

Chapter 26

How Are Professional Societies Changing?

*By Bruce Finlayson, Tom Edgar, Deb Grubbe,
David Missenda, Jim Porter, Rob Reintjies,
Rex Reklaitis, and John Sofranko*

The world is changing and so are societies. Described here are actions taken by societies that have proven successful. The information is a compilation mainly from three sources: (1) research and interviews by a group of AIChE members; (2) a four-year study summarized in *7 Measures of Success: What Remarkable Associations Do That Others Don't*¹; and (3) a summary of societal trends, *Mapping the Future of Your Association*².

The study carried out by the American Society of Association Executives (ASAE) and the Center for Association Leadership spanned four years. It was started by accumulating an extensive list of associations, communicating with the staff, and evaluating these organizations. Eventually the list was narrowed down to nine associations that were deemed successful, and nine similar associations that were not deemed

as successful. The characteristics of the extremely successful associations were compared with those that were moderately successful to determine seven measures of success. Those measures were:

1. Having a customer service culture,
2. Aligning products with their mission,
3. Being data-driven,
4. Having dialog and engagement within the organization,
5. Having a CEO who is a broker of ideas,
6. Being able to adapt to new challenges, and
7. Building alliances with others.

The first two measures are most relevant here, since they deal with customers—their members. Items 3-5 are relevant to internal operations (including operations with volunteers), and items 6-7 relate to adaptation to change.

Societal trends summarized in *Mapping the Future of Your Association* were organized into eight groupings with ten trends within each group, out of which only a few will be mentioned here.

The customer environment is changing: membership is declining, younger potential members are not joining, members are less willing to be volunteers and are more consumers of services, the value of membership is questioned, members want more information digitally, and members are demanding a more targeted value package. Examples are given below of organizations that are responding to these changes in customer environment.

The competitor environment is also changing: volunteers have less time available, virtual associations are competing for members, subspecialties develop and create new competitors, web-based information sources threaten information-based enterprises, and members expect their associations to design products specifically for them, and mass customization is being done by commercial entities.

The technological environment is changing: the internet buildout continues, the cellular buildout continues, educational institutions offer more distance learning and Webinars, internet search engines catalog more of the world's information, and members want products delivered on low-cost digital consumer products.

The AIChE group studied a number of associations, which are listed in Table I. Several were discipline-specific, a few were cross-cutting (including members from different disciplines), and a few were research organizations. The summary below gives examples in which several of these societies have responded to the trends and factors for success.

Table I. Societies Studied (and Approximate Annual Dues)

General Societies

ICChemE	Institution of Chemical Engineers	\$80
ACS	American Chemical Society	\$136
IEEE	Institute of Electrical and Electronics Engineers	\$165
ISA	Instrumentation, Systems & Automation	\$85
ISPE	International Society of Pharmaceutical Engineers	\$200
AWMA	Air and Waste Management Association	\$180
SPE	Society of Petroleum Engineers	\$80
SME	Society of Mining Engineering, Exploration, & Metallurgy	\$130
SIAM	Society of Industrial and Applied Mathematics	\$121

Cross-Cutting Societies

SWE	Society of Women Engineers	\$100
NSPE	National Society of Professional Engineers	\$220
NSBE	National Society of Black Engineers	\$50

Research Societies

MRS	Material Research Society	\$105
SOR	Society of Rheology	\$40

The questions asked of each society are given in Table II.

*Table II. Questions Asked of Each Society**Membership*

- a. What are your requirements for membership?
- b. How do you present the value of membership to prospective members?
- c. How has membership changed over the last 10 years? Expectations for the future?
- d. Are young people joining?
- e. Has there been a change in academic/industrial, or U.S./global?

Web/digital offerings

- f. How has your web/CD/DVD presence changed?
- g. How do you see it changing in the next few years?

Revenue

- h. How have (and will) dues change? Have you considered alternative pricing models?
- i. How do you develop products and the value proposition for segments of your membership? How has this changed?
- j. Do you have a certification program? How has it worked? Do you see it increasing in importance?

Organization

- k. Do you have local sections? Are they active? Increasing or decreasing in importance?
- l. Do you have student chapters? Increasing or decreasing in importance? Which ones are doing a bang-up job and how?
- m. What new partnerships have you developed? Do you see this increasing? How do you pick partners?
- n. Does the organization include societal impact as a goal? How?

Summary

- o. Where will you be in 5 years?
- p. Key changes recently?
- q. Your biggest concern?

The discussion is organized around themes of membership, products, and financing. Membership includes trends, membership criteria, global/local breakdown, academic/industrial breakdown, and conversion of student members to professional membership. Products include web and internet offerings, CDs, regional conferences, and interaction with society. Financing includes incremental pricing as well as corporate memberships and benefits.

Membership

While many societies have declining membership, some have succeeded in increasing their membership. How did they do it?

The Institution of Chemical Engineers (IChemE of the United Kingdom, 26,000 members and growing at the time of the survey) has done it by increasing international memberships, and this was done partly through their certificate program. This program provides validation that a member has achieved a certain level of expertise in the profession. It is especially useful when the member graduated from a school that is not well known and whose credentials may not be clear. The Instrumentation, Systems & Automation (ISA) also has been successful; their certification program has resulted in membership growth in India and China; the membership fee is half of the regular fee in developing countries.

The Air and Waste Management Association (AWMS, 8600 members) has reversed a long-term decline by adding a revamped membership category that was more inclusive. The Society of Mining Engineering, Exploration, and Metallurgy (SME) has increased membership primarily because of the increased interest in mining and resource extraction. The American Chemical Society (ACS) has maintained its membership at 160,000, and one of its six strategic goals is to be a preeminent global scientific community. The Institute of Electrical and Electronics Engineers (IEEE) recognizes that over 50% of the authors and attendees at conferences are not from the U.S. The Society of Petroleum Engineers (SPE) has an international dues structure for developing countries based on ranges of annual salary in those countries. The Society of Rheology (SOR) has lots of non-North American members, and European and Asian members are increasing.

Within the IEEE membership growth occurs in the hottest fields, e.g., biomedical, energy, environment, economics and policy issues. Members tend to identify more with their society (within IEEE) than with the larger organization. There is a drop-off in membership in longer-standing, but important, technical areas. Access to the IEEE electronic library was one

of the perceived benefits of membership, but now organizations license access to the entire library so that individuals have access without being a member. International membership has been increasing in its number and percentage, and currently about 42% of the members live outside the United States.

Many of the societies do not require a disciplinary degree. Working in the field is sufficient, and some societies use self-certification on the internet. For example, while IChemE has a large international membership, only 30% of them are chartered. IEEE requires either a degree in the field or work experience. They have members who are lawyers, policy makers, individuals dealing with technical media, and technical writers, etc. Membership in AWMA is open to anyone interested; membership in SIAM is open to anyone with an interest in mathematics, and 30% of its members are international. Furthermore, 39% of its members graduated since 2000. The Materials Research Society is interdisciplinary, and there are no degree requirements for membership. The Society of Petroleum Engineers welcomes all people working in 'upstream' operations, not just petroleum engineers. Employment in the industry is required, along with a degree either in engineering or applied science, or six years of active practice in the field. Furthermore, the organization accepts applicant's self-certification of those requirements on their web application. The SME has both a professional membership and a more restrictive registered membership. The former has several pathways: degrees, responsible employment in the field (including financial, legal, or human resources), plus others. The registered member requires documentation of degrees and experience related to the field.

Many societies have student chapters as a way of introducing students to their professional organization. Few have succeeded in transitioning those student membership into professional membership after graduation. The ISA has virtual student membership for \$5 one gets access to the online publications; for \$10 one gets printed publications. The ISA has developed a program called YAPfest that focuses on younger members at their meetings, which has been a big success. The SME encourages young people to join by attracting student members. Part of the staff is devoted to communicating directly with schools and

student chapters, as well as with SME's Young Leaders Committee. This provides the younger membership of SME the chance to network with key players in the industry and transition into more active leadership roles throughout SME. The AWMA gives one-year free membership to graduates, which eases the conversion to professional membership provided the student updates their contact information. MRS has student chapters and has been successful with young members: 75% of their members are under 45.

Within the IEEE (and other organizations) there is a big drop off in membership by recent graduates. Various reduced (or gratis) membership programs have been tried but failed, at the time of conversion to paying full membership fee. This is perceived to be a life style matter. Recent grads are starting careers and families, have personal obligations, and focus free time on family rather than their profession. They have less time for volunteer activities not associated with family or their immediate community.

All the disciplinary and cross-cutting societies have local sections, but the research societies do not. *One important characteristic of the best societies is that they examine their mission and determine what the members want and need.* The ACS, IChemE, AWMA, and IEEE have all done this in the recent past. ACS established "core value" codes such as ethics for the profession, increasing support for local sections, targeting "sustainability" as a core initiative, significantly improved the quality and the capability of the website, and increased emphasis on publications and general product sales.

All the factors mentioned here that impact membership are consistent with the trends found in *Mapping the Future of Your Association*².

Products

One of the trends identified in *Mapping the Future* is the desire for obtaining information in digital form and having it easily accessible on the web. This preference carries over to training courses as well. All the societies surveyed were doing this in various degrees. Most associations

have electronic system of submitting and reviewing manuscripts, as well as electronic versions of the published journals. They all have member information available to members too. The ISI is moving to CDs and DVDs for training. The AWMA had an on-line library which has been successful, along with online courses, audio+web conferences. AWMA also has an online jobboard and online mentoring program. The SME is expanding their digital library with OneMine.org, a collaborative digital library that includes technical publications from a multitude of mining and minerals organizations worldwide. Their web site also includes industry information and commodity indices. SWE has a number of CDs with webinars: “Leading Teams without Authority,” “Introductory Project Finance for Engineers,” “The Mentoring Connection-Being and Finding the Perfect Protégé,” for example. The NSPE, by contrast, provides only a limited web service for non-members. Research societies have more focused, but still very useful web presences. The SOR has a unique Rheology Index, which works as a sort of Wikipedia of rheology web sites – and users can post their web sites there for others to find in their search. AIChE currently offers almost all of the products mentioned above.

A classic product of associations has been the conference. But, regional conferences are becoming more important. The IEEE has found growth in regional conferences while attendance at national conferences was static. They run them in a break-even manner, allowing for 15% over direct costs as overhead. Their regional conferences include leadership and soft skills workshops. They tried using video conferencing, but found that people preferred to network at a regional conference. The American Chemical Society holds eight regional conferences each year, with attendance totaling 6,000. Their two national meetings draw 30,000 participants. They are providing electronic access to keynote presentations at those meetings. Furthermore, even the poster session has gone electronic – authors were encouraged to upload their poster presentation to the internet; views were only available to those registered for the meeting, though.

Nearly all of the societies have some sort of internet job assistance: a place to post resumes and job openings, internet job fairs, etc. SWE

allows companies that advertise in their print publications to display clickable icons with links to their websites. In addition to members looking for jobs on their job site, members can download podcasts that provide Career Insights. This is an example of providing information and interaction in the newest digital format. The NSBE has a category for premier advertisers which provides more visibility to job openings in those companies that actively support NSBE. SWE also partners with companies that provide classes for the GMAT or Fundamentals in Engineering Exam: these classes can be subscribed for a reduced fee if you are a member of SWE.

Many of the disciplinary societies and all the cross-cutting ones have a societal impact, which they consider part of their mission. Smaller research societies generally do not. For example, ACS regards contributions to sustainability, support for women and minorities, and the encouragement of innovation as some of the societal benefits of their organization just like AIChE. IEEE has Women in Engineering groups, minority groups, and encourages their members to engage in K-12 activities by giving in-service training to their members who serve as volunteer teachers. SWE has AfterSchool kits which are available only to members, which provide materials needed for small group outreach activities. AIChE, as well as both SWE and NSBE, has active scholarship programs, especially for undergraduates, and they also have outreach activities in K-12.

Finances

One of the trends in societies is an increased pressure on the financial health of the organization. This occurs first because of declining membership and is aggravated by the expectations of new members that many services and information should be free. Examination of the dues listed in Table I indicates that the societies surveyed charge an average of \$131 for membership, but the cross-cutting and research societies average more like \$75. The dues structure can be highly variable depending upon whether the organization has a 'cash cow' (if such things exist any more!). The American Chemical Society runs Chemical Abstracts, which has traditionally been a paper-based service. It has successfully changed

into more of an internet subscription service but still provides substantial support for ACS. Several organizations mentioned above have corporate memberships, and they partner with their advertisers to give companies enhanced notice in job listings, etc. Incremental pricing is not common, but IEEE is looking at it. The basic idea is to unbundle membership cost to be a base + incremental charges for services or access to materials, tutorials, etc. that the member chooses to meet his/her specific needs. None of the societies reviewed by the AIChE group has implemented this, although many provide their information free to members on-line and charge them for paper copies. One method of selling papers involves one price for nonmembers and a much lower price for members. Then, at the point of sale, the nonmember buyer is told how much he/she can save by becoming a member; thus, the membership decision occurs at the time a service is being provided.

The ACS has a goal to be a premier advocacy organization for members and the profession and they have an extensive governmental affairs group. IEEE has a very active federal relations program; it is active in the issue of visas for foreign specialties even though the members are split on the issue.

Conclusion

The societies mentioned here have all responded to the trends described in *Mapping the Future of Your Association*², which is necessary in a changing world.

Bibliography

1. *7 Measures of Success: What Remarkable Associations Do That Others Don't*, ASAE & The Center for Association Leadership (2006).
2. *Mapping the Future of Your Association*, ASAE & The Center for Association Leadership, pp. 2005-6.