intellectual/technical judgment, enduring professional values, etc., to prepare them for a career of life-long learning.

h. Consider separating full-time and part-time students, so that the full-time student curriculum can be “synchronized,” with core and required courses cross-linked with joint projects, taking advantage of the fact that all students will be taking them at exactly the same time. The curriculum for part-time students could meet on a schedule like that of the Rotman executive MBA: intensively on weekends, in the evening, etc.

s\(^5\). With respect to the doctoral curriculum:

a. Recruitment and admission

   i. Recruit students widely, emphasizing international backgrounds, equity, and diversity.

   ii. Be pro-active about recruitment, recognising that the best students will be actively courted by numerous international schools (this will require time-sensitive admissions procedures, imaginative aid packages, telephone calls, campus visits, etc., before and after admissions, etc.).

   iii. Focus on quality—in a continual effort to increase the calibre and promise of the student body. E.g.: (\(\alpha\)) deemphasize requirement that students choose a research area before admission, to allow more exploration and development; (\(\beta\)) pay more attention to intellectual/academic potential than to fit with given faculty member’s existing research program;\(^5\) (\(\gamma\)) employ “content-based admission,” with faculty members reading all applicant files, including sample research papers; (\(\delta\)) improve strategies for dealing with admissions, transcripts, and letters of reference from diverse international sources; etc.

   • All of these mandates, in terms of recruitment and admission, will increase faculty demands. At benchmark institutions (particularly the very best schools) doctoral student admission is an intensive, time-consuming process. But it is crucial; the quality of recruitment and admissions is one of the most important activities a faculty can engage in to increase the quality of its program.

b. Curriculum

   i. Consider substantially increasing the doctoral student course requirements (12–16 half courses is a benchmark standard, even for students with prior master’s degrees).

\(^5\) Ryerson University has an exemplary team-approach in a film-making course, in which some students train to be screenwriters, others to be actors, others to be cinematographers, etc.

\(^5\) It is sometimes said that the FIS curriculum should remain compatible with full-time work (Toronto being expensive). In our judgment, this is incompatible with the vision of academic excellence embraced in Stepping Up. Other strategies for dealing with financial burden and program accessibility must be explored—including, for example, higher tuition fees coupled with substantial financial aid, in order to make graduate school more fiscally progressive (“need-based” tuition).

\(^5\) This is standard practice in benchmark schools. If FIS’s strategic direction is clearly articulated, applicants will self-select. Faculties that adopt this policy make no commitment to provide supervision in areas where they lack competence; what area-independent admission encourages is intellectual exploration and the chance to work on radically unexpected topics—an essential property of excellent graduate student experience.
ii. Offer a mixture of courses, seminars, research groups, lab meetings, etc., to support various “small publics,” develop high-quality research, and amplify student experience.

iii. Enroll all entering doctoral students in a pro seminar, dedicated to a contemporary research topic (different each year), taught jointly by 2 faculty, bringing to bear different methodological and disciplinary perspectives, which introduces students to leading-edge research projects in their first semester. (This seminar—to be introduced spring 2005—will serve as a “bonding” experience for incoming students.)

Note: There may be a concern that increasing the number of seminars and courses, and relaxing the requirement that students select a research area prior to admissions, will increase “time-to-completion.” But it is not clear that this is true. Graduate programs at comparable institutions, and elsewhere at uofr, sustain both properties without requiring longer periods of time to complete.

s6. With respect to undergraduate teaching:
   a. In collaboration with others at uofr—including Arts and Science (a&s), utl, the information literacy efforts at utl/utm, etc.—develop and implement pilot versions of new undergraduate courses that give students a theoretical grip on important informational issues (organization of information; cultural dimensions of information systems; classificatory practices; privacy, security, and intellectual property; etc.).
   • fis lacks adequate resources (positions) to mount an undergraduate program—though its Master’s program (mist) shares a number of properties with other “second-entry” undergraduate programs at uofr.55 One virtue of the proposed alliance, however, is that it involves partners who do offer undergraduate teaching (e.g., ccit at utm). The proposed “pilot courses” might be offered with and through such partners.

3b.i — Continuing Education

In addition to its graduate (degree-granting) programs, fis has operated a self-funded continuing education program—the Professional Learning Centre (plc)—which offers a variety of non-graduate (non-degree granting) certificate programs as well as individual courses, including web-based online version. Universally praised in external reviews,56 the plc has been both a success on its own terms, and a great benefit to the Faculty. It provides instruction for many fis graduates and other professional librarians and archivists and others seeking information skills.

Not only in line with rethinking all of fis, but also because its director is retiring at the end of 2004, this is a time to consider plc’s future as well. It is therefore appropriate:

s7. With respect to the Professional Learning Centre:
   a. Build on plc’s strengths and accomplishments—in ways that benefit the strategic direction and academic programs of the Faculty as a whole;
   b. In the fall of 2004, conduct a review of the plc, to determine appropriate future directions, its role within the reconstituted faculty, requirements for a new director, etc.;
   c. Increase the plc’s connection with the rest of fis—in content, faculty, and practice. In particular, investigate the wisdom and practicalities of bringing, into the main educational mission of the Faculty, plc experience and skills in: distance education, online courses, practical training, is/it-enabled operations, etc.; and
   d. In the longer term, explore the possibilities of transforming parts of plc into:
      i. A degree-granting program, along the lines of the Rotman executive MBA; and
      ii. A separate mist program for part-time students (st-j).

55Such as: not requiring a prior undergraduate degree in the same discipline as that of the master’s degree. See fn. 31.
56Appendix b.
3b.ii — Distributed Education

Cross-cutting all of the above educational initiatives, as part of its shouldering of the β-mission, FIS will engage in the development of programs of distributed education — conceived not as distance education, where a student engages in a course entirely via technologically-mediated connections over physical distance, but as involving a rhythmical mixture of technologically-mediated connection (via video-conferencing, streaming media, online discussions groups, telepresence, etc.) and physical co-presence. For example, students from outside Toronto might come together (at the uoft) over an intensive introductory weekend, at the beginning of a course, and then again, at the end of the course, for a several-day conclusion, with group presentations, discussions, etc. Similarly, uoft students and/or professors might travel to collaborative sites for short, intensive periods or for longer periods (such as a semester). Small groups of students might work together in a number of distinct sites — across the country, or continent, or world — tied together, and to FIS, with high-bandwidth video-conferencing and collaborative networks. And so on.

s8. With respect to distributed education:

a. Establish substantial (and formal) collaborations with the other six Canadian information and library schools, with an eye to offering standardized options for cross-registration for all electives, including enabling remote or distributed participation.

b. Working with KMDF, the School of Continuing Education, and other uoft partners, develop “best practices” for the right mixture of physical presence, telepresence (using KMDF’s “e-presence” technology, video-conferencing, etc.).

c. In partnership with research partners (including members of oise), conduct studies of distributed education pilots and programs, so as to capture insights and experience.

d. Explore the possibility of parlaying distributed education experience and skills to facilitate imaginative uses of mediating technology to help with uoft tri-campus educational issues.

e. Explore and develop distributed versions of other aspects of the educational curriculum, such as for practica, thesis supervision, collaborative group work, etc.

f. Use distributed educational programs to foster international collaboration, recruit international students, and maintain international presence and sensibilities. International programs should not only involve others coming to FIS, but FIS personnel traveling to international sites as well (both students and faculty).

Plans are already underway for a 3-way distributed class to be given in the spring of 2005, involving FIS, the University of Michigan, and the University of the West Indies in Jamaica. Initial discussions of distributed practica have been initiated with Cornell. Using a major CFI infrastructure grant, a usability lab (currently under construction) will be equipped to be used as a video-conferenced classroom, in which studies of distributed education can also be conducted.

3c • Governance and Operations

To prepare FIS for the role envisaged in the plan — and in accord with the reflexive character of the β-mission — the Faculty’s administrative, governance, and operational procedures will be overhauled, and plans developed for renovating its facilities.

A number of strategies are general in character:

s9. With respect to general operations:

a. Have all processes be equitable, representative, and transparent.

b. Have all processes, committees, positions, etc., be substantive (eliminate redundancy, unnecessary bureaucracy, and “rubber stamp” decisions).

[57]The investigation of networked communities is one of FIS’s research strengths.
c. Reward initiative, support decision making, and encourage lateral cooperation in and among different groups within FIS—master's and doctoral students, students and faculty, faculty and librarians, supervisors and staff, staff and academic faculty, etc.
   i. Emphasize content, substance, and initiative (not reporting relations and hierarchy); let responsibility flow from the work.
   ii. Delegate decision making down to the appropriate level; and
   iii. Ensure appropriate stake-holder representation on all working committees (e.g.: student representation at Faculty meetings).

d. Work collaboratively, to the maximum extent possible, with alliance partners, other single-departmental faculties (s12), and other appropriate uoft units.

e. Continue the tradition of weekly tea,\textsuperscript{58} open to all members of the FIS community.

f. Implement leading-edge information technologies, systems, and practices (is/it/ip) to maximize efficiency, collaboration, and transparency (s13).

g. Implement mechanisms and processes so that all academic functions are accountable, not merely via the Dean (or other reporting relationships), but to the Faculty as a whole, through appropriate stake-holders and Faculty Council committees.

h. Establish and maintain a general FIS schedule, including not only the teaching timetable, but also other FIS activities: standing meetings of committees, regular times for colloquia, faculty meetings, brown bag lunches, etc.

An immediate FIS administrative priority will be to streamline and overhaul its Faculty Council: s10. Over summer and fall 2004, rewrite the Faculty Council Constitution, so as to implement the following goals:

a. Ensure that the full Council—including external members and alumni—plays a substantive role in forming and overseeing strategic decisions about overall Faculty direction;

b. Make council committees more substantive, active, and responsible for operations (i.e., deliberating and making real decisions, rather than merely vetting decisions made by others);

c. Have council committees meet on a regular, published schedule; and

d. Establish the following six council committees:\textsuperscript{59}
   i. Admissions—aided by student services, responsible for Master's admissions decisions, and for presenting to the full faculty recommendations for doctoral student admissions.
   ii. Appeals
   iii. Curriculum
   iv. Executive
   v. Information, Infrastructure, and Inforum (i3)
   vi. Life & Times—responsible not only for maintaining an on-going dynamic “buzz” in the FIS community, through regular colloquia, brown-bag lunches, etc., but also for reconfiguring the physical space, through minor renovations and planning major renovation.

s11. With respect to staffing—in addition to general changes in structural collaboration (s12) and changes in information practice (§3d):

\textsuperscript{58}Initiated 2003–04.

\textsuperscript{59}This will involve at least the following changes: functions of the Degree Committee are shifted to the Executive Committee; the Master’s Studies Committee is converted into the Curriculum Committee, which also shoulders responsibility for establishing procedures for the doctoral curriculum; functions of the (non-Council) Space Committee are given to the Life & Times Committee, as is the role of the extant FIS Research Centre; and the functions of the g7/acmob committee are shouldered by new director of Information Systems and Technologies.
a. Appoint an academic Director of Graduate Studies (dgs) to serve as graduate coordinator, oversee student affairs, and participate (with the Dean and Vice Dean) in executive policy.

b. Appoint a Director of the Inforum—a role to be shouldered by one of the Inforum’s professional librarians, analogous to that of the chair of a department (with similar budgetary, staff, and strategic planning responsibilities).

c. Establish a position of Assistant Dean, to assist the Dean and Vice Dean with all operational matters having to do with program and content (communications, student services, continuing education programs, relations with alumni and uoft committees, etc.).

d. In collaboration with other alliance partners, other sdf{2}s (s12, below), and on-going Simcoe Hall efforts to review the is/it practices of uoft generally (§3d), establish a Director of Information Systems and Technologies, reporting to the Dean, to:
   i. Oversee all FIS technical and system infrastructure;
   ii. Lead in the implementation of open-source technologies throughout the alliance; and
   iii. Assist in formulating and implementing a strategy for the use of open-source systems and technologies throughout uoft.

Finally, Stepping Up mandates an overarching goal of interdivisional collaboration. In the present context, this generates two more specific FIS commitments: (i) to collaborate with alliance partners on the information strategy and plan laid out here, and (ii) to work strategically with all uoft single departmental faculties (sdfs), who face similar fiscal, structural, and organizational challenges:

s12. Collaborate with other sdf{s} to share services, maximize efficiencies, and collectively develop best administrative and academic practices for small faculties:

a. To the maximum extent possible, share is/it services with alliance partners, sdf{s}, and other appropriate units on campus (such as oise, through their “Education Commons”).
   • Because of the close connection between is/it services and FIS’s academic mission, FIS will adopt a leadership role on these issues—with its alliance partners, and with respect to other sdf{s}. The open-source (p7, p. 23; s11, p. 25) and reflexive practice (§3d) projects will both be included in this leadership role.

b. To the maximum extent possible, share student and registrarial services with like faculties.

c. To the maximum extent possible, work collaboratively with other sdf{s} on fiscal strategies, or-

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60This position consolidates two previous roles: of Associate Dean and Chair of the Doctoral Studies committee.
61The appointment of a DGS, Inforum Director, Assistant Dean, and IS/IT Director—on top of the recent appointment of a Vice Dean—may suggest that FIS is growing administratively “top-heavy.” But appearances are misleading, and circumstances changing. In prior years, academic administrative positions consisted of: Dean (100%; 75% internal, 25% external), Associate Dean (50%), and Chair of the Doctoral Studies Committees (20% full service)—or a total of ~1.4 FTE on internal operations. The new arrangement redistributes these responsibilities: Dean (100%; ~25% internal, 75% external, as he devotes time to the wider context for FIS), Vice Dean (50%), and DGS (25%)—for a total of only 1.0 FTE on internal operations, or a net reduction of 0.5. On the staff side, adding an Assistant Dean (100%) is offset by that academic reduction, and by not replacing the recruitment/placement officer (60%). Establishing a Director for the Inforum “beefs up” the existing position of Coordinator, but does not add a position. Really, the only addition is that of IS/IT Director—but at only a 50% level, since FIS expects to share half of this person with other parts of the university. That we need to increase strength in this area is: (i) strongly supported across the Faculty, (ii) critical to FIS’s academic mission, (iii) mandated by both reflexive-practice and open-source projects, and (iv) important in order for FIS to be able to provide information practice leadership to other sdf{s}.

Overall, in sum, the plan redistribute responsibilities, rather than adding positions, in order to increase efficiency and to shoulder increased responsibilities: FIS’s commitment to work with other sdf{s}, develop the alliance, increase the calibre of its academic programs, raise funds for Faculty and Institute, and take a strong leadership position across the University.

62There are 9: (i) Architecture, Landscape, and Design; (ii) Dentistry; (iii) Forestry; (iv) Information Studies; (v) Music; (vi) Nursing; (vii) Pharmacy; (viii) Physical Education and Health; and (ix) Social Work.
ganizational challenges, relations with Simcoe Hall, etc., through regular meetings, connections between and among administrative personnel, and an "sdf" caucus.

3d • Information Systems, Technologies, and Practices

As part of the δ-mission, FIS will revamp its academic and administrative procedures, in a major reflexive practice project, to develop and pilot "best practice" uses of information systems and technologies. The aim is to instantiate FIS's own research about how information should be handled in a modern organization. This leads to a major strategy:

S13. Implement a reflexive project of turning FIS into a "digital organization":

a. Develop an appropriate set of processes, procedures, types (using metadata standards), authenticity standards, etc.—building on faculty member research expertise, in conjunction with the Inforum, and involving student research and pedagogical linkages as appropriate—to develop a content management system capable of handling all FIS operational affairs.

b. Maintain all records and documents in appropriate form—electronic or paper. Paper is best for some purposes (such as reading, convenient print-out for the calendar, etc.); digital for others—such as the backbone for routine information flow, editing, authenticity, etc.

• We expect to put virtually all FIS administrative operations onto a digital base. All applications, reference letters, and other correspondence may be scanned, bar-coded, and archived immediately upon receipt, for example—with all subsequent processing based on the digital document, using a content-management system. Similarly, all records about class sizes, student registration, applicant histories, divisions across stream, etc., will be maintained online, instantly accessible by anyone with a "need to know."

⅚. Cover the Bissell Building with high-bandwidth wireless "wifi" networks—extended as soon as possible to include ±0.5 meter location information.

d. Require all FIS students to use wifi-enabled laptops, to facilitate online teaching, course evaluations, registration, etc., and to allow FIS researchers to conduct experiments on technologically-enabled collaboration, coordination, pedagogy, etc.

e. Maintain an up-to-date database (or other system managed by a content-management system) of all the operating statistics of the Faculty, able to be accessed by anyone within the organization with a "need to know," without their having to ask the person responsible for collecting the data to take time to produce a report. Some possible examples:

i. Funding by faculty, type (council, associations, industry, etc.), amount, year, etc.

ii. Student enrolment, by class, faculty member, section, year, etc. (so that it is simple for anyone, such as the DGS or Vice Dean, to determine: average class sizes; student-teacher ratios in different streams; TA support across class, faculty member, year; etc.

iii. Student registration information, including numbers of offers, acceptances, registrations, per stream, per year, etc., including divisions into part and full time, time to graduation for part-time students, etc.

i. Articulate and implement appropriate "ways of working"—e.g.:

i. Enter all data only once.63

ii. Eliminate worry about whether online information is correct or up to date. Accessed versions should always be definitive versions (as part of their job description, personnel in charge of FIS functions should maintain online databases in up-to-date form).

63In the limit, if a student applies to FIS on paper, someone will have to type their name into the system; from that point on, the name should never again need to be typed, for any purpose.
Moving toward such a digital organization will have multiplicitous advantages. FIS will gain efficiency by eliminating data redundancy, and increase information accuracy and reliability. Seamless integration of administrative function will facilitate information access throughout the Faculty, markedly aiding decision-making. And the reflexive character of the project will benefit the university as a whole, in virtue of FIS faculty and students studying and analyzing the project’s design, implementation, and use. In the process, the project will draw on Faculty expertise in participatory design, knowledge management, and the management of organizational records. Lessons learned will be formulated as general recommendations, useful in a wider university setting: on migrating official policies, procedures and calendars to the web; on using knowledge management in an academic setting; on surviving email; on the long-term integrity and authenticity of administrative records; etc.

For the strategy to be effective, all FIS personnel (faculty, librarians, and staff—and to some extent students) will require efficient IS/IT skills, such as:

1. Efficient and effective ability to use email, including being able to sort, categorize, forward, filter, decode and attach attachments, etc., in accord with FIS-wide practice;
2. Efficient and effective ability to use various kinds of productivity software:
   a. Record systems, including spreadsheets, databases, and online (web) form-based protocols;
   b. Word-processors, above and beyond simple typing—e.g.: mail-merge; style sheets; the ability to embed, resize, reorient, and position graphics; etc.; and
   c. Illustration and presentation systems, including abilities to use style sheets, create and embed graphics and videos, adjust colour schemes, use appropriate fonts, arrange transitions, etc.,
3. Efficient and effective ability to navigate and use complex web sites and web-based practices, including the ability to upload and download files, use online forms, etc;
4. Efficient and effective abilities to move documents, files, blocks of text, etc., from one program to another, so as never to enter any piece of data twice, nor to type into a new context information available electronically;
5. Efficient and effective abilities to search meaningfully for information via general search engines (including being able to avoid advertiser-sponsored sites, use phrasal quote marks, narrow search strategies appropriately, find images, etc.) on the uoft and FIS web sites, within all FIS document management systems, and on the web generally;
6. Effective facility with various kinds of document, including text-based, images (in various forms, such as jpg, gif, etc.), including, as appropriate, essential abilities to create and work with static images, video, dynamic images, etc.; and
7. Intrepid abilities to “figure things out” online, including being able both to find and to make effective use of online help files, manuals, tutorials, etc.

To reach this level, FIS will provide appropriate training, support facilities, opportunities for improvement, etc., and communicate clear standards and expectations for all information processes.

3e • McLuhan: Program and Institute

Marshall McLuhan, legend of culture and technology, may be uoft’s chief luminary. World-wide, the University of Toronto is known as “the home of McLuhan.” For disparate reasons, however, on the home front uoft has not done full justice to his legacy, nor created an institution worthy of his name. The McLuhan “Program in Culture and Technology”—located at the Coach House, reporting to FIS—lives on a shoestring. It receives essentially no financial support, from FIS or any other part of uoft. But finances are not its only challenge. Warranted or not, it suffers a reputation of being ideological—as more committed to McLuhan’s legacy than to the intellectual issues that McLuhan

Belonging to St. Michael’s College.
pioneered. Unfortunately, moreover, because of its focus on (among other things) communications, technology, and culture, the existence of the McLuhan Program has stood in the way of UofT establishing a ranking communications or technology and culture department. Overall, the situation needs radical redressing.

As part of this plan, FIS is committed to rethink the McLuhan Program, and to establish a viable strategy for its cluster of interests. The strategy rests on a distinction and an observation:

1. Distinguish:
   1. Studies of those phenomena in the world in which McLuhan was interested; and
   2. Studies of McLuhan himself—his life, thought, archives, etc.

   The latter (m2)—which may be something UofT would like to support—belongs to the realm of biography, archives, and intellectual history (and might be of interest to the Institute for the History and Philosophy of Science and Technology). According to its current director (Derrick de Kerckhove), however, the current McLuhan program is unambiguously dedicated to the former (m1). That being the case, its mandate squarely overlaps with CCIP. A strategy for CCIP and a strategy for the McLuhan Program must therefore be developed together (if not fused).

2. The program’s partially infelicitous reputation may be due in part to, or at least be exacerbated by, the (unusual) fact that the program is named for a scholar, suggesting prior allegiance to his thoughts, insights, or views—characteristics inimical to disinterested inquiry. If the program’s mandate were m2, naming it for McLuhan would be appropriate (in fact the current name is enough to suggest, to many outside observers, that m2 must be the program’s aim).

These considerations lead to the following strategy, with respect to both name and Program:

s14. Implement a three-way strategy, with respect to the “McLuhan” name:

   a. **High-level:** “Lift” the name to an appropriately high, honorific level—a Faculty, School, or Institute. By analogy, consider the Fermi Lab at the University of Chicago. The name is exalted, and appropriate; it is at too high a level to influence content (no one thinks of people who work at the Fermi lab as “Fermi-ists”).

   b. **Medium:** Remove the “McLuhan” name from the intellectual program, and label it instead by its intellectual subject matter: “culture and technology.”

   c. **Low-level:** Offer courses and seminars that deal seriously and critically with “McLuhan’s thought,” perhaps in conjunction with Innis and Frye (with respect to whom McLuhan’s own thinking was in part delineated). It is perfectly appropriate for classes and seminars to consider McLuhan’s thought—just as other UofT courses would consider Baudrillard, Plato, or Trudeau.

This strategy generates 3 specific goals:

1. **Merge,** under appropriate leadership, the substance of the current program with the proposed CCIP area, with CCIT at UTIM, etc. This is not a small task; it will take a number of years. But it is overwhelmingly recommended by its intellectual coherence.

2. Consider establishing a distinct **McLuhan archives**—involving FIS archival expertise, as a resource for the CCIP area, and others in the alliance.

3. If permission can be obtained, use the “McLuhan” name for the (much larger) Institute proposed elsewhere in this proposal, as a major site to host leading-edge considerations of the technological implications of the Information Age.

Launching a major Institute is a major project, which will not happen overnight. As a first step, FIS has proposed that UofT host a series of high-profile international workshops on changes in the intellectual landscape; it has also suggested that UofT host a conference on the issues involved in locating a major
research laboratory on a campus (e.g., as in the Media Lab at MIT), and on the relations between major labs and affiliated departments—e.g., the Fermi lab and the physics department at the University of Chicago, the Stanford Linear Accelerator Center (SLAC) and the Stanford physics department, etc.

Plans for the Institute will be developed over the coming year. Major fundraising will be required. Allied considerations (e.g., recruiting rotating UofT faculty, and affiliation with a proposed UofT Institute of Advanced Studies) are mentioned elsewhere in this document (§3a). Myriad other issues will need addressing—such as plans to provide space for visitors from other universities (e.g., faculty on sabbatical), public sector officials (such as the Canadian Privacy Officer), practitioners on sabbatical or leave, allied health care professionals, fellows from industry, etc. These and a host of other issues will be dealt with in a separate Institute proposal.65

4 • Measuring Achievement

This plan defines a mission and strategic direction for FIS for the next 6 years. It is not only ambitious, in and of itself (given FIS's small size and modest resources), but also ambitiously relational—in the sense of being defined in terms of a vision for a larger, encompassing community of teachers and researchers. FIS can (and will) take some steps alone, but the most important first benchmark will be to garner support from external constituencies: research and teaching partners, affiliated units (including members of the alliance), senior university administration, granting councils, professional associations, etc. This process will start immediately, and remain a top priority during 2004–05 (in line with Simcoe Hall's request for "lateral conversations" during fall 2004).

In the spring of 2006, at the end of the 2nd year, FIS will take stock of whether this essentially relational vision—intended to contravene isolationist tendencies—is, in fact, working. At that point, and in subsequent years, measures of success will include:

1. Rank and status in published rankings of i-schools—especially if, as expected, the number of faculties that self-identity in this way continues to grow;66
2. The ability to hire the very best faculty—particularly in the proposed 5-person "mega-search" (s1a, §3a), but also in on-going faculty recruitment and replacement efforts;
3. Retention of top-ranked faculty;67
4. Graduating doctoral students being offered faculty positions in top-ranked schools;
5. Collaboration with faculty and researchers in other leading i-schools (internationally);
6. Success in developing and offering distributed education courses (measured by reputation, external review, national and international participation rates, etc.);
7. Student receipt of prestigious scholarships (OCGS, Canada Research Scholarships, etc.);
8. Continued success in attracting significant research funds (Figure 1, p. 2); and
9. Impact on the University of Toronto—so that FIS's presence at UofT matters.

Overall, this plan represents a major strategic reworking of the Faculty's direction; it is not merely an incremental adjustment. Implementing it will take substantial resources, hard work, and considerable

65Proposal: Raise funds to build a building or develop a site for the new Institute, dub it the McLuhan Coach House, and move onto or into it—intact—(i) the present Coach House, on Queen's Park Crescent East, historical site of the McLuhan revolution, and (ii) the Coach House Press, on bpNichol Lane. Both structures are small, threatened, and of the greatest historical importance. An ingenious physical-cum-intellectual juxtaposition of these two historical legacies and the new program proposed here could easily become a major international landmark on the uoft campus.

66The U.S. News & World Report ranks only American schools; even if other reports cannot be found, indirect ways to assess ranking include: schools we lose applicants to (or gain from), assessments of disinterested third parties, etc.

67Leading i-schools are hiring; a number of FIS faculty are being actively recruited right now. Both Faculty and University commitment to a compelling strategic plan of this sort is an essential condition of retaining them.
time. In the long run, however, it must be judged in those terms—i.e., by its success in taking the Faculty to a leading position, internationally, in the community of progressive information schools.

5 • Correcting Course and Making Contingency Plans

Any attempt at major strategic renewal presents risks. The challenges for FIS are especially great, for more than half a dozen reasons:

1. As stated repeatedly, this plan is relationally defined; it depends, for its success, on the participation of many different partners over whom FIS has no control. Some will call this strategy foolhardy (even: doomed). We feel otherwise, and believe it is intellectually mandated. But we are not blind to its exposures.

2. The intellectual landscape is evolving so rapidly, and involves such a wide swath of society as a whole and of the university in particular, that staying abreast of the information field is daunting.

3. uoft lacks the resources to make singular, discontinuous investments in major growth areas (of which information practice is just one; this is a challenge for many programs across campus).

4. FIS is extremely small (as mentioned, less than 1% of uoft, by every measure).

5. The fate of single-department faculties at uoft is precarious, in the face of leadership change, fiscal straitening, and the major rethinking of budgetary allocation already underway at both provincial and university levels.

6. In general, academic processes and procedures move very slowly (sometimes for excellent reasons), in tension with explosive development in computing and information practice.

7. i-schools, nationally and internationally, are rapidly expanding, putting pressure on faculty hiring and retention, and on the recruitment of high-quality students.

For these and other reasons, FIS must be vigilantly on guard, during the entire period envisaged in this plan, to ensure that its strategy remains viable, relevant, and on track. In particular, the major theme underlying this entire plan, that FIS serve as a catalyst for changes in information study and practice—something of a “change agent,” on the intellectual landscape—is non-standard. It is not, historically, how Faculties and departments are defined; nor does it represent a “core subject matter” in the traditional sense of that which gives a Faculty or department depth, rigour—even meaning. The intellectual thesis underlying the pervasive “change” theme is that FIS does not have—and cannot have—such a core subject matter. It cannot have one for the same reason that no Faculty or department can specialize in “written practices.” In both cases, the presumptive area is too widely (and wildly) dispersed.

Of the four areas identified in the mission, LAM may stake the best claim to an enduring topic. But even for LAM, the progressive way forward requires imbricating it with the other 3 areas, in order to remain bracingly up-to-date. And the other 3 areas, by the same token, must be thickly engaged with similar on-going developments in the rest of the university, in order that they, too, flourish and remain on the leading edge of research.

For all these reasons, “contingency planning” in the FIS context takes on a special importance. Rather than enumerate particular strategies we will adopt if this or that aspect of the plan does not work out, or if the context or landscape changes in unexpected ways (which it will), we will instead adopt a number of standing mechanisms to check, constantly, on whether we are making adequate progress—and if not, to determine what to do instead:68

1. Each spring, towards the end of the spring semester, a day-long retreat of FIS and alliance faculty will be held, with the explicit mission of evaluating progress-to-date, and of adjusting or even overhauling the strategy in response to emerging circumstances;

68Some more specific contingency plans are identified elsewhere in this plan: e.g., the discussion under §2e.i–1 (p. 17).
2. An external senior intellectual advisory committee will be appointed, consisting of members of the “i-professions” or others involved in universities, society, or government in ways that are closely involved with developing information practices. Annual meetings of the advisory committee will be hosted, at which members will be asked to provide feedback on uoft progress, on developments elsewhere at other universities and in society, and on recommended on-going adjustments.

We hope that the plan as formulated here will carry FIS and its partners through the next 6 years. At the same time, if information practice develops at the expected pace, it would be extremely surprising if mid-course corrections were not required—so surprising, in fact, as to be suspicious. Success will depend on the constant ability to remain alacritously flexible and adaptive.

6 • Conclusion

If it implements the plan laid out above, FIS will succeed in meeting the 4 challenges described in Appendix A. In addition, as well as ensuring FIS prominence in the “Information” realm, the result will help the wider University of Toronto in 2 ways: (i) it will add to uoft’s reputation as a place where dynamic, forward-looking interdisciplinary and interdivisional programs can thrive; and (ii) it will provide the university with a sense of where its own academic and intellectual practices are headed, in coming decades.

Establishing an information alliance is a low overhead, highly leveraged way to give the university a unique angle on addressing these challenges. This is especially true because, as well as sharing resources, the alliance is distinctive in coalescing different kinds of unit—each suited to different particular features of the overall situation:

1. FIS is a small, independent, graduate and professional Faculty—structurally vulnerable to isolation, but capable of hiring faculty members, admitting students, conferring degrees, etc., and small enough to be able to take major structural risks.

2. KMDI, in contrast, as a research institute with a vital collaborative program, can play a “hypoallergenic” role impossible for FIS (or any other Faculty): of coalescing interdivisional partnerships from diverse Faculties, without triggering territorial disputes. It is also able to move quickly, in order to bring multiple perspectives to bear on fast-breaking new ideas.

3. CCIT is different again: as a UTM undergraduate program, established in 1990 and now successfully coalescing with KMDI.

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69It will need to be determined what the advisory committee is an advisory committee to: FIS, the alliance, or the proposed McLuhan Institute (constituting 3 separate committees would be redundant).

70As it did with the internet, in the early 1990s, and in its leadership position this year on open-source software (fn. 12).
it participates in uoft’s western campus expansion, and can track the needs and interests of the youngest generation.

4. utl, as one of the première university libraries in the world, and as a leader at uoft in dealing with issues of information literacy, can help rearticulate the relationships between academic departments, libraries, and other pedagogical resources.

And so on. The idea is to bring these different kinds of players together, in order for each to play the distinctive role it can do best, and to rely on others to cover dimensions it cannot directly address itself. This strategy will give the alliance not only interdisciplinary and interdivisional, but interstructural efficicacy in charting the route ahead.

A chart summarizing some of the plan’s features is given in Figure 7. Some major collaborators are listed, with an indication of the areas in which maximal collaboration would be expected. Two caveats: (i) it is likely that all affiliated programs will involve at least some connection to all 4 areas; the profiles are meant to indicate only the “centres of gravity” of their expected participation; and (ii) the list of collaborators is by no means exhaustive; the α- and β-parts of the mission, especially, should open up as-yet unexplored interactions with many other researchers across campus.

Overall, the plan deals squarely with a number of priorities identified in Stepping Up:

1. **Interdisciplinary and Interdivisional collaboration:** The integrity of the plan depends on strong interdivisional collaboration—as indicated by the list of collaborators cited in Figure 7, and as reflected in the second core value of relationality (v2). The plan is also double interdisciplinary. First, the inter-unit and interdivisional collaborations will bring multiple approaches to bear on common concerns. Second, even within its own walls, fis is intrinsically multidisciplinary. Its faculty are trained in, and apply methods from, all major disciplinary groupings: humanities, social sciences, science, and engineering.71

2. **Changing intellectual landscape:** The plan puts fis, and the whole alliance, on the front lines of what Stepping Up refers to as the “second major change in the intellectual landscape,” having to do with “the consequences of ubiquitous computing, and how we wish to shape those consequences.” The substance not only of this plan, but of fis’s identity, has to do with exploring exactly these consequences—including the consequences for a university’s own core practices.

3. **Student experience:** Students typically take the lead with respect to interdisciplinary research, new and emerging areas of theoretical interest, and the latest technological trends. However, excellent “leading-edge” students of this sort, especially those with interdisciplinary and cross-methodological sensibilities, often find themselves ill-supported, on the margins of academic structure—a situation that can stand in the way of their achieving true excellence. The plan proposed here—including its interdisciplinary and interdivisional teaching and research, the forging of an information alliance, the potential role of the proposed McLuhan Institute as a laboratory for the e-university, the revised curriculum and admissions standards, the refocused and reenergized Faculty, etc.—will all be tremendously beneficial for such students in the vanguard.

**Social and Cultural Importance**

Two core values deeply rooted in the library, archive, and museum traditions are those of public service and the stewardship of precious information resources. Maintaining these values in the new information

71The plan will enable fis, along with other professional faculties, to assume a leadership position on interdisciplinarity, within the university, by defining itself in terms of a phenomenon, rather than in terms of any specific methodology or approach. Overall, this reflects our background view that the rise of interdisciplinarity does not simply mean a rearrangement, interpenetration, and emergence of new disciplinary boundaries, but, more profoundly, signals limits to the idea of organizing a university by discipline or method, in favour of an approach that organizes it by phenomenon.
age is not just a challenge, but an essential public good—to which society and the academy must always remain committed. The challenges are substantial, but the social responsibility of FIS and its partners goes deeper. Reading, deliberating, teaching, providing health care, and other information practices lie at the very foundation of a society and a culture. When these practices are radically reconfigured by technological change, the values on which they rest grow vulnerable. Some of these concerns permeate and even fuel public worries about relentless mechanization, information overload, and the loss of silence and sanctuary.

It is essential, in such conditions, for society to take the time to think, carefully and deliberatively, about the changing landscape it inhabits, and to take a leadership role in shaping the future, rather than merely acquiescing to it as if it had already taken inexorable form. Though they have not been explicitly addressed here, it is to these underlying social and cultural concerns that the goals and strategies proposed here are ultimately dedicated. If FIS and the alliance can shoulder some of these deliberative and leadership responsibilities, that will make the mission worthwhile.

By so doing, we will take one step towards our long-range dream: of serving as a “Pugwash” for the Information Age.

72E.g., in the legal issues unleashed by the fact that technologically-mediated forms of reading now involve (human and/or computational) acts of copying—and therefore fall under copyright law in ways never imagined by its framers.
Appendix A — Challenges for Information Schools

Four challenges face any faculty that aims to address information, information studies, information practice, etc., in the 21st century:

1. **Identity**: The impact of the “information revolution” is making it impossible for any one Faculty to live up to the name “Information Studies.” Academic descriptions should meet a double criterion: of explaining, to a disinterested party, (c1) what the unit does, and (c2) what it does not do. The term “library science” fails the first criterion, being too narrow; “information studies” increasingly fails the second, being too broad.

   The problem is not just that the whole university (and society) is seeing its constitutive practices transformed by developments in information technology. More seriously, informational notions and phenomena are increasingly entering the academic mission as explicit subject matters—in biology, philosophy, physics, sociology, management, law, etc. It is too late for studies of the informational realm—information, information processes, information-using practices, etc.—to be uniquely claimed by FIS or any other unit (or, for that matter, any identifiable subgroup). They are being shouldered across the university as a whole.

   Does this mean Information Faculties should not exist? No. Rather, it raises a challenge of identity. “Information Studies” is—probably always has been—too broad a label. By connoting too much, it weakens our identity. Our aim should be to do more, but claim less.

2. **Diachronics**: The impact of technological change on information practice has yet to work itself so thoroughly into the fabric of the academy that full treatment can be presumed. By analogy, consider computer music. For several decades (~1970–2000), computer music was sufficiently “new and different” to require incubation in separate, dedicated units.73 In 2004 we are just reaching the point where support for computer and electronic music can be found in mainstream music departments—obviating the need for special treatment.

   The technological transformation of information practice has yet to reach that stage. Nourishing is still needed for such topics as: community networks, health delivery, cultural semiotics, intellectual property, social memory, and distributed education. Some such transformations are underway (law, sociology, medicine, management, literature, etc.); others are just beginning. During this entire process, Information Faculties must (i) work collaboratively with those departments, to help midwife the transition, and (ii) in parallel, move out ahead to investigate and “domesticate” even newer intellectual territories, still in need of exploration.

   In sum: information faculties must serve as incubators for new, information-based approaches to arbitrary academic subject matters. Like surfers, they must “ride the wave” of incessant intellectual change.

3. **Stewardship**: Information Faculties retain responsibility for one distinctive realm: the stewardship of information resources, documentary collections, and cultural records—whether housed in such cultural institutions as libraries, archives, or museums, or configured in new organizational settings. It is especially crucial to maintain leadership as these practices, too, are transformed by on-going technological and organizational development. Values and expertise in reference, librarianship, curation, categorization, preservation, public stewardship, etc., must be renewed and reconfigured for changing contexts. In part, this will require “letting go” of a technological focus on “digital library,” “electronic records,” “online information resources,” etc., in favour of the simpler and more durable recognition that records, information resources, cultural materials, etc., can be assumed to

73 Such as Stanford’s Center for Computer Research in Music and Acoustics (CCRMA).
exist in a seamless mixture of paper, electronic, and digital form, in an open-ended and eruptive mixture of static, dynamic, lexical, visual, audio, and intelligent media.

4. **Integration:** “Best-practice” information practices and strategies require strong integration across multiple dimensions: (i) underlying systems and technologies, (ii) processes and practices built on top of them, and (iii) organizational and cultural contexts in which they are deployed (§2a.i). Information Faculties have developed critical expertise in understanding the relationships among these vertically integrated factors. University structures, however, make it difficult to marshal all the necessary expertise into any single academic programs. Expertise is widely distributed—technology in electrical engineering, computer science, and mechanical and industrial engineering; organization in management; etc. For one Faculty to attempt to coalesce all the expertise within its own walls would be unrealistic, skew its mission, and guarantee its being out of date. Vigilance, organizational finesse, and a strong collaborative ethic are required to achieve effective balance.
Appendix B — FIS Self Study

B1 • Description

The Faculty of Information Studies (FIS) is a professional and research faculty offering:

1. A professional Master of Information Studies (MIST);
2. A post-master’s Graduate diploma of Advanced Study in Information Studies (G.DIP.IST);
3. A combined law and information studies J.D./MIST; and
4. A Doctor of Philosophy (Ph.D.).

The MIST program is accredited by the American Library Association (ALA); in June 2003 the ALA Committee on Accreditation approved continued accreditation to Spring 2010.

FIS participates in 6 UofT collaborative programs: (i) Addiction Studies; (ii) Book History & Print Culture (BHPC); (iii) Aging and the Life Course; (iv) Environmental Studies; (v) Knowledge Media Design (KMD); and (vi) Women’s Studies. FIS students constitute the largest student group in both the BHPC and KMD collaborative programs. Through its Professional Learning Centre (PLC), FIS offers a Continuing Education program—the largest of its kind in North America.

As of November 1, 2003 FIS had 333 students (284.1 FTEs). The Faculty currently has 14 tenured/tenure track faculty members; an additional 2 faculty positions, resulting from recent resignations, remain unfilled. Three additional positions will open up, due to retirements, in the next 3 years. A 5-person multi-faculty search is planned for 2004–06 (§3a).

B2 • Accomplishments since the last academic plan

Since the submission of its previous academic plan (2000–2004), FIS has accomplished a great deal. At the Master’s level, we introduced the combined J.D./MIST degree, the Graduate Diploma of Advanced Study, and a (research) thesis option. In the Ph.D. program, enrolment has increased from 25 full-time and 4 flex-time students (2000–01) to 39 full-time students and 1 flex-time student (2003–04), with many of these students awarded prestigious fellowships: a Canada Graduate Scholarship, a Connaught Scholarship, an IDRC Doctoral Research Award, a Canadian Health Services Research Foundation (CHSRF) postdoctoral fellowship, an IBM Fellowship, a CITO Research Excellence Scholarship, and SSHRC doctoral fellowships. The Institute for Scientific Information (ISI) Dissertation Proposal Scholarship, awarded by the American Society for Information Science and Technology (ASIST), was awarded to FIS students in 2001 and 2002. FIS doctoral students have won other awards from ASIST, from the Association for Library and Information Science Education (ALISE), and from the Canadian Library Association (CLA). Re internal awards, FIS has obtained funding for 6 new scholarships, including: four OGSs, the Ontario Library Association–Grace Buller Aboriginal Student Scholarship, and the Public Library Scholarship. Finally, FIS has hosted several international conferences, including: (i) the Sixth International Conference of the International Society for Knowledge Organization (July 2000); (ii) The Power and Passion of Archives (March 2003); (iii) the First International Conference on the History of Records & Archives (October 2003); and (iv) the 9th Annual Connections Conference for doctoral student in information studies (May 2004).

B3 • Research Funding

FIS has been very successful in obtaining funding for research. The 2002 OISE/UT Research Productivity Study compared social sciences faculties within the University of Toronto (Information Studies, Law, Management, Social Work, and OISE/UT). The report showed that, on average, for the years 1998–99, 1999–00 and 2000–01, FIS scored highest on the following indicators: (i) percentage of fac-
ulty holding grants from the federal granting councils; (ii) percentage of faculty holding grants from all sources; (iii) median and average dollar value of SSHRC grants; and (iv) average number of grants per faculty member. FIS was 2nd highest, slightly behind OISE/UT, on the ratio of the number of research grants from the federal granting councils to number of faculty. As shown Figure 1 (p. 2), over the past 8 years external funding of FIS research has increased more than 6-fold, from $240,000 in 1996–97 to $1,520,000 in 2003–04. In the past year, FIS faculty have received funding from several new sources, including: (i) a Premier’s Research Excellence Award (PREA), (ii) the Canada Foundation for Innovation (CFI, 2 grants), and (iii) a major award from SSHRC’s Initiative on the New Economy.

B4 • External Review

An external review is not anticipated during the current planning cycle, since FIS has undergone several recent such reviews. Two were in 2003: the Decanal Review, February–March 2003 (4 external reviewers), and the ALA Accreditation Review, March 2003 (a panel of 6 external reviewers). In addition, an OCGS Periodic Review of FIS was conducted in May 2002. These reviews praised FIS in a number of areas, and identified challenges and weaknesses in others. This section outlines the strengths and the weaknesses noted in the most recent reviews (the Decanal Review and the Accreditation Review), and identifies initiatives since undertaken to address the weaknesses.

Both reviews praised FIS for (i) high quality teaching, (ii) strong scholarship, and (iii) research funding success. Both reviews also praised the success of the PLC continuing education program, the largest CE program in information studies in North America. The Decanal Review called it “outstanding,” and noted that it is “a model of outreach and continuing education for LIS and its related professional specialties.” The Accreditation Review referred to it as “an outstanding continuing education program.” Both reviews also lauded the facilities and services of the Inforum, FIS’s Integrated Library and Information Studies Laboratory. The Decanal Review described the Inforum as a “living laboratory, as well as a state-of-the art facility,” going on to say that the “Inforum lab is outstanding in every respect: collections, facilities, services, staff, and most important, as an ancillary resource to teaching” and that it operates “as an outstanding model of professional practice and library services for FIS students.” The report of the Decanal Review also praised the quality of the doctoral program and the collegiality among faculty members.

In terms of challenges, the Decanal Review stressed the need for an overarching vision for FIS (addressed in this plan), and suggested that FIS needs better public relations, promotion and marketing. Both reviews noted the need for more fundraising. The Decanal Review also pointed to (i) a need for a grants officer, to support proposal development; and (ii) a need to improve the physical facilities.

The Decanal Review recommended more practica or internship opportunities, in which master’s students could gain perspective on their classroom learning and explore, in addition to traditional archives and libraries, alternative settings for professional practice (e.g., industry, government, cultural and educational institutions, NGO’s, or other not-for-profits). This is being addressed (§4, §3b): in 2004–05 we will double the number of practica in the MIST program, and offer a sequence of two project courses—Information Innovations Design Studio I and II.

The report of the Decanal Review also noted a need for a greater voice for faculty, students and staff in planning and decision making. In particular, Decanal reviewers expressed a concern for the quality of students, and indicated that faculty members should be engaged in, and oversee, the student admission process. Some of these challenges have been addressed this year; others will be implemented as part of this plan. The Dean has taken numerous steps to provide opportunities for members of the FIS community to have greater input in all aspects of FIS affairs. He: held 3 retreats for faculty members; hosted a weekly Dean’s Tea, during the academic year, for all students, staff, faculty, and alumni; and created a standing “Life and Times” Committee to coordinate Faculty activities, facilities, and events. In developing the Academic Plan, he solicited input from six internal Working Groups (eventuating in
8 submitted reports), students, alumni, professional associations, the professional community at large, and potential collaborators within uoft. The Dean has also established an Admissions Committee, consisting of 3 faculty members, which reviews and makes decisions on all master’s applications, and which (starting in 2004-05) will bring doctoral admissions recommendations to the entire faculty.