

Farewell Address: The Growing and Graying of ACM

As my term ends, I offer my perspective on two important challenges facing ACM.

Let me start by paraphrasing another President's farewell address [1]:

My fellow members of ACM:

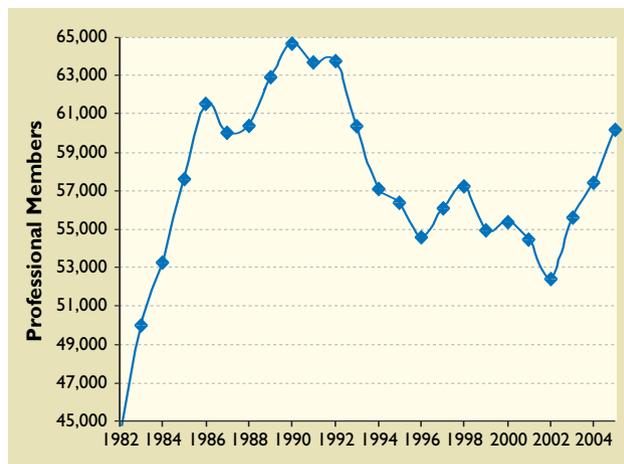
A few days from now, after two years in the service of ACM, I shall lay down the responsibilities of office as, in traditional and solemn ceremony, the authority of the Presidency is vested in my successor.

I come to you with a message of leave-taking and farewell, and to share a few final thoughts with you, my fellow ACM members.

Like every other member, I wish the new President, and all who will labor with him or her ... I pray that the coming years will be blessed with peace and prosperity for all.

Our members expect their President and the rest of ACM leadership to find essential agreement on issues of great moment, the wise resolution of which will better shape the future of ACM.

While my two issues—the growing and graying of ACM—are not as great a challenge as the Military-Industrial Complex was in Eisenhower's 1961 speech, the importance of these two issues to ACM and its members won't lessen if they're not taken seriously and not addressed soon.



THE GROWING OF ACM

The graph here shows the path of ACM's professional membership over the last 25 years. Most organizations like ACM have seen member levels drop since the 1990s. ACM is unusual in that we are turning this trend around, and we've recently

enjoyed four years of growth.

I believe the following five reasons present a great opportunity to grow ACM membership significantly, and I strongly encourage this move.

- **Better recruiting of practitioners.** This has been a long-standing problem for ACM since it expanded from being a research organization to

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embrace practitioners as well in the 1960s. Indeed, helping practitioners was a main reason that *CACM's* editorial direction was changed in the mid-1980s. I believe the Professional Development Centre (PDC) and *Queue* magazine have recently helped this cause and I'm hopeful the new Professions Board will lay out a roadmap that will make ACM even more attractive to practitioners.

- **Better recruiting of ACM conference attendees.** ACM sponsored or co-sponsored about 150 conferences and workshops last year. The total attendance was about 25,000 technical conference attendees at ACM events and about 20,000 technical conference attendees at ACM co-sponsored events. By the end of my term, I will have given welcoming addresses at a half-dozen large conferences. In addition to explaining everything that ACM does and why it's good economics to join [2], I always ask the audience how many are members. About 30% to 40% are ACM members, 20% to 30% are students, and so 30% to 50% are neither. Non-members pay a higher conference fees, which in some cases is higher than an annual ACM membership. Hence, this group, which may be 10,000 to 20,000 strong, seems ripe for ACM membership.
- **Leveraging the rapid growth of the professional IT industry in China, India, and other countries relatively new to IT.** It certainly looks like there will eventually be millions of IT workers in

China and India alone. I have the strong sense that things are changing fast in such environs, and I hope we are not missing the boat as it is taking us longer to address the issue than one would hope. We are just starting two ad hoc committees to advise ACM on how to become the professional society of choice for these nations. Perhaps we can leverage the popular ACM International Collegiate Programming Contest. It just completed its 30th year with more than 5,800 teams from 1,700 universities in 84 countries on six continents. It would seem that the thousands of former participants from these countries who have either competed or helped organize the events might be a base on which we could build.

- **Better recruiting of ACM student members.** ACM has another 20,000 student members, but we only succeed in graduating about 20% into professional members. The Membership Services Board is examining this issue. I believe changes to our flagship publication, as well as becoming more attractive to practitioners, could increase the yield of our student members.
- **Better recruiting of students to study our field.** As I've mentioned a few times in this space, we chartered the Computer Science Teachers Association to help those teaching computing in pre-college institutions. Given the increasing competitiveness of getting into a good college, many students do not have the time to take a

computing course, even if there were well-qualified teachers available to teach them. Hence, we should look for ways to supplement textbooks and course material in math, biology, and physics that present exciting and intellectually challenging problems that computing can address, so that such students might be more willing to consider our courses when they get to college and have more flexibility in their schedules [4].

In talking to literally thousands of people about why they do or do not join ACM or other professional organizations, I've come away with a few strong opinions. First, everyone loves the ACM Digital Library, but most can access it through their institution without having to join ACM. Second, many are willing to *believe* the PDC is valuable for their continuing development, but they have yet to use it. Perhaps 80% of our members have never used the PDC. The PDC is a strong argument for joining ACM since it's a resource that is not available through institutions, so publicizing it and improving it are important for membership growth. Member services that were once valuable, like ACM's email service, have little appreciation in today's world. The recently mailed blue folder from John White and the Membership Services Board has helped raise awareness of the benefits of membership.

The clearest value to members is ACM's flagship publication. Many see joining ACM as subscribing to *Communications of the ACM*; if they don't like *CACM*, they see no reason to join ACM. Hence, if *CACM* became a favorite magazine of people in our field, it would aid recruiting in all the groups noted here. For example, we could offer free trial subscriptions to conference attendees who are not ACM members to try to interest them into joining. Students could become accustomed to reading *CACM*, and want to continue reading it after graduation. If it had articles relevant to IT practitioners in China and India, it could help establish ACM in such countries.

I discussed ideas on revising *CACM* along the lines of *Science* magazine recently in this space [3]. Suggestions include harvesting the best of the best of conference results, including one-page perspectives

to introduce those research contributions, adding news and policy articles from around the world, inviting articles and interviews relevant to managers and practitioners à la *Queue*, and so on. I received about 50 email messages about these suggestions—a record for my column. Since many people who don't like *CACM* don't bother to read it, I was pleasantly surprised to see that an overwhelming majority of these email messages supported such a change. No more than 10% of the respondents liked the current *CACM*, and after exchanging a series of email messages with those who wrote back, I'd say 80% liked the new model.

Why is membership growth important? Growth is one measure of feedback on how good a job ACM is doing at serving the field. A second reason is it increases our clout when we speak out on an issue. A third reason is financial. In addition to more annual dues, increasing membership has the added bonus of increasing the value of the advertisements in our publications (although we may need to do a little more work to quantify the purchasing power of our members to attract advertisers as well).

Financial growth makes life simpler for organizations, making it possible to keep up with the costs of inflation and to expand offerings to their members. ACM hasn't changed membership dues since 2000, despite a temporary drop in membership, primarily because of the growth of income from institutions joining our Digital Library. We are near market saturation as the DL is now in 50% of the libraries around the world, so financial growth will soon need to come from other places. Moreover, there are discussions going on in some circles that research papers funded by government grants should be freely available. Such a change would have a large negative impact on ACM's current financing.

Hence, growing membership in these good times is wise for many reasons, and the opportunity for growth is out there. *Carpe diem*.

THE GRAYING OF ACM

Along with adding new members, another important challenge is persuading younger members to get involved in ACM activities. I've long believed that a fast-changing field like IT is a young person's

President's Letter

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field, as there is much greater value to the present than to the past.

Those of us who grew up in 1960s at least once believed that young people have important new ideas to contribute to older generations. Finally, besides a lack of new ideas, it's unwise to wait until the Baby Boom generation retires to start recruiting new volunteers.

Hence, I was startled when I became president to see just how few young people were involved in ACM's volunteer activities. While I've been beating this drum my whole presidency, things are changing at a geologic pace. The good news is that relatively new boards like the Professions Board and Membership Services Board do have age diversity. The Publications Board and USACM have moved slowly toward age diversity, but the Education Board has had the lowest turnover of members. SIGs vary widely; some like SIGGRAPH have publicized paths for recruiting of new members, but in many SIGs the average age of the volunteers is growing one year every year.

Although my observation was based on the volunteers, it relates to the ACM headquarters staff as well. Leadership stability is a positive sign of any organization, and ACM has enjoyed continuity in these good times. However, we also need to develop a transition plan as staff heads toward retirement and to groom successors so that ACM can continue as an organization that punches above its weight class. I have seen other volunteer-based organizations decline significantly once a key staff person leaves, and we can't let that happen to ACM. Given the small size of ACM's staff, it might be worthwhile to hire an outside consulting firm to assess our staff and make recommendations on how to prepare for such a transition.

My advice is that both the volunteer and professional staffs develop plans to attract new people and groom the next generation of leaders.

CONCLUSION

The good news is while organizations similar to ACM are facing more formidable challenges, ACM is in excellent shape to face its challenges. We can solve them if we address them seriously and promptly.

Let me close by paraphrasing the conclusion of the prior speech [1]:

So—in this my last good night to you as your President—I thank you for the many opportunities you have given me for ACM service. I trust that in that service you find some things worthy; as for the rest of it, I know you will find ways to improve performance in the future...

Now, on Friday midnight, I am to become a private citizen. I am proud to do so. I look forward to it.

Thank you, and good night. ■

REFERENCES

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3. Patterson, D.A. President's Letter: New directions for CACM? *Commun. ACM* 49, 1 (Jan. 2006), 33–35.
4. Purdue University. Linking Mathematics and Computer Science; www.cs.purdue.edu/external_relations/k-12_outreach/summer_camps/linking/linking06.sxhtml

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