FASHION WAVES IN INFORMATION SYSTEMS RESEARCH AND PRACTICE

By: Richard L. Baskerville
Department of Computer Information Systems
Robinson College of Business
Georgia State University
Atlanta, GA 30303
U.S.A.
baskerville@acm.org

Michael D. Myers
Department of Information Systems and Operations Management
University of Auckland Business School
Auckland
NEW ZEALAND 1142
m.myers@auckland.ac.nz

Abstract

Building on neo-institutional theory and theories of innovation and diffusion, recent work in the field of management has suggested that management research and practice is characterized by fashions. A management fashion is a relatively transitory belief that a certain management technique leads rational management progress. Using bibliographic research, we apply Abrahamson’s management fashion theory to information systems research and practice. Our findings reveal that information systems research and practice, like management research and practice, is indeed characterized by fashions. These “IS fashion waves” are relatively transitory and represent a burst of interest in particular topics by IS researchers and practitioners. However, while our findings show that IS research closely parallels practice, we suggest that a more proactive engagement of IS academics is needed in the IS fashion-setting process.

Keywords: Innovation, adoption, diffusion, management fashion, information systems fashion, fashion setting, research agenda, information systems practice

Introduction

Research in the field of management has suggested that management research and practice is characterized by fashions (Abrahamson 1991; Abrahamson and Fairchild 1999; Clark 2004). A management fashion is a relatively transitory belief that a certain management technique leads rational management progress. At first sight, management fashions appear to be new and innovative, but some have suggested that they are in fact just old wine in new bottles and a repackaging of old concepts (Miller and Hartwick 2002). These fashions have a relatively short shelf life and disappear almost as quickly as they arrived. Management fashions have been criticized for tending to offer glib and unworkable “solutions” to a complex international business environment (Currie 1999).

Similar comments have been made about research and practice in the field of information systems. Banville and Landry suggested that IS researchers were overly driven by new technological opportunities and research fads (Banville and Landry 1989; Landry and Banville 1992). Larsen and Levine (2005) say that research and practice in information systems has sometimes been characterized as lacking coherence and durability with respect to core topics in the field. Gregor and Jones (2007) note that waves of “fads and fancies” tend to characterize IS/IT. Various topics in IS research and practice...
have been described as fashions, such as business process reengineering (Jones 1994), enterprise resource planning (ERP) systems (Westrup 2003), and group decision support systems (Ramiller et al. 2008). A prevalent theme in these comments is the idea that many topics in the IS field have little, if any, enduring value.

Given the apparent similarity between the two fields of management and information systems (at least with respect to the fashionable nature of research and practice in both disciplines), we decided to apply Abrahamson’s management fashion theory to information systems research and practice. Like Abrahamson, we used bibliographic research to model the relative strength and duration of selected fashion waves in IS research and practice. Hence, the purpose of the paper is to describe some of the more important fashion waves in recent years and to suggest how IS scholars might better engage with IS practitioners in the IS fashion setting process.


Far from being cosmetic or transient in nature (and popular because of this), management fashions will only diffuse if they claim to be fundamental in their application and timeless in their scope—if they claim to offer solutions to real or perceived efficiency gaps (scarbrough and Swan 2001, p. 9).

We suggest that many IS fashions can be described in a similar way. The proponents of IS fashions claim that the particular IS technique is a fundamental improvement that offers solutions to real or perceived problems with information systems in organizations.

In the management literature, some authors regard management fashions with disdain, casting them “as something from which management scholars should remain disengaged, lest they join the ranks of ‘snake oil salesman’” (Abrahamson 1991, p. 255). In contrast, much like Abrahamson, we take a neutral position. Our purpose in conducting this research project is not to evaluate the wisdom, impact, or merit of the various fashions in information systems research and practice. Rather, our purpose is to describe some of the important fashion waves in recent years and to illuminate the degree to which the research literature reflects the practitioner literature, or vice versa (as far as IS fashion is concerned). Further, we offer an analysis of the negative impacts arising from the absence of IS scholarship from the IS fashion setting process.

The contribution of this paper is, therefore, as follows. First, it helps to open a new reflexive discourse on how we, as academic scholars in the information systems field, set and pursue our research agendas (see also Ramiller et al. 2008). This discourse is distinct from the more well-established discourses on relevance (or irrelevance) and subject-matter coherence (e.g., concerning the “IT artifact”). Second, it suggests new ways in which management fashion theory can be advanced in IS. As examples, we apply management fashion theory to four information systems research and practitioner discourses: office automation, computer-aided software engineering, business process reengineering, and e-commerce. Third, it contributes to the discourse on the relationship between IS research and practice by assessing the extent to which academics and practitioners have influenced each other in the fashion setting process (see Barley et al. 1988).

With respect to this last contribution, IS researchers have lamented the supposed poor state of the relationship between IS research and practice for many years. For example, Benbasat and Zmud (1999) say that the lack of IS research relevance can be traced to the “ivory tower” nature of business research in general, which is popularly regarded as fuzzy, irrelevant, and pretentious. Lyytinen (1999) says that underlying institutional structures create pressures for IS researchers to pursue research directions that respond to academic careers rather than practical usefulness. Pearson et al. (2005) say that IS practitioners have problems finding academic research literature, and when they do, they find it dated, difficult to read, and of little value.

Our findings cast a more positive light on this long-standing debate concerning the relationship between IS research and practice. Contrary to the usual stance lamenting the poor state of the relationship between IS research and practice, our findings show that IS research closely parallels practice. In terms of topic, our research suggests that academic work is usually synchronous with practitioner interests, and indeed, in some cases, leads. By following the latest IS fashions, IS researchers show that they are not simply ivory tower researchers who ignore everything that goes on around them. On the contrary, they show that they are sensitive to trends in industry and are willing to study them. However, we believe there is room for improvement. We suggest that IS academics should be more proactively engaged in the fashion setting process and in the evaluation of IS fashions.

Management Fashion Theory

Abrahamson proposed and subsequently developed his theory of management fashion in a series of articles over a decade.
Abrahamson’s theory of management fashion builds upon neo-institutional theory and theories of innovation and diffusion. Neo-institutional theory asserts that norms of both rationality and management progress influence managers to adopt management techniques perceived as progressive. Abrahamson (1996, p. 263) argues that there is a management fashion setting community that shapes transitory collective beliefs among management fashion followers that certain techniques are rational and at the forefront of management progress. Abrahamson (1991) also draws on the innovation diffusion literature but tries to overcome what he calls the pro-innovation biases in this literature. He points out that many innovations that can be classified as fashions have little if any utility for an organization. In fact, some fashions may harm the organization.

By using the term fashion, Abrahamson does not mean that these phenomena are unimportant or trivial. In fact, swings in management fashion are “deadly serious matters for business schools and the scholars staffing them.” Those who do not follow the latest fashion “will be perceived as lagging rather than leading management progress, as being peripheral to the business community, and as being undeserving of societal support” (1996, p. 255).

**The Fashion-Setting Process in Management**

In his more recent work, Abrahamson has focused mostly on the fashion-setting process. Abrahamson defines fashion-setting “as the process by which management fashion setters continuously redefine both their and fashion followers’ collective beliefs about which management techniques lead rational management progress” (1996, p. 257). Fashion setters are management consultants, business schools, the business press, academic gurus, consultant gurus, and hero managers (Abrahamson 1996). He defines a management fashion as “a relatively transitory collective belief, disseminated by management fashion setters, that a management technique leads rational management progress (1996, p. 257).

His definition suggests that management fashions can differ in scope and duration. With respect to scope, the population that believes that a particular management technique is at the forefront of management progress can be large or small. With respect to duration, the belief that a management technique is at the forefront of management progress can be more or less transitory (Abrahamson 1996).

**Key Concepts**

Abrahamson and Fairchild (1999) characterize management fashions as having two somewhat parallel life cycles related to the particular fashionable technique: the discourse life cycle and the diffusion life cycle. The discourse life cycle is represented in published articles, speeches, company documents, and vendor literature about the technique, while the diffusion life cycle is represented by the actual application of the technique across organizations. Of course, discourse is also integrally constitutive of the action that takes place, and hence there is a close relationship between the two.

Abrahamson and Fairchild say that the type of collective learning fostered by a fashion varies considerably. “Real learning” is where carefully considered arguments trigger the upswing of the fashion wave, and counterfactual evidence triggers its downswing. “Superstitious learning” is where there are emotional outbursts of unrealistic enthusiasm in the upswing followed by disillusionment in the downswing. The fashion upswing and downswing each have three distinctive discourses. These six discourses are described in Table 1.

**Fashion-Setting in Information Systems**

These fundamental ideas of management fashion can be applied to information systems research and practice. Information systems research and practice has often been subject to fashions and bandwagons (Banville and Landry 1989; Gregor and Jones 2007; Jones 1994; Landry and Banville 1992; Ramiller et al. 2008; Westrup 2003). Also, IS research and practice is often influenced by the same management fashions that are found in general management (e.g., business process reengineering features prominently in both sets of literature).

Like Abrahamson, we focus mostly on the process of fashion setting. Consistent with his definition we therefore define an IS fashion as a relatively transitory collective belief in IS research and practice, disseminated by fashion setters, that a technique or technology leads to rational IS innovation.

The fashion setting process can be modeled as a marketplace in which fashion setters and fashion users interact under the influence of norms of rationality and progress (Abrahamson 1996). In addition, fashion users operate under the influence of socio-psychological and techno-economic forces.
Table 1. Fashion Discourses (Examples from Abrahamson and Fairchild 1999, pp. 727-730)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example (Quality Circles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem discourse</td>
<td>A fashion upswing discourse proposing theories about the problem source motivating the fashion.</td>
<td>Productivity improvements in other countries have made U.S. productivity relatively low.</td>
</tr>
<tr>
<td>Solution discourse</td>
<td>A fashion upswing discourse describing the fashion with claims that it is all powerful in scope and impact.</td>
<td>Savings range from large sums in huge companies to small sums that make a large difference in small firms.</td>
</tr>
<tr>
<td>Bandwagon discourse</td>
<td>A fashion upswing discourse relating stories about firms successfully adopting the fashion.</td>
<td>Lockheed is successfully using quality control circles.</td>
</tr>
<tr>
<td>Debunking discourse</td>
<td>A fashion downswing discourse advocating a complete rejection of the fashion.</td>
<td>Circles were simply something the top told the middle to do to the bottom.</td>
</tr>
<tr>
<td>Surfing discourse</td>
<td>A fashion downswing discourse advocating a transition from one fashion to the next.</td>
<td>Total productive maintenance is replacing total quality control.</td>
</tr>
<tr>
<td>Sustaining discourse</td>
<td>A fashion downswing discourse advocating the fashion despite falling interest.</td>
<td>Quality circles were part of something bigger. Little Q set the stage for the Big Q breakthrough.</td>
</tr>
</tbody>
</table>

As shown in Figure 1, norms of rationality and progress embody the strong cultural drivers that influence management fashions. Socio-psychological forces create a continuing demand for management fashions to sustain the impression of management progress. Techno-economic forces also shape management-fashion demand. Unlike many management fashions, however, IS fashions are also influenced by innovations in information technologies. In such cases, new information technologies may be one of the triggers for an IS fashion. For example, the launch of the IBM Personal Computer in 1981 triggered a burst of interest in office automation in the early 1980s. Hence, fashions in IS may be influenced by both management fashions and innovations in IT and, of course, the wider macroeconomic environment.

**Fashion Launching Process**

Abrahamson’s model is expanded to describe the manner in which fashions are launched. Fashion setters operate within a cycle involving the engagement of management gurus, mass media organizations, consulting firms, and business schools. This cycle replicates and builds rhetoric, amplifying the effects of the champions who are backing the fashionable new techniques (and drawing forward new champions). The rhetoric reveals organizational performance gaps and supports management techniques capable of narrowing these gaps. This cycle is also important in drawing forward the needs (demand) of potential fashion users, leading to the creation and selection of techniques for launch into fashion (see Figure 2). Fashion demand is created by thousands of managers who seek to cope with extremely important and complex managerial problems and challenges (Abrahamson 1996).

Aside from Abrahamson’s ground-breaking models of management fashion setting, other aspects of this process have been studied subsequently. For example, the ability to develop and follow a fashion requires a degree of innovation effectiveness, and fashions usually succeed when they arise around modestly useful ideas (Strang and Macy 2001). Research has also indicated that fashions first emerge in specialty areas within management and then disseminate to the broader business press (Spell 1999). The dynamic nature of norms is important in the sense that norm-setting may itself be part of this process. This norm-setting has been studied in the form of the informational cascades that lead to mass conformist behaviors (Bikhchandani et al. 1992). In other words, such norms arise as a sheer effect of people observing a wave of adoption, independently of the claims advanced on behalf of the innovation. Researchers have also examined the “post-fashion” element of the process (David and Strang 2006), while the interest in management fashion itself can be studied as a management fashion (Clark 2004; Swan 2004).

Some earlier research work indicates that this fashion-launching process may apply to the information systems field. For example, the Abrahamson model helps to explain knowledge management diffusion (Scarborough and Swan 2001).
Fashion theories have been used to explore mindfulness (and mindlessness) in information technology innovations (Swanson and Ramiller 2004). In a similar way to the recognition of the norm-setting effect of informational cascades, work in IS has also explored rationality-setting behavior (or perhaps “irrationality”) in organizational fashion-adoption decision making (Ramiller 2001).

Our research explores the relationship between IS fashion in the practical literature and the presence of the fashion in the IS research literature. Most studies of management fashion have focused on the practitioner literature. There is less research on management fashion in the research community. What work there is has shown that the scholarly press more-or-less tracks the popular press (Ramiller et al. 2008). At issue in this research is the status of researchers as followers or leaders. Some suggest that researchers simply engage in fashion-following, whereas others suggest that researchers lead fashion by intervening directly in fashion-setting discourses (Clark 2004, p. 298).
Abrahamson’s fashion launching process model distinguishes fashion setters from fashion users. He identifies a management fashion setting community that consists of management consultants, business schools, and the business press. It also includes academic gurus, consultant gurus, and hero managers. This community senses preferences that guide fashion demand and creates the fashions (management techniques) to satisfy the demand. This community also launches fashions through a process of dissemination based on rhetoric championing the fashion (Abrahamson 1996).

There are two feedback cycles at work in this process (see Figure 2). The outer feedback cycle operates between the fashion setters and the fashion users. The inner feedback cycle operates between the members of the fashion setting community. An important aspect of this process is that the community of fashion setters is generally a community of experts (gurus, authors, consultants, and scholars). This aspect is entirely similar to the way in which fashions are set in the clothing industries. Fashion experts such as authors, designers, and store buyers make up a fashion setting community. We have named the critical importance of experts in fashion setting as the Milan theory of fashion creation: a community of experts is required to collectively interpret the needs of users (or create needs) and interactively launch fashions. The theory is named after the city of Milan, where the world’s experts in clothing fashion often gather to create and launch new fashions.

Following Abrahamson’s model, business schools and academic scholars are supposed to be among the prominent experts in management fashion setting and prominent members of the fashion setting community. However, IS scholars do not currently have a reputation amongst IS practitioners as fashionable. It also means that fashion setting occurs without engagement by all of the experts in the fashion setting community. According to the Milan theory, IS researchers should try to promote real learning during the fashion setting process, whereby carefully considered arguments trigger the upswing of the fashion wave, or counterfactual evidence triggers its downswing (Abrahamson and Fairchild 1999). We should not be content with being fashion followers or fashion critics.

The Milan theory calls for a more active engagement of IS academics with IS fashions. It suggests that the absence of timely academic research in the fashion formulation process leads to IS research having a reputation amongst IS practitioners as unfashionable. It also means that fashion setting occurs without engagement by all of the experts in the fashion setting community. According to the Milan theory, IS researchers should try to promote real learning during the fashion setting process, whereby carefully considered arguments trigger the upswing of the fashion wave, or counterfactual evidence triggers its downswing (Abrahamson and Fairchild 1999). We should not be content with being fashion followers or fashion critics.

There are at least three barriers to better academic participation in information systems fashion-setting. One barrier lies in an antipathy or ambivalence toward engagements with practice (e.g., “sideline” consulting). Many universities permit limited engagement, usually with a view that it provides supplemental compensation for faculty members. It is less prevalent for universities to overtly reward such engagements in the university rewards system (promotion, tenure, compensation, etc.). Another barrier lies in the length of time required to plan, design, and conduct a proper scholarly research project. Such projects often take many months or years, while the spool-up and launch of information systems fashions may occur in only a few months. A third barrier lies in the lengthy and complex processes of scholarly publication (Rüling 2005). Articles submitted to practitioner journals may be published in a matter of weeks or months, but articles submitted to scholarly journals are delayed by the volunteer-based peer review system. The academic publishing process not only adds months or years to the research dissemination time, it has an in-built proclivity toward the status quo. This proclivity arises from the vested interests of many expert reviewers in the preservation of established ideas. Research proposing truly revolutionary new thinking is not only naturally delayed by the academic community, it can also be naturally suppressed (Latour 1987).
While the effects of these barriers are notable in management and information systems research, they are even more prominent in some other disciplines, such as medicine. Indeed, some experts attribute unfounded medical fashions to the slowness of the academic research establishment in delivering the evidence necessary to debunk unjustified medical procedures that can persist for decades (Cohen and Rothschild 1979; Rikkers 2002). “Evidence-based medicine” is one proposed solution. It is a practice paradigm where only procedures anchored in research evidence are given credence. Such a paradigm is intended to drive up the demand by practitioners for research, applying pressures that will overcome the delays inherent in the established academic status quo. Based on these developments in medicine, “evidence-based management” is proposed as an equivalent paradigm for practicing managers (Pfeffer and Sutton 2006a, 2006b). Such a paradigm would serve to drive up the demand for academic research from practitioners who are burdened by wave after wave of questionable fashion-driven practices (Sutton 2004).

In the following sections, we explore the emergence of fashions in the IS research literature in comparison with the IS practical literature. At the simplest level, this study provides examples of when certain fashions have appeared in the IS practice community vis-à-vis the IS research community. At a deeper level, we also explore whether Abrahamson’s model explains how IS fashions emerge. If this model seems to be operating, then we believe the Milan theory calls for a deeper, not lesser, engagement of IS scholars in the IS fashion-setting process.

In terms of how fashions emerge, Abrahamson describes management fashions as having wave-like properties. These waves are essentially “ephemeral popularity curves.” There are “upsweeps of management fashion waves” (Abrahamson and Fairchild 1999, p. 708) followed by equally precipitous downsweeps. For the field of information systems, the fashion waves represent concentrations of energy expended in seeking to understand the capabilities of new technology or management techniques as an enabler for new business processes or organizational arrangements.

**Research Method**

How does one identify a fashion? One way is to measure the volume of discourse about a particular fashion. A proxy measure indicating the size of the fashion would be the number of articles published that refer to it. This rough measure of the size of the fashion discourse indicates the degree to which identifying keywords dominate literature in the domain for a time. This approach means that we necessarily limit ourselves to studying the discourse life cycle (the research and practitioner literature), not the diffusion life cycle (the actual use of techniques).

We used bibliographic research in which article counts were used as a common proxy for tracing the popularity of particular IS concepts over time. The counts are based on the subset of data contained in ABI/INFORM Complete™ (ABII), and represent a 26 year period, from the beginning of 1980 to the end of 2006. This database is a comprehensive and well-established business database indexing 4,000 journals covering business, economics, strategy, management techniques, and information systems, as well as competitive and product information. It is recognized as the most complete business publications database currently available (Rüling 2005, p. 181). In its database ABII includes academic journals such as *MIS Quarterly*, *Information Systems Journal*, *Information and Management*, *European Journal of Information Systems*, *Information Systems Research*, *Communications of the ACM*, and *Journal of Management Information Systems*. ABII also includes practitioner journals such as *Computerworld*, *Datamation*, and *CIO Magazine*. Other researchers have used ABII to investigate management fashions in the literature (e.g., Abrahamson 1996; Rüling 2005; Scarbrough and Swan 2001).

Four distinct fashions were investigated in this study: office automation (OA), computer-aided software engineering (CASE), business process reengineering (BPR), and e-commerce (E-COM). We limited our investigation to four fashions, since a discussion of more would reduce our ability to discuss each fashion in depth. Our approach is consistent with that of previous researchers in management fashion, who have also studied a small number of fashions (Abrahamson 1996; Abrahamson and Fairchild 1999; Rüling 2005). We chose these four fashions because all four meet our definition of an IS fashion that we proposed earlier. All four rose rapidly to prominence in both the academic and practitioner literature, but all four are now unquestionably over—at least as far as the practitioner literature is concerned. These four fashions differ from the ones chosen by Ramiller et al. (2008) because our selection criteria for time and interest profile are different; we chose fashions that were not simultaneous, but had quickly developed high interest from both academics and practitioners. They studied group decision support systems, ERP, and knowledge management.

The ABII database distinguishes scholarly literature from the practitioner literature. The scholarly literature consists of academic journals where the articles are normally peer-reviewed. These articles are usually authored by academics for a target
audience that is mainly academic. The practitioner literature includes journals and magazines where the articles are not peer-reviewed. These articles can be authored by academics or practitioners, but the target audience is mainly business professional.

We counted all articles listed in ProQuest (the online interface of ABI) which satisfied our search criteria. One of the search terms used was always “information systems” to make sure that the topic was related to IS. We searched the citations (keywords, title, and abstract) for certain search terms by year. We then counted the occurrence of these articles by year, distinguishing between practical and research outlets. Table 2 lists the four search terms queries submitted to the proQuest database.

As there are a relatively small number of observations per concept, we have based our interpretation on the graphical representation of the data rather than statistical testing. This analytical convention is consistent with similar fashion studies of the broader management literature (Abrahamson and Fairchild 1999; Rüling 2005; Spell 2001).

The query data were collected on 16 July 2007. The database is somewhat dynamic as journals and other documents may be added or deleted from the database. On this date there were 23,419,578 documents represented in the database, of which 1,352,520 documents (5.78%) were classified as scholarly. Figure 3 gives a sense of the progression of the database measured since 1980 together with the declining relative proportion of scholarly documents represented in the database. This shifting proportion makes comparisons between absolute numbers of scholarly documents in relation to absolute numbers of non-scholarly documents somewhat misleading.

The proportion of scholarly to non-scholarly documents related to information systems has not changed to the same extent. On 16 July 2007 there were 101,923 documents, of which 19,703 were scholarly (19.33%). Figure 4 illustrates the size of the database for information systems and the percentage of these documents that are considered scholarly.

Data Analysis

Our purpose is to explore shifting interests in different topics in the information systems literature. Because absolute counts of numbers of articles represented in the database are distorted by the changing overall size of the database and the variability of the representation of scholarly work in the overall database, we designed a simple index that represents the proportional interest levels in any particular topic at any particular time within information systems. The interest index is simply the percentage of the documents in the database that correspond to a query on that topic against the title, abstract, and keywords within information systems. For example, see Figure 5.

This figure compares the indices for office automation documents in the database from 1980 until 2006. We distinguish the scholarly literature from the non-scholarly literature and assume that the non-scholarly literature represents public and practitioner interest in the topic as distinguished from scholarly interest. In 1980, 1.299 percent of all scholarly articles in information systems were related to office automation. In absolute terms, this means there were 15 office automation documents out of the 154 scholarly information systems articles in the database for that year. In 1980, 4.573 percent of all practical (non-scholarly) articles in information systems were related to office automation. In absolute terms, this means there were 15 office automation documents out of the 328 practical (non-scholarly) information systems articles in the database for that year. In all, there were 17 articles in the database on office automation in 1980. These 17 articles represent 3.527 percent of the 482 articles on information systems. Thus the index numbers (1.299 and 4.573) represent the relative proportion of the two literature bases occupied by the topic. It indicates the degree of interest among information systems authors and readers in the topic proportional to all topics (the overall available literature). An interest index of zero indicates there was no interest in the topic represented in the literature. An interest index of 100 would indicate that everyone was interested in this topic.

Life Cycle of Discourse

The use of the interest index permits us to discover the life cycle of discourse. As Figure 5 reveals, there was a sharp rise of practical interest in office automation reaching an index level of nearly 14 in 1982. This interest declines steadily to less than one in 1991. Scholarly interest in the topic is a somewhat distorted mirror of the practical interest. In 1984, interest peaks at 4.4, declining a bit more erratically to fall below 1 in 1992. This pattern represents a more-or-less synchronous rise and fall of interest between scholars and practitioners, although scholarly interest was never as great as practitioner interest.

\[ \text{Abrahamson and Fairchild (1999)} \] similarly adjusted their figures to factor out the “inflation” in the article counts. Because of the differing growth rates in the practical versus scholarly literature, and the need to compare the two trends, we developed our interest index as it both adjusts for this growth and establishes a shared scale for the two publication arenas.
Table 2. ProQuest Queries

- ((information systems) and (office automation))
- (information systems) and ("computer aided software engineering") or (case tools)
- (information systems) and (reengineering) (information systems) and ((electronic commerce) or (e-commerce) or (ecommerce))
The office automation pattern is fairly representative of other fashion waves in information systems. These fashion waves generally rise sharply and then fall in the practitioner literature and popular press, but take on a more distorted pattern in the scholarly literature. It is important to recognize that the practitioner waves are part of the phenomena that information systems researchers are studying. Both the research and practitioner waves form part of the context for setting research priorities.

Figure 6 compares scholarly and practical interest indices for computer-aided software engineering (CASE). The interest in both scholarly and practitioner literature rises simultaneously and at similar levels. However, while practitioner interest falls sharply, scholarly interest bounces along at a level above 1 for another 4 years. This represents a synchronous rise of interest with a longer trailing research interest.

Figure 7 illustrates a similar pattern in the area of business process reengineering. Practical and research interest rises more or less simultaneously with a slightly higher interest index among the scholarly articles. Again, there is a longer trailing edge of scholarly interest that has not yet dropped below 1, while practitioner interest fell below 1 in 1998.

Figure 8 illustrates a similar practical interest pattern for e-commerce, with a very sharp and high-level rise of interest amongst practitioners, falling off quickly below 1 in 2005. The scholarly interest still remains very high with an index of 6, but there is marked trend downward.


Learning Processes in the Fashion Upswing

Abrahamson and Fairchild found that the discourse promoting management fashions tended to be emotionally charged and enthusiastic. The discourse promoting IS fashions appears to vary similar. Consider this comment about office automation in 1982:

The office of the future will respond to the information overload problem by carrying out most communications electronically. Huge productivity gains are expected (Kornbluh 1982).

With respect to computer-aided software engineering, the following quotation captures the tone of many of the articles at the start of the CASE fashion upswing phase.

According to Filteau, BDM decided to use CASE to design the system so it would satisfy the Air Force’s strict testing, documentation and budget requirements, while avoiding the systems maintenance nightmares typically associated with projects of this size. He said that cost savings associated with BDM’s use of Excelerator paid for the product in less than one year (Emrich 1988, p. 15).

In the case of business process reengineering, the problem discourse pointed to the “heavy investments” in information technology that had delivered “disappointing results” (Hammer 1990). The solution—BPR—was presented by one of its leading proponents with almost evangelical fervor:

It is time to stop paving the cow paths. Instead of embedding outdated processes in silicon and software, we should obliterate them and start over. We should “reengineer” our businesses: use the power of modern information technology to radically redesign our business processes in order to achieve dramatic improvements in their performance.

Unless we change these rules (of automating outdated business processes), we are merely rearranging the deck chairs on the Titanic....If managers have the vision, reengineering will provide a way (Hammer 1990).

The early articles about e-commerce adopted a similar tone. Consider this excerpt from an article in the Harvard Business Review:

The web offers an unparalleled opportunity for this kind of cheap and infinitely discriminating customization of offers, products, and advertisements. Data-mining techniques can be applied to browsing behavior as well as to purchasing history and demographics. And the data are largely unexploited (Evans and Wurster 1999).

Learning Processes in the Fashion Downswing

Abrahamson and Fairchild found that the discourse during the fashion downswing tended to be more negative, less emotional, and more carefully reasoned. They say the debunking, surfing, and sustaining strategies are used during the downswing phase.
The debunking phase during the fashion downswing of office automation is illustrated by the following:

All but the hard-core OA enthusiasts recognize that office automation technologies cannot be “cost-justified” in the conventional sense of cost displacement....That office automation has no future is strongly indicated by the fact that it barely has a present. Malaise is the term that best describes its current state (Hammer 1984).

An example of debunking BPR in information systems is as follows:

Business process reengineering has been touted as the magical elixir that will empower managers to free themselves from existing constraints, to “think out of the box” and to achieve significant benefits....Unfortunately, the popular management literature, by relying too much on hype and too little on research, common sense and the lessons of the past,
of between three to five years. Of the four topics we studied, three of them peaked within five years. The only exception was the research literature on e-commerce, which peaked after eight years.

Another interesting finding is that the peak of the wave tends to be followed quickly by a noticeable downswing, although there is some variability in the speed with which the wave dissipates. Some waves decline sharply whereas others linger on for quite some time. For example, it took only eight years for the wave of scholarly interest in office automation to peter out almost entirely: scholarly articles on office automation had almost disappeared by 1992. With the case of business process reengineering, however, scholarly interest is still bubbling along, some 13 years after peaking in 1994.

As we mentioned earlier, there is a longstanding debate in the general management literature about whether academics influence practitioners or vice versa (Barley et al. 1988). Some suggest that fashions emerge first in the practical press and later in the scholarly press (Spell 2001), whereas others suggest that the upswing is more-or-less simultaneous. The latter group argues that any apparent delay can be explained by the longer review and publication cycle in scholarly journals (Rüling 2005). This debate is important because an answer one way or the other gives some indication of the potential value of academic research for practice.

Our evidence helps explain why the information systems academic literature may appear more old-fashioned than the practical literature. There is a distinct difference between the IS research and practitioner literature with regard to the speed with which the waves dissipate. As a general rule, the IS practitioner waves tend to decline much more rapidly that the IS research waves. Topics survive in the IS research literature for some time, long after IS practitioners have lost interest. For example, the scholarly literature on CASE tools continued to flourish until around 2004, whereas the practitioner literature on CASE tools virtually disappeared after 1996. The IS research literature on business process reengineering continues to flourish at a steady (albeit lower) level, despite the fact that practitioners appear to have lost interest from 2000 onward. It is perhaps too early to say what the long term trend will be for the scholarly literature on e-commerce, but we speculate that e-commerce will follow the same trajectory as BPR. The IS research literature on e-commerce reached its peak in 2004, and has declined slowly since then. The practitioner literature reached an index level of below 1 in 2005.

Abrahamson and Fairchild note a similar trend within the general management literature. For example, they found that the academic and semi-academic literature kept focusing on
quality circles well after most of the popular business press had lost interest. Perhaps this lingering academic interest is a factor of the longer cycle times of academic publication, and longer term academic investments in topical research projects (such as funded research and doctoral thesis topics). These factors lengthen time commitments of scholarly research to selected topics. Unfortunately, one outcome of this long tail-off in the scholarly literature is that a sizeable segment of this literature appears to be outdated and irrelevant to practice.

Despite the unfashionable appearance (to practitioners) of some IS research, our evidence also points to a more positive alternative conclusion: much of the IS research literature closely parallels that of the IS practitioner literature. As a general rule, the peaks of the waves occur within one to five years of each other. For example, both the practical and scholarly literature on CASE tools peaked at the same time (in 1991), as did the literature on reengineering (in 1994). Such evidence indicates that IS research is responsive to IS practice. The rapid, synchronous rise of fashion waves is a positive characteristic of IS research, one that indicates that IS researchers are engaging with the latest practitioner thinking. But paradoxically, such responsiveness also leaves IS researchers open to criticism that they are being too faddish.

Our evidence can thus be interpreted to support two contradictory viewpoints: (1) that the IS research literature parallels the IS practitioner literature and hence is too faddish; (2) that IS research is outdated and irrelevant. The IS research literature may seem faddish because it participates in fashion upswings in concert with the practical literature. It will also seem obsolete because academic interest in the fashion continues long after it dies in practice. What are we to make of this apparent contradiction?

Our view is that the academic discipline of information systems is reasonably effective in tracking IS fashions. Rather than failing to address unfounded fashions for decades, the rise-and-peak timing shows that academia participates in the fashion setting process. The main problem seems to be that much of our research appears very late in the fashion-setting process.

Hence, we recommend that more IS researchers should make a determined effort to participate more directly at the start of the fashion-setting process (either as a positive or negative influence). There are several ways in which this could be done.

Research methods such as action research (Baskerville and Myers 2004), design science (Hevner et al. 2004), and practice research (Mathiassen 2002) bring the scholarly research directly into the hands of practitioners. These research methods are now accepted in information systems, but need to be encouraged by Ph.D. programs and editorial boards. Actually, Van de Ven (2007) argues that any research method can be driven by better engagement with the practitioners, clients, and users among other key stakeholders. Such “engaged research” is participative and benefits from differing perspectives. From our perspective, engaged research also provides an avenue for better participation by IS scholars in the fashion-setting process.

While such directly engaged research methods may enable academic researchers to participate actively in setting useful information systems fashions, more reflexive research into the fashion-setting process itself is also important. Ramiller, Swanson, and Wang (2008) have proposed an institutional ecology that better integrates the academic research community with its practical constituency. A key element of this ecology is the presence of a discourse (rather than a chasm) between information systems research and practice. Such a discourse is needed to enlighten the fashion-setting and fashion-following phenomena in both research and practice.

However, we believe their recommendations for more reflexive research into IS fashions do not go far enough. The notion of evidence-based management, together with the Milan theory we have proposed, demands a much more active engagement of IS academics with the fashion-setting process. Such active engagement encourages researchers to drop topics that have long since lost interest for practitioners, and adopt research that is more prescriptive, more normative, or more future-oriented. IS researchers could play an important role within the fashion-setting cycle, either dampening or amplifying the setting and launching processes depending upon the evidence provided by their research. If academic researchers do not participate in the fashion-setting process, then they are relegated to a role of providing reflective, post hoc critiques. Academic participation in IS fashion setting (and fashion dampening) is not just an intellectual advancement; it is an important responsibility academics owe to practitioners.

In order for IS academics to actively participate in fashion setting, greater agility is required in scholarly IS research. This agility requirement suggests that research methods such as “agile action research” or “agile design research” may need to be used. Such approaches should come somewhat naturally to information systems researchers, as the agility concept already has strong roots in our underlying subject area (Baskerville et al. 2005). Developing agile and engaged research will advance the role of scholarly research in amplifying or dampening fashion-setting.
As well as implying the adoption of new topics and methods, the Milan theory reframes the relationship between academic researchers and knowledge dissemination media. Researchers should become more actively engaged in disseminating their discoveries to practice. Taking a more proactive stance with the news media and practitioner press would mean not only following but also contributing to the practitioner press by providing evidence-based, positive or negative critiques of fashions. Such contributions could be published in practitioner venues like *Computerworld* or *CIO Magazine*. Similarly, reflections on current practice could be given more prominence in IS scholarly journals. Activities like these would mean that IS researchers might well be sought after for their expertise relating to the latest IS fashion.

We suggest that recent moves to provide publication outlets that put academic research into the hands of practitioners (e.g., *MISQ Executive*) should continue to receive encouragement. However, more needs to be done. To prevent research results from getting bogged down in the publication process, we need a publication vehicle with a more rapid response. Such vehicles already exist in other fields. In economics, for example, the highly regarded *Economics Letters* aims for efficiency in delivering fast, up-to-date, and concise knowledge about developments, with a very short review cycle. A similar vehicle, “Information Systems Letters,” could provide researchers and practitioners with fast-track, concise commentaries and research results about the latest innovative thinking, but still subject to peer review. A publication vehicle such as this might enable IS scholars to take the lead in the IS fashion-setting process.

We acknowledge various limitations in this research. First, the content of the ABI/INFORM Complete™ database has changed over time, which may have affected some of our findings; however, there has been a steady increase in the number of journals indexed, which suggests that the database is much more complete now than in previous years. Second, citation analysis does not reveal whether a concept or idea was central or peripheral to the main topic or whether it was referred to positively or negatively. Citation analysis is limited to the counts of references to an idea—it is a relatively crude measure of the discourse life cycle. Third, the boundaries of a fashion discourse can sometimes be difficult to identify, as fashions may develop and be carried forward under new labels. This makes article searches based on two or three words (or phrases) somewhat problematic. Fourth, our data do not indicate the degree to which the ideas are adopted by organizations—the diffusion life cycle (Clark 2004)—only the extent to which the topic is mentioned in the literature. Fifth, our analysis is limited to just four IS fashions; we acknowledge that research is needed on other fashions to see whether our findings are more generally applicable. Finally, our analysis does not reveal the paths of influence. While we show evidence that there is no significant time lag between fashion upswings in research and practice, simple counts cannot reveal the influence of research on the fashion discourse among practitioners, or vice versa.

These limitations suggest a number of opportunities for future research. Further research is needed to examine more deeply how IS academics and practitioners influence each other (see Barley et al. 1988). Such research could dramatically improve the value of IS research to practice. Further research is also needed to examine the triggers of fashion waves and fashion succession. Our selection criteria resulted in four fashions that respectively peaked in 1982, 1990, 1995, and 1999. Does the collapse of one fashion trigger the launch of a new fashion? Management fashion theory suggests that the collapse of one fashion may release energy that triggers the upswing of the next fashion, but our data are insufficient for us to reach any firm conclusions. An effective first treatment of fashion succession in our field will require a much bigger effort, both in theorizing and empirical study.

### Conclusion

In this paper, we have suggested that management fashion theory provides insights into the nature of IS research and practice. Both IS research and IS practice are characterized by fashion waves in certain topics. Although IS research might be seen as faddish or outdated, depending upon which perspective it taken toward IS fashions, our data also shows that IS research closely parallels practice. The more-or-less synchronous rise and fall of fashion waves in the IS research and practitioner literature shows that IS researchers are engaging with practice and with the latest developments in the field. However, much improvement is needed.

The Milan theory we have proposed suggests that IS academics should actively engage with leading IS practitioners in the IS fashion setting process. This engagement could involve advancing IS fashions or it might involve critically dampening them, depending upon the arguments and evidence provided.

In summary, this paper helps to open a new reflexive discourse on how we, as academic scholars in the information systems field, set and pursue our research agendas (see also Ramiller et al. 2008). The concept of IS fashion waves provides a way of conceptualizing the codevelopment of IS research and practice. The bibliographic method we have
used provides an empirical approach of assessing the extent to which academics and practitioners have influenced each other (Barley et al. 1988). Our findings reveal that academic participation in IS fashion waves is not the central problem. The central problem is the absence of active academic engagement with the IS fashion setting process. We propose that IS researchers should be among the leaders, and not just the followers, of fashion.

References


**About the Authors**

**Richard L. Baskerville** is a Board of Advisors Professor of Information Systems and past chairman in the Department of Computer Information Systems, Robinson College of Business, Georgia State University. His research specializes in security of information systems, methods of information systems design and development, and the interaction of information systems and organizations. His interest in methods extends to qualitative research methods. He is editor-in-chief for *European Journal of Information Systems*. A Chartered Engineer, Baskerville holds degrees from the University of Maryland (B.S. *summa cum laude*, Management) and the London School of Economics, University of London (M.Sc., Analysis, Design and Management of Information Systems; Ph.D., Systems Analysis).

**Michael D. Myers** is professor of Information Systems and head of the Department of Information Systems and Operations Management at the University of Auckland Business School, New Zealand. He won the Best Paper award (with Heinz Klein) for the most outstanding paper published in *MIS Quarterly* in 1999. He currently serves as a senior editor of *Information Systems Research* and as editor of the AISWorld Section on Qualitative Research. He previously served as a senior editor of *MIS Quarterly* from 2001 through 2005. He also served as president of the Association for Information Systems (AIS) in 2006-2007.