IEEE President-Elect Questions

Question #1: The open access (OA) publication model presents challenges and opportunities. OA will significantly change IEEE's current publications model, as publication revenues have traditionally formed a significant portion of IEEE operating income. IEEE has to find and adapt new financial business models as a result. In your opinion, how should IEEE approach the challenges posed by OA, and how can IEEE capitalize on the new publications model? In particular, how would you reform IEEE's business model to ensure financial sustainability?

Publications and conferences each are currently ~40% of IEEE revenue while membership provides ~10%. Most publication revenue comes from Xplore sales. Open access shifts revenue from Xplore sales to author upfront fees with the cost of maintaining repository forever.

Risks are in not switching to OA or in choosing the wrong OA model. Another risk is that OA does not reach wide adoption and we lost original revenue. Third risk is that original revenue stream goes away because customers are not willing to purchase Xplore anymore. The biggest risk is in maintaining relevance of our content.

Our approach needs to be a balanced transition to OA, which is already taking place. Most societies have started transition to OA journals as a defensive play. The long term solution is to evolve our offerings to topics that our audiences, industry and research, care about, increasing our relevance to our customer base.

Question #2: In your opinion, what are the most significant financial challenges facing IEEE in the next five years? What are your plans to address those challenges and mitigate their impact on IEEE and its societies and councils?

Today IEEE is in a good financial position, with reserves, long-term investments and profitability in the past two years. However, the percentage of members from industry dropped from 60% in 2000 to 39% in 2016. The long term loss of industry participation will have financial implications over a 5-year horizon, reducing publications and conferences revenues.

Second, while overall IEEE membership is growing, the Computer Society membership is declining. Third, publications revenues are declining (with or without OA, OA just makes things more risky). Changing the publication financial model alone is not enough.

We need to innovate IEEE and societies' products/services and membership. We need products of interest to industry and we need to engage and reach out to broader audience. Being a trusted partner to industry and government, in addition to academia, will secure a long-term financial stability. I address all of these as a part of my platform.

Question #3: What are your specific plans to increase the diversity (including geographic, gender, age) of IEEE's members and volunteers?

When in position of authority I recruit underrepresented myself. I also recommend and nominate diverse candidates to nominations and appointments committees. I recruit students from universities I collaborate with. Finally, I mentor young people around the world to become new IEEE leaders.

I recruited a Young Professional to succeed me as Industry Engagement Committee chair and 4 women from Latin America as members. As a co-chair of IEEE Infrastructure Conference, I recruited five women and individuals from Latin America and Middle East on the steering and program committees.

I nominated diverse candidates for MGA VP and MGA SAC. I provided the Nominations and Appointments Committee with the feedback on last year's lack of diversity and I will continue to do so. In social media, I encourage and send messages supporting diverse representation. I try to be the best example for IEEE, humanity, and for my two daughters.

Question #4: Currently, financial and staff resources for new technically-focused initiatives, while funded by the Societies, are allocated, planned and administered at the IEEE TAB level through Future Directions (FDs), often with limited Society input at critical formative stages. Because of this disconnect, the technical experts, who are more active at their Society level and who would truly drive these FDs initiatives to the highest levels of success, are often not engaged in the early stages. Subsequently they are not interested in being involved as the initiatives progress because they do not feel ownership. Do you think that the current structure for the creation of technical initiatives should be changed to better address this disconnect and, if so, how?

I understand this frustration. However, instead of trying to fix IEEE/TAB first, we should be proactive and leverage the possible benefits. In addition to Future Directions Committee (FDC), New Initiatives Committee (NIC) has an annual budget of \$3M for new proposals. I strongly recommend that IEEE-CS volunteers make FDC/NIC proposals and apply for FDC/NIC volunteer positions.

Over the past three years, Rebooting Computing Initiative received substantial funds from NIC and prior to that from FDC. Cybersecurity effort also received FDC funds. FDC and NIC meetings are open and they continuously solicit proposals. Over the past 4 years I regularly attended FDC meetings and I was also on the NIC 2017-18.

If after active engagement we still make no progress, then I fully support bringing it up with IEEE/TAB leadership and seeking restructure. To start with, we can encourage both committees to be more inclusive of society technical experts.