SIG Structure Task Force Preliminary Report
April 2015

Task Force:
Brent Hailpern, IBM Research (chair) [SIGPLAN]
Donna Cappo, ACM
Elizabeth Churchill, Google [SIGCHI]
Erik Altman, IBM & ACM Council/SGB [SIGMICRO]
Wayne Graves, ACM
Joshua Hailpern, HP
Jeff Hollingsworth, University of Maryland [SIGHPC]
G. Scott Owen, Georgia State University [SIGGRAPH]
Pat Ryan, ACM

Background

At the ACM Retreat it was pointed out that the model for technical communities in ACM dates to the 1960's and is unique among associations with Special Interest Groups (SIGs). From the beginning, ACM SIGs have had significant technical and financial autonomy within ACM. With autonomy has come significant responsibility for fostering strong communities and providing these communities with high quality technical activities, including conferences/workshops, publications, and local chapters.

Over the past 50 years, this model has proved incredibly successful for ACM. SIGs dominate the technical landscape of ACM. Many SIGs represent the preeminent community in their technical area. SIG conferences have grown in number and stature. SIG conference proceedings dominate the content and the count of downloads within the DL. Many SIGs are active beyond conferences with programs in education, professional development, and public policy.

An individual SIG is a relatively complex structure, due to its support of multiple objectives: (e.g., membership, meetings, communications) and required fiduciary management of the funds supporting those activities. This heavyweight structure tends to slow down evolution of the portfolio of ACM SIGs and, thus, the complexion of the technical communities that comprise ACM. The structure also demands support from ACM, as well as the existence of a large and vibrant pool of volunteers. The opportunity cost of these demands on both staff and volunteers is hard to quantify, but unmistakable in terms of number of people and hours required and in terms of other good works foregone.

At issue is whether the current SIG model and structure:
- Provides for continued value to the membership of the SIGs
- Exerts unnecessary pressure on SIGs to conform to one model of success
- Fosters or curtails cross-SIG collaboration
- Fosters or curtails the emergence of new technical communities and activities.
- Fosters or curtails coherence across ACM technical communities

The SIG Structure Task Force was established to address the issues above. In addition, the task force believed it important to consider whether the current structure:

- Realistically and economically supports the spectrum of existing SIG activities
- Provides for continued value to the membership of the SIGs
- Provides for continued value to the volunteers that run the SIGs and SIG activities

Task Force Activities

Information was collected for the individual SIGs and included:

Sponsored Events – Sponsored or co-sponsored conferences
Conference Activity – Unique conference activities
Events Frequently Held In-cooperation – cooperating conferences
Awards – SIG Awards
Publications – newsletters and other publishing activity
Travel Grants/Scholarships/Support – funding programs for the SIG and conferences
Chapters – SIG Chapters
Programs – Programs unrelated to conference activity or the expected activities of a SIG
Additional Activities – expected activities to note (repositories)
Social Media – SIG presence in social media (not conference presence)

In addition the following data was gathered:

# of Conferences and attendance plus breakdown by ACM member, SIG member, Students, Non-members plus breakdown by US/Non-US
# of Tutorials and attendance
journals and transactions as they relate to SIGs
SIG overlap report
SIG demographic report
Webinar topics and attendance figures
SIG budgets with organization and conference breakdown
SIG membership numbers
List of queries regarding SIG startup
Reach reports for each SIG

The data that was collected indicated there was a great variance in the activity levels of the 37 SIGs. The group did analyze structural similarity and overlap of SIG memberships. There are potential economies that could be achieved by SIGs that wish to consider merging activities/membership, but the task force chose not to pursue recommendations on SIG mergers. Rather the task force focused on the current definitions of a successful SIG, and how that could change going forward.

The current standards of SIG viability have been in place for many years. They include a stable membership, an adequate fund balance, a viable pool of volunteers, financially successful workshops/meetings, and (historically) regular newsletter publication. Especially given the evolution of publishing (from printed newsletters to blogs and tweets), the task force focused on whether SIGs were being forced to meet some 20th century ideal at great expense to the volunteers, members, and staff.

Though exact details are yet to be worked out, and detailed procedures for the evolution of the existing SIGs must be created, the task force is recommending that the monolithic SIG structure of today evolve to 3 kinds of SIGs, as well as some more flexible SGB-level activities.

(1) Special Interest Group (SIGs)
A Special Interest Group should meet at least 3 of the following criteria:

> Membership of 1,000+
> Fund balance of $1M+
> Portfolio of Conferences and related activities
> Non-conference related programs
> Chapters program with active oversight and more than a single chapter

These groups would continue to have full administrative bodies and to conduct elections. SIG leaders would be members of the SGB. Viability reviews, similar with the current process, would be required to maintain status as a Special Interest Group.

Value to members: this would be unchanged. But we would urge each of these SIGs to have a vision, or better yet a clear statement, of what they believe the value of membership in the SIG is. There are likely some best practices here, but until we know what these 16 think they are providing, we won't be able to discover those patterns.
Value to volunteers: this would be unchanged. Leadership in SIGs or SIG conferences is a well-recognized public service/professional activity by academia and industrial research. To the extent that the SIGs can better support these activities with the employers of the volunteers, the better the value will be perceived.
Right-size overhead to ACM: this would be unchanged. The task force, including both staff and volunteers, believe that these large SIGs are appropriately right-sized in terms of staff attention.

(2) Special Interest Conference Group (SIGs) with streamlined reviews
There do exist SIGs that did not meet at least 3 of the criteria, but have a rich program of multiple sponsored or co-sponsored conferences (and conference related activities). Under our proposal, these groups would continue to be SIGs, but ACM would streamline its staff focus and the viability reviews to focus on running a set of successful and sustainable conferences/workshops, thereby lowering administrative burden on SIG volunteers to address matters of peripheral interest.

These SIGs with streamlined reviews would continue to have full administrative bodies and conduct elections. Their leaders would continue to be members of the SGB. Viability reviews, however, would focus on their ability to continue to organize and run multiple successful technical meetings. ACM staff could administer the review process through a conference reporting mechanism, with simple approvals by the SGB or SGB Executive Committee.

Given that these SIGS with streamlined reviews would focus almost entirely on conference creation/management, the value of membership in such a SIG must be discussed more fully. In particular, if they are to continue have election of officers, there must be a membership pool to bring in new volunteers and to vote. One possible evolution of these SIGs might be to merge the notion of

membership with conference attendance: attending one SIG conference would confer either full or an affiliate or community membership for some length of time (6 months? One year?) and the ability to volunteer for conference positions, and the right to vote in elections. Needless to say, this would not be a mandatory change to SIG structures, but should be worked out for the financial health of the conferences/SIGs and the continued viability of the volunteer pool. If it were decided that conference attendees are to be made members of the SIG, both category #1 and #2 SIGs would have this option.

Value to members: Main value becomes affiliation with the top conferences in their field. This would include timely notification of new activities, direct access to the DL material from those conferences, and possibly some kind of access to member only materials (yet to be determined).

Value to volunteers: This would be the same as with the SIGs in category #1, since externally there would be no distinction between category #1 and category #2. Ideally, the reduced process would make being a volunteer more rewarding.

Right-size overhead to ACM: The main value to ACM is to cut unneeded overhead for these SIGs and the staff that supports them.

(3) Special Interest Steering Committee (SISC)

ACM has a number of SIGs that do not meet the criteria above to be considered a Special Interest Group. Most of these current SIGs act almost entirely as the steering committee for a single conference.

If a group is really just in place to provide continuity for an otherwise successful conference, the task force recommends that we recognize that fact and "right size" both the volunteer and staff activities to support such "steering committees". There would no need for an elected board for such committees, instead we recommend creating a formal steering committee appointed by the SGB EC, probably starting with current SIG officers or officers elected and assuming office on July 1, 2015, or composed from the current/past conference chairs. There is no need for board elections or attendance of the committee leaders at SGB meetings. These steering committees would "report" to the SGB EC Conference Advisor. No viability reviews beyond the continued success of their managed conference would be required.

Some members of the task force believe that there is a further opportunity to make the creation of the conferences that are managed by a SISC and SGB even more flexible by adopting an agile funding approach to conference creation and review. Under this model, a group with a new conference proposal would come to the SGB executive committee with that proposal, with a very light-weight review by the executive committee (for example, no need for approval of potential overlap by other groups under the supervision of the SGB) the conference can be created and initial expenses paid by the SGB As long as the conference at least breaks even, the conference would continue. After one (or perhaps two) instances where the conference loses money, it would be decommissioned. There was considerable discussion of this model, but the task force did not yet reach consensus on adoption. However, some model for lightweight approval and review will be needed, otherwise we will be in danger of reinventing long heavyweight processes for the conferences.

There are also potential economies of scale if SISC/SGB managed conferences co-locate for local arrangements, use common hosting/tools for web presence, use common program committee tools and procedures for submission selection. This will require a culture change in ACM among volunteers, but if handled correctly can be of great benefit of the volunteers in not having to re-invent the wheel for every new conference. This design may also provide a convenient structure for other ACM conferences that

have arisen in recent years, and which are not associated with SIGs, e.g. Tapia, Learning@Scale, or Applicative, or even for conventional SIG conferences that no longer feel the need to "reinvent the wheel" with details of conference logistics or websites. A great example of such an effort is the ACM DL's offering of conference agendas directly in the ACM DL app, which conferences could use "automatically".

Value to members: Since the "members" here are mostly conference attendees, the value of the conference should be unchanged, and perhaps the focus of the volunteers/staff can be on running a successful conference series, and not to do all the other SIG stuff.
Value to volunteers: This should be MUCH less overhead: no need for extra officers to stand for election, no need for meetings over and above the conference organization.
Right-size overhead to ACM: This basically removes a layer of overhead (the SIG structure) from the running of these conferences. From the point of view of ACM staff, the need for viability reviews beyond financial success entirely goes away.

Evolution of Groups
 It is expected that groups will move between these three categories as sub-communities of ACM evolve. The exact process of this migration has not yet been determined, but it is expected that periodic reviews will be conducted and that some form of hysteresis will be used to ensure groups do not move between categories on an annual basis.

Committees of the SGB
To date, the SGB has managed one kind of entity, the SIG. But groups of ACM members need some mechanism to get together to achieve some purpose for ACM and the SIGs at large. We propose that the SGB or the SGB Executive Committee use its ability to create ad hoc or continuing committees/task forces to support important activities. The creation and supervision would be analogous to ACM's support of the ACM History Committee.

Beyond these SIGs, Steering Committees, and committees, we encourage the SGB to continue to explore new and different ways for the ACM community to come together (global, regional, or online) to achieve some important purpose. The goal should be to experiment without lots of reviews and processes – to try new things and "fail fast".

To ensure that all sub-communities feel represented in the SGB, it is recommended that 2-3 at large seats on the SGB be created to represent the views of Special Interest Steering Committees who would no longer be members of the SGB. A process of selecting these members needs to be created. One possible idea is they would be elected by the officers of all the Special Interest Steering Committees.

Over and over again, the task force returned to what is the value of being a SIG member, over and above membership in ACM. And that topic needs further discussion. Certainly attendance at or participation in a conference is central to today's SIGs.   Affiliation with an activity, which would facilitate notification of new events and deadlines is another facet of value. Discounts at meetings or on gaining access to all or part of the ACM DL (perhaps based on free access to the SIG knowledge areas) is yet another facet. There was also discussion that the value of SIG membership may differ for practitioners and researchers, e.g. practitioner values over time might include (a) coming up to speed in a technical area; (b) being part of a community to ask and answer how-to questions; and (c) learning what recent research may be of value for my work. SIG value for researchers might include (d) staying abreast of the latest advances in a

technical area; (e) publishing one's latest advances in a technical area; and (f) understanding what practical problems may yield interesting research problems.

All of these SIG values and potential values must be clarified and the processes for supporting them "right-sized" in terms of demands on the volunteer pool and staff time.

Next Steps

Assuming this preliminary report has the support of the SGB EC and ACM EC, we propose the following next steps:

1. Work out the details of the "transition diagram" for each existing SIG to be put in one of the three new statuses, how they transition between statuses over time, and how new proposals for groups are to be considered.
2. Socialize the preliminary report with the members of the SGB to get feedback from the perspective of their SIGs.
3. Pursue concepts of lightweight (global, regional, or online) user groups. Ideally these would allow for a lightweight structure with a granular focus (overseen by a SIG or a conference or the SGB), which could be appealing to the practitioner community.   It will be essential to understand how these relate to existing mechanisms, such as those available in social media, so that they have some chance of success.
4. Explore issues of increasing value to members and to volunteers, such as the proposal to use the SIG knowledge areas to provide expanded access to the DL based on SIG membership – or even the possibility of custom knowledge areas, so that interdisciplinary researchers could "roll your own" knowledge area.
5. Nail down the financial and bylaws details that would be involved if a SIG wanted to designate conference attendees to be some level of SIG member.
6. Start an effort to look at the advantages/costs of any further shared services that could be offered to the SIGs by ACM to reduce the overhead in running any level of organization.

 Summary

This document has outlined steps we feel will simultaneously strengthen ACM and the SIGs, while reducing unnecessary burdens on staff and volunteers, in large measure by aligning formal structure with current practice -- practice that has evolved in response to technology and culture changes in the last two decades. These changes should also improve ACM's ability to move into new areas and experiment. In the coming months, we plan to put some version of these proposed changes before appropriate ACM bodies for discussion and approval. We would appreciate comments or concerns before that more formal effort is initiated