PRESIDENT’S MESSAGE

As I reflect on the past few months, I am struck by all the momentum of our vibrant society. The POMS Board met in Baltimore on September 23 and I want to share with you some of the highlights that illustrate how POMS is making progress on a number of fronts that affect our members:

- **Eric Johnson**, POMS V.P. Membership Activities, reported that our membership is on the rise and has topped 1000 members. He presented the results of a membership survey developed with Geoff Parker and Ed Anderson. Eric and his membership activities team are now building action plans based on your responses.

- **Jim Gilbert**, V.P. Meetings, indicated that the planning team for the 2nd World Conference in Cancun (April 30 – May 3, 2004) is on target. Our multinational planning team is busy planning a truly wonderful venue for you in Mexico. Antonio Rios-Ramirez (ITESM), Regional V.P. Americas, will be assisting the Conference team with local arrangements. Be sure to check out www.poms.org and mark your calendars. Looking ahead to future meetings, Jim is also working on plans for the POMS 2005 meeting in Chicago.

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Electronic submissions are
strongly encouraged

Electronic copies of current and past issues of
POMS Chronicle are available at:
www.poms.org
It gives me great pleasure to present Vol. 10, No. 2 issue of the POMS Chronicle. Since the publication of the first issue of POMS Chronicle earlier this year, I have received many valuable suggestions on how to make this periodical more interesting and relevant to POMS members. Your feedback reinforced my own reservations about publishing a “newsletter”-only type of publication, and the need to make it more meaningful for the POM community.

Here are my thoughts on the future and the character of this publication: I believe that despite a plethora of high quality publications that discuss academic and practitioner issues related to POM, we lack a forum for exploring emerging, and sometimes controversial, issues in a timely manner. Where, for example, the POM community engage in active debate about broader business issues such as ethical problems in corporate governance? or operational implications of power grid failures? and so on. While the rest of the world is actively debating the pros and cons of offshore servicing, what does the POM community think of the implications of this to Service Management? Perhaps POM Chronicle can become one such medium where opinions and points of view are welcome and become the catalyst for active discussions on important (and sometimes not so...) issues related to POM.

In this issue, I have attempted to incorporate this vision for POMS Chronicle as a news/discussion magazine. Consider the current issue as a “prototype” which includes thought-provoking feature articles by Gary Thompson and Johnny Rungtusanatham that challenge the readers to think about research in new ways. This issue also includes several “executive translations” of articles published in recent issues of POM journal. The purpose of executive translations is to summarize & highlight key managerial insights emerging from rigorous research articles. In addition, this issue includes information about the upcoming POMS conference, a report from most-recent POMS-EUROMA joint conference in Italy, and a whole lot of other information of interest to POMS members. I would like to thank POMS officers, all contributors and POMS Chronicle editorial board for their active assistance in putting together this issue.

As the POMS Chronicle continues to evolve in its mission and scope, I look forward to receiving your critical comments and suggestions on how to improve the quality of the publication further. I hope that you will consider writing a “letter to the editor”. I also hope that you will consider submitting feature articles and send news items for inclusion within the upcoming issues of POMS Chronicle.

Happy Holiday and Best Wishes for the New Year.

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At our recent Board retreat, we also focused on Creating POMS Future: Strategic Issues and Actions. The Board reviewed POMS mission and identified our society’s strengths and weaknesses with the goal of providing value to members. While we have only considered the tip of the iceberg at this meeting, our Board deliberations formed the kernels of a number of strategic activities going forward. As a professional society, we aim to offer members a network and means for sharing relevant, authoritative, and stimulating ideas related to research and practice in production and operations management. In doing so, we will promote the highest professional ethics and standards. The Board also noted that historically, the production and operations management discipline has been highly fragmented along a number of dimensions. In particular, distinctive research paradigms and geographic and cultural differences have created two separate professional identities. Consequently, we have not yet fully realized the potential collective benefits that are enjoyed by more unified disciplines. Our goal is to create “a bigger pie,” metaphorically speaking, rather than slicing it up.

With the vast array of POM scholars’ contributions to management thinking, this discussion generated for me some serious and thought-provoking notions that I’d like to share with you. In my opinion, this historical fragmentation has created major intellectual gridlocks preventing us from advancing our professional identity and our role in leading practice. In fact, single-driven issues and one-size-fits-all solutions are inconsistent with the complexity of today’s business realities. One major advantage of POMS is this: The POMS society contributes to the unification of the field by bringing together the richness of diverse thinking in research and teaching. Such diversity is a double-edged sword, however. On one hand, it can be powerful and synergistic; on the other hand, it can be highly divisive. Just as in practice, where diversity has been demonstrated to be a key driver of excellence, high-performance workplaces, and customer focus, it must be continuously cultivated and nourished in POMS. Sharing multiple viewpoints, paradigms, and perspectives through POMS can serve to unlock the gridlock; and can stimulate exciting dialogue and debate. This, in turn, will strengthen our professional identity and will generate a plethora of new ideas and research studies that can guide operational advantages in practice.

Aleda Roth
Distinguished Mary Farley Ames Lee Chaired Professor
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Beginning October 1, 2003, Production and Operations Management journal has a new editorial structure with autonomous departments headed by one or more Departmental Editors. For each department, the departmental editors will appoint Associate Editors and members of the Editorial Review Board. The new structure will replace the current editorial board that includes Advisors, Area Editors, and members of the Editorial Review Board. Please contact departmental editors if you would like to serve in any role.

In the near future, we will post statements of each department’s objectives on the POMS Website. This information will also be published a future issue of the journal, and will be distributed by the electronic server of POMS.

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I have been invited to provide a commentary on survey research in the Production and Operations Management (POM) discipline. A survey researcher, by training (Ph.D., Operations Management, University of Minnesota), I have spent the last decade not only conducting and publishing my own survey research but also tracking the progress of survey research in our discipline.

On this latter interest, I have attempted, in the past, to encourage POM survey researchers to conduct formal quantitative assessments of content/face validity as part of the survey research instrument design process (Rungtusanatham, 1998). More recently, my co-authors and I have provided a historical perspective on the growth of survey research in POM (Rungtusanatham et al., 2003).

For this commentary, I do not see much value in repeating what has already been said elsewhere. Neither is it my intent to discuss the criteria for “good” survey research or the process by which survey research should unfold. Superb discussions of these topics already exist in the POM literature. Malhotra and Grover (1998), for example, provide an excellent normative perspective on what constitutes “good” survey research; and Forza (2002) explicates the process of designing, conducting, and analyzing survey research.

In this commentary, I will focus, instead, on identifying opportunities for improvements in the design, conduct, and reporting of POM survey research. These improvement suggestions, I sincerely hope, will continue to elevate the status and acceptance of POM survey research in the eyes of colleagues both within and beyond the POM discipline.

To set the stage for this commentary, let me begin by providing a definition of what survey research is, if not to correct misconceptions than to encourage a uniform understanding. Having done so, I will then highlight and discuss four opportunities for improvements, doing so under the assumption that there is no doubt as to the applicability of the survey research methodology to studying a particular phenomenon of interest in POM.

A Definition for “Survey Research”

For me, survey research involves (a) the purposeful and scientific design and administration of an instrument for collecting primary data from respondents about a phenomenon of interest, (b) the subsequent statistical analyses of such data for purposes of assessing the integrity of the data collection instrument and, finally, (c) the derivation of substantive and meaningful statements about the phenomenon that are supported by additional statistical analyses of the collected data.

My definition, I must admit, is quite restrictive. In fact, such a definition automatically excludes studies in which statements about a particular phenomenon of interest have been derived from analyses of secondary data – i.e., data collected by other researchers for purposes other than the one on hand (Babbie, 1992). Such secondary data could have originally been collected by means of survey research (or interviewing or direct observations). But, when used to analyze a phenomenon of interest for which the data had not been intended to describe when originally collected, such research should, more appropriately, be described as “secondary data analysis” as opposed to “survey research.” Consequently, whereas Rungtusanatham (2001) deserves the “survey research” label, Anderson et al. (1995) and Rungtusanatham et al. (1998) should be labeled studies employing “secondary data analyses.”

Opportunities for Improvement

There is no doubt in my mind that POM survey research has achieved significant progress since the 1980s – progress measured not only in terms of quantity but also with respect to quality. In terms of quality, POM survey researchers are paying increasing attention to critical issues of sampling, measurement quality, common source/method variance, etc. Nonetheless, more can be done in the spirit of continual improvement to improve not only the design and execution of POM survey research but also the publication of POM survey research in the discipline’s top journals.

First, I would encourage POM survey researchers to provide, in their manuscripts, more detailed information about sampling (e.g., what is the sampling unit, how the sampling was done, etc.) and to explicitly discuss strengths and limitations of their sampling strategies. Doing so would allow others to objectively judge the meaning, interpretation, and generalizability of survey research results and conclusions. Moreover, with such information, others can design survey research to replicate and/or extend what has been discovered.

Second, like others before me, I would encourage POM survey researchers to do due diligence in providing discussion and evidence of measurement quality (i.e., reliability and validity) or, at least, references to such information.

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Survey research ... from page 6

Because the lack of reliability and validity in the measurement process can pose threats to the credibility of the theory-testing results and corresponding generalizations (Carmines & Zeller, 1979: pp. 10-11), it is crucial that measurement quality assessments be conducted and discussed before presenting the statistical results of hypotheses testing. To do otherwise would be to place the proverbial cart before the horse.

Third, to be fair, I must acknowledge that page limitations inherent in the publication process often preclude statistical reporting of detailed measurement quality results and substantive testing results. One solution would be for POM journals to allow some leniency in terms of page lengths. A better solution, in my opinion, is for POM journals to place equal value on publishing manuscripts that seek to develop, test, validate, and report on survey-based measurement instruments for new and important POM constructs. Once validated and published, these measurement instruments should improve the efficiency of survey research in POM and, at the same time, discourage efforts to operationalize the same constructs over and over again.

Fourth and last, I perceive an opportunity for POM survey researchers to develop greater awareness of the threat that common methods/source variance in POM survey research may pose. Podsakoff and Organ (1986) and Doty and Glick (1998) are excellent references for this issue. To the extent that POM survey research can be designed so as to explicitly incorporate multiple sources of and/or multiple methods for data collection, this issue becomes less relevant. But, because the unit of analysis (e.g., the plant or the business unit) and the need to complete survey research in a timely manner often do not permit the luxury of doing so, I would encourage POM survey researcher to acknowledge and/or discuss, in good faith, the potential biases that common methods/source variance might pose to statistical results.

Conclusion

Thank you for the opportunity to share my opinions on where POM survey research should be heading. Please note that the four improvement suggestions above have been culled from analyses of 20 some years of survey research in POM. Nonetheless, they are my opinions, as is the definition of survey research that I have offered. I welcome reactions and look forward to occasions, in person or via indirect means, for continued discussion and healthy debate.

REFERENCES


POMS College of Service Operations

The College of Service Operations, a strategic initiative for POMS, needs your feedback on some of the activities the college plans to undertake, including a research repository and a conference. We urge you to take a few minutes and respond to the survey you will receive shortly from the college. Thank you.

Board Members 2003

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Recent advances in predictive maintenance technologies have led many manufacturers to abandon traditional periodic maintenance policies and replace them with predictive maintenance policies. These predictive technologies, including hardware, software and diagnostic engineering services that help signal and diagnose equipment problems, have the potential to eliminate failures, extend the operating life of equipment beyond the traditional periodic interval, and reduce repair times by pinpointing the root cause of equipment problems.

However, adoption of these new predictive maintenance technologies is not an easy task, as exemplified by the experiences at a large American nylon fiber manufacturer. At this plant, major equipment outages were caused by the failure of one valve type. With the use of traditional periodic maintenance policies, unplanned (reactive) valve replacements accounted for 68% of all replacements. To reduce the number of unplanned replacements, the company chose to use only the predictive technology and opted to eliminate periodic replacements. This immediate transition to a predictive maintenance policy resulted in an increase in maintenance costs. Later, enhancement of the diagnostic skills of the maintenance technicians improved the accuracy and precision of the predictions, which eventually resulted in a reduction of the number of unplanned replacements to 26% of all replacements. The predictive maintenance policy helped to avoid the consequences of equipment failure once the basic operating conditions were stabilized and a high level of prediction accuracy was established. Thus, we see that the potential exists for significant improvements from predictive maintenance only if maintenance policies are adapted to the predictive technology and the equipment that it monitors.

A Coordinated Approach

These new predictive maintenance technologies are designed to actively monitor equipment conditions. Ideally, a prediction maintenance policy is able to detect problems so that equipment can be replaced or repaired in a timely manner prior to failure. In this ideal situation, if predictive maintenance expenses are less than or equal to other replacement expenses, no breakdown or periodic maintenance is needed. However, as seen in the example of the nylon fiber manufacturer, the prediction system may not be 100% accurate. On some occasions, conditions dictate equipment replacement when the equipment could continue to operate for some time, and on other occasions, a failure occurs before problems are detected or signaled. Breakdown maintenance will be performed when a failure is not signaled ahead of time.

To determine the best maintenance policy, it is necessary to consider four possible maintenance policies—reactive policy, periodic policy, predictive policy or a coordinated policy with both periodic and predictive maintenance. A reactive maintenance policy specifies that replacement (or repair) is only made upon failure. The traditional periodic maintenance policy specifies a periodic interval when the equipment will be replaced (or repaired)—replacement is made at the time of failure or the periodic interval, whichever comes first. Finally, the predictive maintenance policy replaces (or repairs) the equipment when a failure is signaled or upon failure, whichever comes first. Another option is a coordinated maintenance policy. To specify the coordinated maintenance policy, the decision maker must determine whether or not to conduct both predictive maintenance and periodic maintenance and, if periodic maintenance is conducted, must determine the length of the periodic interval. By assessing the benefits of these policies, it is possible to select a policy that best suits the specific maintenance situation.

Guidelines for Implementation

Instead of simply abandoning traditional periodic maintenance practices for a new predictive maintenance policy, it is critical to select the best combination of maintenance policies for the prediction technology and monitored equipment conditions. While detailed models can provide optimal policies (See McKone & Weiss, 2002), there are several guidelines for selecting a maintenance policy based on the monitored equipment characteristics. See Table 1 for guidelines for adopting different maintenance policies. Note that when the monitored equipment has a decreasing failure rate, the longer the equipment runs, the less likely it is to fail in the next instance and the more uncertain one is about the expected time of failure. When the equipment has an increasing failure rate, the longer the equipment runs, the more likely it is to fail in the next instance.

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A coordinated predictive and periodic maintenance policy appears to offer an improvement to the traditional periodic maintenance policy and the predictive maintenance policy that many adopters of predictive technologies utilize. The benefits of the coordinated policy over the traditional periodic maintenance policy primarily depend on the accuracy (likelihood of signaling an equipment problem prior to an actual failure) and the precision (the proximity of the signal to the time of the actual failure) of the prediction technologies, the magnitude of the maintenance costs, and the reliability of the monitored equipment.

An improvement in the accuracy has a direct impact on the total number of unscheduled breakdowns and can decrease the total maintenance costs by reducing the high costs associated with breakdowns. The precision, on the other hand, indirectly decreases the total maintenance costs by affecting the length of the replacement cycle and the frequency of predictive replacements. When conducting predictive maintenance in conjunction with periodic maintenance, the periodic interval (time between scheduled maintenance) can be extended. The higher the accuracy and precision of the prediction technologies, the longer the periodic interval—approaching infinity with a perfect prediction system. Therefore, the benefits of increased accuracy and precision should be evaluated when selecting among different types of prediction technologies.

Clearly, the cost of maintenance is another determinant of the best policy. When the cost of failure is high relative to the cost of predictive maintenance, it is beneficial to utilize a predictive policy to decrease the likelihood of failure. As is typical in most companies, predictive maintenance should be targeted at equipment with high costs of failure.

For the case of increasing failure rates, the prediction technologies can be used effectively on their own, only if the precision and accuracy are nearly perfect and if the predictive replacement costs are much less than the cost of failure. However, when the accuracy or precision of the prediction technologies are low, it becomes important to utilize periodic maintenance intervals to protect against failure, particularly when the monitored equipment has lower values of equipment reliability. In this case, the equipment has higher variability in failure times and cannot be adequately protected using a periodic interval.

For the case of decreasing failure rates, the longer the equipment runs, the less likely it is to fail in the next instance and the more uncertain one is about the time of failure. Traditionally, a periodic maintenance policy never makes sense in this situation and a reactive policy, where replacement of the equipment takes place upon failure, is the best solution. With the availability of predictive technologies, however, there is another alternative to the reactive policy—a predictive policy can signal or forecast failures and replacements can be made prior to failure. Obviously the predictive maintenance policy looks attractive when prediction technology is 100% accurate and signals failure immediately prior to failure. However, replacement prior to failure, at the time of the prediction signal, can become expensive if the equipment is not very precise in its prediction. If the signal comes too early, the equipment cycle is shortened and the costs of the frequent predictive replacements may exceed the cost of breakdown.

Therefore, the decision to conduct predictive maintenance is based on the predictive and breakdown maintenance costs as well as the prediction precision. A predictive policy should be used when the precision is high and when the cost of failure is much higher than the cost of replacement; and a reactive policy should be used when the precision is poor or when the cost of failure is not much higher than the costs of replacement. To have a successful predictive maintenance policy, emphasis should be placed on acquiring predictive technology with high precision and accuracy and on monitoring equipment that results in predictive maintenance costs that are low relative to breakdown costs. Following these recommendations, the use of predictive technologies can be an effective proactive maintenance policy and can replace the traditional reactive policy when equipment has a decreasing failure rate.

Conclusions

Predictive maintenance policies improve upon traditional maintenance policies by providing protection against equipment failure under both increasing and decreasing failure rates. The predictive policies help detect equipment problems and reduce the opportunity for premature periodic replacements and equipment failures. The guidelines presented in this paper describe the characteristics of the maintenance equipment and the prediction technology that make predictive maintenance most effective. Rather than simply adopting the latest technologies, it is important to select the best maintenance policy for the particular maintenance situation. No one policy is effective in all situations.

Electronic retailers now can deliver service products – conceptualized as bundles of physical goods, offline services, and digital content – to individual customers almost anywhere and at any time. Service processes of electronic retailers are founded on digital technologies that provide flexibility to sense and respond online to the dynamic and complex needs of customers. A wide array of digital technologies exists that retailers can choose from to develop the foundation of their service delivery systems. Variations in the use of digital technologies across retailers are significant. Little is known about the typical configurations of digital technologies on which electronic retailers’ service processes are founded and their relationship to performance. The premise of this paper is that an understanding of the alternative configurations of electronic service processes and their association with relevant measures of performance is fundamental to designing, re-designing, and managing electronic retailing operations effectively.

This paper proposes a taxonomy of service processes for electronic retailers. As shown in Figure 1, the taxonomy differentiates electronic service processes and the relevant digital technologies on a continuum of low to high flexibility. The underlying dimensions of flexibility considered are those related to product and customer interactions, processes of an individual electronic retailer (i.e., intra-service process flexibility), and processes connecting multi-company alliances (i.e., inter-service process flexibility). While some of the dimensions – e.g., mix, volume, and changeover – are adapted from the literature on manufacturing flexibility, the remaining are relevant for responding to the market uncertainties faced by electronic retailers. Table 1 lists and describes the flexibility dimensions.

The empirical analysis to develop the taxonomy is based on data collected from a sample of 255 U.S. electronic food retailers. For a sub-set of the study sample for which data on BizRate (www.Bizrate.com) online customer ratings are publicly available, the association of the ordering of taxonomy configurations with multiple dimensions of customer satisfaction and with customer loyalty is examined. The ordering of the configurations of electronic service processes on a continuum of increasing flexibility exhibits positive association with (i) customer satisfaction with web site aesthetics, web site navigation, product selection, product information, customer support, and ease of return, and (ii) customer loyalty.
Table 1. Dimensions of Service Process Flexibility in Electronic Retailing

<table>
<thead>
<tr>
<th>Service Process Flexibility Dimension</th>
<th>Type of Uncertainty</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Product and Customer Interaction</strong></td>
<td></td>
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<tr>
<td>Mix</td>
<td>Market acceptance of different kinds of service products</td>
<td>The ability to change the range of electronic service products offered within a given period of time.</td>
</tr>
<tr>
<td>Security</td>
<td>Privacy of the electronic transactions</td>
<td>The ability to keep electronic transactions private between provider and customer.</td>
</tr>
<tr>
<td>Order Processing</td>
<td>Willingness of customers to order and pay during an electronic transaction</td>
<td>The ability to change the range of methods used for ordering and payment.</td>
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<tr>
<td><strong>Intra-Service Process</strong></td>
<td></td>
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<tr>
<td>Volume</td>
<td>Fluctuations in the aggregate service product demand</td>
<td>The ability to respond to the aggregate level of service product demand.</td>
</tr>
<tr>
<td>Changeover</td>
<td>Variations in the length of the service product life cycle</td>
<td>The ability to respond to the additions to and subtractions from the service product mix over time.</td>
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<tr>
<td><strong>Inter-Service Process</strong></td>
<td></td>
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<tr>
<td>Backward Integration</td>
<td>Entry into or exit from other companies’ networks</td>
<td>The ability to manage and modify partnerships to participate in other companies’ networks.</td>
</tr>
<tr>
<td>Forward Integration</td>
<td>Other companies’ entry into or exit from a company’s own network</td>
<td>The ability to manage and modify partnerships to allow other companies to participate in a company’s own network.</td>
</tr>
<tr>
<td>Full Integration</td>
<td>Entry into or exit from other companies’ networks and a company’s own network</td>
<td>The ability to manage and modify partnerships to participate in other companies’ networks and allow other companies to participate in a company’s own network.</td>
</tr>
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For additional details: see Heim-Sinha Paper (POM, Vol. 11, No. 1, Spring 2002, 54-74)
This article is a personal reflection on the state of the art in operations management research. I would like to state right up front that I have rather strong opinions about what qualifies as good research. To me, an area such as operations management is (or should be) inextricably tied to practice. I am employed in a school that places a high degree of importance on relevance to the particular industry with which it is aligned. Indeed, the school goes so far as to include an industry representative on tenure committees and it sends a version of faculty portfolios out to industry reviewers during the tenure process. This orientation definitely colors my world-view. Nonetheless, I believe my comments have relevance to more typical academic environments.

What Qualifies Me to Make These Observations

I am a tenured full professor in my 17th year in tenure-track academic appointments. My employer is a well respected program in an Ivy-League institution. During my career I have accumulated a decent number of publications in what are considered to be top-tier academic journals, including Decision Sciences, Interfaces, Journal of Operations Management, Journal of Service Research, Management Science, Naval Research Logistics, and Operations Research.

My experience is not limited to academic work, however. I run a company that sells the scheduling software I’ve developed and I have served as an advisor to a company offering web-based workforce scheduling (eroster.com). About six years ago I developed the algorithms and wrote the computer code that is currently still used to schedule 30,000+ employees in a large hospitality firm that is prominent in the United States of America (unfortunately my contract requires that they remain anonymous). This particular project required approximately eight months of calendar time on my part. I found this work rewarding on a number of levels, one of which was the opportunity to translate into practice ideas and knowledge that I had accumulated during over a dozen years of academic work in the field. Moreover, the work integrated these ideas into a complete system.

Problems with the Status Quo

Let me begin with an anecdote. An acquaintance, who I’ll call Susan, took a job in a business school with a top-20 M.B.A. program. Susan had a project with some of her Ph.D. cohorts that investigated an interesting service delivery problem that involved marketing and operations management issues, and for which she received modest compensation from the client (who I’ll refer to as Company A).

Susan happened to mention to some colleagues that she was doing a consulting project for Company A. The word went through the business school like wildfire and the senior professors became upset. Susan ended up writing a letter to all senior faculty members in the school, explaining the nature of the work and that even though she received some compensation, it was research based. Ironically, Susan got at least three publications—and a best paper award—from this “consulting” work.

Does this story sound familiar? How many of your schools would have similar reactions to Susan’s confession of a “consulting” project? To me, the story is a prototypical example of the disconnect that exists between business and business education. I like to say—only somewhat in jest—that business schools were created to keep certain folks out of business. When I attend academic conferences, I’m continually amazed at the number of academics who “don’t get it.”

Having faculty members interact with industry leads to a number of benefits: their research will be better, their teaching should be better in that they can infuse it with more real-world examples, it will be easier to place students since those students will be better trained and since the faculty members will have contacts at potential employers, and it will increase the likelihood of your institution receiving support from industry.

I will not specifically cite research of which I am critical. Rather, I will provide a criticism of the research, in general. First and foremost, most of the academic research in operations management has been narrowly focused. For example, take an area with which I am quite familiar—workforce scheduling. A quick perusal of the commercial systems leads one to the conclusion that practice is leading research in this area. Commercial systems do not exhibit the narrow focus of academic research because a system must be useable to be saleable.

A Fundamental Challenge for Researchers

As I see it, the fundamental challenge facing researchers is problem complexity. In other words, How does one keep a project to a manageable size while ensuring its relevance? Dealing with complex problems may well be incompatible with the tenure process, at least in US universities. The reason for this is time. Developing an integrated, holistic scheduler required eight months of my nights and weekends (and the one day per week that my institution allows for outside activities). I learned a lot on this project and many of these ideas have shown up in my writing and in my classroom. However, spending eight months on one project is not generally compatible with the “publish or perish” demands on faculty.
Reflections ... from page 13

Recommendations for Individual Faculty Members

In considering the directions for future research, I return to a fundamental consideration, specifically, What is the point of the publishing one’s research? Is it to further one’s career, particularly in the tenure and promotion process? Is to further the true “state of the art” in the field, considering both research and practice? The answer to both questions should be Yes. To my mind—and in my school, at least—doing the latter leads to the former. Here then, are my recommendations to ensure the relevance of your research:

• Start by talking to managers. There are many interesting problems out there that are waiting to be “discovered.” Basing your research on “real” problems can bring monetary rewards (yes, you might get paid for your efforts!) but, more importantly, you will have the satisfaction of knowing your work has some utility in practice.

• Do not define your research problem only by reading the literature. Many of the “seminal” papers were written at times when the state of the art in computer systems made it difficult to have complex problem representations. Because much research has taken these representations as defining certain problems, the field has spent more time trying to find better ways of solving these representations than it has on finding better problem representations.

• Time is (often) NOT of the essence. My practical experience in workforce scheduling (and with timetabling software I sell) is that users are much less concerned with the amount of time an algorithm requires to execute than they are with the quality of schedules the algorithm develops. The only way to get realistic schedules is to have a rich (i.e., complex) problem representation. Without a rich problem representation, schedules would require too much managerial effort to implement (because of the changes needed) and so would not be used.

• It is better to find suboptimal solutions to a realistic problem than optimal solutions to simplistic problems. Throw away your pencil and paper proofs! My contention is that any problem that has a closed form solution is not a problem of much relevance (this contention, by the way, is itself unprovable). If your problem has fewer than a million variables, it probably isn’t realistic.

• Avoid LP/IP based approaches. Even with implicit models (models that greatly reduce the number of variables at the expense of additional constraints) realistic problems are just too complex to solve with current LP/IP technology. Heuristics of some form, then, are the only tools that make sense.

• Embrace uniqueness. Assuming away the uniqueness of individuals, whether they are current, potential or past employees, suppliers, or customers, removes much of what is interesting from a real world perspective. Doing so is a guarantee that practitioners will view your work as being less relevant.

Implications for Deans and Administrators

Business school deans and administrators can play a large role in increasing the relevance of operations management research. Here are some suggestions:

• Encourage your faculty members to interact with industry. Reward this interaction in the annual performance review and in the tenure process. Certainly this should not be the only thing faculty members do with their time—rather it should be viewed as part of a balanced portfolio of accomplishments.

• Make it easier for faculty members to connect with industry. Sponsor brown-bag luncheons or breakfasts with selected business people from your community to encourage dialog. Give faculty members release time to spend in industry, perhaps a week or two during the summer.

• Recruit the right kind of students to your Ph.D. programs. Make interacting with business part of the Ph.D. program.

I see business schools as being much like medical schools were a decade or more ago. Medical schools came to realize that they were training doctors who were technically competent, but who lacked the social skills to relate well to patients. Having come to that realization, they changed the criteria used in selecting applicants to medical programs. If we in business schools do not make a similar change toward selecting students that have the right mix of characteristics, the supply of good faculty will continue to outstrip demand.

Conclusions

You don’t have to agree with my views. I do, however, hope that I have caused you to think critically about your research and the research environment in your school. There is an incredible opportunity for good research for those who can talk with managers about their problems. If you haven’t done it before, it can be a little scary—it’s easier to sit in one’s Ivory tower, in a room lit by the glow of a 23-inch computer monitor. However, your research, your institution, and practice will benefit if you do.
With intense rivalry, globalization, and time-to-market pressures, contemporary firms recognize that agility, or the ability to detect and seize market opportunities with speed and surprise, is becoming an imperative for business success. Agile firms can sense opportunities for competitive action in their product-market spaces and marshal the necessary knowledge and assets for seizing those opportunities. The convergence of computing, communications, and content technologies offers firms significant opportunities for enhancing agility. Contemporary firms are making significant investments in information technologies (such as web services, data warehousing, customer relationship management, or supply chain management technologies) to leverage the functionalities of these technologies in shaping their business models, customer relationships, and go-to-market strategies. In particular, the disruptive forces of digitization, unbundling of information and physical value chains, and the disaggregation of organizational infrastructures for customer relationship, manufacturing, procurement, and supply chain fulfillment have heightened the significance of IT in enabling agile competitive moves.

Adaptive supply demand synchronization is one of the significant capabilities shaping the agility of firms. This capability refers to a firm’s ability to architect structures, processes, and systems that perfectly synchronize the demand side and the supply side activities of a firm. Adaptive supply demand synchronization shifts managerial thinking toward a pull-orientation where arriving customer orders trigger fulfillment actions. Adaptive demand synchronization facilitates agility by:

- Enabling firms to develop business models such as build to order and configure to order
- Delivering customer convenience by allowing customers to conduct transactions online or through a combination of online and offline channels (“bricks and clicks” convenience)
- Optimizing production and fulfillment through better information and available to promise systems
- Pooling inventory risks through the postponement of differentiation in the fulfillment systems
- Optimizing reverse logistics of the returns flows from customers
- Heightening the visibility and understanding of the current fulfillment systems and enabling reconfiguration and optimization

How do firms build adaptive supply demand synchronization? Existing research and observations of best practice suggest that managerial attention and organizational investments should be directed in three areas:

Integration. Three forms of integration are important for facilitating adaptive supply demand synchronization. First, firms must integrate their key business processes to provide global reach. Global reach refers to processes that seamlessly traverse an enterprise across its business units, departments, and locations. Process integration that enables global reach in customer order capture, fulfillment, after care, and supply chain systems is a critical necessity for adaptive supply demand synchronization. Second, firms must build multichannel integration that allows the sharing of information across different channels, including retail outlets, internet, phone, fax, and call centers. Ideally, multichannel integration allows firms to draw upon the relative strengths of individual channels in heightening customer convenience and responsiveness to customer needs. Third, business partner integration is another prerequisite for adaptive supply demand synchronization and refers to the sharing of actions and coordination of actions between a firm and its extended network of business partners.

Analytics. Adaptive supply demand synchronization requires real-time visibility into the flow of orders, fulfillment rates, and exception handling. Further, real-time collaborative planning and decision making across the business partnership network is required to synchronize replenishment of inventories at the stores or retail outlets in response to the actual orders or sales. As an example, TAL Apparel, a shirts manufacturer in Hong Kong directly collects point-of-sale data from individual J.C. Penney stores, decides how many shirts to make, and in what styles, colors, and sizes, and sends the shirts directly to each store, bypassing the retailers’ warehouses and corporate decision makers. Further, depending upon the urgency of the replenishment, TAL dispatches shirts by air in exceptional circumstances to prevent stockouts. Analytics refers to the gathering of real-time sales and inventory information, application of predictive forecasting models to determine production schedules, and monitoring of the entire supply-demand chain along key flashpoints for signs of trouble.

Open standards. Adaptive supply demand synchronization requires open standards to enable easy sharing of information across the firms in the partnership network. The Internet, web services technologies, and industry-specific partner interface protocols (PIPs) such as RosettaNet have contributed to the implementation of such open standards.

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Adaptive Supply Chain ... from Page 14

Investments in information technology and sound management of these investments are critical for realizing the above requirements for adaptive supply demand synchronization. First, firms must examine their current IT infrastructure and assess its readiness to facilitate process, channel, and partner integration as well as analytics. Though enterprise resource planning systems (ERP) were initially considered to be the integration platform, experiences suggest that a more hybrid approach that integrates ERP with supply chain management (SCM), customer relationship management (CRM), data warehousing, online analytic processing (OLAP), and call center and web technologies will be appropriate. To succeed, firms will need to think about their IT infrastructure as a digital platform that integrates current and emerging technologies and positions the firm with the appropriate degree of process, channel, and partner integration. IT infrastructure management has emerged as a critical organizational capability and is the key to assurance that the following conditions are being met:

- Does the current IT infrastructure provide the degree of global reach that is demanded by our business model?
- Does the current IT infrastructure offer the flexibility to connect new business partners, enter new markets, and architect new alliances or sourcing agreements?
- Does the current IT infrastructure enable the best efficiencies and cost of service?
- Does the current IT infrastructure guarantee the appropriate level of security across the entire supply-demand network?

Second, firms must develop an understanding about how to value investments in information technology in order to develop the appropriate digital platforms. Constructing an IT infrastructure requires massive levels of IT investment and exposes firms to considerable risks. Stories of the failure of ERP, SCM, and CRM investments are numerous and highlight the challenges of integrating these technologies with the firms’ business processes. Managers often make two mistakes:

(1) Invest in information technologies without appreciating the enormity of the needed business process change and the potential for riskiness in these investments. Therefore, without a good understanding of the current business process and an appreciation for business process management, investments in IT are likely to prove disappointing. Further, an appreciation of the risks of IT investments is likely to shape realistic expectations about the impacts of these investments and the resulting gains in productivity, efficiency, cost savings, and profitability.

(2) Under-invest in information technologies because of their inability to appreciate how to value the intangible benefits of IT. Most managers understand how to apply formal and quantifiable techniques for the valuation of IT investments: ROI, project payback, and cash flow analysis. However, such techniques tend to undervalue the proposed investments because they do not facilitate a full accounting for the intangible benefits of IT in terms of enhanced decision-making, collaboration, and real-time visibility. Therefore, there is a realization that a valuation methodology such as real options might be more appropriate because it facilitates attention to intangible gains as well as the incorporation of risks in the analysis. Further, managers must think through how the proposed investments will impact their transaction speed and efficiency, decision-making effectiveness, partnership effectiveness, and customer relationship effectiveness and focus on creatively “monetizing” these impacts to develop a fuller accounting of the investments’ benefits.

Finally, supply chain and manufacturing executives must be willing and active champions of the proposed IT investments. Without their championship, and possible abdication of responsibilities to the IT executives, efforts to invest in or utilize IT infrastructures are not likely to succeed. Partnerships between supply chain and manufacturing executives and IT executives, characterized by trust, collaboration, and joint risk-taking will be necessary for positioning IT as a platform for adaptive supply demand synchronization. While supply chain and manufacturing executives possess knowledge about business processes, IT executives provide understanding about technology. Partnerships among these executives will provide the necessary understanding in developing a full valuation of the proposed IT investments, appreciation of the investment risks, and willingness to undertake the complementary business process and organizational changes.

POMS College of Supply Chain Management
2003 Board Members
- Ananth Raman, Harvard
- Marshall Fisher, Wharton
- K.K. Sinha, Minnesota
- Karen Donahue, Minnesota
- Jay Swaminathan, UNC Chapel Hill
- Eric Johnson, Dartmouth College
When in 1996 I accepted to chair the International Conference of the Production and Operations Management Society (POMS) for the year 2000, I came up against the need to find an enticing theme for the Conference. The end of the century was a good excuse, almost an invitation, to reflect on scientific disciplines. Ours, Operations Management, has gone through, and is still going through, a time of change and of new and difficult challenges, with an expanding field of studies and a demand for new approaches to solve new problems in new contexts. Given this scenario, Marty Starr and myself thought it would be suitable to choose the theme: “POM Facing the New Millennium: Evaluating the Past, Dealing with the Present and Planning the Future of Operations”.

This choice led me to realize that if we really wanted to think deeply about what the theme for the Conference involved, this should originate out of world-wide discussion. In this way it would be possible to take a look at the problems surrounding POM from a wide variety of standpoints and points of view, and through the looking-glasses of different cultures. In short, there was a need for experts in POM from all the various geographical areas in the world to discuss the problems facing companies when it comes to managing Operations in a globalised economy which is undergoing very swift change and in the face of ever-greater competition. It was important for doubts and knowledge to be shared and, finally, that proposals should come out of this discussion pointing to means of solution.

In my opinion, this goal could not be easily achieved within the context of a regular POMS Conference. For this reason, I asked for the support of the POMS Board in organising the First World Conference on Production and Operations Management, to be held in Seville (Spain). The idea was accepted and EurOMA and JSPM (the Japanese Society of Production Management) agreed to collaborate in different ways, as did the most important Spanish academic associations in Business Administration, ACEDE and AEDEM.

Finally, the challenge was overcome and global co-operation was successful. I think that the objective that was the creation of a new Conference-product through the combination of top-quality scientific work and available time for tourism and social activities to facilitate networking, has proved to be effective and viable. As a symbolic gesture, Bob Hayes (POMS President), Chris Voss (EurOMA President) and Masanori Kodama (JSPM President) put their signatures to one of the old barrels at the Sherry wineries in Jerez to sanction their mutual commitment to the celebration of new World Conferences every four years.

With a view to publicizing this spirit of global collaboration worldwide, I proposed to the Editors of three of the leading POM journals that they publish special issues or sections with papers selected from the Printed Proceedings of the Conference. Kalyan Singhal (Editor-in-Chief of Production and Operations Management, JPOM, the Journal of POMS), Robert Hollier (Editor-in-Chief, International Journal of Production and Operations Management, IJOPM, the Journal of EurOMA), and Robert Grubbström (Editor-in-Chief, International Journal of Production Economics, IJPE) agreed to this idea.

All the articles which appear in these SI went through a tough selection process. First of all, there was the part of the process which allowed them to be included in the printed Proceedings (51 out of 296). Apart from this, these papers have been improved by their authors in order to comply with the three Journals standards and then sent for a new double-blind review (standard journals review process). As a result, two special issues were finally published (there were not enough accepted papers to have a POM S.I):


The second POM World Conference will be held in Cancun by the end of April and the beginning of May 2004. I am sure that it will be a great Conference. Jeet Gupta (POMS) is the General Chair and Michiya Morita (JSPM) and myself (EUROMA) are the General Co-chairs. We look forward to seeing you there.
The First Joint EurOMA-POMS Conference “One World? One view of OM? The Challenges of Integrating Research and Practice” took place in Cernobbio, Lake Como, Italy between June 16 and 18, 2003. The event attracted more than 420 delegates from 32 countries around the world in the magnificent setting of Spazio Villa Erba, Cernobbio, a unique area that combines the charm of the past - the ancient frescoed Villa Antiqua, and the efficiency of the modern architecture of the conference centre. The Conference location is among the most beautiful natural settings in Northern Italy. The organization of the event was conducted by the consolidated partnership between Politecnico di Milano and Università di Padova, that in 1999 successfully organized the VI Euroma International Conference in Venice. Co-chairmen of the conference were Gianluca Spina from Politecnico di Milano and Andrea Vinelli from Università di Padova.

Three keynote speakers were invited to talk about these issues. In particular Craig Giffi from Deloitte & Touche discussed some of the main trends in global supply chain management, highlighting differences and commonalities between Europe and North America. Professor Nigel Slack from Warwick Business School (UK), considered the important topic of the “research world” and “managerial world” and the need for their integration. Andrea Cuomo from STMicroelectronics discussed the problem of leading in the global economy, calling for a metanational challenge and a global vision to build success.

The Conference was then closed by a round table, chaired by Professor Aleda Roth, facing the new paradigms of Operations Management in the Global Economy. Umberto Bedini (Candy Group), Jerome Caille (Adecco) and Christophe Chabert (Renault) provided their experience in dealing with the challenges of globalization, and discussed how the relationship between management practice and theory develops.

During the Conference more than 330 papers were presented in 14 parallel streams. The presentations illustrated theoretical models, examples and applications of operations management in different industrial and service sectors within different economic systems. Among the subject discussed we find Manufacturing strategy, Supply chain management, Global operations, Service operations, Purchasing, Operations planning and control, Logistics, Environmental management, Operations management and the internet, New product development, Quality management and Teaching and research in operations management.

The number of people participating to the event testifies the overall success of the meeting. Besides the natural and architectural setting, the success was guaranteed by the rich and stimulating programme.

As the title suggests, the conference focused on important research matters in Operations Management. The first central theme was the globalization of the markets and supply chains, and the consequent challenges for companies in order to reconcile global efficiency and attention towards local needs and peculiarities.

The second central theme dealt with the confrontation between research and managerial practice in the field of OM. From one side it is more and more important that researchers develop theories and models that are directly adoptable by companies. From the other side, companies need to look at research in order to access the knowledge that is needed to innovate and deal with the ever more complex competitive challenges.
Also, three special panel sessions were organised, regarding Logistical Operations and Teaching Paradigms, Operations Strategy and SAP University Alliances. The latter one was organised in combination with the sponsorship offered by SAP for the technical equipment of the Conference.

All contributions have been collected in three-volumes Proceedings: “One World? One view of OM? The Challenges of Integrating Research & Practice”, edited by Gianluca Spina, Andrea Vinelli, Raffaella Cagliano, Matteo Kalchschmidt, Pietro Romano e Fabrizio Salvador; SGE – Padova, 2003, made with the contribution of Adecco. Among these contributions, the paper by Cagliano R., Acur N., Boer H., “Manufacturing Strategy Configurations: Stability and Trends of Change” has been awarded with the Chris Voss Best Paper Award, sponsored by Emerald.

The conference was closed with two plant tours, respectively to Mantero’s and Cobra’s production plants. Mantero is one of the world’s leading specialists in the creation, production and distribution of silk fabrics and accessories. Cobra is a leading global security designer that manufactures components and systems to protect, secure and manage a wide range of valuable vehicle assets.

The papers presented at the conference, the presentations made by the keynote speakers a picture gallery and other relevant information are available on the conference web site (www.euromapoms2003.org).

All in all, the Conference has been a great achievement, also thanks to the sponsors - Adecco, SAP and Como Chamber of Commerce - that we would like to acknowledge once again. The attendance has been well over any possible expectation and the interest for the topics discussed very high. We all look forward to the next successful joint event between Euroma and POMS, the two leading Operations Management associations across the ocean.

The Organising Committee
Dear Sir or Madam,

I have just developed a series of teaching cases on Humanitarian Logistics in Disaster Situations. The subject of disaster management is an absolutely fascinating one that is growing in importance. Students, MBA as well as executives, love it given their increasing interest in Not-For-Profit organizations and corporate social responsibility issues.

This set of cases is unique in that there are very few pedagogical materials on disaster management and more specifically on the central role of logistics in disaster preparedness, disaster response and coordination in the field. Extensive teaching notes are also available.

The first set of two cases deals with the International Federation of the Red Cross and Red Crescent Societies (red cross for short). The hurricane Mitch case discusses how pretty much everything went wrong when this hurricane hit South America. The culprit was the blatant lack of preparedness and hence an inadequate and slow response to the sudden onset disaster. As a result of the criticism from the media and the international community, the Red Cross reorganized and started building preparedness and capabilities in logistics. The second case on the response to the Gujarat earthquake shows how a better prepared logistics mobilization and response department was able to provide a successful coordinated response to a dramatic and complex event just a few years after the Mitch debacle.

The second set of three cases deals with the United Nations Joint Logistics Center concept. A UNJLC is set up in complex disasters to coordinate logistics between the different agencies and to augment the agencies’ logistics capabilities. As an example, the UNJLC may interface with military forces or a government in order to open a corridor or facilitate customs procedures for all humanitarian organizations. The UNJLC may also coordinate airlift operations so that cargo capacity of these expensive assets can be efficiently and effectively shared by various agencies in critical situations.

The first UNJLC case traces the origins of the concept throughout several man-made and natural disasters in the nineties with a special emphasis on the spectacular airlift operations during the Mozambique 2000 floods.

The second case discusses the first six months of the UNJLC in the particularly complex Afghanistan crisis (Oct 2001 – March 2002). The third case deals with the second year in Afghanistan (April 2002 – March 2003). Whereas the first period was more concerned with debottlenecking corridors into and inside the country and with deconflicting between humanitarian needs and military operations, the second period dealt more with coordinating the Winterization campaign to help Afghanistan get through the harsh winter and with nation building and rehabilitation activities. This set of three cases, soon to be augmented with a fourth case on the institutionalization of the UNJLC concept within the United Nations, allows one to deeply discuss how to coordinate logistics activities between essentially competing organizations with different charters in difficult crisis circumstances.

Finally, the last case in the series deals with SUMA, the humanitarian logistics software developed by Fundesuma, funded among others by the Pan American Health Organization. The case describes how the software allowed control of the entry of relief items into El Salvador after the devastating 2001 earthquakes. In addition to coordinating relief supplies and matching them to the needs of the population, the software also provided visibility on what happened with the goods and to whom they had been distributed, an important item in this complex political environment. The case allows for a discussion of the usefulness of tracking and tracing software in emergency situations but it also allows a profound discussion on the difficulties to stay faithful to the humanitarian values of neutrality and impartiality when under pressure to help people in a highly political environment.

The set of six cases can be used as the basis for a course on the subject but I have also used some of them in general POM or Supply Chain Management courses. I find them to work especially well at the start of a course (to generate all the issues) or at the end (to allow the students to apply what they learned to a completely different but motivating context). I sincerely hope you will enjoy reading the cases and that you will decide to use one or more of them in your classes. Finally, I would like to express my gratitude to the Fritz Institute for their unstinting support in developing these materials.

Editors Note: Please contact Professor Wassenhove directly for additional details about the cases and for information about using his cases in classroom and in research.
The Wickham Skinner Awards will be presented during the POM-2004 meeting in Cancun, Mexico, April 30 – May 3. For information about that meeting, go to the POMS website (http://www.poms.org/) and click on “Meetings” and then “POM 2004: 2nd World Conference on POM & 15th Annual POM Conference.”

These awards are intended to encourage POM scholarship and publication, to promote significant research in the field, to reward academics who have achieved unusually high accomplishment early in their careers, and to facilitate the sharing of innovative new ideas about teaching POM, and thereby to establish POMS as the leading professional society in the field of production and operations management.

It should be noted that neither Officers nor Board members of POMS (including members of the Council of POMS Presidents) are eligible for these awards. Awards not be given if the submissions do not meet the standards for each award category.

There are three categories of Wickham Skinner Awards.

A. Best Unpublished Paper presented at the
B. Early-Career Research Accomplishments
C. Teaching Innovation Achievements

Send submission materials to:
Professor Sushil Gupta
Executive Director - POMS, College of Engineering
Florida International University, EAS 2460
10555 West Flagler Street
Miami, Florida 33174, USA
Phone: 305-348-1413
Fax: 305-348-6890
E-mail: poms@fiu.edu

A. AWARD FOR BEST UNPUBLISHED PAPER PRESENTED AT THE CANCEUN MEETING

The best unpublished paper presented at the Cancun Meeting will receive a prize of $1,000 and will undergo an expedited review by the POMS Journal. The runner-up will receive $500.

Those who wish to enter this competition should send substantial abstracts (at least eight pages) of their papers before January 9, 2004, in Microsoft Word or Adobe Portable Document Format (PDF) via e-mail to the Executive Director of POMS. Please label the abstracts "Wickham Skinner Best Paper Award." The Executive Director will confirm receipt of abstracts and send copies to both the screening committee and the Editor-in-Chief of the POMS Journal.

By February 13, 2004, applicants should email a copy of the complete paper excluding the cover page with author information, using the proper editorial format (see “Information for Contributors” in the POMS Journal), along with the cover page in a separate electronic file, to the Editor-in-Chief of the POMS Journal at:

Professor Kalyan Singhal,
Merrick School of Business, University of Baltimore,
1420 N. Charles Street, Baltimore, MD 21201, USA,
Phone: 410-837-4976, E-mail: kasinghal@ubmail.ualt.edu

The Editor-in-Chief will acknowledge receipt of each paper and distribute copies to the judges. Unless a delay is requested by the author(s), the paper will then be reviewed as a submission to the POMS Journal. Simultaneously, each paper will be reviewed by a five-person judging committee.

The awards will be announced and presented to the winner(s) at the POM-2004 Cancun closing ceremony on Monday afternoon, May 3, 2004. Multiple authors of an award-winning paper will divide the award money, but each will receive an award plaque and be honored as an award winner.

Any papers previously submitted to POMS and still under the sole review of POMS are also eligible for this award, and the authors should follow the same submission procedures above, with a note indicating the paper’s prior submission to the journal and the desire that it be considered for the award.

All paper submissions for this award must not be under review by another journal or conference. The authors certify this through their submission of a paper for this award.

Any individual can only be considered for one Best Paper award. If multiple submitted papers bear the name of an author, only one of these can be considered for the award.
**B. EARLY-CAREER RESEARCH ACCOMPLISHMENTS AWARD**

There will be at most two winners of this award. Award winners are not eligible to apply again for the award, but unsuccessful applicants may resubmit their materials in a later year.

**Definition Of Early-Career Researcher**

An “Early-Career Researcher” will be defined as someone who has received a doctoral degree (or its equivalent outside of the U.S.A.) within the previous five years. For the POM-2004 Meeting, 1999 is the starting year for inclusion.

**Basis for the Early-Career Researcher Award**

Accomplishments can be measured in many ways, with publications and presentations given primary importance. Work published (or formally accepted for publication) or presented at a conference within the five-year eligibility period will be considered in the evaluation process if properly documented.

The judges will evaluate the impact of the body of work in terms of its ability to broaden, extend, and alter the way that POM is conceptualized, practiced, and viewed. The judges are not required to give awards if applicants do not meet the standards they establish.

**Procedure for Submissions**

Applicants wishing to participate in this competition must send one electronic copy or eight (8) hard copies of the materials listed below to the Executive Director of POMS, who will confirm their receipt. This portfolio must be sent electronically or by mail or special delivery service (such as UPS, FedEx, etc.) before January 9, 2004. Additions the portfolio cannot be made after the January 9 deadline. The portfolio should include:

1. A cover letter of no more than two pages applying for the award that highlights the major contributions of the applicant’s entire body of research
2. A copy of the candidate’s resume
3. Copies of one to three key papers
4. A maximum of three letters of recommendation for the award from other academics or area/department chairs describing the applicant’s contribution to research, or from practitioners confirming the successful application of research findings.

**Awards and Winners Presentation**

The award will be announced and the winner(s) will make a brief presentation describing their work at the POM-2004 Cancun closing ceremony on Monday afternoon, May 3.

The early-career research accomplishments awards include:

1. Public recognition at the POM-2004 Cancun
2. A plaque
3. A check for $1,000
4. Complimentary POMS membership for the following two years

**C. TEACHING INNOVATION ACHIEVEMENTS AWARD**

This award (limited to two individuals) is intended to foster the improvement of POM pedagogy through the sharing of innovative teaching methods. There will be five judges, who are not required to give awards if applicants do not meet the standards they establish. The awards will be announced and presented at the closing ceremony of the POM-2004 Cancun Meeting on Monday, May 3.

**Basis for the Teaching Innovation Achievements Award**

These awards will be based on a portfolio furnished by each candidate that demonstrates various aspects of innovative teaching achievements. The portfolio might include specific teaching materials; descriptions of innovative approaches to teaching (including team teaching, student teams, action learning, and role playing, in addition to the traditional lectures and case discussions); innovative uses of technology for delivering materials (e.g., interactive media, the Internet, distance- and e-learning); and/or new ways for understanding actual operating problems and the methods that can be applied to deal with them (e.g., ERP, ASP, etc.). Evaluations of the teaching innovations by users should be provided. These can include other teachers, students, and other evaluators who are in a position to comment knowledgeably about the teaching innovation. At a minimum, the innovative teaching portfolio should include:

1. A personal statement reflecting the applicant’s teaching philosophy and favored approaches (which should include a description of the teaching environment at the applicant’s institution)
2. A representative set of course syllabi
3. Course/teaching evaluation data
4. A statement of the applicant’s educational innovations that are felt to be most important.

**Procedure For Submissions**

Before January 9, 2004, applicants must submit a letter of intent to apply for the award to the Executive Director of POMS, who will confirm receipt.

Before February 13, 2004, applicants should send one electronic or eight (8) hard copies of the portfolio of teaching achievements, electronically or by mail or special delivery service (UPS, FedEx, etc.), to the Executive Director of POMS, who will confirm receipt.
CALL FOR PAPERS

After only a few decades since its introduction into the university business curriculum, the field of Operations Management is now recognized as one of the cornerstones to business education and practice worldwide. The substance of OM, first narrowly conceived as the set of activities involved with the control of manufacturing has matured. The expanding constellation of Operations Management has grown along several dimensions. It is no longer just about manufacturing, no longer just about control, and no longer just about internal operations. Modern operations managers deal at the strategic, tactical, and operational levels in the world network of products and services. With this as its theme, the Production and Operations Management Society (POMS), the European Operations Management Association (EUROMA) and The Japan Society for Production Management (JSPM) announce the second world POM conference and fifteenth annual POMS conference to be held from April 30 to May 3, 2004 in Cancun Mexico.

Information about Cancun

Cancun is very easy to get to, with over 80 flights arriving daily. It is only about 1.5 hours from Miami and four hours from Chicago and New York. Mexicana has flights to Cancun from Los Angeles, San Francisco, Dallas/Fort Worth, Denver, and Chicago. American Airlines flies non-stop from Dallas/Fort Worth. Aeromexico flies from Los Angeles. Delta Airlines flies non-stop from Los Angeles. Continental Airlines flies non-stop from Houston.

From the E.U. and Asia, a number of capitals have direct flights to Cancun (e.g., Madrid, Amsterdam, Roma, Frankfurt) or with one stop (e.g., Paris and London [via Miami] or Tokyo [via Dallas]).

The weather in late April and early May is perfect with lows in the mid-70s and highs in the mid-80s. Cancun is a wonderful family resort with some of the best white powder sand beaches, clear waters, and some of the best reefs in the world. Also, you will be in the land of the Maya. The ruins of Tulum are especially noteworthy.

While the details of this conference are still in development phases, in addition to the regular announcing the general call for papers, suggestions for the organization of special sessions, panels, and tutorials are being invited. Also, if you wish to participate in the conference organization as a member of the Scientific Program Committee or some other suitable role, please contact the conference general co-chairs.

Continued on Page 23
Preliminary topics include but are not limited to:

- Global Supply Chain Management
- Purchasing and Materials Management
- Logistics and Distribution
- Operations Strategy
- Global Operations
- Performance Measurement
- Internet-Enabled Operations
- Enterprise Resource Planning
- Product and Process Design
- Service Operations Management
- Quality Management and Six Sigma
- Continuous Improvement
- Mass Customization
- Operations Flexibility
- Innovation in Teaching
- Cases in Operations Management
- Operations Planning, Scheduling and Control
- JIT Manufacturing/Lean Production
- Inventory Management
- Mathematical/Software Tools for Operations
- OM in Emerging Economies
- Environmental Management

Conference Co-Chairs

Jatinder (Jeet) N. D. Gupta, Ph.D., CFPIM (POMS Representative) www.poms.org

Eminent Scholar in Management of Technology, Administrative Science Bldg. 126E, University of Alabama in Huntsville, 301 Sparkman Drive, Huntsville, AL 35899 USA. Phone: 256.824.6593, Fax: 256.824.2929, Email: guptaj@uah.edu

Jose Antonio Dominguez Machuca, Ph.D (EurOMA Representative) www.euroma-online.org

Professor of Operations Management, Chair GIDEAO Research Group, Universidad de Sevilla, Avda. Ramon y Cajal, 1, 41018 - Sevilla, ESPAÑA, Phones: 34-95-4557627, 34-95-4557610, Fax: 34-95-4557570, E-mail: jmachuca@cica.es

Michiya Morita, Ph.D (JSPM Representative) www.jspm.jp

Professor of Faculty of Economies, Gakushuin University, 1-5-1 Mejiro Toshima-Ku Tokyo 171-8588, Japan, Phone: +81-3-5992-1281, Fax: +81-3-5992-1007, E-mail address: michiya.morita@gakushuin.ac.jp

Program Chair: John (Jack) J. Kanet, Ph.D.,
Niehaus Chair in Operations Management, Dept. of MIS, OM, and DS, University of Dayton, 300 College Park, Dayton, OH 45469-2130, USA, Phone: 937.229.2316, Email: cancun@udayton.edu

Local Arrangements Coordinator: Dr. Antonio Rios-Ramirez

Director de EGADE (Escuela de Graduados, y Alta Dirección de Empresas), Dean of EGADE (Graduate and Executive Programs) Phone: (614) 439-5006, Fax: (614) 439-5004, E-mail: antonio.rios@itesm.mx

Exhibits and Sponsorships Coordinator: Chelliah Sriskandarajah

School of Management, The University of Texas at Dallas, Richardson, TX 75083-0688, USA, Phone: (972) 883-4047, Fax: (972) 883-2089 Home Page: www.utdallas.edu/~chellia

IMPORTANT DEADLINES

- **Abstract Submission:** All abstracts will be submitted online at the POMS website www.poms.org. The website will be available for submitting papers on October 07, 2003. The last date to submit abstracts is January 9, 2004.

- **Conference Registration:** All registrations for the conference will be done online at the POMS website www.poms.org. The website will be available for registrations on November 15, 2003. The registration fees are as follows:

  - By January 15, 2004: Members ($350) and Non-members ($375)
  - January 16, 2004 to February 15 2004: Members ($375) and Non-members ($400)
  - After February 16, 2004 and on site: Members ($450) and Non-members ($475)

  Students and retirees pay $95 before January 15, 2004, $115 by February 15, 2004, and $135 after February 16 and on site.

- **Hotel Information:** Special room rates have been worked out with the Hilton Cancun Beach and Golf Resort Hotel. These special hotel room rates are $145.00 per day. Additional hotel registration details will be provided at the POMS website, www.poms.org.
8th International Research Seminar in Service Management  
8-11 June 2004  
La Londe les Maures, FRANCE  
Submission Deadline: January 30, 2004  
Contact: rose-mary.calazel@iae-aix.com  
Website: http://www.iae.univ-aix.fr/cerog/manifestations/ 
lalonde2004/anglais/accueil.htm

Recent Advances in Retailing and Services Science  
European Institute of Retailing and Service Studies (EIRASS)  
10-13 July 2004, Prague, Czech Republic  
Contact Professor Harry Timmermans (eirass@bwk.tue.nl)

EurOMA 2004 - Operations as a Change Agent  
European Operations Management Association  
27-29 June 2004, Fontainebleau, France  
Website: http://www.insead.edu/events/euroma04

QUIS-9: The 9th International Research Symposium on Service Quality  
15-18 June 2004, Karlstad, Sweden  
Website: http://www.quis9.com

First annual INFORMS Summer Workshop on Teaching Management Science  
8-11 July 2004, Marlborough, MA  
Website: http://www.informs.org/Edu/TMSWorkshop/

First Conference of POMS College of Service Operations  
Operations Management in Services: Theory and Practice

Service industries, such as retailing, financial services, hospitality, and transportation make up an important and growing part of developed economies. Operational problems in these industries have also led to a range of exciting new developments in both the theory and practice of operations management. New research topics that are associated with the management of service operations include revenue management, the integration of consumer behavior into process design, the control of operational risk, and globalization of information-intensive services. In many schools, service operations and its associated problems are now considered to be a core part of the operations management curriculum.

The POMS College of Service Operations seeks to support research and teaching related to service operations. To that end, its first Conference, “Operations Management in Services: Theory and Practice,” will be held in December 2004, in New York. The conference will feature presentations from a mix of academic and industry leaders. A dinner will inaugurate the conference and will be followed by one and one-half days of conference sessions.

Further details on the conference will be announced in Spring 2004. We look forward to welcoming you in New York in December 2004. The organizing committee:

Nelson Fraiman, Graduate School of Business  
Columbia University, nmf1@columbia.edu

Noah Gans, The Wharton School,  
University of Pennsylvania, gans@wharton.upenn.edu

Michael Pinedo, Stern School of Business  
New York University, mpinedo@stern.nyu.edu

POMS New Appointments

Scott Sampson, Associate Professor of Business Management and Kevin and Debra Rollins Fellow of e-Business was recently appointed Associate POMS Online Editor for Education.

Congratulations Scott!
KENAN-FLAGLER BUSINESS SCHOOL
University of North Carolina at Chapel Hill

The Kenan-Flagler Business School at the University of North Carolina at Chapel is seeking one or more faculty positions in the Operations, Technology, and Innovative Management Area starting July 1, 2004 (subject to final approval). Applicants should have strong analytic skills with research interests in fields such as supply chain management, technology management, e-operations/commerce, service operations, and manufacturing strategy. Applicants with cross-disciplinary research on marketing-operations and information-operations interface as well as those with an empirical approach to research are encouraged to apply. These positions require a doctorate, granted or nearly completed, in operations management, industrial engineering, or operations research, with a demonstrated commitment to applied research. Applicants for associate and above rank should have established teaching skills as well as significant research accomplishments. All applicants should be able to contribute to the Area's teaching mission at the undergraduate, MBA, and doctoral levels. Recognition will be given to candidates who can teach in Kenan-Flagler's Executive programs and/or who can contribute to global supply chain management concentration. The University of North Carolina at Chapel Hill is an Equal Opportunity Employer. Deadline to submit materials will be December 15, 2003. Review of applications will begin immediately. Interested individuals should write, enclosing curriculum vitae, a sample of research papers and four letters of recommendation, to Chair, OTIM Search Committee, Kenan-Flagler Business School, Campus Box 3490, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3490.
Faculty Positions in Operations Management at Wharton School, University of Pennsylvania

The Department of Operations and Information Management at the Wharton School of the University of Pennsylvania expects to hire at least one tenure-track faculty member in the field of operations management for the 2004-2005 academic years. Our group is broadly concerned with understanding and improving the design, creation, and delivery of products and services. Candidates with any interests related to the operating core of the enterprise are encouraged to apply. Information about the department can be found at http://opim.wharton.upenn.edu.

Please send a CV and statement of interests to: opim-recruit@wharton.upenn.edu

The University of Pennsylvania is an Equal Opportunity Affirmative Action Employer. Women and minority candidates are strongly encouraged to apply.

Operations Management Search, Attention: Ms. Kim Watford
Department of Operations and Information Management
The Wharton School, Jon M. Huntsman Hall, Suite 500
Philadelphia, PA 19104-6340 USA

POMS Board Member and VP-Finance Jack Meredith Receives Distinguished Scholar Award

At the annual Academy of Management conference in August 2003, Jack Meredith received one of the first Distinguished Scholar Awards from the Operations Management Division. The awards are to honor distinguished leaders in the field of Operations Management and, in particular, to highlight, define, and honor scholars that embrace an empirical, holistic approach to researching operations management issues.

CONGRATULATIONS JACK!!!!

Jack Meredith is Professor of Management and Broyhill Distinguished Scholar and Chair in Operations at the Babcock Graduate School of Management at Wake Forest University. He received his undergraduate degrees in engineering and mathematics from Oregon State University and his PhD and MBA from University of California, Berkeley. He has worked for Ampex Corporation, Hewlett-Packard Company, Douglas Aircraft Company, and TRW. He has co-authored five textbooks including the popular, Project Management: A Managerial Approach, Operations Management for MBAs, and Project Management in Practice. He is past Editor-in-Chief of the Journal of Operations Management.
2004 POMS MEMBERSHIP FORM (Federal ID # 52-1640912)

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Please mail to
Professor Sushil K. Gupta, POMS Executive Director, College of Engineering, Florida International University,
EAS 2460, 10555 West Flagler Street, Miami, FL 33174, USA.
Dues include a subscription to the society’s journal Production and Operations Management and newsletter POMS Chronicle

* Persons of limited income may join at the $20 rate by simply informing the society in writing that they seek this option.