

PIM in the Professional Home Office: An Ethnographic Study

Leslie Thomson

University of Toronto, Faculty of Information
140 St. George Street, Toronto, ON, M5S 3G6
leslie.thomson@utoronto.ca

ABSTRACT

Information Science (IS) scholars have long articulated the importance of physical and social factors—environments—when examining how individuals acquire, store, organize, maintain, and retrieve information in one of their home or work lives. Yet, few have raised the question of how these same information practices are altered and affected in home offices, fused living and working spaces that lie at the intersection of the personal and the professional. This paper reports findings from a 2010 Masters thesis centred upon describing and analyzing the information practices that characterize home offices—specifically, professional home offices *that serve as their user's only workplace*. Four professional home offices compose the field from which data was gathered via tours, mapping and diagramming, photography, interviews, and observation. Results suggest that the professional home office environment differs from that of both traditional professional offices (in corporate-institutional settings) and personal home offices (used for non-professional tasks), and that information practices therein are influenced by, reflective of, and responsive to a continual negotiation between the two spheres of household and organization.

Keywords

Ethnography, information management, information use, information seeking.

INTRODUCTION

Recent estimates place the number of employed Canadians routinely completing at least some professional work from their homes around 17-19 percent (Akyeampong, 2007; Globe and Mail, 2010), and the number of employed Americans doing so at approximately 20 percent (Business Trends, 2008, p. 21; Hill, Ferris, and Martinson, 2003). Projected increases in these already significant figures abound as organizations and employees alike experiment with the significance of such flexible work arrangements.

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In 1988, Lansdale wrote that, “users’ behaviour in offices... is largely adapted to overcoming the problems being created by the mismatch between the facilities provided, the users’ need, and their cognitive capacities” (p. 63). In 1991, Taylor wrote that, “within a corporation management establishes, inadvertently or otherwise, an attitude toward information and consequently affects the information behaviour of its employees” (p. 227). Lansdale and Taylor each point to environmental factors—physical and social, respectively—as potentially influencing individuals’ information practices, or the ways in which they “acquire or create, store, organize, maintain, retrieve, use, and distribute” (Jones, 2007, p. 453) information items such as notes, documents, files, and resources, whether in a paper or digital format.

In turn, home offices have been described as spaces “that contain work in the antithesis of a corporate setting, redefining the rhythm of working life in the context of family and friends” (Myerson and Ross, 2006, p. 156). Home office users perform their work at a site far removed from company controls and colleagues’ prying eyes, yet hybrid living and working environments pose altogether new considerations and challenges for individuals’ information practices.

In order to begin to understand the nature of information practices in the home office setting, and its effects on what Jones (2007; 2008) terms users’ “meta-level” information activities (the ways in which they “establish, use, and maintain a mapping between information and need” (2007, p. 464; 2008, p. 60)), field outings into four individual’s professional home offices were carried out for the purposes of this study. Professional home office users must be distinguished as those who, nonetheless employed by centralized companies, *are solely home-based in their careers, operating without any alternate workplaces* (Thomson, 2010). All four of the participants in this study are account managers at printing firms, liaising between clients (publishers or authors) and production plants to oversee all printing orders for textbooks, trade books, newspapers, magazines, agendas, brochures, and more. They represent a prime, untapped population to study from an information-centric perspective given the heavy volume of diverse document types that they handle daily.

PRE-EXISTING LITERATURE

Though the Information Science (IS) and more narrowly focused personal information management (PIM) fields have produced abundant research on individual and group information practices in traditional professional office settings, neither has focused substantial attention on these same phenomena within professional home offices, giving, in fact, minimal attention to the question of home offices at all. Similarly, a somewhat smaller subset of IS and PIM research has examined various information practices within the home setting, but done so only looking through the lens of domestic, non-work-related contexts.

Even when considered side by side, these bodies of work are inadequate to the task of revealing how the unique personal-professional hybridity defining professional home office spaces might affect users' information practices.

The "office continuum" model below (Figure 1), from Thomson's (2010) research, visually depicts how previous studies of individuals' information-centred practices tend to congregate around one of two specific spaces—the traditional office or the home—depending on whether researchers' topics of interest are primarily work-related or non-work-related. The professional home office, at the intersection of the professional and the personal, has remained, on the whole, unexplored.



Figure 1. The "office continuum" model, depicting a range of different office types that exist.

The "office continuum"

The "office continuum," as well as pointing to conspicuous gaps in the IS and PIM information-behaviour and practices canons, also stands alone as a response to the need to more accurately and vividly reflect the varied types of real-life office spaces and the diverse ways in which they are used.

Definitions for *office* and *home office* in current circulation cannot be said to truly capture nor convey the spectrum of experiences in either setting. Generally, *office* is an umbrella term used to refer to any "room, set of rooms, or building where the business of a commercial or industrial organization or of a professional person is conducted" (Dictionary.com, 2010), or "used as a place of business for non-manual work" (Oxford English Dictionary, 2009). *Home office* falls under that broad heading as "a work or office space set up in a person's home and used exclusively for business on a regular basis" (Dictionary.com, 2010). Professional activities seem to be favoured as a de facto standard for offices, though a range of information-centred tasks involving office spaces is imaginable, as is a wider range of settings within which such tasks are completed.

The multi-directional arrows between the office types in the "office continuum" model serve three purposes:

01. They indicate that gradations between each of the three main office types highlighted along the continuum indeed exist, every one with its own characteristics and nuances that set it apart.
02. They indicate that an individual may (and usually does) possess more than one of these spaces simultaneously, moving back and forth between them based on need.
03. They indicate that to users of the same office, the space may concurrently inhabit a different position on the continuum based on their differing rationales for using it.

The boundaries between office types—particularly between the professional and the personal home office—are fluid, and at any time one space may be reconfigured as the other depending on its user's purposes. Given this, there is nothing inherent in a physical space itself that determines office type; rather, this depends upon the needs, perspectives, and purposes of the users of that space.

The three main types of office highlighted by this model are so based on their prevalence in IS and PIM literatures and their prevalence in contemporary thinking about offices, work, and information-centred task settings. The imaginably unique and multi-faceted grey areas that exist between the three main nodes should not be overlooked by future researchers in this area. The "office continuum" concept is returned to in the "Discussion" section of this paper.

Information in the workplace and the home

Pictured at the leftmost end of the "office continuum" above is the traditional professional office, the space that is most commonly associated with conventional notions of offices as centralized workplaces occupied by one or more organizations, detached and located apart from the home.

As already noted, studies of professionals' information behaviours in the workplace are a predominant mode of IS and PIM research, providing valuable portraits of localized, in-office habits. Perhaps most widely observed is the idea that the broad situations or circumstances within which information is received and required professionally plays a key role in determining its management—whether it is kept, discarded, posted, piled, or filed (for example, Malone, 1983; Kwasnik, 1991; Barreau, 1995; Barreau, 2008; Whittaker and Hirschberg, 2001; Sellen and Harper, 2002; Bondarenko and Janssen, 2005; among others). Also often acknowledged is the notion that "personal style" (Whittaker and Hirschberg) and "social value" (Malone) exist in a continuous, tenuous balance in traditional workplaces, though such statements have gone largely unprobed.

At the rightmost end of the "office continuum" is the personal home office, a space located in the home where non-professional information-centred tasks and pursuits

(personal Internet and email usage, personal recordkeeping, and so on) of one or more inhabitants are carried out. Personal home offices might be specifically designed and designated spaces, or they may be shiftable ad hoc creations, such as dining room tables or kitchen counters acting as desks for those multi-tasking or on the fly.

Kalms (2008) and Hartel (2007) have both confirmed that non-professional information practices within the home are intensely individualized. However, this is still not to say that they are free of social influences; Rieh (2004) notes in her study of personal internet searching that the home is equally “a socially defined setting rather than merely a physical setting” (p. 2). Rather, no matter the shape they take, intra-home information practices emerge out of the complex “interactions of a householder with information, information-related devices and services, [and] other householders” (Kalms, conclusions section).

Like information practices in traditional workplaces, therefore, domestic information practices are affected by a triad of personal preferences, social influences, and surrounding spaces. Yet, the home setting is still one that stands “in marked contrast to the more openly public affair of doing one’s work” (O’Brien and Rodden, 1997, p. 252) in a traditional office. One scholar has pronounced work and home “two different countries” with “differences in language or word use, differences in what constitutes acceptable behaviour, and differences in how to accomplish tasks” (Campbell Clark, 2000, p. 751). If individuals both consciously and unconsciously order the workplace and the home differently, how do professional information practices alter when they take place in a home office setting?

Information in the home office

Between the two divergent settings of work and home sits the professional home office. Professional home offices are distinguished as spaces within the home where the professional work of at least one individual with no supplementary workplace—no matter how lightly or infrequently it is relied upon—is completed (Thomson, 2010). Whether professional work-related tasks are the sole type of task carried out within the space or are completed there in addition to non-professional tasks, it must serve as the sole professional workplace of at least one user at all times.

IS and PIM scholars have long articulated the importance of information settings and environments (for example, Taylor, 1991; Kwasnik, 1991; Rieh, 2004; among others), pointing out that information practices are not uncompromised across places and spaces. Nonetheless, only one (Fulton, 2000a; 2000b; 2002) has examined the arrangements of employees with centralized offices who occasionally “telework” from their homes (meaning they cannot accurately be called “professional home office users” if one follows the strict definitions advanced in this paper), approaching the issue from a problematized, logistical

stance that stops short of detailing information practices or possible information behaviour patterns.

Studying the degree of control over their work (2000a; 2002) and work processes (2000b) that these occasional home office users have compared to their colleagues who work solely from traditional offices, Fulton notes that individuals based out of two workplaces face challenges in trying to effectively divide their tasks based on what each space can afford and best support. Working from home, teleworkers deal with “missing information,” “reduced collegial contact” (2000b), constraints on storage (2002), and added demands on space, time, and attention (2000a). The casual home office users in Fulton’s studies “frequently [attempt] to recreate the organizational office” (2002, p. 211) and “office experience” (2000b) in their homes, but find that when their workplace is changed, so too, inevitably, is their “means of working” (2002, p. 209).

Outside of the IS and PIM fields proper, a significant amount of sociological and—unsurprisingly—business research has broached the phenomena of home offices, teleworking, and working in general from angles of socio-cognitivism and management. With the respective aims of promoting a harmonious work/life balance and increasing employee productivity, these studies indicate that individuals acknowledge the existence of “borders” or “boundaries” (Nippert-Eng, 1996; Campbell Clark, 2000; 2001) between office and home, and that “spillover” is never without consequence, whether positive, negative, or neutral (Hill, Ferris, and Martinson, 2003; Olson-Buchanan and Boswell, 2006; among others). Both of these literatures provide a broader context within which the findings of this study can be usefully situated.

RESEARCH DESIGN AND METHODS

This study adopted an exploratory, ethnographic approach, whereby the researcher “intentionally [puts] themselves in a position to make discoveries” (Stebbins, 2001, p. 4) in an unknown setting, paying heed to “qualitative insights and compelling examples, not statistical proof of [prior] conjectures” (Malone, 1983, p. 101).

Four participants were recruited via purposeful, non-probabilistic snowball sampling, whereby data was collected from locatable individuals who were then relied upon to help “locate other members of the population whom they happen to know” (Babbie, 2007, p. 185). Inclusion criteria required that all participants be long-time (5-plus years) account managers for printing companies, and that all work solely from professional home offices in the Greater Toronto Area of Ontario, Canada. Another significant, albeit unintentional, commonality was that all participants in this study were (for lack of a better descriptor) “collegially isolated” within their off-site home offices, never visited there by coworkers or clients during business hours. As it worked out, two participants were men and two were women. Data was collected between February and December 2009; three of

the participants were visited once for a period of 1-2 hours each, and one participant was visited twice for periods of 1-2 hours on each occasion.

As a first attempt to engage with home office spaces at a fine level of detail, this study aimed for depth of findings over breadth of time or sample size. A variety of methods were used in order to gather data during scheduled field outings, allowing for a triangulation that, to some extent, mollifies the relatively limited length of researcher engagement with participants in their spaces. However, this study remains limited in its capacity to evaluate or theorize about what variables may contribute to or affect information practices.

Guided tours of each participant's professional home office space, led by them, were used during all four field outings. Spurred on by "object probes" (De Leon and Cohen, 2005) and an invitation to show the researcher "the different locations and resources that you would go to in order to obtain needed information throughout the workday" (Thomson, 2010), participants provided valuable insights that allowed for mapping and diagramming of each space and preparation of an extensive "photographic inventory" (Hartel, 2006; Hartel, 2007; Hartel and Thomson, 2011) chronicling the information-related features of each professional home office.

Following the guided tour of their home office space, a semi-structured interview with each participant took place, beginning with questions related to their history in the printing industry and their professional home office, moving to more focused questions regarding work routines and information flow and organization, and closing with example scenarios in which participants were asked to demonstrate how they manage (whether acquire, store, organize, or dispose of, for example) and use certain information items.

Unobtrusive observation was planned as the final stage of each field outing, during which time participants' day-to-day work routines and natural information practices and habits were chronicled and used to verify, illuminate, or elaborate on data collected during the guided tour and semi-structured interview stages.

FINDINGS

This study investigated the nature of information practices, conventional or unconventional, that characterize home office settings, and the effects of setting and environment on "meta-level" information activities (Jones 2007; 2008). It produced findings suggesting that in home office settings, information practices are at least somewhat influenced by the intersectional personal and professional environment within which they occur, reflective of this intersectionality, and responsive to this intersectionality.

Participants in this study are of a relatively homogenous group, though ranging in years spent in the printing

industry, years spent in professional home offices, location of professional home offices in their homes, users of and purposes for their home offices, as well as in the size or degree of professional home office¹ they have established. While the first four of these characteristics are readily determined, the latter is a more subjective measure based on a combination of initial impressions from field outings. Table 1 below summarizes background details for each participant in the study.

	Participant 1	Participant 2	Participant 3	Participant 4
Years in printing industry	25	18 (intermittent)	20	49
Years in professional home office	4	5	4	10
Location of professional home office	enclosed basement room	open-concept second floor	enclosed main floor room	open-concept basement
Users of/ Purposes for space	singular user, purpose	multiple users, purposes	singular user, purpose	singular user, purpose
Size of professional home office	small	small	medium	large

Table 1. Summary of the professional history and home offices of participants.

Influenced by personal and professional

Within their professional home offices, participants necessarily encapsulated several professional roles that had previously been distinct in the traditional office setting, acting as their own managers, secretaries, and support staff, on top of filling their usual positions and job descriptions. They did all of this while too, by choice, remaining a presence in their larger households, purposefully intermixing artefacts of the home amidst their office and work content (or vice versa, mixing office and work content into their maintained home set-ups) in order to stay

¹ Attaching a size or degree to each professional home office studied is not meant to be a deceiving measure of quantification: some participants worked almost entirely from invisible information and noted keeping massive volumes of electronic files, documents, and emails and, also, a "digital versus paper" divide was not absolute in any of the cases but instead one of scale. Rather, it is simply thought of as useful to classify the presence of the professional home office within a home in order to more vividly and richly portray (in keeping with ethnographic tradition) the range of differences that can occur amongst individuals who carry out the same work when set up independently of one another. This is, of course, also not meant to suggest that such a range of differences would not or could not exist in a traditional office, but does indicate that the professional home office, existing in an environment widened beyond the socio-professionalism of industry and company to include the more personal/socio-familial household, may influence information practices. It should also be noted that, in this study, the size or degree of each home office did not correspond to the size of the home in which it was located; all participants lived and worked in what would be considered moderate to large (i.e., 2,000 square feet or more) multi-storey dwellings.

connected to the domestic realm. Even inside the designated professional home offices they established—and all treated it as an obvious given that they would keep demarcated office space—participants chose that their professional information practices would work both with and around the home, its structures, and its contents.

Sociologist Nippert-Eng (1996, p. 5) details an “integration/segmentation” spectrum along which individuals may lie, with “integrators” preferring and ensuring no distinction between home and work, no matter the time or place, and “segmentors” treating the two domains entirely separately. Falling somewhere along the midline between these two poles, the four participants in this study were deliberate about and even reveled in their spaces’ duality, rather than viewing the intersection of living and working inherent in the professional home office as an impediment beyond control, as Fulton (2000a) does.

In two of the home offices studied, a predominance of understated non-office artefacts, or artefacts of the home, blended work into surrounding décor moreso than in the other two cases. Some greeting cards and framed photographs, a decorative table lamp rather than a functional one, a mirror, and a painting in Participant 1’s home office, along with several photographs, children’s artwork and knickknacks, and functional home items like a sewing machine and closet full of clothes in Participant 2’s, infused the physical spaces and balanced or even neutralized their work aspects with living ones. Participant 2 used her family’s decorative bookcases to shelve her “library” of work samples beside her own books. Though a slight distinction was made between work and home books based on what side of the structure they are placed on, to the outsider unfamiliar with this arrangement, the bookcase carries no quintessential office-like quality and appears as a collection that might be expected in any North American household.



Figure 2. Personal touches like a decorative console, mirror, and lamp, as well as a greeting cards and an iPod docking station, neutralize professional aspects in one home office (left). Photographs, artwork, knickknacks, a sewing machine, and family books (on the left-hand side of the bookcase) do the same in another, blending work-related

printed samples (on the right-hand side of the bookcase) into the background.

On the other hand, Participant 3’s home office was largely devoid of non-office content, save a plant, a few framed photographs, and a figurine; therein, the influence of home in her home office seemed no more than that of the enclosed, contained office throughout the rest of the home.

Her off-site office storage space, a communal rec. room in the basement, however, projected a more “integrated” image. Similar to the way that Participant 2’s household books and decorative bookcase blended work-related content into the background and foregrounded the home in her home office area, Participant 3’s “library” of work samples is kept on larger bookcases that line a cozy living space replete with armchairs, a sofa, a coffee table, a TV, and wall art. The bookcases provide an ordinary backdrop for a home, especially with matching wrought-iron decorations dispersed on each unit, falling in line with the primary intentions for the area. Still, work aspects are not wholly washed away in the space: a cut-out of her company name is displayed above the bookcases, sticky notes portraying her alphabetical classification scheme are tacked to each shelf, and behind the bookcases stands a row of large filing cabinets containing archived job files.



Figure 3. Office artefacts, such as a sign displaying a company name and sticky notes showcasing an alphabetical classification scheme, co-exist alongside non-office furniture and artifacts in an off-site storage space.

At an extreme from Participant 1 and 2’s downplayed home offices stands Participant 4’s home office, wherein work content has overlaid and displaced artefacts of the home even beyond the boundaries of the home office proper. Stacks of printed samples, piles of job files, and miscellaneous tools and supplies overpower the surrounding communal rec. room. This participant’s attempt to more deeply recreate the seamlessness of a traditional office in his home office has led to appropriations of areas formerly designated to home artefacts alone. Household content once having a place within this larger space ends up continuously re-imposed amidst the spreading office, reinforcing prior household routines in what Kirk and Sellen (2010) call a “complex ecology of overlapping relationships between family members and specific objects” (p. 6).



Figure 4. Household items, such as travel coolers and a bin of potatoes (left), and Christmas decorations (right), are imbricated in a series of continual re-impositions with a mass of office content overtaking space beyond the home office proper.

No matter the size or degree of their office—or to which side of the “integration/segmentation” spectrum’s midline they tended to lean—not one of the participants indicated that the particular blend of home and office content in and around their home offices was impeding or uneasy. All preferred to keep one hand in the home world once in their designated workspaces, as each maintained separate home phones or phone lines within the ready reach of their home office desks. Figure 5 acutely captures this dichotomous blend, as Participant 4’s home phone sits atop a stack of his printed samples.



Figure 5. Balancing the personal and the professional, one participant’s home phone sits atop a pile of printed work samples in his home office.

The presence of non-office artefacts in the home offices studied materialized a negotiation between personal and professional that comes part and parcel with intersectional living and working spaces, yet no compromise of one for the other was implied. For the participants in this study, at least, the two were not mutually exclusive concepts.

Reflective of personal and professional

Participants in this study also blurred means of managing and using information content seemingly inherited (or perhaps simply inherent) with more personalized ones in the non-traditional work setting of their home offices. However, the conventional aspects of their environments

exerted strong sway over systems of information placement and schemas for information organization.

All participants employed systems or methods for placing content when dealing with the flow of information into and within their home offices, following the general and often observed pattern of “piling” and “filing” paper and electronic documents (Malone, 1983; Whittaker and Hirschberg, 2001). Beneath this existed another more finely grained system of dividing documents based on immediacy and relevancy to their work at hand. Previous IS and PIM literature investigating information in the traditional office notes that most workers keep “action” (or “hot”) documents that are needed often separate from “working” (or “personal work” or “warm”) documents that are required only sometimes, and both of these separate from “archival” (or “archived” or “cold”) documents that are referenced very infrequently (see, for example, Cole, 1982; Lansdale, 1988; Barreau, 1995; Whittaker and Hirschberg, 2001; Sellen and Harper, 2002; Jones, 2008).

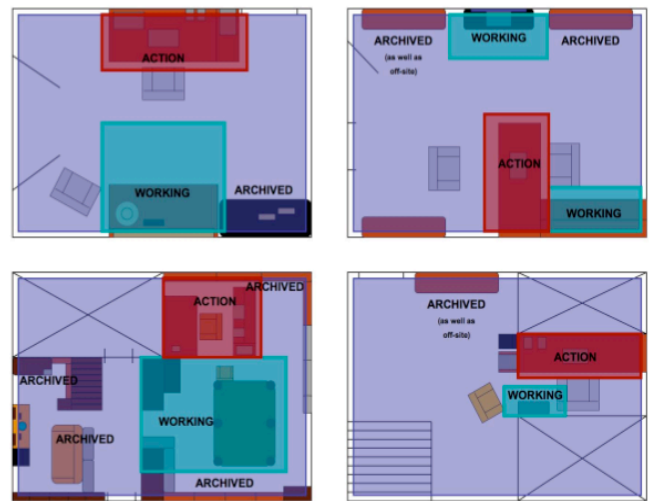


Figure 6. Diagrams showing three zones of information content in each home office studied: “action,” “working,” and “archived.” Documents dissipated farther away from the main hubs of participants’ desks as need for them declined over time.

It has also been noted that information requiring immediate response will make use of “location” (Neumann, 1999, p. 457; Taylor and Swan, 2005, p. 3). Malone (1983) stressed that office organization would consciously serve the functions of “finding” (p. 111), allowing workers accessibility to needed pieces of paper information, and of “reminding” (p. 111), engaging workers in needed tasks through the strategic placement of pieces of paper information. Likewise, Barreau and Nardi (1995) found that the placement of digital information on computer desktop served for users a “critical reminding function” (p. 41). According to Swan, Taylor, and Harper (2008), “by being ever-present and on display, these [pieces of information]... function as reminders... [and] reminding elicits an irritation... and motivates action” (pp. 9-10).

The participants studied were no exception to these well established customs; all of their organizational systems took the form of “piles” or “files” of “action,” “working,” and “archival” documents set progressively farther from the central hub of their desks and out of their direct sightlines as they lessened in importance over time.

Participant 3 keeps her current “action” job files in a hanging file frame on her desk, and the few she does not bother to print to paper format in her email inbox until the jobs to which they refer are well under way. When she knows that a printing order is moving along in production, she moves its now-“working” paper file folder to a drawer in her office (or its now-“working” digital documents from her email inbox to an electronic file folder stored in her email), given that she will need to access these much less frequently than she did when the order was just beginning. Long after completion of the printing order, its now-“archival” paper file folder can be moved to her off-site “archives” (or its now-“archival” electronic file folder contents to her computer hard drive). A variation on this basic system was followed by all other study participants.

The widespread support for “action,” “working,” and “archived” information content in previous IS and PIM literature indicates that these are conventional systems of placement, likely “learned” or “shared” and then transposed from participants’ previous traditional offices into their home offices, or simply ones inherent in all individuals’ information arrangement activities. Either way, participants in this study had actively shaped their new spaces to be more traditionally office-like in certain respects, assured to uphold and support the tasks they complete, despite the changed setting and environment.

Schemas for the organization and classification of documents in participants’ home offices also followed a consistent pattern. Having always grouped the majority of most-often used information content—job files and printed samples—by client name in their traditional offices, participants carried this same tactic with them into their home offices. Participant 4 succinctly explains that, for the printing professional, “organizing everything by client is just the easiest way.” Just as they did with their systems of information placement, participants actively shaped their settings and environments by recycling conventional schemas, choosing to recreate the “office experience” (Fulton, 2000b) for their own ease of work rather than take chances on an alternative organizational method that might not prove as useful.

However, as participants scaled back or extended these above-mentioned information practices in their professional home offices, more unconventional, individualized aspects of home-based professionals’ unique environments seemed to influence their choices. These were reflective of their (and their fellow householders’) preferences for acquiring, storing, and retaining little or much information content and how this was done (in what format), and, in turn,

determined whether they established a small, medium, or large home office. Instead of the four communal bookcases to hold printed samples that Participant 4 recalls his former traditional office supplying its employees, in professional home offices, users may have as little or as much beyond the previous par as they prefer and as their new physical and social settings will allow.

The decision to either retain or destroy previously acquired information was the one that, when delayed, caused a ripple effect as documents were kept longer than needed, taking up storage space for new content or rendering other content less easily accessed. Choosing a final disposition for information content at one time acquired into the home office was the last stage in an information management cycle identified by the participants in this study.

Participants 1 and 3 were systematic in enforcing the destruction of information content no longer needed. For both, final disposition is decided immediately upon a document’s receipt, leading to either its appropriate placement or its trashing. In contrast, Participant 4 kept all modifications to job orders in their designated paper job files and rarely, if ever, destroyed this content, likely why his large home office, even with all of its large office storage structures, requires that much content be piled—there is simply no longer any room for it to be filed. Participant 2 explicitly stated that she would never delete a file from her computer, though noting:

I should. It is... you know, I think, getting crowded. I get rid of dead [superceded] files and stuff, like quotes. But sometimes I want to keep them just so that I know...

Acquisition, upkeep, and final disposition activities—together, the practice of information management—are shaped by the broad environment of household and workplace influences within which they occur. Professional requirements, personal preferences, intra-home obligations, and socio-familial forces may all coalesce in the ways that individuals manage information content in their professional home offices.

Responsive to personal and professional

Campbell Clark (2000) writes of three forms of “border” that may separate (or not) work from home: physical, defining “*where* domain-relevant behaviour takes place,” temporal, dividing “*when* work is done from when family responsibilities can be taken care of,” and psychological, “rules created by individuals that dictate when thinking patterns, behaviour patterns, and emotions are appropriate for one domain but not the other” (p. 756, original emphasis).

In response to their hybrid environments, participants did take certain bounded and “segmented” approaches to their “meta-level” information activities. While still embracing personal and professional duality in their blending of office and non-office content, and in their acquisition, upkeep, and final information disposition, they best served their need to

maintain a “mapping” through their intersectional settings by instituting at least one boundary between the personal and professional spheres of their lives.

Even though individuals may (and usually do) simultaneously possess more than one type of office—traditional, personal, or professional home—moving back and forth between them based on need, in all but one case, physical barriers between participants’ personal and professional lives were erected. Within their homes, most kept entirely separate personal home offices, set apart from the professional home offices used in their everyday work.

The exception to this, Participant 2, shared her professional home office with the rest of her family, who used it as a personal home office after she “packs up” (Thomson, 2010) at the end of the workday. As O’Brien and Rodden (1997) note, “routines emerge by virtue of which certain spaces are seen as ‘belonging’ to certain individuals at certain points in time” (p. 256). Once working hours are over, and temporal borders suspended, a professional home office can transform into a different space, carrying with it a different meaning whereby professional concerns are subsidiary to personal use. All four participants carried out only work-related tasks on company time within their professional home offices, saving personal business for after working hours.

Psychological borders were too implemented: personal information in document form was never acquired into or dealt with in the professional home offices of any of the participants in this study, as all maintained separate email accounts and files, and often separate physical structures and technological machinery altogether, for storing their personal content.

Participating in and influencing—even if just a small bit—where, when, and how their personal and professional worlds would “integrate” or “segment” was a source of joy and pride for the professional home office users in this study. Undeniably, the addition of household influences to their environments was at times a challenge. When there are “multiple demands upon a single physical space” (O’Brien and Rodden, 1997, p. 256) as there can be for Participant 2, whose daughter wants to use “my [Participant 2’s] computer” during working hours, and for Participant 4, whose work files and papers may end up hidden beneath a bin of vegetables, individuals are made especially aware of the negotiation between personal and professional that working from home requires.

Yet, they are not stuck in a perpetual cycle of compromising one of personal or professional for the other; the “blurring of physical space [which] means that the worker never really leaves home or work behind” (Fulton, 2000a, p. 272), oftentimes viewed as a potential obstacle, was just as much a welcome change for participants in this study. Rather than be passive or reactive within their complex dual environments, Campbell Clark (2000) points out that “individuals [will] mold the parameters and scope of their activities and create personal meaning” (p. 750).

DISCUSSION AND CONCLUSION

Having taken an exploratory, ethnographic approach, this study claims to have produced only tentative findings, descriptive of the information practices of particular individuals within particular settings at particular points in time. Still, these provide a first step in studying home office settings and hybrid personal and professional environments for both the IS and PIM worlds, and offer insight and ideas for future research.

The intersection of personal and professional is a theme traceable throughout this study’s findings. Participants in this study did not view this hybridity as problematic, or at least not consistently so. Fulton (2000a; 2000b; 2002), one of the only other scholars to have studied home offices from an IS perspective, however, frames her research on teleworkers with intersectionality as the disjuncture with which individuals must “cope.” She is joined by several other researchers outside the IS field proper, including Hill, Ferris, and Martinson (2003), Olson-Buchanan and Boswell (2006), and, at times, Campbell Clark (2001). Fulton calls for more organizational support for teleworking in the forms of “policies” and “training” (2000a, p. 275) that will dictate to employees what constitutes an acceptable physical space in which to conduct work in the home.

Given the disagreement across findings from this study and Fulton’s studies (2000a; 2000b; 2002), more research into the underexamined terrain of the home office is necessary. The professional home office users in this study, who are entirely home-based all of the time in their work, appreciated the relaxation of professional influences and the room for personalization in their information practices afforded by the home office setting. An imposition of regulations or corporate policies such as Fulton suggests might even prove, for them, counter-productive. Instead of feeling themselves the “interlopers” (2000a) to whom she refers, participants in this study had taken deliberate care to set up and maintain their professional home offices, expressing true ownership over their spaces and affinity to their practices therein.

If there is indeed a fundamental difference between the professional needs of permanent and occasional home-based workers, as may be suggested by the discord among this study and other studies that have examined teleworking (Fulton, 2000a; 2000b; 2002; Hill, Ferris, and Martinson, 2003), would policies always be appropriate for the latter group but not the former? In the alternate vein of thinking, is there anything that the traditional professional office could learn from the intersectional professional home office space that participants in this study seemed to so greatly enjoy, or would traditional office users be found to be equally as able to position and re-position themselves along the “integration/segmentation” spectrum?

Returning to the “office continuum” presented in Figure 1, it is clear that the four participants in this study, consciously or not, made the same distinctions between three main types

of information-centred workspaces as were modeled, and that they too work to actively uphold these distinctions.

Still, the “office continuum” concept can be used as a tool to pose more questions and guide more research. Further studies of the professional home office space, and the environment accompanying it, are required before conclusions are drawn about whether information practices therein ever fall into patterns as widely recognizable as those of the traditional home office. Even though, as Dietsch (2008) writes, “there is no single model for working at home.... The styles are as varied as the owners whose ingenious solutions underscore the spatial richness of this hybrid building type” (p. 21), could a theory regarding the unique blend of personal and professional that characterizes home office spaces be found through further investigation?

On top of this, much more research into the grey spaces, falling somewhere between the three main types of workspace highlighted by the “office continuum,” is needed. Participants in this study were employees operating in a larger corporate and household environment who still had to carry out their work in a way sanctioned by their company and on its clock. What of the environment and the information practices of other corporate employees working in home offices, in other fields and types of work? self-employed individuals working in home offices, seemingly answerable only to themselves? teleworkers like those in Fulton’s (2000a; 2000b; 2002) studies, who move between different environments and workspaces regularly, or rarely? individuals working in shared home offices, who have an added social element within their environments and immediate workspaces with which to contend? or even in the sticky case called to mind by Campbell Clark (2000) of “family-run businesses, where work interactions are also family interactions, work decisions are family decisions, and time at work is also time with family” (p. 763)?

This study set out to explore the unique dynamics surrounding professional home offices as intersectional, hybrid living and working spaces, and to ethnographically document the effects of setting on individuals’ information practices and activities. Taking as its participants four printing professionals who are entirely home-based in their work, immersing itself in their home office spaces, job routines, and ways of handling assorted information items, it illuminated a complex interplay between personal and professional, and setting and information practices, that exists within professional home office spaces.

Certain informational dimensions, such as the content required to carry out work, methods of organizing it, and the principal ways it is managed and used generally, suggest an independence from matters of setting. Other phenomena, such as slight variations across the ways that specific bits of information are acquired, stored, and retained, hinted at a subtle, more nuanced interweaving of setting and information practices, perceptible only through

the in-depth probing and active discovery that both exploration and ethnography stress.

Extending the line of inquiry raised in this small study may strengthen what is known about different information environments and sharpen understanding of the extent to which physical and social settings converge upon individuals’ information practices.

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REFERENCES

- Akyeampong, E.B. (2007). Working at home: An update. *Perspectives on Labour and Income*, 8(6). Retrieved from <http://www.statcan.gc.ca/pub/75-001-x/10607/9973-eng.htm>.
- Babbie, E. (2001). *The practice of social research* (9th ed.). Belmont, CA: Wadsworth.
- Barreau, D. (1995). Context as a factor in personal information management systems. *Journal of the American Society for Information Science*, 46(5), 327-339.
- Barreau, D. (2008). The persistence of behavior and form in the organization of personal information. *Journal for the American Society of Information Science and Technology*, 59(2), 307-317.
- Barreau, D., & Nardi, B. A. (1995). Finding and reminding: File organization from the desktop. *SIGCHI Bulletin*, 27(3), 39-43.
- Bondarenko, O., & Janssen, R. (2005, April 2-7). *Documents at hand: Learning from paper to improve digital technologies*. Paper presented at the Conference on Human Factors and Computing systems, CHI '05, Portland, Oregon, USA.
- Business Trends. Home, office distinction blurs. (2008). *Journal of Accountancy*, 206(3), 21.
- Campbell Clark, S. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747-770.
- Campbell Clark, S. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior*, 58, 348-365.
- Cole, I. (1982). Human aspects of office filing: Implications for the electronic office. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 26(1), 59-63.
- De Leon, J. P., & Cohen, J. H. (2005). Object and walking probes in ethnographic interviewing. *Field Methods*, 17(2), 200-204.

- Dietsch, D. K. (2008). *Live/work: Working at home, living at work*. New York: Abrams.
- Fulton, C. (2000a). "My home workplace is my castle": Functioning in the home work environment. In E. Balka & R. Smith (Eds), *Women, work, and computerization: Charting a course to the future* (pp. 268-275). Norwell, MA: Kluwer Academic.
- Fulton, C. (2000b, May). *The impact of telework on information professionals' work processes*. Paper presented at the Canadian Association for Information Science Annual Conference, Edmonton, Alberta, Canada.
- Fulton, C. (2002). Information control in the virtual office: Preparing intermediaries to facilitate information exchange in the home work environment. *New Library World*, 103(1177), 209-215.
- Globe and Mail. (2010, December 8). More Canadians working from home: study. Retrieved from <http://www.theglobeandmail.com>.
- Hartel, J. (2006). Information activities and resources in an episode of gourmet cooking. *Information Research*, 12(1). Available online at <http://InformationR.net/ir/12-1/paper282.html>.
- Hartel, J. K. (2007). *Information activities, resources, and spaces in the hobby of gourmet cooking* (Doctoral dissertation). Retrieved from Proquest Dissertations & Theses: Full Text. Doc. ID: 1495959911.
- Hartel, J., & Thomson, L. (2011). Visual approaches and photography for the study of immediate information space. *Journal of the American Society for Information Science and Technology*, 62(11), 2214-2224.
- Hill, E. J., Ferris, M., & Martinson, V. (2003). Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life. *Journal of Vocational Behavior*, 63, 220-241.
- Home office. (2010). In *Dictionary.com*. Retrieved from <http://dictionary.reference.com/browse/home+office>.
- Jones, W. (2007). Personal information management. In B. Cronin (Ed.), *Annual Review of Information Science and Technology*, 41(1) (pp. 453-504). New Medford, NJ: Information Today.
- Jones, W. (2008). *Keeping found things found: The study and practice of personal information management*. San Francisco, CA: Morgan Kaufmann.
- Kalms, B. (2008). Household information practices: How and why householders process and manage information. *Information Research*, 13(1). Retrieved from <http://informationr.net/ir/13-1/paper339.html>.
- Kirk, D. S., & Sellen, A. (2010). On human remains: Values and practice in the home archiving of cherished objects. *ACM Transactions on Computer-Human Interaction*, 17(3).
- Kwasnik, B. H. (1991). The importance of factors that are not document attributes in the organization of personal documents. *Journal of Documentation*, 47(4), 389-398.
- Lansdale, M. (1988). The psychology of personal information management. *Applied Ergonomics*, 19(1), 55-66.
- Malone, T. (1983). How do people organize their desks? Implications for the design of office information systems. *Proceedings of ACM Transactions on Office Information Systems*, 1(1), 99-112.
- Myerson, J., & Ross, P. (2006). *Space to work: New office design*. London, England: Laurence King.
- Neumann, L. J. (1999). Paper, piles, and computer files: Folklore of information work environments. *Library Trends*, 47(3), 439-469.
- Nippert-Eng, C. E. (1996). *Home and work: Negotiating boundaries through everyday life*. Chicago: University of Chicago Press.
- O'Brien, J., & Rodden, T. (1997). *Interactive systems in domestic environments*. Paper presented at the Designing Interactive Systems Conference, DIS '97, Amsterdam, The Netherlands.
- Office. (2010). In *Dictionary.com*. Retrieved from <http://dictionary.reference.com/browse/office>.
- Office. (2009). In *Oxford English dictionary online* (2nd ed.).
- Olson-Buchanan, J. B., & Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. *Journal of Vocational Behavior*, 68, 432-445.
- Rieh, S. Y. (2004). On the web at home: Information seeking and web searching in the home environment. *Journal of the American Society for Information Science and Technology*, 55(8), 743-753.
- Sellen, A. J., & Harper, R. H. R. (2002). *The myth of the paperless office*. Cambridge, MA: MIT Press.
- Stebbins, R. A. (2001). *Exploratory research in the social sciences*. Thousand Oaks, CA: Sage.
- Swan, L., & Taylor, A. S. (2005, April 2-7). Notes on fridge surfaces. Paper presented at the Conference on Human Factors and Computing Systems, CHI '05, Portland, Oregon, USA.
- Swan, L., Taylor, A. S., & Harper, R. (2008). Making Place for clutter and other ideas of home. *ACM Transactions on Computer-Human Interaction*, 15(2), 1-24.
- Taylor, R. S. (1991). Information use environments. In B. Dervin & M. Voigt (Eds.), *Progress in communication sciences* (Vol. 10) (pp. 173-216). Norwich, NJ: Ablex.
- Thomson, L. E. A. (2010). *Information in the home office: An ethnographic study of space, content, management and use* (Unpublished master's thesis). University of Toronto.
- Whittaker, S., & Hirschberg, J. (2001). The character, value, and management of paper archives. *Transactions on Computer Human Interaction*, 8, 150-170.