

SPE Strategic Plan 2013-2017

**APPROVED BY
THE SPE BOARD OF DIRECTORS**

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TABLE OF CONTENTS

Introduction 3

Strategic Framework..... 5

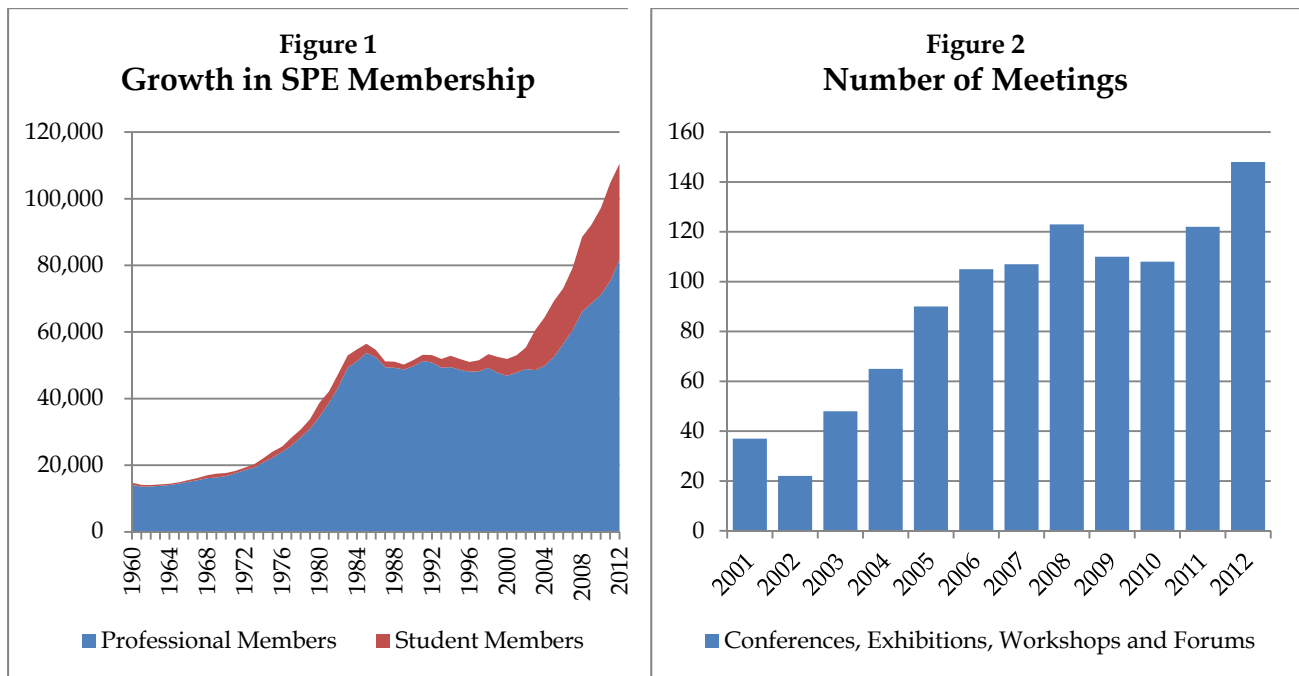
Strategic Priorities..... 6

Appendix A: Strategic Planning Steering Committee 10

INTRODUCTION

Since its inception 55 years ago, the Society of Petroleum Engineers (SPE) has remained constant in its mission to collect, disseminate, and exchange technical knowledge and to provide opportunities for professionals to enhance their technical and professional competence. SPE is increasingly aware of the impact a changing environment and global influences may have on its ability to be effective in serving an increasingly diverse membership in a highly complex industry.

By all objective measures, SPE is a highly successful organization. SPE has seen dramatic growth in membership globally (Fig. 1) and in the number of meetings offered (Fig. 2) to serve these members. At the same time, SPE has added new programs, expanded the reach of its programs and services, opened new offices to serve its global membership, and worked with other organizations to create greater value for members and the industry as a whole.



One SPE

Throughout this period of strong growth, SPE has strived to operate in a manner consistent with a set of One SPE Guiding Principles adopted by the Board in September 2001:

- The Society of Petroleum Engineers is a diverse community of professionals that provides valuable knowledge and services to those professionals and to the industry in varied forms.
- The concept of One SPE reflects the goal that each function and activity of the Society should serve the broader membership while addressing local needs, supporting technical and professional excellence, and making wise use of Society resources.
- The voluntary donation of time and talent by SPE members is our most vital asset and the creative energy of volunteers must be encouraged and supported by the Society.

Threats to SPE Success

While SPE has achieved great success, several factors could affect SPE's ability to sustain this success.

- Oil and gas price volatility. The price of oil and gas are key external factors that can affect support for SPE activities, including meeting attendance, membership, and participation in other programs. While SPE cannot affect the price of oil and gas, it can develop contingency plans for how to adapt the business to a sharp and sustained decline in prices.
- Technical quality within SPE programs. Rapid growth in SPE programs has led to concern that the quality of programming could be impacted. To sustain its success, SPE must ensure that technical quality is not compromised.
- Volunteerism. The changing demographics of SPE's membership mean that more members come from areas that lack a tradition of volunteerism. Coupled with the pending retirement of many of SPE's long-time active volunteers, SPE could face a significant challenge to following its traditional volunteer-driven path to programming.

At the same time that SPE pursues its strategic priorities, it must consider ways to manage or mitigate the potential impact of these threats to its business.

Developing a New Strategic Plan

SPE leaders determined it was time to reassess and either confirm or recalibrate its direction and core strategies to ensure SPE's continued long-term success. In June 2012, SPE launched a strategic planning process to look at the direction the industry is moving and to develop a new SPE Strategic Framework for the next 5 years. The initiative, led by Ganesh Thakur, SPE President, Mark Rubin, SPE Executive Director, and a Steering Committee comprised of five board members (identified in Appendix A), was organized in three phases:

- Phase I was to gather data and best thinking from multiple sources *both within and outside* the organization: leaders in the field, SPE members, SPE Board Members, and SPE staff. The data collection findings were comprised of 85 responses to a strategic planning survey, 13 one-on-one interviews with industry leaders, and a July senior staff leadership team workshop.
- Phase II of the process was a 1-day facilitated Strategic Planning Workshop for the SPE Board of Directors and the SPE staff who work with Board Committees.
- Phase III engaged the Steering Committee and SPE staff leadership team in coalescing and advancing the workshop discussions and creating a high level 5-year Strategic Plan to guide SPE decision-making and priority-setting through 2017.

This process led to the identification of four key strategic priorities. SPE's Board Committees and work groups will examine these priorities and develop specific initiatives to address them over the next five years. SPE should also evaluate whether it has the appropriate infrastructure (governance and staff) to ensure its long-term success.

SPE Strategic Framework 2013-2017



STRATEGIC PRIORITIES

SPE identified four key areas of focus to advance the Society over the next five years.

1. **Capability development (to support industry in dealing with the big crew change)**

Areas of challenge or opportunity associated with this strategic priority that SPE may choose to address include:

- Accelerate competency development. Those coming into the industry will have to gain skills and be prepared to take on responsibility quickly as retirements accelerate. New professionals will need mentoring, training and other resources to fill the gaps in their knowledge. While technical skills are crucial, the full skill set required for success must be addressed through a combination of technology and soft skills training to accelerate competency.
- Support faculty development and retention. Universities struggle to recruit, develop, and retain faculty due to the numerous opportunities available in the private sector. This has created a zero sum game where universities recruit faculty from each other without increasing the total pool of educators. Universities face a “crew change” of their own, which will exacerbate the staffing challenge.
- Fill faculty gap with experienced professionals. The number of future industry professionals is limited by the availability of faculty. There may be several ways to address this, including the creation of opportunities for qualified industry professionals to teach in universities. This could be something that companies would support for their technical leaders and might also be attractive to experienced professionals transitioning to retirement. Universities would need ways to identify those who will make good educators.
- Facilitate lifecycle learning strategies (for any career stage). For professional development and advancement, individuals at all stages of their career have a need to master new areas of expertise, equip themselves for new responsibilities and keep their technical knowledge current.
- Assess competency. Both companies and individuals need measures for competency – ways to demonstrate that certain skills have been acquired and can be put to use. Availability of competency assessment tools could encourage members to train themselves in new areas, and be used to demonstrate to prospective employers that they are ready for a particular assignment. Within companies, assessment methods are necessary to measure whether competency development has been successfully accelerated. An additional benefit could be to communicate to the public that engineers have demonstrated certain levels of professional competence.

2. Knowledge transfer

This priority offers many opportunities, along with some challenges, that SPE may be able to address:

- Maintain and enhance technical quality within SPE programs. With the rapid growth in SPE meetings and other programs, questions have been raised whether that growth may have negatively affected the timing of knowledge delivery to members, quality of papers, and other program elements. Ensuring that the technical content offered through its programs remains of the highest quality is crucial to SPE's success.
- Address volunteerism issues. SPE relies heavily on member volunteers for its programs, and especially to provide technical expertise. Volunteerism is not common in many areas outside the US and Western Europe. As membership from these areas grow, SPE will be challenged to apply its traditional model successfully. SPE must explore ways to make volunteering for SPE programs more efficient, effective and attractive to SPE members.
- Make knowledge available on-demand and in user friendly ways. Technology has enhanced member expectations for the delivery of technical knowledge when, where, and in the format needed. Offerings must be easy to use and provide the features members expect.
- Address language issues. While English remains the language of the oil and gas industry, SPE has growing membership with limited English skills. Determining to what extent translation is appropriate or needed and how to fill any gaps will be an important aspect of serving these members and growing membership in certain regions.
- Take full advantage of communications technologies. New technologies open the possibility for new types of events, new methods of content delivery, and new ways for members to network and communicate. For continued success, SPE must explore the potential of these technologies and deploy those that enhance the value of what is offered or support volunteer participation in SPE activities.
- Enable identification and closure of technology gaps. As R&D has become more dispersed across the industry, it can be challenging to know whether technical gaps are being addressed. Better means for identifying the technical capabilities required to enable development of world oil and gas resources are needed. SPE may be in a unique position to facilitate discussions and exchange of information around gaps in existing technologies and whether other industries may have applicable technologies that could be deployed.
- Complete and promote use of PetroWiki. PetroWiki has the potential to become an invaluable technical resource for industry through member contributions. It will serve as a vehicle for both capturing and sharing the technical knowledge of SPE's members. Making PetroWiki content available publicly increases transparency and supports SPE's image as an independent technical resource.
- Serve as a curator of content. The volume of information available continues to increase and can be overwhelming. Sorting through vast quantities of content and

identifying the material of greatest value or relevance for members will enhance SPE value.

- Determine future of peer reviewed journals. The value of peer-reviewed content is clear and peer-reviewed journals are crucial to the academic community. Yet, like many publishers, SPE has seen declining subscriptions to its journals. Submissions for peer review have declined as industry is busier and oil companies have reduced the amount of research they perform. Reconciling these trends is important to supporting industry academics who educate future engineers.
- Facilitate mentoring. The retirement of experienced professionals disrupts the informal mentoring that occurs on the job with new engineers. The knowledge transferred in these interactions covers both technical and corporate skills. As retirements increase, filling the mentoring gap may provide opportunities for SPE to address this need.

3. Promoting professionalism and social responsibility

Several opportunities that SPE should consider in this area are:

- Emphasize SPE professional code of conduct. There is a growing trend for government organizations to require that professional engineers be part of an organization that emphasizes accountability for professionalism (as an alternative to the government setting up its own mechanisms). While SPE has long had a Guide for Professional Conduct, it has not emphasized accountability, and should evaluate to what extent that is an appropriate path forward for SPE. Developing a common global understanding of professional behavior is another area to be addressed.
- Incorporate ethics and ethics education in SPE programming. The growing interest in ethics and need for ethics education should be addressed by SPE.
- Provide certification – general as well as discipline specific. As the pool of available talent grows in non-traditional areas, companies need ways, such as certification, to ensure that the technical training received by those individuals is sufficient to meet their needs. Even for professionals with industry experience, knowledge that the individual meets certain competency standards in a discipline has value to both employers and prospective employees. Government agencies are also showing interest in knowing that certain industry positions are filled by individuals with demonstrated expertise, which could necessitate certifications in specific areas of knowledge.
- Promote safety and environmental protection as high priorities with our membership. Over the past two decades, industry has become far more cognizant of the far-reaching environmental and social consequences of its activities. While many companies have very strong safety and environmental programs, several recent incidents have reinforced public and government skepticism of industry's focus on these issues. SPE should emphasize safety, the environment, and sustainability to its members as a complement to current corporate efforts. Ensuring that environmental and social responsibility are part of SPE programming may provide opportunities to improve awareness and perception.

- Maintain integrity and independence of SPE. As an individual membership society that emphasizes technical knowledge, SPE is viewed as credible and independent of corporate influence. As SPE evaluates future opportunities, it is crucial to retain SPE's integrity and independence. Sharing this emphasis with local sections to inform their activities is also important.

4. Public education about petroleum engineering profession and industry issues

Communicating industry activities publicly yields several challenges and opportunities SPE may choose to address:

- Attract young people to the industry. Public perception of the oil and gas industry is poor in the US and Western Europe, increasing the challenge to attract young people to industry careers. Enhancing energy and STEM¹ education in schools helps to counter those perceptions, and there may be other ways SPE can help to make the industry an attractive career choice.
- Develop public awareness programs based on technology. The technology used by the oil and gas industry is complex and not easily understood by the general public. This makes public perception subject to inaccurate interpretations of technical information. Making technical information accessible and enhancing awareness based on that information is a possible role for SPE.
- Serve as a technical authority/trusted source of unbiased information. SPE may be able to leverage its reputation for integrity and technical excellence to provide white papers, case studies and other factual, technical information to governmental organizations and the public. These materials can help both industry and the public by explaining technologies, technical issues, best practices, and challenges in meeting the world's energy needs.
- Leverage membership to provide expertise on technical issues. As SPE works to leverage its technical reputation to expand public information, it is important to position SPE as an organization of technical experts. When expertise is required to assist a government organization, or speak publically, SPE should have a process to identify members with appropriate expertise to serve that role.

¹ Science, Technology, Engineering, and Math (STEM)

APPENDIX A

SPE Strategic Planning Steering Committee

- Ganesh Thakur, SPE 2012 Board President and Steering Committee Chair
- Mark Rubin, SPE Executive Director
- Egbert Imomoh, SPE 2013 Board President
- Ken Arnold, SPE 2012 Vice President Finance
- Janeen Judah, SPE 2013 Vice President Finance
- Alain Labastie, SPE 2011 Board President
- Jeff Spath, SPE 2014 Board President-Elect

Consultant and facilitator: Susan S. Meier, Principal, Meier and Associates